VALIDATED PRODUCTS LIST
Volume 1
1995 No. 2

Programming Languages
Database Language SQL
Graphics
POSIX
Computer Security

Judy B. Kailey
Editor

U.S. DEPARTMENT OF COMMERCE
Technology Administration
National Institute of Standards
and Technology
Computer Systems Laboratory
Software Standards Validation Group
Gaithersburg, MD 20899

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April 1995
(Supersedes January 1995 issue)
FOREWORD

The Validated Products List (VPL) identifies information technology products that have been tested for conformance to Federal Information Processing Standards (FIPS) in accordance with Computer Systems Laboratory (CSL) conformance testing procedures, and have a current validation certificate or registered test report. The VPL also contains information about the organizations, test methods and procedures that support the validation programs for the FIPS identified in this document. The VPL includes computer language processors for programming languages COBOL, Fortran, Ada, Pascal, C, M[UMPS], and database language SQL; computer graphic implementations for GKS, CGM, PHIGS, and Raster Graphics; operating system implementations for POSIX; open systems interconnect implementations for GOSIP; and computer security implementations for DES, MAC and Key Management. The testing of products to assure conformance to the FIPS may be required by Government agencies in accordance with the FIPS, Federal Information Resources management Regulation (FIRMR) Parts 201.13 and 201.39, and the associated Federal ADP and Telecommunications Standards Index. The VPL is updated and published quarterly.

The entries for GOSIP are presented in Volume 2 of the Validated Products List. Volume 2 will be sent only to those who specifically request it. If you have received only Volume 1 and wish to receive Volume 2, please contact:

Ms Judy Kailey  
National Institute of Standards and Technology  
Computer Systems Laboratory  
Software Standards Validation Group  
Building 225, Room A266  
Gaithersburg, MD  20899

(301) 975-3259
ACKNOWLEDGEMENTS

The editor would like to acknowledge the valuable efforts and contributions of the following people and organizations within NIST.

Peggy Himes, of the Software Standards Validation Group (SSVG), who worked with the personnel in the Information Systems Engineering Division (ISE) to prepare the SQL entries; and also for her assistance in proof-reading the document.

William Dashiell (ISE) for Ada and SQL entries

Susan Sherrick, (ISE), for GKS entries

Lynne Rosenthal, (ISE), for CGM entries

Kevin Brady, (ISE), for PHIGS information

Martha Gray, of the Systems and Software Technology Division, CSL, for the POSIX entries

James Foti, of the Computer Security Division, CSL, for the Computer Security entries

Michelle Buckley, of the Systems and Network Architecture Division, CSL, for GOSIP.
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APPENDIX A FIPS CONFORMANCE TESTING PRODUCTS AND SERVICES .... A-1
1. INTRODUCTION

1.1 Purpose

The testing of Information Technology (IT) Products to determine the degree to which they conform to specific Federal Information Processing Standards (FIPS) may be required by Government agencies as specified by the FIPS, Federal Information Resources Management Regulation (FIRM) Parts 201-20.303, 201-20.304, and 201-39.1002, and the associated Federal ADP and Telecommunications Standards Index. Products having a current validation certificate or test report may be offered or delivered by vendors in response to requirements as set forth in solicitations by Federal agencies. The Validated Products List (VPL) contains conformance testing information for the following IT Standards:

- Programming Languages: COBOL, Fortran, Ada, Pascal, C, and M[UMPS]
- Database Language: SQL
- Graphics
- POSIX
- Computer Security
- GOSIP

This List is updated and published quarterly. The information contained herein is supplied by the contributors listed in Section 2.6 and Appendix A, and is current as of the tenth of the month preceding the publication date. Copies of the VPL may be obtained from:

National Technical Information Service
U.S. Department of Commerce
5285 Port Royal Road
Springfield, VA 22151

Subscriptions: (703) 487-4630
Individual Copies: (703) 487-4650

Ordering Number: PB94-937304/AS

The entries in the printed VPL (except those for GOSIP, POSIX and Ada) are contained in WordPerfect Version 5.1 files and may be accessed on the Internet using the following instructions:

Type: `ftp speckle.ncsl.nist.gov` (internet address is 129.6.59.2)
Login as user `ftp`
Type your e-mail address preceded by a dash (-) as the password
Type: `cd vpl`
Type: `binary`
Type: `get` and the name of the file you want; e.g. `language`

These entries are also available as DOS text files, through the World Wide Web using MOSAIC using one of the following instructions:

a. Open the file called "http://speckle.ncsl.nist.gov/~kailey/intro.htm"
b. Open the file called "ftp://speckle.ncsl.nist.gov/vpl/html/intro.htm"
Questions or comments concerning the VPL should be directed to:

National Institute of Standards and Technology (NIST)
Computer Systems Laboratory
Software Standards Validation Group
Building 225, Room A266
Gaithersburg, MD 20899
Telephone (301) 975-3274

1.2 Document Organization

1.2.1 Programming Languages

Section 2 identifies those COBOL, Fortran, Pascal, C, Ada, and M[UMPS] programming language processors that have a current validation certificate or registered test report referencing the applicable FIPS as of the date of this publication.

1.2.2 Database Language SQL

Section 3 identifies those SQL language processors that have a validation certificate or a registered test report for FIPS PUB 127-2 as of the date of this publication.

1.2.3 Graphics

Section 4 lists the implementations or files for which a validation certificate is currently in place. These entries include:

- Graphical Kernel System (GKS) implementations (FIPS PUB 120-1),
- Programmer's Hierarchical Interactive Graphics Systems (PHIGS) (FIPS PUB 153),
- Computer Graphics Metafiles (CGMs) (FIPS PUB 128),
- Raster Graphics data files (FIPS PUB 150).

1.2.4 POSIX

Section 5 identifies POSIX products that have a current validation certificate for FIPS PUB 151-1 and FIPS PUB 151-2.

1.2.5 Computer Security

Section 6 contains information regarding validated products for FIPS PUB 46-1, Data Encryption Standard (DES), FIPS PUB 113, Computer Data Authentication (Implements Message Authentication Code, ANSI X9.9), and FIPS PUB 171, Key Management Using ANSI X9.17.

1.2.6 GOSIP

Section 7, presented in Volume 2 contains information regarding FIPS PUB 146-1, GOSIP, conformance testing registers.

1.2.7 FIPS Conformance Testing Products

Appendix A lists FIPS conformance testing products and services available to the public. Information for these products and services may be obtained by contacting the appropriate person listed.
2. PROGRAMMING LANGUAGES

2.1 FIPS Programming Language Standards

As specified by the FIPS, FIRMR and the associated Federal ADP and Telecommunications Standards Index, Federal agencies when acquiring language processors, are responsible for assuring that processors are in accordance with the following FIPS for programming languages:

a. COBOL processors must satisfy the provisions of FIPS PUB 21-3, COBOL, and must be identified as implementing all of the language elements of at least one of the subsets of FIPS COBOL as specified in FIPS PUB 21-3.

b. BASIC processors must satisfy the provisions of FIPS PUB 68-2, BASIC.

c. Fortran processors must satisfy the provision of FIPS PUB 69-1, Fortran, (based on ANSI X3.9-1978) and must be identified as implementing all of the language elements of the subset or full levels of FIPS Fortran as specified in FIPS PUB 69-1.

d. Pascal processors must satisfy the provisions of FIPS PUB 109, Pascal.

e. Ada processors must satisfy the provisions of FIPS PUB 119, Ada.

f. M[UMPS] processors must satisfy the provisions of FIPS PUB 125-1, M[UMPS].

g. C processors must satisfy the provisions of FIPS PUB 160, C.

h. VHDL processors must satisfy the provisions of FIPS PUB 172, VHDL.

Copies of the above publications are for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Conformance testing programs are currently available for all above FIPS except for the programming language BASIC and VHDL. A test suite for BASIC is being developed.

2.2 Organization of Programming Language Processor Entries

The entries in the VPL for programming language processors are presented as follows:

• The SUPPLIER column contains the name of the provider of the processor that was tested.

• The next column contains the PROCESSOR IDentification, the Validation Summary Report (VSR) number, the SUBSET, and the EXPIRY DATE.

The PROCESSOR ID is the product name and version of the processor that was tested.

The VSR number refers to the VSR that was produced as a result of the testing. The VSR describes the testing environment and details any processor nonconformity that was detected as a result of the testing. Information for obtaining a VSR is listed in section 2.6.
The EXPIRY DATE is the expiration date of the Certificate of Validation or Registered Validation Summary Report. A processor may be included in the List after the certificate has expired if the validation is in process. Notification must be received by NIST at least 30 days prior to publication of the List in order for such a processor to be included. In this case the expiration date will be followed by "(pending)".

For COBOL processors, the SUBSET refers to the applicable Federal Subset (Minimum, Intermediate, or High). For Fortran processors, the LEVEL specifies the applicable Federal level (Subset or Full). For Pascal processors, the ISO 7185 Pascal Standard Level (ISO 7185 Level 0 is equivalent to FIPS 109).

- The HARDWARE & OPERATING SYSTEM column presents the hardware and operating system environment (including pertinent supporting system software) used during the validation.

- The entries in the OTHER ENVIRONMENTS column are registered hardware and operating system environments for the processor tested. The vendor of the processor has certified that the identified processor, when operating under the environments included in this column, produces the same test results as those obtained from the hardware and operating system environment used during the validation. Test results and other information from these environments may be required as evidence for entries to be included in this column.

The entries for Ada language processors are not presented in column format.

Also listed are the programming language processors that have been tested and during the testing were found to have one or more nonconformities.

2.3 Validation of Processors

2.3.1 Validation Requirements

In accordance with the requirements referenced in Section 1.1, language processors offered to the Government for purchase, lease, or use in connection with ADP services shall be validated for conformance to FIPS for programming languages. To confirm that the specifications of the designated FIPS have been met:

a. the processor shall be tested with the Compiler Validation System (CVS) approved by NIST,

b. the processor validations shall be conducted in accordance with NIST validation procedures,

c. a Validation Summary Report (VSR) shall be produced summarizing the test results of the CVS on the designated processor for that FIPS,

d. all nonconformities noted in the VSR shall be corrected within twelve months,

e. a Certificate of Validation shall be issued if validation results warrant. In order for a processor to receive a Certificate of Validation the processor must successfully pass all applicable tests of the CVS without exception.

The Federal ADP and Telecommunications Standards Index supplies standard terminology which may allow for delayed validation. When delayed validation is allowed, the offeror may meet this requirement by showing evidence of having submitted the processor for validation. Proof of submission is in the form of a letter from NIST scheduling the validation.
Programming language processors offered to the Federal Government must comply with the applicable Government requirements. Failure to comply with these requirements shall be deemed sufficient cause to declare a bidder non-responsive or to declare a vendor in default for failure to deliver required software.

2.3.2 Placement in the List

For a processor to be placed in the List it must:

a. have been officially tested within the past twelve calendar months, and
b. have no errors remaining that were identified during a previous test.

2.3.3 Removal from the List

A processor is removed from the List when:

a. the processor is not officially tested within twelve calendar months, or
b. testing indicates that the processor still contains errors identified during a previous validation.

2.3.4 Validation Procedures

Validation procedures are published in the following documents:

- Compiler Validation Procedures, dated January 15, 1993
- Ada Compiler Validation Procedures and Guidelines, Version 3.1, August, 1992
- Pascal Validation Policy and Procedures, Version 5.6, September 1, 1994

2.4 Certificate of Validation

A Certificate of Validation is issued for those programming language processors that have been tested and are considered to be in compliance with the FIPS as specified by the FIPS, FIRMR and the associated Federal ADP and Telecommunications Index.

The requirement for retesting may be waived and the certificate of validation extended at the option of NIST if:

a. no errors were identified during the previous testing of the processor,

b. the vendor certifies, in writing, to NIST that no changes have been made to either the processor or the supporting system software, and

c. no new version of the validation system has been officially released during the interim period.
2.5 Language Processor Validation Suites

Following are the validation suites and ordering information for testing programming language processors for conformance to FIPS.

a. Copies of the COBOL, Fortran, M[U[MPS]], and Ada Compiler Validation Suites may be purchased from:

National Technical Information Service (NTIS)
5285 Port Royal Road
Springfield, VA 22161
Telephone (703) 487-4650 (Voice)
(703) 321-8547 (FAX)

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<tr>
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<td>Fortran (FCVS78)</td>
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<td>PB94-500691</td>
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<td>Ada [Tape ANSI Standard]</td>
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<tr>
<td>Ada [Disk (MS/DOS)]</td>
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<td>ADA212549</td>
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<tr>
<td>M[U[MPS]]</td>
<td>8.3</td>
<td>PB94-504099</td>
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</table>

b. The current version of the Pascal Validation System (PVS) is Version 5.6 and is available from:

Prospero Software
190 Castelnau
London
SW13 9DH
ENGLAND
Telephone (011) +44-081 741 8531 (Voice)
(011) +44-081 748 9344 (FAX)

c. The current version of the ANSI C Validation Suite (ACVS™) is Version 4.2 and is available from:

Perennial, Inc.
4699 Old Ironsides Drive
Suite 210
Santa Clara, CA 95054
Telephone (408) 748-2900 (Voice)
(408) 748-2909 (FAX)

2.6 Testing Laboratories and Supporting Organizations

The organizations listed below have performed validations, supplied information, or are sources for Validation Summary Reports (VSR) for programming languages. These organizations may be contacted for validation information and for copies of VSR(s). COBOL and Fortran VSR(s) may
be obtained from NIST. Pascal VSR(s) whose VSR numbers begin with "NIST" or end in "US" may also be obtained from NIST. Pascal VSR(s) whose VSR numbers end in "UK" are available from BSI. Ada VSR(s) may be obtained from the Ada Information Clearinghouse, the National Technical Information Service, or from the Ada Validation Facility (AVF) that produced the VSR. To obtain a copy of a VSR from an AVF, locate the upper case letter in the certificate number (e.g., 870608W1...). That letter corresponds to the letter in the CODE column to the left of the organizations listed below.

<table>
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<tr>
<th>CODE</th>
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<th>CONTACTS</th>
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<td>S</td>
<td>National Institute of Standards and Technology</td>
<td>L. Arnold Johnson</td>
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<td></td>
<td>Software Standards Validation Group</td>
<td>Judy Kailey</td>
<td>COBOL, Fortran</td>
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<td>Building 225, Room A266</td>
<td>Carmelo Montanez</td>
<td>BASIC</td>
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<td></td>
<td>Gaithersburg, MD 20899</td>
<td>William Dashiell</td>
<td>Ada, M[UMPS], SQL, VHDL</td>
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<td>National Computing Centre Limited (NCC)</td>
<td>Jane Pink</td>
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<td>Oxford House, Oxford Road</td>
<td>Jon Leigh</td>
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British Standards Institution
Quality Assurance (BSIQA)
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(011) +44-908-22-06-71 (Fax)
Telex: 827682 BSIQAG

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Language Control Facility
ASD/SCEL
Wright-Patterson AFB, OH 45433-6503
(513) 255-4472

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or (AFNOR)
A Direction Certification
Tour Europe, Cedex 7
BP-92049 Paris la Defense
FRANCE
(011) 33-142915960
(011) 33-142915656 (Fax)
Telex: AFNOR 611 974 F

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Falls Church, VA 22041
(703) 681-2466

National Technical Information Service
U.S. Department of Commerce
5285 Port Royal Road
Springfield, VA 22161
(703) 487-4650
## 2.7 LANGUAGE PROCESSORS WITH CERTIFICATES

### 2.7.1 COBOL PROCESSORS

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## 2.7.2 FORTRAN PROCESSORS

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NOTE: Though some of the Suppliers may name the compilers Fortran 90, no testing has been done and no certificates have been issued for Fortran 90. All testing and the certificates are for FIPS 69-1, Fortran (77) only.
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<td>Guardian Version D20</td>
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<td>UNISYS</td>
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<td>2200 OS EXEC Version 44R3 Release SB5R3</td>
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</table>
2.7.3 Ada PROCESSORS

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST) NOTICE:

In approximately six (6) months, the National Institute of Standards and Technology (NIST) is considering the deletion of those Ada validation registrations including both Witness Tested Registrations and vendor asserted registrations which do not satisfy the NIST validation registration requirements as specified in FIPS PUB 119-1.

The list of Ada compilers that have been validated by the Ada Joint Program Office (AJPO) is presented here. An electronic copy of the Ada part of the VPL is available on the AdaIC Bulletin Board as file VALPROC.HLP. Access to the menu-driven bulletin board requires a computer terminal or personal computer and modem. Users should set their telecommunications package with the following parameters: Baud rate = 300 - 9600 baud; Data Bits = 8; Parity = none; Stop Bits = 1. Then dial 703/614-0215 (Commercial) or 224-0215 (Autovon). First-time users will be prompted to register for an account.

Most files have been compressed using PKZIP and must be uncompressed after downloading. PKZIP is available on the bulletin board and can be obtained by downloading the file PKZ101.EXE. Macintosh Plus users can download the file UNZIP101.SIT.

Copies may also be obtained by purchase from the Defense Technical Information Center (DTIC) and the National Technical Information Service (NTIS) with accession number AD A257 705. NTIS sells documents to the public. DTIC distributes documents only to Military, government, or defense contractors who are registered with them.

National Technical Information Service (NTIS)
U.S. Department of Commerce
5285 Port Royal Road
Springfield, VA 22161
703/487-4650

Defense Technical Information Center (DTIC)
Cameron Station
Alexandria, VA 22314
703/274-7633
AV 284-7633

The NIST Ada Validation Summary Reports are available electronically in ASCII format and may be accessed on the Internet using the following instructions:

Type: ftp speckle.ncsl.nist.gov (Internet address is 129.6.59.2)
Login as user: ftp
Type your email address preceded by a dash (-) as the password
Type: cd ada-testing/VSRs
Type: ascii
Type: get and the name of the file you want

Always obtain the latest README.TXT file.
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* Compiler Vendor: Alliant Computer Systems Corporation
  Address: (now GS Computer) (see GS Computer for POC information)
  City:
  State:
  Zip Code:
  Contact Name:
  Phone:
  E-mail:

* Compiler Vendor: Alsys
  Composer Type: Base
  Validation Certificate #: 00050611.11009
  Compiler Name: AlsysCOMP_003, Version 1.82
  Host: VAX 8530 (under VMS, Version 5.1)
  Target: Same as Host

* Compiler Vendor: Alsys
  Composer Type: Base
  Validation Certificate #: 00081411.11013
  Compiler Name: AlsysCOMP_042, Version 5.3
  Host: IBM 9370 Model 90 (under AIX/370 Version 1.2)
  Target: Same as Host

* Compiler Vendor: Alsys
  Composer Type: Base
  Validation Certificate #: 00081411.11040
  Compiler Name: AlsysCOMP_025, Version 1.82
  Host: Sun-3/60 (under SunOS, Version 4.0.3)
  Target: Same as Host

* Compiler Vendor: Alsys
  Composer Type: Base
  Validation Certificate #: 00081411.11041
  Compiler Name: AlsysCOMP_025, Version 1.83
  Host: MIPS M/120-5 (under RISC/os, Version 4.0)
  Target: Same as Host

* Compiler Vendor: Alsys
  Composer Type: Base
  Validation Certificate #: 001022A1.11043
  Compiler Name: AlsysCOMP_046, Version 5.3
  Host: Sony NEWS NWS-1850 (under NEWS-OS 3.3)
  Target: Same as Host

* Compiler Vendor: Alsys
  Composer Type: Derived
  Validation Certificate #: 001022A1.11043 (BASE)
  Compiler Name: AlsysCOMP_046, Version 5.3
  Host: Sony NEWS series 1250, 15xx, 17xx, 18xx & 19xx (under NEWS-OS versions 3.3 & 3.4)
  Target: Any Host

Compiiler Vendor: Ateal Defense Systems, Inc.
Address: Via Tiburtina km. 12,4
City: 00121 Rome
State:
Zip Code: ITALY
Contact Name: Nicola Botta
Phone: +39 6 41972520
E-mail: (No address given)

* Compiler Vendor: Ateal Defense Systems, Inc.
  Composer Type: Base
  Validation Certificate #: 911012W1.11224
  Compiler Name: AI-ADA/49K, Version 3.0
  Host: VAXstation 3100 Cluster (under VMS 5.3)
  Target: DSP9002 ADS board (bare machine)

* Compiler Vendor: Ateal Defense Systems, Inc.
  Composer Type: Base
  Validation Certificate #: 911012W1.11225
  Compiler Name: AI-ADA/49K, Version 3.0
  Host: Sun-4/330 (under SunOS 4.1.1)
  Target: DSP9002 ADS board (bare machine)

* Compiler Vendor: Ateal Defense Systems, Inc.
  Composer Type: Derived
  Validation Certificate #: 000630W1.11030 (BASE)
  Compiler Name: AI-ADA/88K, Version 2.4
  Host: All DEC MicroVAX, VAXstation, VAXserver, VAX-11, VAX 8800 & VAX 6800 series (under VMS versions 5.0, 5.1, 5.2 & 5.3, as supported)
  Target: Tadpole TP880V (88100-based VME board) & Motorola MVME181 (68100-based VME board) (bare machines)

* Compiler Vendor: Ateal Defense Systems, Inc.
  Composer Type: Derived
  Validation Certificate #: 000630W1.11030
  Compiler Name: AI-ADA/88K, Version 2.4
  Host: All DEC MicroVAX, VAXstation, VAXserver, VAX-11, VAX 8800 & VAX 6800 series (under VMS versions 5.0, 5.1, 5.2 & 5.3, as supported)
  Target: Tadpole TP880V (88100-based VME board) & Motorola MVME181 (68100-based VME board) (bare machines)

* Compiler Vendor: Ateal Defense Systems, Inc.
  Composer Type: Derived
  Validation Certificate #: 000630W1.11030
  Compiler Name: AI-ADA/88K, Version 2.4
  Host: All DEC MicroVAX, VAXstation, VAXserver, VAX-11, VAX 8800 & VAX 6800 series (under VMS versions 5.0, 5.1, 5.2 & 5.3, as supported)
  Target: Tadpole TP880V (88100-based VME board) & Motorola MVME181 (68100-based VME board) (bare machines)

* Compiler Vendor: Ateal Defense Systems, Inc.
  Composer Type: Derived
  Validation Certificate #: 000630W1.11030
  Compiler Name: AI-ADA/88K, Version 2.4
  Host: All DEC MicroVAX, VAXstation, VAXserver, VAX-11, VAX 8800 & VAX 6800 series (under VMS versions 5.0, 5.1, 5.2 & 5.3, as supported)
  Target: Tadpole TP880V (88100-based VME board) & Motorola MVME181 (68100-based VME board) (bare machines)
Ada PROCESSORS, Continued

* Compiler Vendor: Alsys
  Compiler Type: Base
Validation Certificate #: 901022A1.11044
Compiler Name: AlsyCOMP_004, Version 5.3
Host: Apollo DN4000 (under Domain/OS SR10.2)
Target: Same as Host

* Compiler Vendor: Alsys
  Compiler Type: Derived
Validation Certificate #: 901022A1.11044 (BASE)
Compiler Name: AlsyCOMP_004, Version 5.3
Host: Apollo DN3500, DN3500, DN4000 & DN4500 (under Domain/OS SR10.2 & SR10.3)
Target: Any Host

* Compiler Vendor: Alsys
  Compiler Type: Derived
Validation Certificate #: 901022A1.11045
Compiler Name: AlsyCOMP_004, Version 5.5.1
Host: Bull DPX/2 320 (under B.O.S. 02.00.05)
Target: Any Host

* Compiler Vendor: Alsys
  Compiler Type: Base
Validation Certificate #: 901022A1.11046
Compiler Name: AlsyCOMP_002, Version 5.3
Host: HP 9000s350 (under HP-UX 6.5)
Target: Same as Host

* Compiler Vendor: Alsys
  Compiler Type: Derived
Validation Certificate #: 901022A1.11046 (BASE)
Compiler Name: AlsyCOMP_002, Version 5.3
Host: HP 9000 Series 300, all mod (under HP-UX 6.5 & 7.0)
Target: Any Host

* Compiler Vendor: Alsys
  Compiler Type: Derived
Validation Certificate #: 901022A1.11046 (BASE)
Compiler Name: AlsyCOMP_002, Version 5.5.1
Host: HP 9000 Series 300 & 400 (all models) (under HP-UX 8.0)
Target: Any Host

* Compiler Vendor: Alsys
  Compiler Type: Base
Validation Certificate #: 901022A1.11047
Compiler Name: AlsyCOMP_005, Version 5.3
Host: Sun-3/260 (under SunOS 3.2)
Target: Same as Host

* Compiler Vendor: Alsys
  Compiler Type: Derived
Validation Certificate #: 901022A1.11047 (BASE)
Compiler Name: AlsyCOMP_005, Version 5.3
Host: Sun 3/50, 80, /75, /80, /260, /280, /470 & /480 (under SunOS 3.2, 3.5, 4.0 & 4.1)
Target: Any Host

* Compiler Vendor: Alsys
  Compiler Type: Derived
Validation Certificate #: 901022A1.11048
Compiler Name: AlsyCOMP_035, Version 5.3
Host: CETIA Unigraph 8000 (under Unigraph/X 3.1)
Target: Same as Host

* Compiler Vendor: Alsys
  Compiler Type: Derived
Validation Certificate #: 901022A1.11048 (BASE)
Compiler Name: AlsyCOMP_035, Version 5.3
Target: Any Host

* Compiler Vendor: Alsys
  Compiler Type: Derived
Validation Certificate #: 901022A1.11048 (BASE)
Compiler Name: AlsyCOMP_035, Version 5.5.1
Host: CETIA Unigraph models 1000/325; 2000/50, /250, /325; 3000/325-333; 6000/325-333; 7000/325/8000/325; & 9000 (under Unigraph/X 3.2c.1)
Target: Any Host

* Compiler Vendor: Alsys
  Compiler Type: Base
Validation Certificate #: 901102W1.11055
Compiler Name: AlsyCOMP_016, Version 5.1
Host: Compaq Deskpro 386 (under MS-DOS 3.30, Phar Lap 2.0)
Target: Same as Host

* Compiler Vendor: Alsys
  Compiler Type: Derived
Validation Certificate #: 901102W1.11055 (BASE)
Compiler Name: AlsyCOMP_016, Version 5.1.1
Host: Any Computer System that executes the Intel 80386 or 80486 instruction set (under MS/DOS 5.0 & Phar Lap 4.0)
Target: Any Host
<table>
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<td>Alsys</td>
<td>Derived</td>
<td>901102W1.11055 (BASE)</td>
<td>AlsyCOMP_085, Version 5.1</td>
<td>Any computer that executes the Intel 80386, 80486, or Pentium instruction set (under MS-DOS 6.2 and PharLap TNT 6.1, with MS-Windows 3.1)</td>
<td>Any Host machine (under MS-DOS 3.3 or higher and PharLap TNT 6.1)</td>
</tr>
<tr>
<td>Alsys</td>
<td>Derived</td>
<td>901102W1.11056 (BASE)</td>
<td>AlsyCOMP_016, Version 5.1</td>
<td>HP Vectra RS/20, RS/20C, RS/25 &amp; RS/25C; AST Premium 386; and Unisys 386 &amp; Desktop III (under MS-DOS 3.30, Phar Lap 2.0)</td>
<td>Any Host</td>
</tr>
<tr>
<td>Alsys</td>
<td>Derived</td>
<td>901102W1.11056 (BASE)</td>
<td>AlsyCOMP_016, Version 5.1</td>
<td>Any Computer System Comprising: cpu: Intel 80386; fpu: optional; memory: 5 MByte RAM; disk: 10 MByte (under MS-DOS 3.30, Phar Lap 2.0)</td>
<td>Same as Host</td>
</tr>
<tr>
<td>Alsys</td>
<td>Base</td>
<td>901102W1.11057</td>
<td>AlsyCOMP_018, Version 5.1</td>
<td>ALR Power Veisa 486 (under MS-DOS 3.30, Phar Lap 2.0)</td>
<td>Same as Host</td>
</tr>
<tr>
<td>Alsys</td>
<td>Base</td>
<td>901102W1.11058</td>
<td>AlsyCOMP_003, Version 5.1</td>
<td>HP Vectra RS/25C (under MS-DOS 3.30)</td>
<td>Same as Host</td>
</tr>
<tr>
<td>Alsys</td>
<td>Derived</td>
<td>901102W1.11058</td>
<td>AlsyCOMP_003, Version 5.1</td>
<td>Any Computer System that executes the Intel 80286, 80386, or 80486 instruction set (under MS/DOS 5.0)</td>
<td>Any Host</td>
</tr>
<tr>
<td>Alsys</td>
<td>Derived</td>
<td>901102W1.11058</td>
<td>AlsyCOMP_003, Version 5.1</td>
<td>Unisys Desktop III (under MS-DOS 3.30)</td>
<td>Same as Host</td>
</tr>
<tr>
<td>Alsys</td>
<td>Base</td>
<td>901102W1.11059</td>
<td>AlsyCOMP_003, Version 5.1</td>
<td>Zenith Z-248 Model 50 (under MS-DOS 3.30)</td>
<td>Same as Host</td>
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<tr>
<td>Alsys</td>
<td>Derived</td>
<td>901102W1.11059</td>
<td>AlsyCOMP_003, Version 5.1</td>
<td>HP Vectra ES/12; and IBM PC/AT (all models) (under MS-DOS 3.30)</td>
<td>Any Host</td>
</tr>
<tr>
<td>Alsys</td>
<td>Derived</td>
<td>901114N1.11065</td>
<td>AlsyCOMP_037, Version 5.2</td>
<td>INMOS T800 transputer on a B405 TRAM (bare) with an INMOS B008 Communications link implemented in an IBM PC/AT (under MS-DOS 3.1 and INMOS Iserver V1.3)</td>
<td>INMOS T800 transputer on a B405 TRAM (bare) using an IBM PC/AT under MS-DOS 3.1 running INMOS Iserver 1.3 for file-server support via an INMOS B008 board link</td>
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<tr>
<td>Alsys</td>
<td>Derived</td>
<td>901114N1.11065</td>
<td>AlsyCOMP_037, Version 5.3</td>
<td>INMOS T800 transputer on a B403 TRAM (bare) with an INMOS B008 Communications link implemented in an IBM PC/AT (under MS-DOS 3.1 and INMOS Iserver V1.3)</td>
<td>INMOS T800 transputer on a B403 TRAM (bare) using an IBM PC/AT under MS-DOS 3.1 running INMOS Iserver 1.3 for file-server support via an INMOS B008 board link; INMOS T425 transputer on a B403 TRAM (bare) using an IBM PC/AT under MS-DOS 3.1 running INMOS Iserver 1.3 for file-server support via an INMOS B008 board link</td>
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<td>901114N1.11065</td>
<td>AlsyCOMP_037, Version 5.4.2</td>
<td>INMOS T800 transputer on a B405 TRAM board (bare), with an INMOS B008 Communications link implemented in an IBM PC/AT (under MS-DOS 3.1 and INMOS Iserver V1.42h)</td>
<td>INMOS T800 transputer on a B405 TRAM (bare) using an IBM PC/AT under MS-DOS 3.1 running INMOS Iserver V1.42h for file-server support via an INMOS B008 board link; INMOS T425 transputer on a B403 TRAM (bare) using an IBM PC/AT under MS-DOS 3.1 running INMOS Iserver V1.42h for file-server support via an INMOS B008 board link</td>
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Ada PROCESSORS, Continued

* Compiler Vendor: Alsys
  Compiler Type: Derived
  Validation Certificate #: 001116A1.11086 (BASE)
  Compiler Name: AlsyCOMP_012, Version 5.3
  Host: HP 9000 Series 300 (all models) (under HP-UX 6.5 & 7.0)
  Target: Motorola MVME101, MVME121, MVME131, MVME133XT, MVME135, MVME135XT, MVME137, MVME147, & MVME167 (68000, 68010, 68020, 68030, & 68040-based single-board computers) (bare machines, using ARTK Version 5.3)

* Compiler Vendor: Alsys
  Compiler Type: Derived
  Validation Certificate #: 001116A1.11086 (BASE)
  Compiler Name: AlsyCOMP_012, Version 5.3
  Host: HP 9000 Series 300, Models 340, 345, 360, 370 & 375 (under HP-UX 6.5 & 7.0)
  Target: Motorola MVME101, MVME121, MVME131, MVME133XT, MVME135, MVME135XT, MVME137, & MVME167 (68000, 68010, 68020, 68030, & 68040 cpu.s) (bare machines, using ARTK Version 5.3)

* Compiler Vendor: Alsys
  Compiler Type: Derived
  Validation Certificate #: 001116A1.11086 (BASE)
  Compiler Name: AlsyCOMP_012, Version 5.3
  Host: HP 9000 Series 400 (all models) (under HP-UX 8.0)
  Target: Motorola MVME101, MVME121, MVME131, MVME133XT, MVME135, MVME135XT, MVME137, & MVME167 (68000, 68010, 68020, 68030, & 68040 cpu.s) (bare machines, using ARTK Version 5.3)

* Compiler Vendor: Alsys
  Compiler Type: Derived
  Validation Certificate #: 001116A1.11086 (BASE)
  Compiler Name: AlsyCOMP_012, Version 5.3
  Host: Sun SPARCstation & SPARCserver computer families; SPARCcenter 2000 (under Solaris 2.3); Solborne Series 5/100, 5/300, 600, 870, 870, 870, 870, 870, & 8400 (under OS/400.1A.1)
  Target: Motorola MVME101, MVME121, MVME131, MVME133XT, MVME135, MVME135XT, MVME137, & MVME167 (68000, 68010, 68020, 68030, & 68040 cpu.s) (bare machines, using ARTK Version 5.3)

* Compiler Vendor: Alsys
  Compiler Type: Derived
  Validation Certificate #: 001116A1.11086 (BASE)
  Compiler Name: AlsyCOMP_012, Version 5.3
  Host: Sun Microsystems Sun-4, SPARCstation, & SPARCserver series of computers; SPARCcenter 2000 (under SunOS 4.1.2); Solborne Series 5/100, 5/300, 600, 870, 870, 870, 870, 870, & 8400 (under OS/400.1A.1)
  Target: Motorola MVME101, MVME121, MVME131, MVME133XT, MVME135, MVME135XT, MVME137, & MVME167 (68000, 68010, 68020, 68030, & 68040 cpu.s) (bare machines, using ARTK Version 5.3)

* Compiler Vendor: Alsys
  Compiler Type: Derived
  Validation Certificate #: 001116A1.11086 (BASE)
  Compiler Name: AlsyCOMP_012, Version 5.3
  Host: Sun Microsystems Sun-4, SPARCstation, & SPARCserver series of computers; SPARCcenter 2000 (under SunOS 4.1.2)
  Target: Motorola MVME101, MVME121, MVME131, MVME133XT, MVME135, MVME135XT, MVME137, & MVME167 (68000, 68010, 68020, 68030, & 68040 cpu.s) (bare machines, using ARTK Version 5.3)
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<td>Alsys</td>
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<td>901118A1.11067 (BASE)</td>
<td>AlsysCOMP_030, Version 5.5.1</td>
<td>HP 9000 Series 400 (all models) (under DomainOS SR 10.4)</td>
<td>Motorola MMVE101, MMVE121, MMVE131, MMVE133 MMVE133XT, MMVE135, MMX32EVS, MMVE147, &amp; MMVE167 (68000, 68010, 68020, 68030, &amp; 68040 cpu.s) (bare machines, using ARTK 5.5.1)</td>
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<td>901118A1.11066 (BASE)</td>
<td>AlsysCOMP_015, Version 5.3</td>
<td>Sun 3/260 (under SunOS 3.2)</td>
<td>Motorola MMVE121 (68010) (bare machine, using ARTK Version 5.3)</td>
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<td>Alsys</td>
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<td>901118A1.11065 (BASE)</td>
<td>AlsysCOMP_006, Version 5.5.1</td>
<td>MicroVAX II (under VMS V5.3)</td>
<td>INMOS T425 transputer on a B403 TRAM (bare) using the Host running INMOS Iserver 1.421 for file-server support via a CAPLIN QTO board link; INMOS T800 transputer on a B405 TRAM (bare) using the Host running INMOS Iserver 1.421 for file-server support via a CAPLIN QTO board link</td>
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<td>901120A1.11070 (BASE)</td>
<td>AlsysCOMP_018, Version 5.2</td>
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<td>Alsys</td>
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<td>AlsysCOMP_006, Version 5.5.1</td>
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<td>Alsys</td>
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<td>AlsysCOMP_020, Version 5.3</td>
<td>IBM 370 30840 (under MVS/XA release 3.2)</td>
<td>Same as Host</td>
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<td>Alsys</td>
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<td>901127A1.11089</td>
<td>AlsysCOMP_011, Version 5.3</td>
<td>VAX 6210 (under VMS 5.2)</td>
<td>Motorola MMVE125-1 (68020/68881) (bare machine, using ARTK Version 5.3)</td>
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**Ada PROCESSORS, Continued**

- **Compiler Vendor:** Alsys
  - **Compiler Type:** Derived
  - **Validation Certificate #:** 901127A1.11069 (BASE)
  - **Compiler Name:** AlsyCOMP_011, Version 5.3
  - **Host:** DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 4000, VAX 6000, VAX 6000 & VAX 9000 Series of computers (as supported) (under VMS 5.2, 5.3 & 5.4)
  - **Target:** Motorola MVME101 (68000), MVME121 (68010), MVME135-1 (68020/68881) & MVME147-1 (68030/68882) (bare machines, using ARTK 5.3)

- **Compiler Vendor:** Alsys
  - **Compiler Type:** Derived
  - **Validation Certificate #:** 901127A1.11069 (BASE)
  - **Compiler Name:** AlsyCOMP_011, Version 5.3.1
  - **Host:** DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 4000, VAX 6000, VAX 6000 & VAX 9000 series of computers (under VMS 5.2, 5.3, & 5.4, as supported)
  - **Target:** Motorola MVME101 (68000), MVME121 (68010), MVME133XT & MVME135-1 (68020), & MVME147-1 (68030) (bare machines, using ARTK 5.3.1)

- **Compiler Vendor:** Alsys
  - **Compiler Type:** Derived
  - **Validation Certificate #:** 901127A1.11069 (BASE)
  - **Compiler Name:** AlsyCOMP_011, Version 5.5.1
  - **Host:** DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 4000, VAX 6000, VAX 6000 & VAX 9000 computer series (under VMS 5.4)
  - **Target:** Motorola MVME 131, MVME133, MVME133XT, MVME135, & MVME147 (68020 & 68030 cpu's) (bare machines, using VRTX32); Motorola MVME101, MVME121, MVME131, MVME133, MVME133XT, MVME135, M68332EV5, MVME147, & MVME167 (68000, 68010, 68020, 68030, & 68040 cpu's) (bare machines, using ARTK 5.5.1)

- **Compiler Vendor:** Alsys
  - **Compiler Type:** Derived
  - **Validation Certificate #:** 901127A1.11069 (BASE)
  - **Compiler Name:** AlsyCOMP_028, Version 5.3
  - **Host:** Compaq Deskpro 386/20 (under DOS 3.31 & 5.0)
  - **Target:** Motorola MVME101, MVME121, MVME131, MVME133, MVME133XT, MVME135-1, M68332EV5, MVME147-1, & MVME167 (68000, 68010, 68020, & 68030 cpu's) (bare machines, using ARTK 5.3)

- **Compiler Vendor:** Alsys
  - **Compiler Type:** Derived
  - **Validation Certificate #:** 901125W1.11090 (BASE)
  - **Compiler Name:** TeleGen2 Ada Host Development System for SPARCsystems, Version 2a
  - **Host:** Sun/4-690 (under SunOS release 5.3)
  - **Target:** Same as Host

- **Compiler Vendor:** Alsys
  - **Compiler Type:** Derived
  - **Validation Certificate #:** 901122W1.11103 (BASE)
  - **Compiler Name:** AlsyCOMP_034, Version 5.1
  - **Host:** Multitech 1100 (under SCO Unix 3.2)
  - **Target:** Same as Host

- **Compiler Vendor:** Alsys
  - **Compiler Type:** Derived
  - **Validation Certificate #:** 901122W1.11103 (BASE)
  - **Compiler Name:** AlsyCOMP_034, Version 5.1
  - **Host:** Any Computer System that executes the Intel 80386 or 80486 instruction set (under SCO Open Desktop 1.1 & SCO Unix 3.2, SCO Open Desktop 2.0 & SCO Unix 3.2.4, Interactive Unix 3.2.2, and AT&T Unix System V Release 4.0)
  - **Target:** Any Host (same OS as Host)
Ada PROCESSORS, Continued

* Compiler Vendor: *Alsys*
Compiler Type: Base
Validation Certificate #: 901221W1.11104
Compiler Name: AlsyCOMP_043, Version 5.3
Host: Apple Macintosh IIfx (under Macintosh System Software 6.0.5)
Target: Same as Host

* Compiler Vendor: *Alsys*
Compiler Type: Base
Validation Certificate #: 910129W1.11113
Compiler Name: AlsyCOMP_034, Version 5.1
Host: IBM PS/2 Model 80 (under LynxOS Version 2.0 + Threads Release 11)
Target: Same as Host

* Compiler Vendor: *Alsys*
Compiler Type: Derived
Validation Certificate #: 910129W1.11113 (BASE)
Compiler Name: AlsyCOMP_034, Version 5.5.6
Host: IBM PS/2 Model 80 series (under LynxOS v2.2)
Target: Same as Host

* Compiler Vendor: *Alsys*
Compiler Type: Derived
Validation Certificate #: 910129W1.11113 (BASE)
Compiler Name: AlsyCOMP_070, Version 5.5.3
Host: Any computer system that executes the Intel 80386 or 80486 instruction set (under LynxOS, Version 2.1)
Target: Same as Host

* Compiler Vendor: *Alsys*
Compiler Type: Base
Validation Certificate #: 9101311.11127
Compiler Name: AlsyCOMP_056, Version 1.82
Host: Sun 3/30 (under SunOS, Version 4.0.3)
Target: KWS EB668020 (under OS-9/68020, Version 2.3)

* Compiler Vendor: *Alsys*
Compiler Type: Base
Validation Certificate #: 910201W1.11128
Compiler Name: AlsyCOMP_055, Version 1.82
Host: VAX 8530 (under VMS, Version 5.3-1)
Target: KWS EB668020 (under OS-9/68020, Version 2.3)

* Compiler Vendor: *Alsys*
Compiler Type: Base
Validation Certificate #: 910323W1.11131
Compiler Name: AlsyCOMP_029, Version 5.3
Host: CompuAdd 325 (under DOS 3.31)
Target: Intel ISBC 386/116 (bare machine, using ARTK 5.3)

* Compiler Vendor: *Alsys*
Compiler Type: Derived
Validation Certificate #: 910323W1.11131 (BASE)
Compiler Name: AlsyCOMP_029, Version 5.3.1
Host: Any Computer System that executes the Intel 80386 or 80486 instruction set (under MS-DOS version 5.0 & PharLap version 4.0)
Target: Any 80486 single board computer (bare machine, using ARTK 5.3)

* Compiler Vendor: *Alsys*
Compiler Type: Base
Validation Certificate #: 910323W1.11132
Compiler Name: AlsyCOMP_030, Version 5.3
Host: MicroVAX II (under VMS 5.2)
Target: Intel ISBC 386/51 (bare machine, using ARTK 5.3)

* Compiler Vendor: *Alsys*
Compiler Type: Derived
Validation Certificate #: 910323W1.11132 (BASE)
Compiler Name: AlsyCOMP_030, Version 5.3.1
Host: Any computer system that executes the Intel 80386 or 80486 instruction set (under MS-DOS version 5.0 or higher and PharLap version 4.0)
Target: Any Intel486 DX2 single board computer (bare machine, using ARTK 5.3)

* Compiler Vendor: *Alsys*
Compiler Type: Derived
Validation Certificate #: 910323W1.11132 (BASE)
Compiler Name: AlsyCOMP_030, Version 5.3.1
Host: MicroVAX II (under VMS 5.2)
Target: Any 80386 single board computer (bare machine, using ARTK 5.3)

* Compiler Vendor: *Alsys*
Compiler Type: Derived
Validation Certificate #: 910323W1.11132 (BASE)
Compiler Name: AlsyCOMP_050, Version 5.3.1
Host: MicroVAX II (under VMS 5.2)
Target: Any Intel486 DX2 single board computer (bare machine, using ARTK 5.3)

* Compiler Vendor: *Alsys*
Compiler Type: Derived
Validation Certificate #: 910323W1.11132 (BASE)
Compiler Name: AlsyCOMP_052, Version 5.3.1
Host: Sun Microsystems Sun-4, SPARCstation, & SPARCserver computer families (under SunOS 4.1)
Target: Any Intel486 DX2 single board computer (bare machine, using ARTK 5.3)

* Compiler Vendor: *Alsys*
Compiler Type: Derived
Validation Certificate #: 910323W1.11133
Compiler Name: AlsyCOMP_003, Version 5.3
Host: Sun 3/140 (under SunOS 4.1)
Target: Intel ISBC 386/12 (bare machine, using ARTK 5.3)

* Compiler Vendor: *Alsys*
Compiler Type: Derived
Validation Certificate #: 910323W1.11133 (BASE)
Compiler Name: AlsyCOMP_052, Version 5.3.1
Host: Sun Microsystems Sun-4, SPARCstation, & SPARCserver computer families (under SunOS 4.1)
Target: Intel ISBC 386/31, ISBC 386/1xx, ISBC 486/1xx (bare machines, using ARTK 5.3)
### Ada PROCESSORS, Continued

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<tr>
<th>Compiler Vendor</th>
<th>Compiler Type</th>
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<th>Compiler Name</th>
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<td>* Alsys</td>
<td>Derived</td>
<td>910323W1.11133 (BASE)</td>
<td>AlysCOMP_084, Version 5.5.1</td>
<td>Sun Microsystems Sun-4, SPARCstation, &amp; SPARCServer computer families (under Solaris 2.1)</td>
<td>Intel iSBC 360/31, ISBC 360/1xx, ISBC 460/1xx (bare machine, using ARTK 5.3)</td>
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<td>Alsys</td>
<td>Base</td>
<td>91040711.11144 (BASE)</td>
<td>AlysCOMP_049, Version 1.83</td>
<td>DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 4000, VAX 6000, VAX 8000, &amp; VAX 9000 series of computers (under VMS 5.3 &amp; 5.4)</td>
<td>Lockheed Sanders STAR MVP (R3000/R3010) (bare machine)</td>
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<td>91002811.11193 (BASE)</td>
<td>AlysCOMP_057, Version 1.83</td>
<td>DECstation 3100 (under ULTRIX Version 4.0)</td>
<td>same as Host</td>
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<td>Alsys</td>
<td>Derived</td>
<td>91072111.11194 (BASE)</td>
<td>TeleGen2 Ada Host Development System for Maciell Systems, Version 4.1</td>
<td>Macintosh iix &amp; iixx (under AIX 3.0 Secure)</td>
<td>same as Host</td>
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<td>Alsys</td>
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<td>910806W1.11195</td>
<td>AlysCOMP_024, Version 5.3</td>
<td>IBM RISC System 6000, model 520 (under AIX v3.1)</td>
<td>same as Host</td>
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<td>910809W1.11195 (BASE)</td>
<td>AlysCOMP_024, Version 5.4</td>
<td>IBM RISC System 6000 (all models) (under AIX 3.2)</td>
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<td>910809W1.11195 (BASE)</td>
<td>AlysCOMP_058, Version 5.3</td>
<td>Unisys B39 (under BTOS II, v3.2.0)</td>
<td>same as Host</td>
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<td>* Alsys</td>
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<td>91010161.11233</td>
<td>AlysCOMP_065, Version 5.3</td>
<td>HP Vectra RS/25C (under DOS 3.30)</td>
<td>Unisys B39 (under BTOS II, v3.2.0)</td>
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<td>* Alsys</td>
<td>Base</td>
<td>911107W1.11227</td>
<td>AlysCOMP_062, Version 5.35</td>
<td>HP 9000 Series 700 Model 720 (under HP-UX, Version A.B.8.05 (release 8.05))</td>
<td>same as Host</td>
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<td>* Alsys</td>
<td>Derived</td>
<td>911107W1.11227 (BASE)</td>
<td>AlysCOMP_062, Version 5.35</td>
<td>HP 9000 Series 700, all models (under HP-UX, Version A.B.8.05 (release 8.05)); HP 9000 Series 800, all models (under HP-UX, Version A.B.8.00 (release 8.00))</td>
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<td>HP 9000 Series 700, all mods (under HP-UX, V 9.01); HP 9000 Series 800, all mods (under HP-UX, V 9.0)</td>
<td>HP 9000 Series 700, all mods (under HP-UX, V 9.01); HP 9000 Series 800, all mods (under HP-UX, V 9.0)</td>
<td>Solbourne Series 5/500, /530, /600, /670, /800 &amp; SE/900, and S4000 (under OS/MP 4.1)</td>
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<td>Target</td>
<td>HP 9000 Series 700, all models (under HP-UX, V 9.0)</td>
<td>HP 9000 Series 700, all models (under HP-UX, V 9.0)</td>
<td>HP 9000 Series 700, all models (under HP-UX, V 9.0)</td>
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- **Ada PROCESSORS, Continued**

  * Compiler Vendor: Alsys
  * Compiler Type: Derived
  * Validation Certificate #: 011107W1.11228 (BASE)
  * Compiler Name: AlsyCOMP_062, Version 5.5.2
  * Host: HP 9000 Series 700, all mods (under HP-UX, V 9.01); HP 9000 Series 800, all mods (under HP-UX, V 9.0)
  * Target: HP 9000 Series 800, all models (under HP-UX, V 9.0)

  * Compiler Vendor: Alsys
  * Compiler Type: Derived
  * Validation Certificate #: 011107W1.11228 (BASE)
  * Compiler Name: AlsyCOMP_062, Version 5.5.2
  * Host: HP 9000 Series 700, all mods (under HP-UX, V 9.01); HP 9000 Series 800, all mods (under HP-UX, V 9.0)
  * Target: HP 9000 Series 800, all models (under HP-UX, V 9.0)

  * Compiler Vendor: Alsys
  * Compiler Type: Derived
  * Validation Certificate #: 011107W1.11228 (BASE)
  * Compiler Name: AlsyCOMP_062, Version 5.5.2
  * Host: HP 9000 Series 700, all mods (under HP-UX, V 9.01); HP 9000 Series 800, all mods (under HP-UX, V 9.0)
  * Target: HP 9000 Series 800, all models (under HP-UX, V 9.0)

  * Compiler Vendor: Alsys
  * Compiler Type: Derived
  * Validation Certificate #: 011107W1.11228 (BASE)
  * Compiler Name: AlsyCOMP_062, Version 5.5.2
  * Host: HP 9000 Series 700, all mods (under HP-UX, V 9.01); HP 9000 Series 800, all mods (under HP-UX, V 9.0)
  * Target: HP 9000 Series 800, all models (under HP-UX, V 9.0)

  * Compiler Vendor: Alsys
  * Compiler Type: Derived
  * Validation Certificate #: 011107W1.11228 (BASE)
  * Compiler Name: AlsyCOMP_062, Version 5.5.2
  * Host: HP 9000 Series 700, all mods (under HP-UX, V 9.01); HP 9000 Series 800, all mods (under HP-UX, V 9.0)
  * Target: HP 9000 Series 800, all models (under HP-UX, V 9.0)

  * Compiler Vendor: Alsys
  * Compiler Type: Derived
  * Validation Certificate #: 011107W1.11228 (BASE)
  * Compiler Name: AlsyCOMP_062, Version 5.5.2
  * Host: HP 9000 Series 700, all mods (under HP-UX, V 9.01); HP 9000 Series 800, all mods (under HP-UX, V 9.0)
  * Target: HP 9000 Series 800, all models (under HP-UX, V 9.0)
**Ada PROCESSORS, Continued**

* **Compiler Vendor:** Alsys
  **Compiler Type:** Derived
  **Validation Certificate #:** 911119A1.11231 (BASE)
  **Compiler Name:** AlsyCOMP_072, Version 5.5.1
  **Host:** Solbourne Series 6/500, /530, /600, /870, /880, & 5E/900; & S4000 (under OS/MP 4.1)
  **Target:** Any Host

* **Compiler Vendor:** Alsys
  **Compiler Type:** Derived
  **Validation Certificate #:** 911119A1.11231 (BASE)
  **Compiler Name:** AlsyCOMP_072, Version 5.5.1
  **Host:** Sun Microsystems Sun-4, SPARCstation, & SPARCE server computer series (all models) (under Solaris 2.1)
  **Target:** Any Host

* **Compiler Vendor:** Alsys
  **Compiler Type:** Derived
  **Validation Certificate #:** 911119A1.11231 (BASE)
  **Compiler Name:** AlsyCOMP_066, Version 6.1
  **Host:** Sun Microsystems Sun-4, SPARCstation & SPARCE server series of computers (under SunOS 5.3 (Solaris 2.3))
  **Target:** Any Host

* **Compiler Vendor:** Alsys
  **Compiler Type:** Base
  **Validation Certificate #:** 92030611.11248
  **Compiler Name:** NATO SWG on APSE Compiler for VAX/VMS to VCM-2
  **Host:** VAX 8630 (under VMS Version 5.4-1, with CAIS Ver 5.5E)
  **Target:** Motorola MVM133XT (MC68020) (bare machine)

* **Compiler Vendor:** Alsys
  **Compiler Type:** Base
  **Validation Certificate #:** 92030611.11251
  **Compiler Name:** AlsyCOMP_061, Version 1.83
  **Host:** DECstation 3100 (under ULTRIX Version 4.2)
  **Target:** Lockheed Sanders STAR MVP board (R3000/R3010) (bare machine)

* **Compiler Vendor:** Alsys
  **Compiler Type:** Derived
  **Validation Certificate #:** 92042911.11251 (BASE)
  **Compiler Name:** AlsyCOMP_061, Version 1.84
  **Host:** DEC DECstation & DECsystem computer families (under ULTRIX 4.2)
  **Target:** Lockheed Sanders STAR MVP board (R3000/R3010) (bare machine)

* **Compiler Vendor:** Alsys
  **Compiler Type:** Base
  **Validation Certificate #:** 92027811.11261
  **Compiler Name:** NATO SWG on APSE Compiler for Sun/SunOS to MC68020, Version S3CM1.82
  **Host:** Sun-3/80 (under SunOS Version 4.0.3, with CAIS Ver 5.5E)
  **Target:** Motorola MVME133XT (MC68020) (bare machine)

* **Compiler Vendor:** Alsys
  **Compiler Type:** Derived
  **Validation Certificate #:** 92073011.11262
  **Compiler Name:** AlsyCOMP_069, Version 1.83
  **Host:** Control Data 4436 (under TC/IX 1.0.2)
  **Target:** Same as Host

* **Compiler Vendor:** Alsys
  **Compiler Type:** Derived
  **Validation Certificate #:** 92073011.11262 (BASE)
  **Compiler Name:** AlsyCOMP_069, Version 1.83
  **Host:** Control Data 4000 series of computers (under TC/IX 1.0.2 & 1.1)
  **Target:** Any Host

* **Compiler Vendor:** Alsys
  **Compiler Type:** Derived
  **Validation Certificate #:** 92073011.11262 (BASE)
  **Compiler Name:** AlsyCOMP_069, Version 1.83
  **Host:** Control Data 4000 series of computers (under TC/IX 1.2)
  **Target:** Any Host

* **Compiler Vendor:** Alsys
  **Compiler Type:** Derived
  **Validation Certificate #:** 92073011.11262 (BASE)
  **Compiler Name:** AlsyCOMP_069, Version 1.83-02A
  **Host:** Control Data 4000 series of computers (under EP/LX 1.3)
  **Target:** Any Host

* **Compiler Vendor:** Alsys
  **Compiler Type:** Derived
  **Validation Certificate #:** 92073011.11262 (BASE)
  **Compiler Name:** AlsyCOMP_069, Version 1.83-02B
  **Host:** Control Data 4000 series of computers (under EP/LX 1.3)
  **Target:** Any Host

* **Compiler Vendor:** Alsys
  **Compiler Type:** Derived
  **Validation Certificate #:** 92102911.11265 (BASE)
  **Compiler Name:** TeleGen2 Ada Cross Development System for SUN-4 to eMIPS, Version 2a
  **Host:** Sun-4/800 (under SunOS 5.3)
  **Target:** Algorithmics p-4000i (R4000) (bare machine)
### Ada PROCESSORS, Continued

* **Compiler Vendor:** Alsys  
  **Compiler Type:** Base  
  **Validation Certificate #:** 930115S1.11307  
  **Compiler Name:** Alsys Ada Software Development Environment for HP 9000 Series 600, 700 & 800, Version 5.35  
  **Host:** HP 9000 Series 600 Model 847 (under HP-UX BLS V A.08.08)  
  **Target:** Same as Host

* **Compiler Vendor:** Alsys  
  **Compiler Type:** Base  
  **Validation Certificate #:** 930115S1.11306  
  **Compiler Name:** Alsys Ada Software Development Environment for HP 9000 Series 600, 700 & 800, Version 5.35  
  **Host:** HP 9000 Series 600 Model 857 (under HP-UX BLS V A.08.08)  
  **Target:** Same as Host

* **Compiler Vendor:** Alsys  
  **Compiler Type:** Base  
  **Validation Certificate #:** 930125S1.11310  
  **Compiler Name:** AlsyCOMP_068, Version 1.83  
  **Host:** Control Data 4680 (under EP/IX 1.4.3)  
  **Target:** Same as Host

* **Compiler Vendor:** Alsys  
  **Compiler Type:** Base  
  **Validation Certificate #:** 931206W1.11333  
  **Compiler Name:** AlsyCOMP_032, Version 5.5  
  **Host:** CompuAdd 433 (under IBM OS/2, Version 2.1 + Threads)  
  **Target:** Same as Host

* **Compiler Vendor:** Alsys  
  **Compiler Type:** Base  
  **Validation Certificate #:** 931206W1.11334  
  **Compiler Name:** AlsyCOMP_083, Version 5.5  
  **Host:** CompuAdd 466 (under Windows NT, Version 3.1 + Threads)  
  **Target:** Same as Host

* **Compiler Vendor:** Alsys  
  **Compiler Type:** Base  
  **Validation Certificate #:** 940826N1.11375  
  **Compiler Name:** AlsyCOMP_17, Version 5.4.10  
  **Host:** VAXstation 4000 Model 80 (under VMS 5.5-2)  
  **Target:** INMOS T9000 transputer Gamma D02 on an INMOS VME TestBoard (bare machine)

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Compiler Vendor: ATLAS ELEKTRONIK GmbH  
Address: Sebaldsbruecker Heerstr. 235  
P.O. Box 44 85 45  
City: W-2800 Bremen 44  
State:  
Zip Code: GERMANY  
Contact Name: Dieter Weigel  
Phone: +49-291 457-3058
Ada PROCESSORS, Continued

* Compiler Vendor: ATLAS ELEKTRONIK GmbH
  Compiler Type: Base
  Validation Certificate #: 90132411.11138
  Compiler Name: ATLAS ELEKTRONIK Ada Compiler VVME 1.82
  Host: VAX 6000-410 (under VMS Version 5.2)
  Target: ATLAS ELEKTRONIK GmbH MPR 2300 (under MOS 2300, Version 2.1)

Compiler Vendor: Concurrent Computer Corporation
Address: 2 Crescent Place
City: Oceanport
State: NJ
Zip Code: 07757
Contact Name: Linda Lewis
Phone: (908) 870-4643
E-mail: lewisl@westford.cur.com

* Compiler Vendor: Concurrent Computer Corporation
  Compiler Type: Base
  Validation Certificate #: 90042711.11008
  Compiler Name: C3 Ada, Version 0.5
  Host: Concurrent Computer Corporation 8400 (MIPS R3000/3010) (under RTU Version 5.1)
  Target: Same as Host

* Compiler Vendor: Concurrent Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 90042711.11008
  Compiler Name: C3 Ada, Version 0.5
  Host: Concurrent Computer Corporation 8500 (MIPS R3000/R3010) (under RTU Version 5.1)
  Target: Same as Host

* Compiler Vendor: Concurrent Computer Corporation
  Compiler Type: Base
  Validation Certificate #: 901130W1.11107
  Compiler Name: C3 Ada, Version 1.1v
  Host: Concurrent Computer Corporation 6650 with Super Lightning Floating Point (under RTU Version 5.0C)
  Target: Same as Host

* Compiler Vendor: Concurrent Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 901130W1.11107
  Compiler Name: C3 Ada, Version 1.1
  Host: Concurrent Computer Corporation Series 6000 (MC68030, with Super Lightning Floating Point) & Series 5000 (MC68020, with Lightning Floating Point) (under RTU Versions 5.0A, 5.0B, 5.0C & 6.0)
  Target: Same as Host

* Compiler Vendor: Concurrent Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 901130W1.11107
  Compiler Name: C3 Ada, Version 1.1v
  Host: Concurrent Computer Corporation Series 6000 with Super Lightning Floating Point, and Series 5000 with Lightning Floating Point (all models) (under RTU Version 5.0A, 5.0B & 5.0C)
  Target: Any Host

* Compiler Vendor: Concurrent Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 901130W1.11107
  Compiler Name: C3 Ada, Version 2.0b
  Host: Concurrent Computer Corporation Series 8000 (MIPS R3000/3010) (under RTU Version 6.0)
  Target: Any Host

* Compiler Vendor: Concurrent Computer Corporation
  Compiler Type: Base
  Validation Certificate #: 901130W1.11108
  Compiler Name: C3 Ada, Version R03-00V
  Host: Concurrent Computer Corporation System Bus Processor family of computers (under Trusted OS/32 and MTM Ver R08-03.3S, and OS/32 Versions R08-03.2, R09-01.10S/32, & R09-02)
  Target: Any Host

* Compiler Vendor: Concurrent Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 901130W1.11109
  Compiler Name: C3 Ada, Version 1.0
  Host: Concurrent Computer Corporation 8400 (MIPS R3000/3010) (under RTU Version 5.1)
  Target: Same as Host

* Compiler Vendor: Concurrent Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 901130W1.11109
  Compiler Name: C3 Ada, Version 1.0
  Host: Concurrent Computer Corporation Series 8000 (MIPS R3000/3010) (under RTU Versions 5.1A, 5.1B & 6.0)
  Target: Same as Host

* Compiler Vendor: Concurrent Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 901130W1.11109
  Compiler Name: C3 Ada, Version 1.0
  Host: Concurrent Computer Corporation Series 8000 (all models) (under RTU Versions 5.1, 5.1A & 5.1B)
  Target: Any Host
**Ada PROCESSORS, Continued**

* Compiler Vendor: Concurrent Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 901130W1.1110 (BASE)
  Compiler Name: C3 Ada, Version 2.0
  Host: Concurrent Computer Corporation Series 8000 (R3000/3010), all models (under RTU Versions 5.1A, 5.1B & 6.0)
  Target: Same as Host

* Compiler Vendor: Concurrent Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 901130W1.1110 (BASE)
  Compiler Name: C3 Ada, Version 3.0
  Host: Concurrent Computer Corporation MAXI0N Multiprocessor System with MIPS R4400 and Internal Floating Point (all models) (under RTU Version 6.2)
  Target: Any Host

* Compiler Vendor: Concurrent Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 901130W1.1110
  Compiler Name: C3 Ada, Version 1.1v
  Host: Concurrent Computer Corporation 6850 with MC68882 Floating Point (under RTU Version 5.0C)
  Target: Same as Host

* Compiler Vendor: Concurrent Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 901130W1.1110 (BASE)
  Compiler Name: C3 Ada, Version 1.1
  Host: Concurrent Computer Corporation Series 6000 (MC68030/MC68882) & Series 5000 (MC68020/MC68881) (under RTU Vers 5.0A, 5.0B, 5.0C & 6.0)
  Target: Same as Host

* Compiler Vendor: Concurrent Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 901130W1.1110 (BASE)
  Compiler Name: C3 Ada, Version 1.1v
  Host: Concurrent Computer Corporation Series 6000 with an MC68882 fpu, and Series 5000 with an MC68881 fpu (all models) (under RTU Vers 5.0A, 5.0B & 5.0C)
  Target: Any Host

* Compiler Vendor: Concurrent Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 901130W1.1110 (BASE)
  Compiler Name: C3 Ada, Version 1.2 & 2.0b
  Host: Concurrent Computer Corporation Series 7000 (MC68040) (under RTU Version 6.1)
  Target: Any Host

* Compiler Vendor: Concurrent Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 901130W1.1110 (BASE)
  Compiler Name: C3 Ada, Version 2.0b
  Host: Concurrent Computer Corporation Series 7000 (MC68040) (under RTU Version 6.1)
  Target: Any Host

* Compiler Vendor: Concurrent Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 901130W1.1110 (BASE)
  Compiler Name: C3 Ada, Version 2.0b & 2.0bVc
  Host: Concurrent Computer Corporation Series 7000 (MC68040) (under RTU, Version 6.1A)
  Target: Any Host

* Compiler Vendor: Concurrent Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 901130W1.1110 (BASE)
  Compiler Name: C3 Ada, Version 2.0b & 2.0bVc
  Host: Concurrent Computer Corporation Series 7000 (MC68040) (under RTU, Version 6.1A)
  Target: Any Host

* Compiler Vendor: Control Data Systems, Inc.
  Compiler Type: Base
  Validation Certificate #: 90312751.11336
  Compiler Name: NOS/VE Ada, Version 1.4
  Host: CYBER 180-930-31 (under NOS/VE, Level 826)
  Target: Same as Host

* Compiler Vendor: CONVEX Computer Corporation
  Compiler Type: Base
  Validation Certificate #: 9009610W1.1107
  Compiler Name: CONVEX Ada, Version 2.0
  Host: CONVEX C220 (under ConvexOS 8.1)
  Target: Same as Host

* Compiler Vendor: CONVEX Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 9009610W1.1107 (BASE)
  Compiler Name: CONVEX Ada, Version 2.0
  Host: CONVEX C120, C201, C202, C210, C220, C230, C240, C320, C3210, C3420, C3440, C3450, C3480, C3600, C3680, C3670, C3800 (under ConvexOS versions 8.1, 9.0, 9.1 & 10.0)
  Target: Any Host

* Compiler Vendor: CONVEX Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 9009610W1.1107 (BASE)
  Compiler Name: CONVEX Ada, Version 2.0
  Host: CONVEX C120, C201, C202, C210, C210i, C220, C220i, C230, C230i, C240, C320, C3210, C3420, C3440, C3450, C3480, C3600, C3680, C3670, C3800 (under ConvexOS versions 8.1, 9.0, 9.1 & 10.0)
  Target: Each Host, self-targeted

* Compiler Vendor: CONVEX Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 9009610W1.1107 (BASE)
  Compiler Name: CONVEX Ada, Version 2.1
  Host: CONVEX C120, C201, C202, C210, C210i, C220, C220i, C230, C230i, C240, C320, C3210, C3420, C3440, C3450, C3480, C3600, C3680, C3670, C3800 (under ConvexOS versions 8.1, 9.0, 9.1 & 10.0)
  Target: Same as Host
Ada PROCESSORS, Continued

Compiler Vendor: Cray Research, Inc.
Address: 500 Montezuma, Suite 118
City: Santa Fe
State: NM
Zip Code: 87501
Contact Name: Sylvia Crain
Phone: (505) 988-2468, ext. 30
E-mail: svc@cray.com

* Compiler Vendor: Cray Research, Inc.
Compiler Type: Base
Validation Certificate #: 901112W1.11116
Compiler Name: Cray Ada Compiler Release 2.0
Host: Cray X-MP/EA (under UNICOS Release 5.0)
Target: Same as Host

* Compiler Vendor: Cray Research, Inc.
Compiler Type: Derived
Validation Certificate #: 901112W1.11116
Compiler Name: Cray Ada Compiler Release 2.0
Host: CRAY X-MP & X-MP/EA, all models (under UNICOS Releases 5.1, 6.0 & 6.1)
Target: Each Host, self-targeted

* Compiler Vendor: Cray Research, Inc.
Compiler Type: Derived
Validation Certificate #: 901112W1.11116
Compiler Name: Cray Ada Compiler Release 3.0
Host: CRAY Y-MP & Y-MP EL (all models) (under UNICOS Rel 6.1)
Target: Each Host, self-targeted

* Compiler Vendor: Cray Research, Inc.
Compiler Type: Derived
Validation Certificate #: 901112W1.11117 (BASE)
Compiler Name: Cray Ada Compiler Release 3.1
Host: CRAY Y-MP & Y-MP EL (all models) (under UNICOS Releases 6.1 & 7.0)
Target: Any Host

* Compiler Vendor: Cray Research, Inc.
Compiler Type: Derived
Validation Certificate #: 901112W1.11117 (BASE)
Compiler Name: Cray Ada Compiler Release 6.0
Host: CRAY-2/4-128 (under UNICOS Release 6.1)
Target: Same as Host

* Compiler Vendor: Cray Research, Inc.
Compiler Type: Derived
Validation Certificate #: 911006W1.11223
Compiler Name: Cray Ada Compiler Release 2.0
Host: CRAY-2/4-128 (under UNICOS Release 6.1)
Target: Each Host, self-targeted

* Compiler Vendor: Cray Research, Inc.
Compiler Type: Derived
Validation Certificate #: 911006W1.11223 (BASE)
Compiler Name: Cray Ada Compiler Release 2.0
Host: CRAY-2 (all models) (under UNICOS Release 6.1)
Target: Each Host, self-targeted

* Compiler Vendor: Cray Research, Inc.
Compiler Type: Derived
Validation Certificate #: 911006W1.11223 (BASE)
Compiler Name: Cray Ada Compiler Release 3.0
Host: CRAY-2/4-128 (all models) (under UNICOS Release 6.1)
Target: Each Host, self-targeted

* Compiler Vendor: Cray Research, Inc.
Compiler Type: Derived
Validation Certificate #: 911006W1.11223 (BASE)
Compiler Name: Cray Ada Compiler Release 3.1
Host: CRAY CRAY-2/4-128 (all models) (under UNICOS Releases 6.1 & 7.0)
Target: Any Host

Compiler Vendor: DDC-I, Inc.
Address: (formerly DDC-Inter, Inc.)
410 North 44th Street
City: Phoenix
State: AZ
Zip Code: 85008
Contact Name: Kelly Swainson
Phone: (602) 275-7172
E-mail: kjs@ddciiphx@uunet.uu.net
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<th>Compiler Vendor</th>
<th>Type</th>
<th>Validation Certificate #</th>
<th>Compiler Name</th>
<th>Host</th>
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<tr>
<td>DDC-I, Inc.</td>
<td>Derived</td>
<td>90112051.11074 (BASE)</td>
<td>DACS VAX/VMS to 80486 PM Bare Ada Cross Compiler System, Version 4.6</td>
<td>VAX 8530 (under VMS Version 5.3)</td>
<td>Intel ISB 486/128 (bare machine)</td>
</tr>
<tr>
<td>DDC-I, Inc.</td>
<td>Base</td>
<td>91070551.11191</td>
<td>InterACT Ada 1750A Compiler System, Release 3.5</td>
<td>MicroVAX 3100 Cluster (under VMS 5.2)</td>
<td>InterACT MIL-STD-1750A Instruction Set Architecture Simulator Release 2.3 (bare machine simulation)</td>
</tr>
<tr>
<td>DDC-I, Inc.</td>
<td>Base</td>
<td>91070551.11192</td>
<td>InterACT Ada MIPS Cross-Compiler System, Release 2.0</td>
<td>MicroVAX 3100 Cluster (under VMS 5.2)</td>
<td>Lockheed Sanders STAR MVP R3000/R3010 Board (bare machine)</td>
</tr>
<tr>
<td>DDC-I, Inc.</td>
<td>Derived</td>
<td>91070551.11192 (BASE)</td>
<td>InterACT Ada MIPS</td>
<td>MicroVAX 3100 Cluster (under VMS 5.2)</td>
<td>Lockheed Sanders STAR MVP R3000/R3010 Board (bare machine)</td>
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<tr>
<td>DDC-I, Inc.</td>
<td>Base</td>
<td>92080551.11263</td>
<td>DACS MIPS RISC/OS to MIPS R3000 Bare Ada Cross Compiler System, Release 2.1-16</td>
<td>MIPS M/120-5 (under RISC/OS Version 4.50)</td>
<td>Lockheed Sanders STAR MVP R3000/R3010 Board (bare machine)</td>
</tr>
<tr>
<td>DDC-I, Inc.</td>
<td>Base</td>
<td>92080551.11264</td>
<td>DACS DECstation/ULTRIX to MIPS R3000 Bare Ada Cross Compiler System, Release 2.1-6</td>
<td>DECstation 3100 (under ULTRIX Version 4.0)</td>
<td>Integrated Device Technology IDT7R301 R3000/R3010 Board (bare machine)</td>
</tr>
<tr>
<td>DDC-I, Inc.</td>
<td>Base</td>
<td>92080551.11205</td>
<td>DACS Sun SPARC/SunOS Native Ada Compiler System, Version 4.6.1</td>
<td>SPARCstation 2 (under SunOS, Version 4.1.1)</td>
<td>Same as Host</td>
</tr>
<tr>
<td>DDC-I, Inc.</td>
<td>Base</td>
<td>93111851.11331</td>
<td>DACS Sun SPARC/SunOS to 80386 PM Bare Ada Cross Compiler System, Version 4.6</td>
<td>Sun SPARCstation 1+ (under SunOS, Release 4.1.1)</td>
<td>Intel iSBC 386/116 (bare machine)</td>
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</table>

<table>
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<tr>
<th>Compiler Vendor</th>
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<th>Validation Certificate #</th>
<th>Compiler Name</th>
<th>Host</th>
<th>Target</th>
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<tr>
<td>DDC-I, Inc.</td>
<td>Base</td>
<td>9311191S1.1133</td>
<td>DACS MIP5 R3000 Bare Ada Cross Compiler System, Version 4.7.1</td>
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<tr>
<td>DDC-I, Inc.</td>
<td>Base</td>
<td>940325S1.11341</td>
<td>DACS Sun SPARC/SunOS to 80166 Bare Ada Cross Compiler System, Version 4.6.4</td>
<td>Sun SPARCstation IPX (under SunOS, Release 4.1.2)</td>
<td>Intel ISB 186/100 (bare machine)</td>
</tr>
<tr>
<td>DDC-I, Inc.</td>
<td>Base</td>
<td>940325S1.11342</td>
<td>DACS Sun SPARC/Solaris to 80166 Bare Ada Cross Compiler System w/ Rate Monotonic Scheduling, V4.6.4</td>
<td>Sun SPARCstation IPX (under SunOS, Release 4.1.2)</td>
<td>Intel ISB 186/100 (bare machine)</td>
</tr>
<tr>
<td>DDC-I, Inc.</td>
<td>Base</td>
<td>940325S1.11343</td>
<td>DACS Sun SPARC/Solaris to 80166 Bare Ada Cross Compiler System w/ Rate Monotonic Scheduling, V4.6.4</td>
<td>Sun SPARCstation IPX (under SunOS, Release 4.1.2)</td>
<td>Intel ISB 186/100 (bare machine)</td>
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<tr>
<td>DDC-I, Inc.</td>
<td>Base</td>
<td>940325S1.11344</td>
<td>DACS Sun SPARC/Solaris to 80166 Bare Ada Cross Compiler System w/ Rate Monotonic Scheduling, V4.6.4</td>
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<td>DDC-I, Inc.</td>
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<td>DACS Sun SPARC/Solaris to 80166 Bare Ada Cross Compiler System w/ Rate Monotonic Scheduling, V4.6.4</td>
<td>Sun SPARCstation IPX (under SunOS, Release 4.1.2)</td>
<td>Intel ISB 186/100 (bare machine)</td>
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<tr>
<td>DDC-I, Inc.</td>
<td>Base</td>
<td>940325S1.11346</td>
<td>DACS Sun SPARC/Solaris to 80166 Bare Ada Cross Compiler System w/ Rate Monotonic Scheduling, V4.6.4</td>
<td>Sun SPARCstation IPX (under SunOS, Release 4.1.2)</td>
<td>Intel ISB 186/100 (bare machine)</td>
</tr>
</tbody>
</table>

* Compiler Vendor: DDC-I, Inc.  
* Compiler Type: Base  
* Validation Certificate #: 93111851.11331  
* Compiler Name: DACS Sun SPARC/SunOS Native Ada Compiler System, Version 4.6.1  
* Host: SPARCstation 2 (under SunOS, Version 4.1.1)  
* Target: Same as Host  
* Compiler Vendor: DDC-I, Inc.  
* Compiler Type: Base  
* Validation Certificate #: 9311191S1.11331  
* Compiler Name: DACS Sun SPARC/SunOS to 80386 PM Bare Ada Cross Compiler System, Version 4.6  
* Host: Sun SPARCstation 1+ (under SunOS, Release 4.1.1)  
* Target: Intel iSBC 386/116 (bare machine)  

**Ada PROCESSORS, Continued**
### Ada PROCESSORS, Continued

<table>
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<tr>
<th>Compiler Vendor</th>
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  Compiler Type: Base
  Validation Certificate #: 910502S1.11159
  Compiler Name: DACS Sun-3/SunOS to 88030 Bare Ada Cross Compiler System, Version 4.6.4, MRI IEEE 695 (BASIC_MODE)
  Host: Sun-3/50 (under SunOS Release 4.0_Export)
  Target: Motorola MVME143 (68030/68882) board (bare machine)

* Compiler Vendor: DDC-International A/S
  Compiler Type: Derived
  Validation Certificate #: 910502S1.11159 (BASE)
  Compiler Name: DACS Sun-3/SunOS to 88030 Bare Ada Cross Compiler System, Version 4.6.9, MRE IEEE 695 (SECURE_MODE)
  Host: Sun Microsystems Sun-3 computer families (under SunOS Version 4.0)
  Target: Motorola MVME143 (68030/68882) board (bare machine)

* Compiler Vendor: DDC-International A/S
  Compiler Type: Derived
  Validation Certificate #: 910502S1.11160
  Compiler Name: DACS Sun-3/SunOS to 88030 Bare Ada Cross Compiler System, Version 4.6.9, MRE IEEE 695 (SECURE_MODE)
  Host: Sun-3/50 (under SunOS Release 4.0_Export)
  Target: Motorola MVME143 (68030/68882) board (bare machine)

* Compiler Vendor: DDC-International A/S
  Compiler Type: Derived
  Validation Certificate #: 940325S1.11341
  Compiler Name: DACS Sun SPARC/SunOS to 80186 Bare Ada Cross Compiler System, Version 4.6.4
  Host: Sun SPARCstation IPX (under SunOS, Release 4.1.2)
  Target: Intel ISBC 8635 (bare machine)

* Compiler Vendor: DDC-International A/S
  Compiler Type: Derived
  Validation Certificate #: 940325S1.11341 (BASE)
  Compiler Name: DACS Sun SPARC/SunOS to 80186 Bare Ada Cross Compiler System, Version 4.6.4
  Host: Sun Microsystems Sun-4, SPARCserver, SPARCclassic, and SPARCstation computer families (under SunOS, Version 4.1)
  Target: Intel ISBC 8635 (bare machine)
Ada PROCESSORS, Continued

* Compiler Vendor: Digital Equipment Corporation
  Compiler Type: Base
  Validation Certificate #: 901109S1.11053
  Compiler Name: VAX Ada, Version 2.2
  Host: VAX 8800 (under VMS Version 5.4)
  Target: Same as Host

* Compiler Vendor: Digital Equipment Corporation
  Compiler Type: Derived
  Validation Certificate #: 901109S1.11053 (BASE)
  Compiler Name: VAX Ada, Version 2.3
  Host: All VAX, MicroVAX, VAXstation, VAXserver series of computers (as supported) (under VMS Versions 5.4 & 5.5)
  Target: Any Host

* Compiler Vendor: Digital Equipment Corporation
  Compiler Type: Base
  Validation Certificate #: 901109S1.11054
  Compiler Name: VAX Ada, Version 2.2
  Host: VAX 8800 (under VMS Version 5.4)
  Target: MicroVAX II (under VAXELN Version 4.1, using VAXELN Ada Version 2.2)

* Compiler Vendor: Digital Equipment Corporation
  Compiler Type: Derived
  Validation Certificate #: 901109S1.11054 (BASE)
  Compiler Name: VAX Ada, Version 2.2
  Host: VAX 4000, VAX 8000 & VAX 8000 Series of computers (as supported); Raytheon Military VAX Computer Model 880; and Norden MilVAX Computer Model MilVAX II (under VMS Version 5.4)
  Target: VAX 4000 Models 200 & 300; VAX 6000 Series 200, 300 & 400; VAX 8200, 8300, 8500, 8530, 8550, 8700, 8800, & 8610; VAX-11/730 & 750; MicroVAX II, 2000, 3100, 3150, 3200, 3500, 3600, 3800 & 3900; VAXstation 2000, 3100, 3150, 3200, 3500, & II/GPX; VAXserver 4000-300; VAXserver 6000 Models 210, 220, 310, 320, 410, & 420; Raytheon Military VAX Computer Models 810 & 830; & RTA: KA20-BA, KA800-M, & KA300 VME SBC; rVAX 300, 1000, 3000, 4000, 6000, & 9000 series of computers; & rVAXstation 3100 series of computers (under VAXELN Version 4.4, using VAXELN Ada Version 2.2)

* Compiler Vendor: Digital Equipment Corporation
  Compiler Type: Derived
  Validation Certificate #: 901109S1.11054 (BASE)
  Compiler Name: VAX Ada, Version 2.3
  Host: All VAX, MicroVAX, VAXstation, VAXserver series of computers (as supported) (under VMS Versions 5.4 & 5.5)
  Target: VAX 4000, 6000, & 9000 series of computers; MicroVAX II, 2000, & 3000 series of computers; VAXstation 2000, 3000, & 4000 series of computers; VAXserver 3000, 4000, & 6000 series of computers; IVAX 620 & 630; KA820-BA; KA800-M, & KA300 VME SBC; rVAX 300, 1000, 3000, 4000, 6000, & 9000 series of computers; & rVAXstation 3100 series of computers (under VAXELN Version 4.4, using VAXELN Ada Version 2.2)

* Compiler Vendor: Digital Equipment Corporation
  Compiler Type: Base
  Validation Certificate #: 911025S1.11226
  Compiler Name: DEC Ada, Version 1.0
  Host: DECstation 5000 Model 200 (under ULTRIX 4.2)
  Target: Same as Host

* Compiler Vendor: Digital Equipment Corporation
  Compiler Type: Derived
  Validation Certificate #: 911025S1.11226 (BASE)
  Compiler Name: DEC Ada, Version 1.0
  Host: DECstation 2100, 3100, & 5000, and DECsystem 5000, 5100, 5400, 5600, & 5900 series of computers (under ULTRIX Versions 4.0, 4.1, 4.2, & 4.2A)
  Target: Any Host
**Ada PROCESSORS, Continued**

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Ada PROCESSORS, Continued

**Compiler Vendor:** Dowty Maritime Limited  
**Address:** (now Ultra Electronics)  
(see Ultra Electronics for POC information)  
**City:**  
**State:**  
**Zip Code:**  
**Contact Name:**  
**Phone:**  
**E-mail:**

* Compiler Vendor: Dowty Maritime  
Compiler Type: Derived  
Validation Certificate #: 9103251.11139 (BASE)  
Compiler Name: TeleGen2 Ada Cross Development System, Version 3.2 for VAX/VMS to 386  
Host: DEC VAX-11, MicroVAX, VAXserver, VAXstation, VAXf; and VAX 4000, 6000, 7000, 8000, 9000, & 10000 series of computers (under VMS 5.5-2)  
Target: All members of the Intel ISBC 386 & ISBC 486 model series (bare machines, using TeleAda-EXEC 3.2)

**Compiler Vendor:** E-Systems, ECI Division  
**Address:**  
**City:**  
**State:**  
**Zip Code:**  
**Contact Name:**  
**Phone:**  
**E-mail:**

* Compiler Vendor: E-Systems/ECI Division  
Compiler Type: Base  
Validation Certificate #: 901003W1.11039  
Compiler Name: Tolerant Ada Development System, Version 6.0  
Host: Tolerant Eternity (under TX, 5.4.0)  
Target: Same as Host

**Compiler Vendor:** EDS Defence Limited  
**Address:** Pembroke House  
Pembroke Broadway  
Camberley  
**City:** Surrey  
**State:**  
**Zip Code:** GU15 3XD UNITED KINGDOM  
**Contact Name:** Ghanesh Narine  
**Phone:** +44 276 868200  
**E-mail:** (No e-mail address given)

* Compiler Vendor: EDS Defence Limited  
Compiler Type: Derived  
Validation Certificate #: 901007N1.11042 (BASE)  
Compiler Name: XD Ada CPU32/MC68332, Version 1.3-15  
Host: MicroVAX 3100 (under VMS 8.0)  
Target: Motorola M68332EV5 Evaluation System (MC68332) CPU32, with 128K additional RAM and MC68881 fpu (bare machine)

* Compiler Vendor: EDS Defence Limited  
Compiler Type: Derived  
Validation Certificate #: 901007N1.11042 (BASE)  
Compiler Name: XD Ada CPU32/MC68332, Version 1.3-15  
Host: MicroVAX 3100 (under VMS 8.0)  
Target: Motorola M68332EV5 Evaluation System (MC68332) CPU32, with 128K additional RAM and MC68881 fpu (bare machine)

* Compiler Vendor: EDS Defence Limited  
Compiler Type: Derived  
Validation Certificate #: 901007N1.11042 (BASE)  
Compiler Name: XD Ada CPU32/MC68332, Version 1.3-15  
Host: MicroVAX 3100 (under VMS 8.0)  
Target: Motorola M68332EV5 Evaluation System (MC68332) CPU32, with 128K additional RAM and MC68881 fpu (bare machine)

* Compiler Vendor: EDS Defence Limited  
Compiler Type: Derived  
Validation Certificate #: 901007N1.11042 (BASE)  
Compiler Name: XD Ada CPU32/MC68332, Version 1.3-15  
Host: MicroVAX 3100 (under VMS 8.0)  
Target: Motorola M68332EV5 Evaluation System (MC68332) CPU32, with 128K additional RAM and MC68881 fpu (bare machine)
Ada PROCESSORS, Continued

* Compiler Vendor: EDS Defence Limited
  Compiler Type: Derived
  Validation Certificate #: 921112N3.11297 (BASE)
  Compiler Name: XDI Ada MC88040/ARTX, Version 1.3-24
  Host: Motorola MVM1E187 (88040) (bare machine, using ARTX Real Time Executive)

Compiler Vendor: EDS-Sicon
Address: U.S. Software Products Group
City: Burlington
State: MA
Zip Code: 01803
Contact Name: Alistair Wilson
Phone: (617) 273-3030, ext. 226
E-mail: (No e-mail address given)

* Compiler Vendor: EDS-Sicon
  Compiler Type: Base
  Validation Certificate #: 921112N1.11297
  Compiler Name: XD Ada MC88040/ARTX, Version 1.2
  Host: Local Area VAX Cluster (comprising VAXserver 3000, MicroVAX 2000 (2), & MicroVAX II machines) (under VMS 5.8)
  Target: Motorola MVM1E187 (88040) (bare machine)

Compiler Vendor: Encore Computer Corporation
Address: 6001 W. Sunrise Blvd.
City: Ft. Lauderdale
State: FL
Zip Code: 33313
Contact Name: Gary Beerman
Phone: (305) 587-2900, ext. 2380
E-mail: (No e-mail address given)

* Compiler Vendor: Encore Computer Corporation
  Compiler Type: Base
  Validation Certificate #: 910130W1.11114
  Compiler Name: Parallel Ada Development System, Revision 1.0
  Host: Encore 91 Series Model 91-0340 (under UMAX 3.0)
  Target: As host

* Compiler Vendor: Encore Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 910130W1.11114 (BASE)
  Compiler Name: Parallel Ada Development System, Revision 1.0
  Host: Encore 91 Series, all models (under UMAX 3.0)
  Target: Any Host

* Compiler Vendor: Encore Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 910130W1.11114 (BASE)
  Compiler Name: Parallel Ada Development System, Revision 2.0
  Host: Encore 91, 93, & 94 Series, all models (under UMAX 3.0)
  Target: Any Host

* Compiler Vendor: Encore Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 910130W1.11114 (BASE)
  Compiler Name: Parallel Ada Development System, Revision 2.2.0
  Host: Encore 91 Series, all models (under UMAX 3.0.X)
  Target: Any Host

* Compiler Vendor: Encore Computer Corporation
  Compiler Type: Derived
  Validation Certificate #: 910130W1.11114 (BASE)
  Compiler Name: Parallel Ada Development System, Revision 2.2.0
  Host: Encore 91 Series, all models (under UMAX 3.0.X)
  Target: Any Host machine (under MicroARTE 1.2.0)
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<td>City:</td>
<td>Ft. Lauderdale</td>
</tr>
<tr>
<td>State:</td>
<td>FL</td>
</tr>
<tr>
<td>Zip Code:</td>
<td>33209-1802</td>
</tr>
<tr>
<td>Contact Name:</td>
<td>Jeff Hollensen</td>
</tr>
<tr>
<td>Phone:</td>
<td>(305) 973-5427</td>
</tr>
<tr>
<td>E-mail:</td>
<td><a href="mailto:jeff.hollensen@mail.hcsc.com">jeff.hollensen@mail.hcsc.com</a></td>
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Ada PROCESSORS, Continued

* Compiler Vendor: Harris Computer Systems Corporation
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  Compiler Name: Harris Ada Compiler, Version 5.1.1
  Host: Harris NH-1200, NH-3400, & NH-3800 (under CX/UX 6.1, CX/RT 6.1, & CX/SX 6.1)
  Target: Any Host

Compiler Vendor: Hewlett-Packard Company
Address: (Hewlett-Packard Ada products are now Alsys)
(see Alsys for POC information)
City: State:
Zip Code:
Contact Name:
Phone:
E-mail:

* Compiler Vendor: Hewlett-Packard Company
  Compiler Type: Derived
  Validation Certificate #: 90222W1.11049 (BASE)
  Compiler Name: HP 9000 Series 300 Ada Compiler, Version 5.35
  Host: HP 9000 Series 300 Model 370 (under HP-UX, Version A.07.00)
  Target: Same as Host

* Compiler Vendor: Hewlett-Packard Company
  Compiler Type: Derived
  Validation Certificate #: 901022W1.11049
  Compiler Name: HP 9000 Series 300 Ada Compiler, Version 5.35
  Host: HP 9000 Series 300 & 400, all models (under HP-UX, Version A.B7.03)
  Target: Any Host

* Compiler Vendor: Hewlett-Packard Company
  Compiler Type: Derived
  Validation Certificate #: 90222W1.11049 (BASE)
  Compiler Name: HP 9000 Series 300 Ada Compiler, Version 5.35
  Host: HP 9000 Series 300 & 400, all Models (under HP-UX, Versions A.B7.00 (release 7.0), A.B7.03 (release 7.3), A.B7.05 (release 7.5) & A.B8.00 (release 8.0), as supported)
  Target: Any Host from the same Series, under same OS Version

Compiler Vendor: Hewlett-Packard Company
Address: (Hewlett-Packard Ada products are now Alsys)
(see Alsys for POC information)
City: State:
Zip Code:
Contact Name:
Phone:
E-mail:

* Compiler Vendor: Hewlett-Packard Company, Apollo Systems Division
  Compiler Type: Base
  Validation Certificate #: 910411W1.11137
  Compiler Name: Domain Ada, Version 6.0m
  Host: DN4500 (under Domain/OS SR10.3)
  Target: Same as Host

* Compiler Vendor: Hewlett-Packard Company, Apollo Systems Division
  Compiler Type: Base
  Validation Certificate #: 910411W1.11138
  Compiler Name: Domain Ada, Version 6.0p
  Host: DN10000 (under Domain/OS SR10.3, p)
  Target: Same as Host

Compiler Vendor: IBM Canada, Ltd.
Address: (IBM Canada Ada products are now OC Systems)
(see OC Systems for POC information)
City: State:
Zip Code:
Contact Name:
Phone:
E-mail:

* Compiler Vendor: IBM Canada, Ltd.
  Compiler Type: Base
  Validation Certificate #: 901127W1.11085
  Compiler Name: AIX Ada/6000 Release 2.0
  Preliminary Version Host: RISC System/6000 model 7013-530 (under AIX 3.1)
  Target: Same as Host

* Compiler Vendor: IBM Canada, Ltd.
  Compiler Type: Derived
  Validation Certificate #: 901127W1.11085
  Compiler Name: AIX Ada/6000 Release 2.2
  Preliminary Version Host: RISC System/6000 models 7013-320, -520, -530, -540, -550, -730 & -930 (under AIX 3.1 & 3.2)
  Target: Any Host running same AIX version as Host

* Compiler Vendor: IBM Canada, Ltd.
  Compiler Type: Derived
  Validation Certificate #: 910612W1.11168 (BASE)
  Compiler Name: OCS Legacy Ada/370 VM, Version 2.0
  Host: IBM 937X, 43xx, 308x, 3090, & ES/9000 processors (under VM/ESA 1.1, 1.1.1.1, & 2.1; VM/XA 2.1; VM/SP HPO 6.0)
  Target: Same as Host

* Compiler Vendor: IBM Canada, Ltd.
  Compiler Type: Derived
  Validation Certificate #: 910612W1.11169 (BASE)
  Compiler Name: OCS Legacy Ada/370 MVS, Version 2.0
  Host: IBM 937X, 43xx, 308x, 3090, and ES/9000 processors (under MVS/ESA 3.1.0, 4.1.0, & 4.3.0; & MVS/SP XA 2.2)
  Target: Same as Host

* Compiler Vendor: IBM Canada, Ltd.
  Compiler Type: Derived
  Validation Certificate #: 920121W1.11234
  Compiler Name: AIX Ada/6000 Internal
  Development Version Host: RISC System/6000 model 7012-320 (under AIX 3.2)
  Target: Same as Host
**Ada PROCESSORS, Continued**

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Address: (IBM Ada products are now OC Systems) (see OC Systems for POC information)

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<tr>
<td>Compiler Type:</td>
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<tr>
<td>Validation Certificate #:</td>
<td>901128W1.11091 (BASE)</td>
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<tr>
<td>Compiler Name:</td>
<td>IBM Ada/370, Version 1.1.0</td>
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<tr>
<td>Host:</td>
<td>IBM 3090 (under VM/ESA Release 9.0)</td>
</tr>
<tr>
<td>Target:</td>
<td>Same as Host</td>
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<tr>
<td>Compiler Vendor</td>
<td>Compiler Type</td>
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</table>

* Compiler Vendor: Intel Corporation
  Compiler Type: Base
  Validation Certificate #: 910612W1.11169 (BASE)
  Compiler Name: Intermetrics MVS Ada Compiler, Version 8.1
  Host: AMDahl 5860/180E (under MVS/ESA 2.2)
  Target: Same as Host

* Compiler Vendor: Intel Corporation
  Compiler Type: Base
  Validation Certificate #: 910622W1.11170
  Compiler Name: Intermetrics MVS Ada Compiler, Version 8.1
  Host: AMDahl 5860/180E (under MVS/ESA 2.2)
  Target: Same as Host

* Compiler Vendor: Intel Corporation
  Compiler Type: Derived
  Validation Certificate #: 910622W1.11170 (BASE)
  Compiler Name: Intermetrics MVS Ada Compiler, Version 8.1
  Host: AMDahl 5860/180E (under MVS/ESA 2.2)
  Target: Same as Host

* Compiler Vendor: Intel Corporation
  Compiler Type: Derived
  Validation Certificate #: 910601W1.11321
  Compiler Name: RISC/EXE TRW RH32 targeted Ada Compiler, Ver 1.0
  Host: RISC/EXE TRW RH32 Simulator (bare machine simulation, executing on the Host)
* Compiler Vendor: Intermetrics, Inc.  
  Compiler Type: Base  
  Validation Certificate #: 930901W1.11322  
  Compiler Name: RISC/AB Honeywell RH32-targeted Ada Compiler, Version 1.0  
  Host: VAXstation 4000 (under VMS 5.5)  
  Target: RISC/AB Honeywell RH32 Simulator (bare machine simulation, executing on the Host)  

Compiler Vendor: International Computers Limited  
Address: (now DESC Ltd.)  
(see DESC Ltd. for POC information)  
City:  
State:  
Zip Code:  
Contact Name: Joe Kolhi  
Phone: (714) 250-1366, ext. 210  
E-mail: info@irvine.com  

* Compiler Vendor: Irvine Compiler Corporation  
  Compiler Type: Base  
  Validation Certificate #: 905010W1.11145  
  Compiler Name: ICC Ada, Version 7.0.0  
  Host: HP 9000 Model 720 (under HP-UX Release 8.01)  
  Target:Same as Host  

* Compiler Vendor: Irvine Compiler Corporation  
  Compiler Type: Derived  
  Validation Certificate #: 905010W1.11145 (BASE)  
  Compiler Name: ICC Ada for HP 9000 Series 700/800, Ver 7.4  
  Host: HP 9000 Series 700 & 800, all Models (under HP-UX Version A.88.05 (release 8.05))  
  Target: Any Host  

Compiler Vendor: Irvine Compiler Corporation  
Address: 34 Executive Park, Suite 270  
City: Irvine  
State: CA  
Zip Code: 92714  
Contact Name: Joe Kolhi  
Phone: (714) 250-1366, ext. 210  
E-mail: info@irvine.com  

* Compiler Vendor: Irvine Compiler Corporation  
  Compiler Type: Base  
  Validation Certificate #: 905010W1.11145 (BASE)  
  Compiler Name: ICC Ada for HP 9000 Series 700/800, Ver 7.4  
  Host: HP 9000 Series 700 & 800, all Models (under HP-UX Version A.88.05 (release 8.05))  
  Target: Any Host  

* Compiler Vendor: Irvine Compiler Corporation  
  Compiler Type: Derived  
  Validation Certificate #: 905010W1.11145 (BASE)  
  Compiler Name: ICC Ada for HP 9000 Series 700/800, Ver 7.4  
  Host: HP 9000 Series 700 & 800, all Models (under HP-UX Version A.88.05 (release 8.05))  
  Target: Any Host  

* Compiler Vendor: Irvine Compiler Corporation  
  Compiler Type: Base  
  Validation Certificate #: 905010W1.11146  
  Compiler Name: ICC Ada, Version 7.0.0  
  Host: Sun 3/50 (under SunOS V4.0)  
  Target: Same as Host  

* Compiler Vendor: Irvine Compiler Corporation  
  Compiler Type: Derived  
  Validation Certificate #: 905010W1.11146 (BASE)  
  Compiler Name: ICC Ada for Sun3, Version 7.4  
  Host: Sun Microsystems Sun-3 computer family (under SunOS 4.0 & 4.1)  
  Target: Any Host  

* Compiler Vendor: Irvine Compiler Corporation  
  Compiler Type: Base  
  Validation Certificate #: 905010W1.11147  
  Compiler Name: ICC Ada, Version 7.0.0  
  Host: HP 9000 Model 400 (under HP-UX Release 7.03)  
  Target: Same as Host  

* Compiler Vendor: Irvine Compiler Corporation  
  Compiler Type: Derived  
  Validation Certificate #: 905010W1.11147 (BASE)  
  Compiler Name: ICC Ada for HP 9000 Series 300/400, Version 7.4  
  Host: HP 9000 Series 300 & 400, all Models (under HP-UX Version A.B8.05 (release 8.05))  
  Target: Any Host  

* Compiler Vendor: Irvine Compiler Corporation  
  Compiler Type: Base  
  Validation Certificate #: 905010W1.11148  
  Compiler Name: ICC Ada, Version 7.0.0  
  Host: VAXstation 3100 Model M38 (under VMS 5.3-1)  
  Target: Intel i80960MC (bare machine)  

* Compiler Vendor: Irvine Compiler Corporation  
  Compiler Type: Derived  
  Validation Certificate #: 905010W1.11148 (BASE)  
  Compiler Name: ICC Ada for i900MC, Version 7.4  
  Host: Sun Microsystems Sun-4, SPARCstation, & SPARCserver computers, all models (under SunOS version 4.1.2 & Solaris version 1.0.1, all releases)  
  Target: Intel i900MC, with/without ICE690 on an Intel EXV80960MC board; any single-board computer using the i960 chip; & Intel i686 simulator, executing on the Host (bare machines)  

* Compiler Vendor: Irvine Compiler Corporation  
  Compiler Type: Derived  
  Validation Certificate #: 905010W1.11148 (BASE)  
  Compiler Name: ICC Ada for i900MC, Version 7.4  
  Host: Sun Microsystems Sun-3 computers, all models (under SunOS version 4.1.2 & Solaris Version 1.0.1)  
  Target: Intel i900MC, with/without ICE690 on an Intel EXV80960MC board; any single-board computer using the i960 chip; & Intel i686 simulator, executing on the Host (bare machines)
Ada PROCESSORS, Continued

* Compiler Vendor: Irvine Compiler Corporation
  Compiler Type: Derived
  Validation Certificate #: 910510W1.11148 (BASE)
  Compiler Name: ICC Ada for i960MC, Version 7.4
  Host: HP 9000 Series 700, all models (under HP-UX Version 8.0, all releases)
  Target: Intel i600MC, with/without ICE600 on an Intel EXV8000MC board; any single-board computer using the i600 chip; & Intel i600 simulator, executing on the Host (bare machine)

* Compiler Vendor: Irvine Compiler Corporation
  Compiler Type: Derived
  Validation Certificate #: 910510W1.11148 (BASE)
  Compiler Name: DEC VAX-11, VAXstation, MicroVAX, VAX 4000, VAX 6000, VAX 8000, & VAX 10000 series of computers (under VMS 5.4)
  Host: Intel i600MC, with/without ICE600 on an Intel EXV8000MC board; any single-board computer using the i600 chip; & Intel i600 simulator, executing on the Host (bare machine)

* Compiler Vendor: Irvine Compiler Corporation
  Compiler Type: Derived
  Validation Certificate #: 910510W1.11148 (BASE)
  Compiler Name: ICC Ada for i960XA, Version 7.5
  Host: DEC VAX-11, MicroVAX, VAXserver, VAXstation, VAXft; and VAX 4000, 6000, 7000, 8000, 9000, & 10000 series of computers (under VMS 5.4)
  Target: Intel i600XA, with/without ICE600 on an Intel EXV8000XA board; any single-board computer using the i600 chip; & Intel i600XA simulator, executing on the Host (bare machines)

* Compiler Vendor: Irvine Compiler Corporation
  Compiler Type: Base
  Validation Certificate #: 92052011.11250
  Compiler Name: ICC Ada, Version 7.4.0
  Host: VAXstation 3100 Model M38 (under VMS V 5.3-1)
  Target: Intel i960MX in Hughes DMV running in tagged mode (bare machine, using CHKSYS kernel Version 104)

* Compiler Vendor: Irvine Compiler Corporation
  Compiler Type: Derived
  Validation Certificate #: 92052011.11250 (BASE)
  Compiler Name: ICC Ada for i960MM and i960MX, Version 7.4
  Host: Sun Microsystems Sun-4, SPARCstation, & SPARCserver computers, all models (under SunOS version 4.1.2 & Solaris version 1.0.1, all releases)
  Target: Intel i960MM & i960MX with/without ICE600, on a TRONIX P1960MX-JXV JIAWG Execution Vehicle board; any single-board computer using the 960MM/MX superscalar chip; & Intel i960 simulator, executing on the Host (bare machine)

* Compiler Vendor: Irvine Compiler Corporation
  Compiler Type: Derived
  Validation Certificate #: 02052011.11250 (BASE)
  Compiler Name: ICC Ada for i960MM and i960MX, Version 7.4
  Host: HP 9000 Series 700, all models (under HP-UX Version 8.0, all releases)
  Target: Intel i960MM & i960MX with/without ICE600, on a TRONIX P1960MX-JXV JIAWG Execution Vehicle board; any single-board computer using the 960MM/MX superscalar chip; & Intel i960 simulator, executing on the Host (bare machine)

* Compiler Vendor: Irvine Compiler Corporation
  Compiler Type: Derived
  Validation Certificate #: 02052011.11250 (BASE)
  Compiler Name: ICC Ada for i960MM and i960MX, Version 7.4
  Host: HP 9000 Series 300 & 400, all models (under HP-UX Version 8.0, all releases)
  Target: Intel i960MM & i960MX with/without ICE600, on a TRONIX P1960MX-JXV JIAWG Execution Vehicle board; any single-board computer using the 960MM/MX superscalar chip; & Intel i960 simulator, executing on the Host (bare machine)

* Compiler Vendor: Irvine Compiler Corporation
  Compiler Type: Derived
  Validation Certificate #: 02052011.11250 (BASE)
  Compiler Name: ICC Ada for i960MX and i960MM, Version 7.4
  Host: DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 4000, VAX 6000, VAX 8000, VAX 9000, & VAX 10000 series of computers (under VMS 5.4)
  Target: Intel i960MX & i960MM on a TRONIX P1960MX-JXV JIAWG Execution Vehicle board; any single-board computer using the 960MM/MX superscalar chip; & Intel i960 simulator, executing on the Host (bare machine)

Compiler Vendor: Meridian Software Systems
Address: (Meridian Ada products are now Rational)
          (see Rational for POC information)
City:
State:
Zip Code:
Contact Name:
Phone:
E-mail:

* Compiler Vendor: Meridian Software Systems, Inc.
  Compiler Type: Base
  Validation Certificate #: 900906W1.11031
  Compiler Name: Meridian Ada, Version 4.1
  Host: Sun-3/260 (under SunOS, Version 4.1)
  Target: Same as Host
<table>
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<tr>
<th>Compiler Vendor</th>
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<th>Compiler Name</th>
<th>Host</th>
<th>Target</th>
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<tr>
<td>Meridian Software Systems, Inc.</td>
<td>Base</td>
<td>900009W1.11034</td>
<td>Meridian Ada, Version 4.1</td>
<td>IBM PS/2 Model 60 (with Floating-Point Co-Processor) (under IBM PC-DOS 3.30)</td>
<td>Same as Host</td>
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<tr>
<td>Meridian Software Systems, Inc.</td>
<td>Derived</td>
<td>900009W1.11034 (BASE)</td>
<td>Meridian Ada, Version 4.1</td>
<td>Any Computer System comprising: cpu: any that executes the Intel 80286, 80386, or 80486 instruction set, fpu: Intel 80287, 80387, or equivalent, as appropriate, memory: 640 KByte RAM minimum, disk: 20 MByte hard drive, OS: IBM PC-DOS 3.3</td>
<td>Any Host</td>
</tr>
<tr>
<td>Meridian Software Systems, Inc.</td>
<td>Base</td>
<td>900009W1.11036</td>
<td>Meridian Ada, Version 4.1</td>
<td>ITT XTRA/286 (with Floating-Point Co-Processor) (under MS-DOS 3.20/OS286)</td>
<td>Same as Host</td>
</tr>
<tr>
<td>Meridian Software Systems, Inc.</td>
<td>Derived</td>
<td>900009W1.11036 (BASE)</td>
<td>Meridian Ada, Version 4.1</td>
<td>Any Computer System comprising: cpu: any that executes the Intel 80286, 80386, or 80486 instruction set, fpu: Intel 80287, 80387, or equivalent, as appropriate, memory: 1.5 MByte RAM minimum, disk: 20 MByte hard drive, OS: MS-DOS 3.20/OS286</td>
<td>Any Host</td>
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## Ada PROCESSORS, Continued

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<th>Compiler Vendor</th>
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<th>Host</th>
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<td>* Meridian Software Systems, Inc.</td>
<td>Derived</td>
<td>900000081.11036 (BASE)</td>
<td>Meridian Ada, Version 4.1</td>
<td>Any Computer System Comprising: Cpu: any that executes the Intel 80286, 80386, or 80486 instruction set; Fpu: Intel 80287, 80387, or equivalent, as appropriate; Memory: 1.5 or greater MByte RAM; Disk: 20 MByte hard drive (under MS-DOS 3.30/OS286)</td>
<td>Any Host</td>
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<tr>
<td>* Meridian Software Systems, Inc.</td>
<td>Derived</td>
<td>900000081.11036 (BASE)</td>
<td>Meridian Ada, Version 4.1</td>
<td>Any Computer System Comprising: Cpu: any that executes the Intel 80286, 80386, or 80486 instruction set; Fpu: Intel 80287, 80387, or equivalent, as appropriate; Memory: 1.5 MByte RAM; Disk: 20 MByte hard drive (under MS-DOS 3.30/OS286)</td>
<td>Any Host</td>
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<tr>
<td>* Meridian Software Systems, Inc.</td>
<td>Base</td>
<td>900108111.10060</td>
<td>Meridian Ada, Version 4.1</td>
<td>Apple Macintosh II (under System 6.0.3)</td>
<td>Same as Host</td>
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<td>* Meridian Software Systems, Inc.</td>
<td>Derived</td>
<td>900108111.10062</td>
<td>Meridian Ada, Version 4.1</td>
<td>Starient Titan P3 (under Starient/Unix 3.0)</td>
<td>Same as Host</td>
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<td>* Meridian Software Systems, Inc.</td>
<td>Base</td>
<td>900108111.10063</td>
<td>Meridian Ada, Version 4.1</td>
<td>MicroVAX II (under VMS 5.2)</td>
<td>Same as Host</td>
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<td>* Meridian Software Systems, Inc.</td>
<td>Base</td>
<td>911002111.1218</td>
<td>Meridian Ada, Version 4.1.1</td>
<td>IBM/PS2 Model 80 (with Floating Point Co-Processor) (under IBM PC-DOS 3.30/OS386)</td>
<td>Same as Host</td>
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<tr>
<td>* Meridian Software Systems, Inc.</td>
<td>Derived</td>
<td>911002111.1218 (BASE)</td>
<td>Meridian Ada, Version 4.1.4</td>
<td>Any Computer System Comprising: Cpu: any that executes the Intel 80386 or 80486 instruction set; Fpu: Intel 80387 or equivalent, as appropriate; Memory: 1.5 MByte RAM; Disk: 20 MByte hard drive (under IBM PC-DOS 3.30/OS386)</td>
<td>Any Host</td>
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* Compiler Vendor: Meridian Software Systems, Inc.
  Compiler Type: Base
  Validation Certificate #: 911002W1.11210
  Compiler Name: Meridian Ada, Version 4.1
  Host: NeXTStation (under System Release 2.0)
  Target: Same as Host

* Compiler Vendor: Meridian Software Systems, Inc.
  Compiler Type: Base
  Validation Certificate #: 911002W1.11220
  Compiler Name: Meridian Ada, Version 4.1
  Host: SGI PowerSeries 4D/310S (under IRIX Sys V 3.3.2)
  Target: Mercury MC680 VM (under MC/OS, Version 2.0)

* Compiler Vendor: Meridian Software Systems, Inc.
  Compiler Type: Derived
  Validation Certificate #: 911002W1.11220 (BASE)
  Compiler Name: Meridian Ada, Version 4.1
  Host: SGI PowerSeries 4D/310S (under IRIX Sys V 3.3.2)
  Target: Mercury MC680VM & MC680VM (under MC/OS, Version 2.0)

* Compiler Vendor: Meridian Software Systems, Inc.
  Compiler Type: Base
  Validation Certificate #: 911002W1.11221
  Compiler Name: Meridian Ada, Version 4.1
  Host: Sun-4/110 (under SunOS, Version 4.1)
  Target: Mercury MC680 VM (under MC/OS, Version 2.0)

* Compiler Vendor: Meridian Software Systems, Inc.
  Compiler Type: Derived
  Validation Certificate #: 911002W1.11221 (BASE)
  Compiler Name: Meridian Ada, Version 4.1
  Host: Sun Microsystems Sun-4/110, /150, /260 & /280; SPARCstation 330, 370, 390, 470 & 490; and SPARCstation 2, IPC & IPX (under SunOS Versions 4.1 & 4.1.1) and SPARCengine 1E (under SunOS Version 4.1e)
  Target: Mercury MC680VB & MC680VM (under MC/OS, Version 2.0) and Mercury MC680VS (under MC/OS, Version 2.0/V)

* Compiler Vendor: Meridian Software Systems, Inc.
  Compiler Type: Base
  Validation Certificate #: 911216W1.11232
  Compiler Name: Meridian Ada, Version 4.1
  Host: Sequoia Series 400 (under Topix, Version 6.5)
  Target: Same as Host

* Compiler Vendor: Meridian Software Systems, Inc.
  Compiler Type: Base
  Validation Certificate #: 920915W1.11260
  Compiler Name: Meridian Ada, Version 4.1.3
  Host: Intergraph InterPro 2400 (under CLIX System 5, Rel 3.1)
  Target: Same as Host

* Compiler Vendor: Meridian Software Systems, Inc.
  Compiler Type: Derived
  Validation Certificate #: 920915W1.11266 (BASE)
  Compiler Name: Meridian Ada, Version 4.1.3
  Host: InterGraph InterPro Series C300- & C400-based models (under CLIX, System 5 Release 3.1)
  Target: Any Host

* Compiler Vendor: Meridian Software Systems, Inc.
  Compiler Type: Base
  Validation Certificate #: 920915W1.11287
  Compiler Name: Meridian Ada, Version 4.1.3
  Host: Essence 836 (under DOS 5.0, running Microsoft Windows 3.0)
  Target: Same as Host

* Compiler Vendor: Meridian Software Systems, Inc.
  Compiler Type: Base
  Validation Certificate #: 921202W1.11301
  Compiler Name: Meridian Ada, Version 4.1.3
  Host: HP 9000/827 (under HP-UX 8.02)
  Target: Same as Host

* Compiler Vendor: Meridian Software Systems, Inc.
  Compiler Type: Base
  Validation Certificate #: 930401W1.11313
  Compiler Name: Meridian Ada, Version 4.1.3
  Host: Motorola VME 167-68040 (under OS9 68K, v2.4)
  Target: Same as Host

* Compiler Vendor: Meridian Software Systems, Inc.
  Compiler Type: Base
  Validation Certificate #: 930401W1.11314
  Compiler Name: Meridian Ada, Version 4.1.3
  Host: Essence 486 (under MS-DOS 5.0)
  Target: ADSP-21020 (bare machine)

Compiler Vendor: MIPS Computer Software Systems
Address: (now Rational, DDC-I, & Green Hill Software)
(see Rational, DDC-I, & Green Hill Software)

City:
State:
Zip Code:
Contact Name:
Phone:
E-mail:
Ada PROCESSORS, Continued

* Compiler Vendor: MIPS Computer Systems
  Compiler Type: Base
  Validation Certificate #: 000619W1.11010
  Compiler Name: MIPS ASAPP, Version 3.0
  Host: MIPS M/2000 (under RISC/OS 4.50)
  Target: R3200-6 CPU board (bare machine)

* Compiler Vendor: MIPS Computer Systems
  Compiler Type: Base
  Validation Certificate #: 000619W1.11011
  Compiler Name: MIPS Ada, Version 3.0
  Host: MIPS M/2000 (under RISC/OS 4.50)
  Target: Same as Host

Compiler Vendor: Multiprocessor Toolsmiths, Inc.
Address: 302 Legget Drive, Suite 200
City: Kanata, Ontario
Zip Code: K2K 1Y5
Contact Name: Kim Rowe
Phone: (613) 599-0565
E-mail: (No e-mail address given)

* Compiler Vendor: Multiprocessor Toolsmiths, Inc.
  Compiler Type: Base
  Validation Certificate #: 930722W1.11318
  Compiler Name: CASEWorks/RT Ada for the Sun SPARCStation, Version 1.1
  Host: Sun SPARCStation 10 (under SunOS 4.1.3)
  Target: Same as Host

* Compiler Vendor: Multiprocessor Toolsmiths, Inc.
  Compiler Type: Derived
  Validation Certificate #: 930722W1.11318 (BASE)
  Compiler Name: CASEWorks/RT Ada for the Sun SPARCStation, Version 1.1
  Host: Sun Microsystems SPARCstation series (under SunOS 4.11, 4.1.2, & 4.1.3)
  Target: Any Host

* Compiler Vendor: Multiprocessor Toolsmiths, Inc.
  Compiler Type: Base
  Validation Certificate #: 930722W1.11319
  Compiler Name: CASEWorks/RT Ada MC68x00, Version 1.1
  Host: Sun SPARCStation 10 (under SunOS 4.1.3)
  Target: Motorola MVME147 (bare machine)

* Compiler Vendor: Multiprocessor Toolsmiths, Inc.
  Compiler Type: Derived
  Validation Certificate #: 930722W1.11319 (BASE)
  Compiler Name: CASEWorks/RT Ada for the Sun SPARCStation, Version 1.1
  Host: Sun Microsystems SPARCstation series (under SunOS 4.11, 4.1.2, & 4.1.3)
  Target: Any MC68020-, MC68030-, & MC68040-based single-board computer (bare machine, using Unison 3.1)

* Compiler Vendor: Multiprocessor Toolsmiths, Inc.
  Compiler Type: Base
  Validation Certificate #: 930722W1.11320
  Compiler Name: CASEWorks/RT Ada i860, Version 1.1
  Host: Sun SPARCStation 2 (under SunOS 4.1.1)
  Target: CSPI Supercard II (Intel 80860) with VSB daughterboard (bare machine)

* Compiler Vendor: Multiprocessor Toolsmiths, Inc.
  Compiler Type: Derived
  Validation Certificate #: 930722W1.11320 (BASE)
  Compiler Name: CASEWorks/RT Ada i860, Version 1.1
  Host: Sun Microsystems SPARCstation series (under SunOS 4.11, 4.1.2, & 4.1.3)
  Target: CSPI Supercard 2 with VSB daughterboard, CSPI Supercard 3 with VSB daughterboard, CSPI Supercard 3XL with VSB daughterboard, & CSPI Supercard 4 with VSB daughterboard (bare machines, using Unison/pPOS+ 3.1)

Compiler Vendor: NEC Corporation, Environment Systems Dept.
Address: Basic Software Laboratory
C&C Common Software Development Laboratory
Shibaura 2-11-5, Minato-ku
City: Tokyo 108
Zip Code: JAPAN
Contact Name: Shin-Ichi Morimoto
Phone: +63-3-574-1105
E-mail: morimoto@ccs.mt.nec.co.jp

* Compiler Vendor: NEC Corporation
  Compiler Type: Base
  Validation Certificate #: 910981S1.11216
  Compiler Name: NEC Ada Compiler System for EWS-UX/V (Release 4.0, Version Release 2.1 (4.0)
  Host: NEC EWS4800/220 (under EWS-UX/V (Release 4.0)
  Target: Same as Host

* Compiler Vendor: NEC Corporation
  Compiler Type: Derived
  Validation Certificate #: 910981S1.11216 (BASE)
  Compiler Name: NEC Ada Compiler System, Release 4.1 (4.8.4)
  Host: UP4800 Series models 520, 605, 620, 625, 630, & 635 (under UP-UX/V R4.1) EWS4800 Superstation RISC Series (all EWS RISC models, only) (under EWS-UX/V(R4.0) R6.2 & EWS-UX/V(R4.2) R7.1, as supported)
  Target: Any Host

* Compiler Vendor: NEC Corporation
  Compiler Type: Base
  Validation Certificate #: 910981S1.11217
  Compiler Name: NEC Ada Compiler System for EWS-UX/V to V70/RX-UX332, Version 1.0
  Host: NEC EWS4800/60 (under EWS-UX/V R8.1)
  Target: NEC MV4000 (under RX-UX332 V1.0)

* Compiler Vendor: NEC Corporation
  Compiler Type: Derived
  Validation Certificate #: 910981S1.11217 (BASE)
  Compiler Name: NEC Ada Compiler System for EWS-UX/V (Release 4.0) to V70/RX-UX332, Version 1.0
  Host: All RISC (MIPS R3000- & R4000-based) models of the EWS4800 series (under EWS-UX/V (4.0) R2.1
  Target: NEC MV4000 (under RX-UX332 V1.0)
Ada PROCESSORS, Continued

* Compiler Vendor: NEC Corporation
  Compiler Type: Derived
  Validation Certificate #: 90101851.11217 (BASE)
  Compiler Name: NEC Ada Compiler System for EWS-U/X/V (Release 4.0) to V70/RX-UX32 Version Release 4.1 (4.6.4)
  Host: EWS-U/X/V(R4.0) R.6.2
  Target: NEC MV4000 (under RX-UX32 V1.63)

  Compiler Vendor: North China Institute of Computing Technology
  Address: Building 13 Wenmingyuan
  City: Beijing 100037
  State: CHINA
  Zip Code: 10000
  Contact Name: Li Xin
  Phone: (01) 8342700, 8313399-3406
  E-mail: (No e-mail address given)

* Compiler Vendor: North China Institute of Computing Technology
  Compiler Type: Base
  Validation Certificate #: 9100291.11198
  Compiler Name: C_Ada, Version 1.0
  Host: MicroVAX II (under ULTRIX 3.0)
  Target: Same as Host

* Compiler Vendor: Proprietary Software Systems
  Address: 426 Santa Monica Boulevard, Suite 430
  City: Santa Monica
  State: CA
  Zip Code: 90401
  Contact Name: Richard Gilinsky
  Phone: (310) 394-5233
  E-mail: Compuserve: 73374,2017

* Compiler Vendor: Proprietary Software Systems, Inc.
  Compiler Type: Base
  Validation Certificate #: 9204231.11250
  Compiler Name: PSV AX/2R3425 Compiler, Version X8-01.000
  Host: VAX 8350 (under VMS Version 5.4)
  Target: PSV Zorax ZR34235 Digital Signal Processor/AdaRAID Version X0-01.000 (bare machine simulation, executing on the Host)

* Compiler Vendor: R.R. Software, Inc.
  Address: P.O. Box 1512
  City: Madison
  State: WI
  Zip Code: 53701
  Contact Name: Ian Goldberg
  Phone: (608) 251-3133
  E-mail: RBruckardt@bix.com

* Compiler Vendor: R.R. Software, Inc.
  Compiler Type: Base
  Validation Certificate #: 90112011.11088
  Compiler Name: Janus/Ada 2.2.0 Phar Lap/DOS
  Host: IBM PS/2 Model 80 (under Phar Lap/DOS 3.3)
  Target: IBM PS/2 Model 80 (under MS DOS 3.3)

* Compiler Vendor: R.R. Software, Inc.
  Compiler Type: Derived
  Validation Certificate #: 90112011.11088 (BASE)
  Compiler Name: Janus/Ada 2.2.0 Phar Lap/DOS
  Host: IBM PS/2 Model 80 (under Phar Lap/DOS 3.3)
  Target: IBM PS/2 Model 80 (under MS DOS 3.3)

* Compiler Vendor: R.R. Software, Inc.
  Compiler Type: Derived
  Validation Certificate #: 90112011.11088 (BASE)
  Compiler Name: Janus/Ada 2.2.0 Phar Lap/DOS
  Host: IBM PS/2 Model 80 (under Phar Lap/DOS 3.3)
  Target: IBM PS/2 Model 80 (under MS DOS 3.3)

* Compiler Vendor: R.R. Software, Inc.
  Compiler Type: Derived
  Validation Certificate #: 90112011.11088 (BASE)
  Compiler Name: Janus/Ada 2.2.0 Phar Lap/DOS
  Host: IBM PS/2 Model 80 (under Phar Lap/DOS 3.3)
  Target: IBM PS/2 Model 80 (under MS DOS 3.3)

* Compiler Vendor: R.R. Software, Inc.
  Compiler Type: Derived
  Validation Certificate #: 90112011.11088 (BASE)
  Compiler Name: Janus/Ada 2.2.0 Phar Lap/DOS
  Host: IBM PS/2 Model 80 (under Phar Lap/DOS 3.3)
  Target: IBM PS/2 Model 80 (under MS DOS 3.3)

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  Compiler Type: Derived
  Validation Certificate #: 90112011.11088 (BASE)
  Compiler Name: Janus/Ada 2.2.0 Phar Lap/DOS
  Host: IBM PS/2 Model 80 (under Phar Lap/DOS 3.3)
  Target: IBM PS/2 Model 80 (under MS DOS 3.3)

* Compiler Vendor: R.R. Software, Inc.
  Compiler Type: Derived
  Validation Certificate #: 90112011.11088 (BASE)
  Compiler Name: Janus/Ada 2.2.0 Phar Lap/DOS
  Host: IBM PS/2 Model 80 (under Phar Lap/DOS 3.3)
  Target: IBM PS/2 Model 80 (under MS DOS 3.3)

* Compiler Vendor: R.R. Software, Inc.
  Compiler Type: Derived
  Validation Certificate #: 90112011.11088 (BASE)
  Compiler Name: Janus/Ada 2.2.0 Phar Lap/DOS
  Host: IBM PS/2 Model 80 (under Phar Lap/DOS 3.3)
  Target: IBM PS/2 Model 80 (under MS DOS 3.3)

* Compiler Vendor: R.R. Software, Inc.
  Compiler Type: Derived
  Validation Certificate #: 90112011.11088 (BASE)
  Compiler Name: Janus/Ada 2.2.0 Phar Lap/DOS
  Host: IBM PS/2 Model 80 (under Phar Lap/DOS 3.3)
  Target: IBM PS/2 Model 80 (under MS DOS 3.3)

* Compiler Vendor: R.R. Software, Inc.
  Compiler Type: Derived
  Validation Certificate #: 90112011.11088 (BASE)
  Compiler Name: Janus/Ada 2.2.0 Phar Lap/DOS
  Host: IBM PS/2 Model 80 (under Phar Lap/DOS 3.3)
  Target: IBM PS/2 Model 80 (under MS DOS 3.3)
Ada PROCESSORS, Continued

Compiler Vendor: Rational Software Corporation
Address: 1600 NW Compton Drive, Suite 357
City: Aloha
State: OR
Zip Code: 97006
Contact Name: Sam Quiring
Phone: (503) 580-1116, ext. 8732
E-mail: shq@rational.com

* Compiler Vendor: Rational Software Corporation
  Compiler Type: Derived
  Validation Certificate #: 900600W1.11038 (BASE)
  Compiler Name: VADSself
  Host: DEC Alpha AXP, OSF/1
  Target: Any Host

* Compiler Vendor: Rational Software Corporation
  Compiler Type: Derived
  Validation Certificate #: 910517W1.11157 (BASE)
  Compiler Name: VADSself for DEC Alpha AXP OSF/1, Product #2100-01436, Version 6.2
  Host: DEC 4000 Model 610 AXP (under OSF/1, Version 2.0)
  Target: Same as Host

* Compiler Vendor: Rational Software Corporation
  Compiler Type: Derived
  Validation Certificate #: 920101W1.11260 (BASE)
  Compiler Name: VADSself for DEC Alpha AXP OSF/1, Product #2100-01439, Version 6.2
  Host: DEC 3000 Model 500 AXP (under OSF/1, Version 1.3)
  Target: Same as Host

* Compiler Vendor: Rational Software Corporation
  Compiler Type: Derived
  Validation Certificate #: 940608W1.11356
  Compiler Name: Apex, Version 1.4.1
  Host: SPARCstation 10/51 (under Solaris 2.3)
  Target: Same as Host

* Compiler Vendor: Rational Software Corporation
  Compiler Type: Derived
  Validation Certificate #: 940608W1.11357
  Compiler Name: Apex, Version 1.4.1
  Host: RS/6000 model 350 (under AIX 3.2.5)
  Target: Same as Host

* Compiler Vendor: Rational Software Corporation
  Compiler Type: Derived
  Validation Certificate #: 940630W1.11359
  Compiler Name: VADSself for DEC Alpha AXP OSF/1, Product #2100-01439, Version 6.2
  Host: DEC 4000 Model 610 AXP (under OSF/1, Version 2.0)
  Target: Same as Host

* Compiler Vendor: Rational Software Corporation
  Compiler Type: Derived
  Validation Certificate #: 940630W1.11360
  Compiler Name: VADSself for DEC Alpha AXP OSF/1, Product #2100-01439, Version 6.2
  Host: DEC 3000 Model 500 AXP (under OSF/1, Version 1.3)
  Target: Same as Host
* Compiler Vendor: Rational Software Corporation
  Compiler Type: Base
  Validation Certificate #: 940630W1.11301
  Compiler Name: VADS, VAda-2100-00732, Version 6.2
  Host: Silicon Graphics Challenge (4IP19 @ 100 MHz) (under IRIX 5.2)
  Target: Same as Host

* Compiler Vendor: Rational Software Corporation
  Compiler Type: Base
  Validation Certificate #: 940630W1.11302
  Compiler Name: VADScross IBM RISC System/6000 AUX 3.2.3 => MIPS R4000, Version 6.2
  Host: Silicon Graphics Challenge (4IP19 @ 100 MHz) (under IRIX 5.2)
  Target: SGI Indigo X5400 (MIPS R4000), operating as a bare machine

* Compiler Vendor: Rational Software Corporation
  Compiler Type: Base
  Validation Certificate #: 940630W1.11303
  Compiler Name: VADS PowerPC => PowerPC, Product #2100-01445, Version 6.2
  Host: IBM RS/6000 Model 250 (under AIX 3.2.5)
  Target: Motorola MVME1601 (PowerPC 601) (bare machine)

* Compiler Vendor: Rational Software Corporation
  Compiler Type: Base
  Validation Certificate #: 940630W1.11304
  Compiler Name: VADS IBM RS/6000 => PowerPC, Product #2100-01445, Version 6.2
  Host: IBM RS/6000 Model 530 (under AIX 3.2.5)
  Target: Motorola MVME1601 (PowerPC 601) (bare machine)

* Compiler Vendor: Rational Software Corporation
  Compiler Type: Base
  Validation Certificate #: 940630W1.11305
  Compiler Name: VADS PowerPC SELF, Product #2100-01443, Ver 6.2
  Host: IBM RS/6000 Model 250 (under AIX 3.2.5)
  Target: Same as Host

* Compiler Vendor: Rational Software Corporation
  Compiler Type: Derived
  Validation Certificate #: 940630W1.11306 (BASE)
  Compiler Name: VADS PowerPC SELF, Product #2100-01443, Ver 6.2
  Host: IBM RS/6000 Model 41T (under AIX 3.2.5)
  Target: Same as Host

* Compiler Vendor: Rational Software Corporation
  Compiler Type: Base
  Validation Certificate #: 940630W1.11306
  Compiler Name: DADScross Sun4 => MIPS R3000, Product #2100-01451, Version 6.2
  Host: Sun SPARCstation 10 (under SunOS 4.1.3)
  Target: Hewkon HKMIPS/V3500 (MIPS R3000) (bare machine)

* Compiler Vendor: Rational Software Corporation
  Compiler Type: Base
  Validation Certificate #: 940630W1.11307
  Compiler Name: DADScross Sun4 Solaris 2.3 => MIPS R4000, Ver 6.2
  Host: Sun SPARCstation 10/512 (under Solaris 2.3)
  Target: SGI Indigo X5400 (MIPS R4000) (operating as a bare machine)

* Compiler Vendor: Rational Software Corporation
  Compiler Type: Base
  Validation Certificate #: 940630W1.11308
  Compiler Name: DADScross Sun4 => MIPS R4000, Product #2100-01451, Version 6.2
  Host: Sun SPARCstation 10 (under SunOS 4.1.3)
  Target: Intel Paragon (under O/S/1, Release 1.1.4)

* Compiler Vendor: Rational Software Corporation
  Compiler Type: Base
  Validation Certificate #: 940630W1.11309
  Compiler Name: VADS Sun4 => PowerPC, Product #2100-01444, Version 6.2
  Host: Sun SPARCcenter 2000 (under Solaris 2.3)
  Target: Motorola MVME1601 (PowerPC 601) (bare machine)

* Compiler Vendor: Rational Software Corporation
  Compiler Type: Derived
  Validation Certificate #: 940630W1.11310 (BASE)
  Compiler Name: VADS Sun4 => PowerPC Simulator, Product #2100-01455, Version 6.2
  Host: Sun SPARCstation 2 (under SunOS 4.1.2)
  Target: VADS PowerPC Instruction Set Simulator, executing on the Host (bare machine simulation)

* Compiler Vendor: Rational Software Corporation
  Compiler Type: Base
  Validation Certificate #: 940630W1.11311
  Host: Motorola Series 900 Model 911 (M8110) (under UNIX System V, Release 4)
  Target: Same as Host

* Compiler Vendor: Rational Software Corporation
  Compiler Type: Base
  Validation Certificate #: 940630W1.11312
  Host: DG AVION G70592-A (85110) (under UNIX System V, Release 4)
  Target: Same as Host

* Compiler Vendor: Rational Software Corporation
  Compiler Type: Base
  Validation Certificate #: 940630W1.11313
  Compiler Name: VADS AT&T 3B2/800GR UNIX System V Release 4, Product #2100-01449, Version 6.2
  Host: AT&T 3B2/800GR UNIX System V, Release 4, Product #2100-01449, Version 6.2
  Target: AT&T 3B2/800GR (under System V, Release 4.0)
Ada PROCESSORS, Continued

**Compiler Vendor:** Rockwell International Corporation  
**Address:** Engineering Process and Support  
**City:** Cedar Rapids  
**State:** IA  
**Zip Code:** 52408  
**Phone:** (319) 395-1729  
**E-mail:** sro@hobbes.cca.cr.rockwell.com

* Compiler Vendor: Rockwell International Corporation  
  **Compiler Type:** Derived  
  **Validation Certificate #:** 910306WI.11129  
  **Compiler Name:** DDC-Based Ada/CAPS Compiler, Version 6.1  
  **Host:** DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 6000, VAX 8000 & VAX 9000 Series of computers (under VMS Versions 5.3-1 & 5.4)  
  **Target:** CAPS/AAMP1 (bare machine)

* Compiler Vendor: Rockwell International Corporation  
  **Compiler Type:** Derived  
  **Validation Certificate #:** 910306WI.11130  
  **Compiler Name:** DDC-Based Ada/CAPS Compiler, Version 6.0  
  **Host:** VAXstation 3100 Model 30 (under VMS 5.4)  
  **Target:** CAPS/AAMP2 (bare machine)

* Compiler Vendor: Rockwell International Corporation  
  **Compiler Type:** Derived  
  **Validation Certificate #:** 910306WI.11130  
  **Compiler Name:** DDC-Based Ada/CAPS Compiler, Version 6.1  
  **Host:** DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 6000, VAX 8000 & VAX 9000 Series of computers (under VMS Versions 5.3-1 & 5.4)  
  **Target:** CAPS/AAMP2 (bare machine)

* Compiler Vendor: Rockwell International Corporation  
  **Compiler Type:** Derived  
  **Validation Certificate #:** 910306WI.11130  
  **Compiler Name:** DDC-Based Ada/CAPS Compiler, Version 6.3  
  **Host:** DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 4000, VAX 6000, VAX 8000, VAX 9000, & VAX 10000 series of computers (under VMS 5.5-2)  
  **Target:** CAPS/AAMP2 & CAPS/AAMP3 (bare machine)

Compiler Vendor: SD-Scicon UK Ltd.  
**Address:** (SD-Scicon Ada products now EDS-Scicon)  
(see EDS-Scicon for POC information)  
**City:**  
**State:**  
**Zip Code:**  
**Contact Name:**  
**Phone:**  
**E-mail:**  

* Compiler Vendor: SD-Scicon UK Ltd  
  **Compiler Type:** Derived  
  **Validation Certificate #:** 901007N1.11042  
  **Compiler Name:** XD Ada MC68020, Version 1.2A  
  **Host:** VAX Cluster (comprising VAXserver 3600, MicroVAX 2000 (2) & MicroVAX II machines) (under VMS V 5.3)  
  **Target:** Motorola MVME133XT board (MC68020) (bare machine)

* Compiler Vendor: SD-Scicon UK Ltd  
  **Compiler Type:** Derived  
  **Validation Certificate #:** 901007N1.11042  
  **Compiler Name:** XD Ada MC68020, Version 1.2A  
  **Host:** VAX Cluster (comprising VAXserver 3600, MicroVAX 2000 (2) & MicroVAX II machines) (under VMS V 5.4)  
  **Target:** Motorola MVME133XT board (MC68020) (bare machine)

* Compiler Vendor: SD-Scicon UK Ltd  
  **Compiler Type:** Derived  
  **Validation Certificate #:** 901007N1.11042  
  **Compiler Name:** XD Ada CPU32/MC68332, Version 1.2  
  **Host:** VAX Cluster (comprising VAXserver 3600, MicroVAX 2000 (2) & MicroVAX II machines) (under VMS V 5.4)  
  **Target:** Motorola MVME133-1 (MC68020) & MVME1475-1 (MC68030) boards (bare machines)

* Compiler Vendor: SD-Scicon UK Ltd  
  **Compiler Type:** Derived  
  **Validation Certificate #:** 901007N1.11042  
  **Compiler Name:** XD Ada MC68020, Version 1.2  
  **Host:** VAX Cluster (comprising VAXserver 3600, MicroVAX 2000 (2) & MicroVAX II machines) (under VMS V 5.3)  
  **Target:** Motorola MVME133-1 board (MC68020) and Motorola MVME1475-1 board (MC68030) (bare machines)

* Compiler Vendor: SD-Scicon UK Ltd  
  **Compiler Type:** Derived  
  **Validation Certificate #:** 901007N1.11042  
  **Compiler Name:** XD Ada MC68020, Version 1.2A  
  **Host:** VAX Cluster (comprising VAXserver 3600, MicroVAX 2000 (2) & MicroVAX II machines) (under VMS V 5.4)  
  **Target:** Motorola MVME133XT board (MC68020) (bare machine)

* Compiler Vendor: SD-Scicon UK Ltd  
  **Compiler Type:** Derived  
  **Validation Certificate #:** 901007N1.11042  
  **Compiler Name:** XD Ada MC68020/EDA, Version 1.2A  
  **Host:** VAX Cluster (comprising VAXserver 3600, MicroVAX 2000 (2) & MicroVAX II machines) (under VMS V 5.4)  
  **Target:** Motorola MVME133-1 board (MC68020) (bare machine)
* Compiler Vendor: SD-Scicon UK Ltd
  Compiler Type: Base
  Validation Certificate #: 010314N1.11134
  Compiler Name: XD Ada MC68000/EFA, Version 1.2
  Host: Local Area VAX Cluster (comprising VAXserver 3600, MicroVAX 2000 (2) & MicroVAX II machines) (under VMS 5.4)
  Target: Motorola MC68000 on MVME117-3FP board (bare machine)

* Compiler Vendor: SD-Scicon UK Ltd
  Compiler Type: Derived
  Validation Certificate #: 010314N1.11134 (BASE)
  Compiler Name: XD Ada MC68000/EFA, Version 1.2
  Host: Local Area VAX Cluster (comprising VAXserver 3600, MicroVAX 2000 (2) & MicroVAX II machines) (under VMS 5.4)
  Target: Motorola MC68000 on MVME117-3FP board (bare machine)

* Compiler Vendor: SD-Scicon UK Ltd
  Compiler Type: Base
  Validation Certificate #: 010911N1.11199
  Compiler Name: XD Ada MC68020/ARTX, Version T1.2
  Host: Local Area VAX Cluster (comprising VAXserver 3600, MicroVAX 2000 (2) & MicroVAX II machines) (under VMS 5.4)
  Target: Motorola MVME147S-1 (MC68030) (bare machine)

* Compiler Vendor: SD-Scicon UK Ltd
  Compiler Type: Base
  Validation Certificate #: 011121N1.11230
  Compiler Name: XD Ada MC68040, Version 1.2
  Host: Local Area VAX Cluster (comprising VAXserver 3600, MicroVAX 2000 (2) & MicroVAX II machines) (under VMS 5.4)
  Target: Motorola MVME165 (MC68040) (bare machine)

* Compiler Vendor: SD-Scicon UK Ltd
  Compiler Type: Derived
  Validation Certificate #: 011121N1.11230 (BASE)
  Compiler Name: XD Ada MC68040, Version 1.2
  Host: Local Area VAX Cluster (comprising VAXserver 3600, MicroVAX 2000 (2) & MicroVAX II machines) (under VMS 5.4)
  Target: Motorola MVME167 (MC68040) (bare machine)

* Compiler Vendor: SD-Scicon UK Ltd
  Compiler Type: Derived
  Validation Certificate #: 011128N1.11230 (BASE)
  Compiler Name: XD Ada MC68040/ FORCE CPU-40, Version 1.2
  Host: Local Area VAX Cluster (comprising VAXserver 3600, MicroVAX 2000 (2) & MicroVAX II machines) (under VMS 5.4)
  Target: FORCE CPU-40 (MC68040) (bare machine)

* Compiler Vendor: SD-Scicon UK Ltd
  Compiler Type: Derived
  Validation Certificate #: 011128N1.11230 (BASE)
  Compiler Name: XD Ada MC68040/ FORCE CPU-40, Version 1.2
  Host: Local Area VAX Cluster (comprising VAXserver 3600, MicroVAX 2000 (2) & MicroVAX II machines) (under VMS 5.4)
  Target: FORCE CPU-40 (MC68040) (bare machine)

* Compiler Vendor: Siemens Nixdorf Informationssysteme AG
  Compiler Type: Base
  Validation Certificate #: 9011191.11111
  Compiler Name: Siemens NIXDORF BS2000 Ada Compiler, Ver 2.1
  Host: Siemens NIXDORF 7.560G (under BS2000 V6.5)
  Target: Same as Host

* Compiler Vendor: Siemens Nixdorf Informationssysteme AG
  Compiler Type: Base
  Validation Certificate #: 910741W1.11181
  Compiler Name: Ada (SINIX), Version 4.1
  Host: Siemens Nixdorf WX200 (SINIX-ODT) (under SINIX-ODT V1.5)
  Target: Same as Host

* Compiler Vendor: Siemens Nixdorf Informationssysteme AG
  Compiler Type: Derived
  Validation Certificate #: 910741W1.11181 (BASE)
  Compiler Name: Ada (SINIX), Version 4.1
  Host: Siemens Nixdorf WX200 (SINIX-ODT) (under SINIX-ODT V1.5)
  Target: Same as Host

* Compiler Vendor: Siemens Nixdorf Informationssysteme AG
  Compiler Type: Base
  Validation Certificate #: 0203251.11240
  Compiler Name: Ada (SINIX), Version 4.1
  Host: Siemens Nixdorf MX300i (under SINIX Version V5.41)
  Target: Same as Host

* Compiler Vendor: Siemens Nixdorf Informationssysteme AG
  Compiler Type: Derived
  Validation Certificate #: 0203251.11240 (BASE)
  Compiler Name: Ada (SINIX), Version 4.1
  Host: Siemens Nixdorf WX200 & MX500i (under SINIX Ver 5.41)
  Target: Each Host, self targeted

* Compiler Vendor: Siemens Nixdorf Informationssysteme AG
  Compiler Type: Base
  Validation Certificate #: 0203251.11240 (BASE)
  Compiler Name: Ada (SINIX), Version 4.1
  Host: Siemens Nixdorf PC (under SINIX Version V5.41)
  Target: Same as Host
Ada PROCESSORS, Continued

* Compiler Vendor: Siemens Nixdorf Informationsysteme AG
  Compiler Type: Base
  Validation Certificate #: 02092211.11276
  Compiler Name: Ada (SINIX), Version 4.1
  Host: Siemens Nixdorf RM600 (under SINIX Version V5.41)
  Target: Same as Host

* Compiler Vendor: Siemens Nixdorf Informationsysteme AG
  Compiler Type: Derived
  Validation Certificate #: 02092211.11276 (BASE)
  Compiler Name: Ada (SINIX), Version 4.1
  Host: Siemens Nixdorf RM400 (under SINIX Version V5.41)
  Target: Same as Host

Compiler Vendor: Silicon Graphics, Inc.
Address: 2011 North Shoreline Boulevard
City: Mountain View
State: CA
Zip Code: 94043
Contact Name: Dave McAllister
Phone: (415) 390-3238
E-mail: davemc@sgi.com

* Compiler Vendor: Silicon Graphics, Inc.
  Compiler Type: Base
  Validation Certificate #: 900703W1.11014
  Compiler Name: 4D ADA, Version 3.0
  Host: Iris-4D/230S (under IRIX Release 4D-3.3)
  Target: Same as Host

* Compiler Vendor: Silicon Graphics, Inc.
  Compiler Type: Base
  Validation Certificate #: 900703W1.11015
  Compiler Name: 4D ADA, Version 3.0
  Host: Iris-4D/230S (under IRIX Release 4D-3.3)
  Target: Same as Host

* Compiler Vendor: Silicon Graphics, Inc.
  Compiler Type: Base
  Validation Certificate #: 900703W1.11016
  Compiler Name: 4D ADA, Version 3.0
  Host: Iris-4D/230S (under IRIX Release 4D-3.3)
  Target: Same as Host

* Compiler Vendor: Silicon Graphics, Inc.
  Compiler Type: Base
  Validation Certificate #: 910620W1.11203
  Compiler Name: VADS SGI-Irix, SC4-ADA-4.0, Version 6.1
  Host: SGI Indigo (under irix V4.0)
  Target: Same as Host

* Compiler Vendor: Silicon Graphics, Inc.
  Compiler Type: Derived
  Validation Certificate #: 910620W1.11203 (BASE)
  Compiler Name: VADS SGI-Irix, SC4-ADA-4.0, Version 6.1
  Host: IRIS Indigo, Personal IRIS 4D, IRIS 4D series of computers (under irix V4.0)
  Target: Any Host

* Compiler Vendor: Silicon Graphics, Inc.
  Compiler Type: Base
  Validation Certificate #: 910620W1.11204
  Compiler Name: VADS SGI-Irix, SC4-ADA-4.0, Version 6.1
  Host: SGI 4D/440 (under irix V3.3)
  Target: Same as Host

Compiler Vendor: SKY Computers, Inc.
Address: A Subsidiary of Analogic
City: Chelmsford
State: MA
Zip Code: 01824
Contact Name: Richard Jaenicke
Phone: (800) 488-3400
E-mail: jaenicke@sky.com

* Compiler Vendor: SKY Computers, Inc.
  Compiler Type: Base
  Validation Certificate #: 010711W1.11183
  Compiler Name: Meridian Ada, Version 4.1
  Host: SGI Personal Iris W-4D25 (under Irix System V 3.3)
  Target: SKYbolt 8116-V (under SKYbolt kernel version 2.33)

* Compiler Vendor: SKY Computers, Inc.
  Compiler Type: Base
  Validation Certificate #: 010711W1.11189
  Compiler Name: Meridian Ada, Version 4.1
  Host: SGI Personal Iris W-4D25 (under Irix System V 3.3)
  Target: Same as Host

* Compiler Vendor: SKY Computers, Inc.
  Compiler Type: Base
  Validation Certificate #: 940803W1.11374
  Compiler Name: SKYvec ADA, Release 3.6
  Host: SPARCstation 10 Model 402 (under SunOS 4.1.3)
  Target: SKYbol Model 8146-V (under SKYmpxrt, Release 3.6)

Compiler Vendor: Software Leverage, Inc.
Address: 411 Waverly Oaks Road
City: Waltham
State: MA
Zip Code: 02154-8414
Contact Name: Mike Gilbert
Phone: (617) 894-3399
E-mail: sales@tili.com

* Compiler Vendor: Software Leverage, Inc.
  Compiler Type: Base
  Validation Certificate #: 940411W1.11355
  Compiler Name: Parallel-Leveraged Ada, Ver 6.1.0.2
  Host: Sequent Symmetry S27 (under DYNIX/pbx, 1.2)
  Target: Same as Host

* Compiler Vendor: Software Leverage, Inc.
  Compiler Type: Derived
  Validation Certificate #: 940411W1.11355 (BASE)
  Compiler Name: Parallel-Leveraged Ada, Version 6.1.0.2
  Host: Unisys U6000/7x & U6000/8x series, and Unisys Commercial Secure U6000/7x & U6000/8x ser, all mod (under DYNIX/pbx 1.2)
  Target: Any Host

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Ada PROCESSORS, Continued

Compiler Vendor: Stratus Computer, Inc.
Address: 55 Fairbanks Boulevard
City: Marlboro
State: MA
Zip Code: 01752-1298
Contact Name: Lisa Ludwig
Phone: (508) 490-2605
E-mail: lisa_ludwig@vos.stratus.com

* Compiler Vendor: Stratus Computer, Inc.
  Compiler Type: Base
  Validation Certificate #: 921015W1.1124
  Compiler Name: Stratus Ada, Version 6.1
  Host: Stratus XAR20 (under FTX, 2.0.1)
  Target: Same as Host

* Compiler Vendor: Stratus Computer, Inc.
  Compiler Type: Derived
  Validation Certificate #: 921015W1.1124 (BASE)
  Compiler Name: Stratus Ada, Version 6.0.5
  Host: Stratus XAR series of computers (under FTX 2.3)
  Target: Any Host

Compiler Vendor: Sun Microsystems, Inc.
Address: Sun Pro, Inc.
2550 Garcia Avenue
MS: UMPK03-205
City: Mountain View
State: CA
Zip Code: 94043-1100
Contact Name: Carole Amos
Phone: (415) 688-9424, (415) 966-6396
E-mail: carole.amos@eng.sun.com

* Compiler Vendor: Sun Microsystems, Inc.
  Compiler Type: Derived
  Validation Certificate #: 900510W1.11006 (BASE)
  Compiler Name: Sun Microsystems Sun Ada, SunOS, ADE-1.0-4-4-21, Version 1.0
  Host: Sun Microsystems Sun-4, SPARCserver, & SPARCstationcomputer families; SPARCserver600MP Series; & 4600MP-64 (under SunOS Version 4.2 release 4.1 & 4.1.2, as supported)
  Target: Any Host

* Compiler Vendor: Sun Microsystems, Inc.
  Compiler Type: Derived
  Validation Certificate #: 900510W1.11006 (BASE)
  Compiler Name: Sun Microsystems Sun Ada, SunOS, ADE-1.1-4-4-21, Version 1.1
  Host: Sun Microsystems Sun-4, SPARCserver, SPARCstation, & SPARCengine computer families; SPARCserver600MP Series; & 4600MP-64 (under SunOS Version 4.2 rel 4.1.2)
  Target: Any Host

* Compiler Vendor: Sun Microsystems, Inc.
  Compiler Type: Derived
  Validation Certificate #: 900510W1.11006 (BASE)
  Compiler Name: Sun Microsystems Sun Ada, SunOS, ADE-1.1-4-4-21, Versions 1.0 & 1.1
  Host: Sun Microsystems Sun-4, SPARCserver, & SPARCstationcomputer families (under SunOS 4.1.3)
  Target: Any Host

* Compiler Vendor: Sun Microsystems, Inc.
  Compiler Type: Derived
  Validation Certificate #: 921004W1.11298 (BASE)
  Compiler Name: Sun Microsystems SPARCCompilerAda, Version 2.1
  Host: Sun-4, SPARCserver, & SPARCstation computer families (under Solaris 2.0, 2.1, 2.2, & 2.3)
  Target: Any Host

* Compiler Vendor: Sun Microsystems, Inc.
  Compiler Type: Derived
  Validation Certificate #: 921004W1.11290 (BASE)
  Compiler Name: Sun Microsystems SPARCworks iMProve Ada, Ver 1.0
  Host: Sun-4, SPARCserver, & SPARCstation computer families (under Solstice 2.0, 2.1, 2.2, & 2.3)
  Target: Any Host

Compiler Vendor: Tartan, Inc.
Address: 300 Oxford Drive
City: Pittsburgh
State: PA
Zip Code: 15146
Contact Name: Wayne Lieberman
Phone: (412) 850-3800
E-mail: lieberman@tartan.com

* Compiler Vendor: Tartan, Inc.
  Compiler Type: Base
  Validation Certificate #: 90121011.11121
  Compiler Name: Tartan Ada VMS/C30, Version 4.0
  Host: VAXStation 3100 (under VMS 5.2)
  Target: Texas Instruments TMS320C30 Application Board (bare machine)

* Compiler Vendor: Tartan, Inc.
  Compiler Type: Derived
  Validation Certificate #: 90121011.11121 (BASE)
  Compiler Name: Tartan Ada VMS/C30, Version 4.1
  Host: VAXStation 3100 (under VMS 5.2)
  Target: Texas Instruments TMS320C30 Application Board (bare machine)

* Compiler Vendor: Tartan, Inc.
  Compiler Type: Derived
  Validation Certificate #: 90121011.11121 (BASE)
  Compiler Name: Tartan Ada VMS/C30, Version 4.1.1
  Host: VAXStation 3100 (under VMS 5.2)
  Target: Texas Instruments TMS320C30 Application Board, NAVY SEM-D Key Code ADSP (bare machines)

* Compiler Vendor: Tartan, Inc.
  Compiler Type: Derived
  Validation Certificate #: 90121011.11121 (BASE)
  Compiler Name: Tartan Ada VMS/C30/IPS, Ver 4.1.2
  Host: VAXStation 3100 (under VMS 5.2)
  Target: Texas Instruments TMS320C30 (bare machine)

* Compiler Vendor: Tartan, Inc.
  Compiler Type: Derived
  Validation Certificate #: 90121011.11121 (BASE)
  Compiler Name: Tartan Ada VMS/C3X, Version 4.3
  Host: VAXStation 3100 (under VMS 5.5)
  Target: Texas Instruments TMS320C30 Application Board, Atlanta Signal Processors E7F TMS320C31 board (bare machines)
<table>
<thead>
<tr>
<th>Compiler Vendor</th>
<th>Compiler Type</th>
<th>Validation Certificate #</th>
<th>Compiler Name</th>
<th>Host</th>
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<tr>
<td>Tartan, Inc.</td>
<td>Base</td>
<td>90121011.11122</td>
<td>Tartan Ada Sun/900MC, Version 4.0</td>
<td>Sun 3/60 (under SunOS Version 4.0.3)</td>
<td>Intel ICE60/25 on an Intel EXV80960MC board (bare machine)</td>
</tr>
<tr>
<td>Tartan, Inc.</td>
<td>Base</td>
<td>90121111.11118</td>
<td>Tartan Ada Sun/Sun, Version 4.0</td>
<td>Sun 3/60 (under SunOS Version 4.0.3)</td>
<td>Same as Host</td>
</tr>
<tr>
<td>Tartan, Inc.</td>
<td>Derived</td>
<td>90121111.11118 (BASE)</td>
<td>Tartan Ada Sun/Sun, Version 4.1</td>
<td>Sun 3/60 (under SunOS Version 4.0.3)</td>
<td>Same as Host</td>
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<tr>
<td>Tartan, Inc.</td>
<td>Base</td>
<td>90121211.11120</td>
<td>Tartan Ada VMS/960MC, Version 4.0</td>
<td>VAXstation 3100 (under VMS 5.2)</td>
<td>Intel ICE60/25 on an Intel EXV80960MC board (bare machine)</td>
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<td>90121211.11120 (BASE)</td>
<td>Tartan Ada VMS/960MC/PMRT, Version 4.3</td>
<td>VAXstation 3100 (under VMS 5.5)</td>
<td>Cyclone CVME902 board, Intel EXV80960MC board, &amp; PI-900MX-JXV board (bare machines)</td>
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<tr>
<td>Tartan, Inc.</td>
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<td>90121211.11123</td>
<td>Sun 3/50 (under SunOS Version 4.0.3)</td>
<td>Texas Instruments TMS320C30 Application Board (bare machine)</td>
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<tr>
<td>Tartan, Inc.</td>
<td>Derived</td>
<td>90121311.11119</td>
<td>Tartan Ada VMS/1750A, Version 4.0</td>
<td>VAXstation 3200 (under VMS 5.2)</td>
<td>Texas Instruments STL VHSIC 1750A (bare machine)</td>
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<td>Tartan, Inc.</td>
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<td>Tartan Ada VMS/1750A, Version 4.1</td>
<td>VAXstation 3200 (under VMS 5.2)</td>
<td>Texas Instruments STL VHSIC 1750A (bare machine)</td>
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<tr>
<td>Tartan, Inc.</td>
<td>Base</td>
<td>91061311.11171</td>
<td>Tartan Ada VMS/680X0, Version 4.1</td>
<td>VAXstation 3100 (under VMS 5.2)</td>
<td>Motorola MVME134 (MC68020) (bare machine)</td>
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<tr>
<td>Tartan, Inc.</td>
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<td>9106131.11171 (BASE)</td>
<td>Tartan Ad AVM/88000, Version 4.1.1</td>
<td>VAXstation 3100 (under VMS 5.2)</td>
<td>Motorola MVME134 (MC68020), MVME143 (MC68030), &amp; MVME165 (MC68040) (bare machines)</td>
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<td>Tartan, Inc.</td>
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<td>9106131.11171 (BASE)</td>
<td>Tartan Ad VMS/88000X/PS, Version 4.1.2</td>
<td>VAXstation 3100 (under VMS 5.2)</td>
<td>Motorola MVME134 (MC68020) (bare machine)</td>
</tr>
<tr>
<td>Tartan, Inc.</td>
<td>Derived</td>
<td>9106131.11171 (BASE)</td>
<td>Tartan Ad VMS/88000X/PS, Version 4.3</td>
<td>VAXstation 3100 (under VMS 5.5)</td>
<td>Motorola MVME134 (68020), MVME143 (68030), MVME165 (68040), MC68332 (CPU32), &amp; MC68340 (CPU32) (bare machine)</td>
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<tr>
<td>Tartan, Inc.</td>
<td>Base</td>
<td>9203131.11244</td>
<td>Tartan Ad SPARC C30, Version 4.2</td>
<td>SPARCstation ELC (under SunOS version 4.1.1)</td>
<td>Texas Instruments TMS320C30 Application Board (bare machine)</td>
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<tr>
<td>Tartan, Inc.</td>
<td>Derived</td>
<td>9203131.11244</td>
<td>Tartan Ad SPARC C3X, Version 4.3</td>
<td>SPARCstation ELC (under SunOS version 4.1.1)</td>
<td>Texas Instruments TMS320C30 Application Board, &amp; Atlanta Signal Processors E1H TMS320C31 board (bare machines)</td>
</tr>
<tr>
<td>Tartan, Inc.</td>
<td>Base</td>
<td>9203131.11245</td>
<td>Tartan Ad SPARC 1750A, Version 4.2</td>
<td>SPARCstation ELC (under SunOS version 4.1.1)</td>
<td>Fairchild F0450 on an SBC-50 board (MIL-STD-1750A) (bare machine)</td>
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<tr>
<td>Tartan, Inc.</td>
<td>Derived</td>
<td>9203131.11245</td>
<td>Tartan Ad SPARC 1750A, Version 4.2</td>
<td>SPARCstation ELC (under SunOS version 4.1.1)</td>
<td>Fairchild F0450 on an SBC-50 board (bare machine)</td>
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* Compiler Vendor: Tartan, Inc.  
  * Compiler Type: Derived  
  * Validation Certificate #: 9203131.11246  
  * Compiler Name: Tartan Ad SPARC 860X0, Version 4.2  
  * Host: SPARCstation ELC (under SunOS version 4.1.1)  
  * Target: Motorola MVME134 (MC68020) (bare machine)  

* Compiler Vendor: Tartan, Inc.  
  * Compiler Type: Derived  
  * Validation Certificate #: 9203131.11246  
  * Compiler Name: Tartan Ad SPARC/68XXX, Version 4.3  
  * Host: SPARCstation ELC (under SunOS version 4.1.1)  
  * Target: Motorola MVME134 (68020), MVME143 (68030), MVME165 (68040), MC68332 (CPU32), & MC68340 (CPU32) (bare machines)  

* Compiler Vendor: Tartan, Inc.  
  * Compiler Type: Derived  
  * Validation Certificate #: 9203131.11247  
  * Compiler Name: Tartan Ad SPARC 960mc, Version 4.2  
  * Host: SPARCstation ELC (under SunOS version 4.1.1)  
  * Target: Intel EXV80960MC board (bare machine)  

* Compiler Vendor: Tartan, Inc.  
  * Compiler Type: Derived  
  * Validation Certificate #: 9203131.11247  
  * Compiler Name: Tartan Ad SPARC 960mc, Version 4.2  
  * Host: IBM RISC System/6000 Model 320H (under AIX Version 3.2)  
  * Target: Intel EXV80960MC board (bare machine)  

* Compiler Vendor: Tartan, Inc.  
  * Compiler Type: Derived  
  * Validation Certificate #: 9203131.11247  
  * Compiler Name: Tartan Ad SPARC/960MC/PMRT, Version 4.3  
  * Host: SPARCstation ELC (under SunOS Version 4.1.1)  
  * Target: Intel EXV80960MC board (bare machine)  

* Compiler Vendor: Tartan, Inc.  
  * Compiler Type: Derived  
  * Validation Certificate #: 9203131.11247  
  * Compiler Name: Tartan Ad SPARC/960MC/PMRT, Version 4.3  
  * Host: SPARCstation ELC (under SunOS Version 4.1.1)  
  * Target: Cyclone CVME962 board, Intel EXV80960MC board, & PI-960MX-JXV board (bare machines)  

* Compiler Vendor: Tartan, Inc.  
  * Compiler Type: Derived  
  * Validation Certificate #: 9203131.11247  
  * Compiler Name: Tartan Ad SPARC/960MC/PMRT, Version 4.3  
  * Host: SPARCstation ELC (under SunOS Version 4.1.1)  
  * Target: Cyclone CVME962 board, Intel EXV80960MC board (bare machine)  

* Compiler Vendor: Tartan, Inc.  
  * Compiler Type: Derived  
  * Validation Certificate #: 9203131.11247  
  * Compiler Name: Tartan Ad SPARC/960MC/PMRT, Version 4.3  
  * Host: SPARCstation ELC (under SunOS Version 4.1.1)  
  * Target: Intel 80960XB on an Intel EXV-960MC/EXV960 (Execution Vehicle) (bare machine)  

* Compiler Vendor: Tartan, Inc.  
  * Compiler Type: Derived  
  * Validation Certificate #: 9203131.11247  
  * Compiler Name: Tartan Ad SPARC/960MC/PMRT, Version 4.3  
  * Host: SPARCstation ELC (under SunOS Version 4.1.1)  
  * Target: Cyclone CVME962 board, Intel EXV80960MC board (bare machines)
### Ada PROCESSORS, Continued

<table>
<thead>
<tr>
<th>Compiler Vendor</th>
<th>Compiler Type</th>
<th>Validation Certificate #</th>
<th>Compiler Name</th>
<th>Host</th>
<th>Target</th>
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<tbody>
<tr>
<td>TeleSoft</td>
<td>Derived</td>
<td>901128W1.11090 (BASE)</td>
<td>TeleGen2 Ada Host Development System, Version 4.1 for SPARCSystems</td>
<td>Hand</td>
<td>Any Host</td>
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<tr>
<td>TeleSoft</td>
<td>Derived</td>
<td>9101211.11124 (BASE)</td>
<td>TeleGen2 Ada Cross Development System, Version 4.1 for VAX/VMS to 68K</td>
<td>DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 6000, VAX 8000 &amp; VAX 9000 Series of computers (under VMS Versions 5.0, 5.1, 5.2, 5.3 &amp; 5.4, as supported)</td>
<td>Host: Sun Microsystems Sun-4, SPARCserver, &amp; SPARCstation computer families (under Solaris 2.1) Any Host</td>
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<tr>
<td>TeleSoft</td>
<td>Derived</td>
<td>9101211.11124 (BASE)</td>
<td>TeleGen2 Ada Cross Development System, Version 4.1 for VAX/VMS to 68K</td>
<td>DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 6000, VAX 8000 &amp; VAX 9000 Series of computers (as supported) (under VMS Versions 5.0, 5.1, 5.2, 5.3 &amp; 5.4)</td>
<td>Host: Motorola board series MVME133*, MVME135*, MVME136* (MC68020); MVME141* &amp; MVME147* (MC68030); and Force CPU-30, CPU-31, CPU-32, &amp; CPU-37 (bare machines)</td>
</tr>
<tr>
<td>TeleSoft</td>
<td>Derived</td>
<td>9101211.11124 (BASE)</td>
<td>TeleGen2 Ada Cross Development System, Version 4.1 for VAX/VMS to 68K</td>
<td>DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 6000, VAX 8000 &amp; VAX 9000 Series of computers (as supported) (under VMS Versions 5.0, 5.1, 5.2, 5.3 &amp; 5.4)</td>
<td>Host: Motorola board series MVME185* &amp; MVME187* (58040) board families (bare machines)</td>
</tr>
<tr>
<td>TeleSoft</td>
<td>Derived</td>
<td>9101211.11124 (BASE)</td>
<td>TeleGen2 Ada Cross Development System, Version 4.1 for VAX/VMS to 68K</td>
<td>DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 6000, VAX 8000 &amp; VAX 9000 Series of computers (as supported) (under VMS Versions 5.0, 5.1, 5.2, 5.3 &amp; 5.4)</td>
<td>Host: Motorola board series MVME147* (MC68030) (bare machines, using TeleAda-Exec)</td>
</tr>
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</table>

**Note:** Ada products are now Alasys (see Alasys for POC information)
* Compiler Vendor: TeleSoft
  Compiler Type: Base
  Validation Certificate #: 01012311.11125
  Compiler Name: TeleGen2 Ada Cross Development System, Version 4.1 for VAX/VMS to MIPS
  Host: MicroVAX 3800 (under VAX/VMS Version 5.2)
  Target: Integrated Device Technology ID77R5301 System (R3000/R3010) (bare machine)

* Compiler Vendor: TeleSoft
  Compiler Type: Base
  Validation Certificate #: 01012511.11126
  Compiler Name: TeleGen2 Ada Cross Development System, Version 4.1 for SUN-3 to 68K
  Host: Sun-3/480 (under Sun UNIX, Release 4.1)
  Target: Motorola MVME135-1 (MC68020) (bare machine)

* Compiler Vendor: TeleSoft
  Compiler Type: Base
  Validation Certificate #: 01022511.11130
  Compiler Name: TeleGen2 Ada Cross Development System, Version 3.1 for VAX/VMS to 386
  Host: VAX 8210 (under VMS 5.3)
  Target: Intel i868-120 (68386/387) (bare machine, using TeleAda-EXEC 1.0)

* Compiler Vendor: TeleSoft
  Compiler Type: Derived
  Validation Certificate #: 01032511.11130 (BASE)
  Compiler Name: TeleGen2 Ada Cross Development System, Version 3.1.1 for SUN 4 to 68K
  Host: VAX 4000-300 (under VMS 5.4-3)
  Target: Intel i868/133SE board (bare machine, using TeleAda-EXEC 1.0)

* Compiler Vendor: TeleSoft
  Compiler Type: Base
  Validation Certificate #: 01032511.11140
  Compiler Name: TeleGen2 Ada Cross Development System, Version 3.1 for SPARC to 68K
  Host: Sun-4/80 (under SunOS 4.1)
  Target: Motorola MVME147 (68030) (bare machine, using TeleAda-EXEC 1.0)

* Compiler Vendor: TeleSoft
  Compiler Type: Derived
  Validation Certificate #: 01032511.11140 (BASE)
  Compiler Name: TeleGen2 Ada Cross Development System, Version 4.1 for SPARC to 68K
  Host: Sun Microsystems Sun-4, SPARServer & SPARCstation computer families (under SunOS 4.1)
  Target: Motorola MVME133*, MVME135*, MVME135* (68020); MVME141* & MVME147* (68030); and MVME165* & MVME167* (68040) board fam (bare machines, optionally using TeleAda-EXEC 2.0)

* Compiler Vendor: TeleSoft
  Compiler Type: Base
  Validation Certificate #: 01072111.11194
  Compiler Name: TeleGen2 Ada Host Development System, Version 4.1 for MacIntosh Systems
  Host: Apple Macintosh IIx (under A/UX 2.0)
  Target: Same as Host

* Compiler Vendor: TeleSoft
  Compiler Type: Derived
  Validation Certificate #: 01107211.11104 (BASE)
  Compiler Name: TeleGen2 Ada Host Development System, Version 4.1 for MacIntosh Systems
  Host: Apple Macintosh II family, & SE/30 (under A/UX Rel 2.0)
  Target: Any Host

* Compiler Vendor: TeleSoft
  Compiler Type: Base
  Validation Certificate #: 01102311.11220
  Compiler Name: TeleGen2 Ada Development System, Version 3.25 for VAX to 1750A
  Host: MicroVAX 3800 (under VMS Version 5.4)
  Target: MIL-STD-1750A ECSPO ITS RAID Simulator, Version 6.0 (bare machine simulation, executing on the Host)

* Compiler Vendor: TeleSoft
  Compiler Type: Base
  Validation Certificate #: 01112911.11125
  Compiler Name: TeleGen2 Ada Compilation System, Version 4.1 for VAX to 80006
  Host: MicroVAX 3800 (under VMS Version 5.4)
  Target: Intel EXV 660 MC-MIL (960 XA) (bare machine, using Hughes O.S. Ada RTS interface)

* Compiler Vendor: TeleSoft
  Compiler Type: Base
  Validation Certificate #: 02102011.11295
  Compiler Name: TeleGen2 Ada Cross Development System, Version 4.1.1 for SUN-4 to eMIPS
  Host: Sun-4/690 (under SunOS Release 4.1.2)
  Target: Integrated Device Technology ID77R5301 System (R3000/R3010) (bare machine)

* Compiler Vendor: TeleSoft
  Compiler Type: Base
  Validation Certificate #: 02121811.11303
  Compiler Name: TeleGen2(tm) Ada Cross Development System, Version 4.1.1 for SUN-4 to 68K
  Host: Sun-4/690 (under SunOS Release 4.1.2)
  Target: CVME892 System (68030A board with MC Processor) (bare machine)

* Compiler Vendor: TeleSoft
  Compiler Type: Base
  Validation Certificate #: 02121811.11304
  Compiler Name: TeleGen2(tm) Ada Cross Development System, Version 4.1c for Sun-4 to 68K
  Host: Sun-4/690 (under SunOS Release 4.1.2)
  Target: Motorola MVME147S-1 (68030/68882) (bare machine)

Compiler Vendor: Texas Instruments
Address: 6500 Chase Oakl Boulevard
City: Plano
State: TX
Zip Code: 75023
Contact Name: Dave Struble
Phone: (214) 575-5348
E-mail: struble@mcopn.dseg.ti.com
* Compiler Vendor: Texas Instruments  
Compiler Type: Base  
Validation Certificate #: 901030W1.11052  
Compiler Name: MIPS-Ada, Version 3.0  
Host: MIPS M/2000 (under RISC/os 4.02)  
Target: TI DP32 R3000 Processor (bare machine, using TI DP32 RTE Version 1.0)

* Compiler Vendor: Texas Instruments  
Compiler Type: Base  
Validation Certificate #: 901040W1.11135  
Compiler Name: TI Ada, Version 1.0  
Host: MicroVAX 3400 (under VMS 5.3-1)  
Target: TI DP32 R3000 Processor (bare machine, using TI Executive and Runtime Services (EARS) Version 1.0)

Compiler Vendor: TISOFT, Inc.  
Address: 10521 Rosshave Street, Suite 200  
City: Fairfax  
State: VA  
Zip Code: 22030  
Contact Name: David Hicks  
E-mail: (No e-mail address given)

* Compiler Vendor: TISOFT, Inc.  
Compiler Type: Base  
Validation Certificate #: 94101251.11379  
Compiler Name: Green Hills Optimizing Ada Compiler, Version 1.8.7 with Patch ID 1  
Target: Same as Host

* Compiler Vendor: TISOFT, Inc.  
Compiler Type: Derived  
Validation Certificate #: 94101251.11379 (BASE)  
Compiler Name: Green Hills Optimizing Ada Compiler, Version 1.8.7 with Patch ID 1  
Target: Any Host

Compiler Vendor: TLD Systems, Ltd.  
Address: 3625 Del Amo Boulevard, Suite 100  
City: Torrance  
State: CA  
Zip Code: 90503  
Contact Name: Terry Dunbar  
Phone: (310) 542-5433  
E-mail: tld_ptr@cerf.net

* Compiler Vendor: TLD Systems, Ltd.  
Compiler Type: Base  
Validation Certificate #: 920319W1.11237  
Host: Sun-4/75 (under SunOS, Version 4.1.1)  
Target: Rockwell International RT-1750AB Brassboard Development System (bare machine, using TLDtrx Real-time Executive, Version 1.0.0)
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<tr>
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<td>920319W1.11242 (BASE)</td>
<td>TLD VAX/MIL-STD-1750A Ada Compiler System, Version 2.9.0</td>
<td>DEC VAX-11, VAXserver VAXstation MicroVAX, VAX 4000, VAX 8000, VAX 8000 &amp; VAX 9000 Series of computers (under VMS 5.4)</td>
<td>IBM User Console with IBM Generic VHSC Spaceborne Computer (bare machine, using the TLDrtx Real-time Executive, Version 1.0.0)</td>
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**Contact Information**

<table>
<thead>
<tr>
<th>Compiler Vendor</th>
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<td>Host</td>
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<td>U.S. Navy</td>
<td>Base</td>
<td>910517S1.11182</td>
<td>AdaVAX, Version 5.0 (/OPTIMIZE)</td>
<td>VAX 8600 (under VMS Version 5.3)</td>
<td>Same as Host</td>
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<td>U.S. Navy</td>
<td>Base</td>
<td>910517S1.11183</td>
<td>AdaVAX, Version 5.0 (/NO_OPTIMIZE)</td>
<td>VAX 8600 (under VMS Version 5.3)</td>
<td>Same as Host</td>
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<td>U.S. Navy</td>
<td>Base</td>
<td>910517S1.11184</td>
<td>AdaVAX, Version 5.0 (/OPTIMIZE)</td>
<td>VAX-11/785 (under VMS Version 5.3)</td>
<td>Same as Host</td>
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<tr>
<td>U.S. Navy</td>
<td>Base</td>
<td>910517S1.11185</td>
<td>AdaVAX, Version 5.0 (/NO_OPTIMIZE)</td>
<td>VAX-11/785 (under VMS Version 5.3)</td>
<td>Same as Host</td>
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<td>Base</td>
<td>910625S1.11172</td>
<td>Ada/L, Version 4.0 (/OPTIMIZE)</td>
<td>VAX 8550 (under VMS Version 5.3)</td>
<td>AN/UYK-43 (single cpu) (bare machine)</td>
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<td>U.S. Navy</td>
<td>Base</td>
<td>910625S1.11173</td>
<td>Ada/L, Version 4.0 (/OPTIMIZE)</td>
<td>VAX 8550 (under VMS Version 5.3)</td>
<td>AN/UYK-43 (EMR) (bare machine)</td>
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<td>Base</td>
<td>910625S1.11174</td>
<td>Ada/M, Version 4.0 (/OPTIMIZE)</td>
<td>VAX 8550 (under VMS Version 5.3)</td>
<td>AN/UYK-44 (bare machine)</td>
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<td>U.S. Navy</td>
<td>Base</td>
<td>910625S1.11175</td>
<td>Ada/M, Version 4.0 (/OPTIMIZE)</td>
<td>VAX 8550 (under VMS Version 5.3)</td>
<td>AN/AYK-14 (bare machine)</td>
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<td>Ada/L, Version 4.0 (/OPTIMIZE)</td>
<td>VAX-11/785 (under VMS Version 5.3)</td>
<td>AN/UYK-43 (single cpu) (bare machine)</td>
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<td>U.S. Navy</td>
<td>Base</td>
<td>910626S1.11177</td>
<td>Ada/L, Version 4.0 (/OPTIMIZE)</td>
<td>VAX-11/785 (under VMS Version 5.3)</td>
<td>AN/UYK-44 (EMR) (bare machine)</td>
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<td>U.S. Navy</td>
<td>Base</td>
<td>910626S1.11178</td>
<td>Ada/M, Version 4.0 (/OPTIMIZE)</td>
<td>VAX-11/785 (under VMS Version 5.3)</td>
<td>AN/AYK-14 (bare machine)</td>
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<td>U.S. Navy</td>
<td>Base</td>
<td>92091S1.11270</td>
<td>AdaVAX, Version 5.5 (/OPTIMIZE)</td>
<td>VAXstation 4000 (under VMS Version 5.5)</td>
<td>Same as Host</td>
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<td>U.S. Navy</td>
<td>Base</td>
<td>92091S1.11271</td>
<td>AdaVAX, Version 5.5 (/NO_OPTIMIZE)</td>
<td>VAXstation 4000 (under VMS Version 5.5)</td>
<td>Same as Host</td>
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<td>U.S. Navy</td>
<td>Base</td>
<td>92091S1.11273</td>
<td>Ada/M, Version 4.5 (/OPTIMIZE)</td>
<td>VAX Cluster (comprising VAX 8550, 8600, &amp; 8650 machines) (under VMS Version 5.3)</td>
<td>VHSCic Processor Module (VPM) AN/AYK-14 (bare machine)</td>
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* Compiler Vendor: U.S. Navy
  Compiler Type: Base
  Validation Certificate #: 920918S1.11274
  Compiler Name: Ada/M, Version 4.5 (NO_OPTIMIZE)
  Host: VAX Cluster (comprising VAX 8550, 8600, & 8650 machines) (under VMS Version 5.3)
  Target: Enhanced Processor (EP) AN/JVK-44 (bare machine)

* Compiler Vendor: U.S. Navy
  Compiler Type: Base
  Validation Certificate #: 920918S1.11275
  Compiler Name: Ada/M, Version 4.5 (NO_OPTIMIZE)
  Host: VAX Cluster (comprising VAX 8550, 8600, & 8650 machines) (under VMS Version 5.3)
  Target: VHIC Processor Module (VPM) AN/JVK-14 (bare machine)

* Compiler Vendor: UNISYS Corporation
  Address: 506 Highway 85 North
  City: Niceville
  State: FL
  Zip Code: 32578
  Contact Name: Joseph Kovach
  Phone: (904) 678-4217
  E-mail: (No e-mail address given)

* Compiler Vendor: UNISYS Corporation
  Address: 506 Highway 85 North
  City: Niceville
  State: FL
  Zip Code: 32578
  Contact Name: Joseph Kovach
  Phone: (904) 678-4217
  E-mail: (No e-mail address given)

* Compiler Vendor: UNISYS Corporation
  Address: 506 Highway 85 North
  City: Niceville
  State: FL
  Zip Code: 32578
  Contact Name: Joseph Kovach
  Phone: (904) 678-4217
  E-mail: (No e-mail address given)
* Compiler Vendor: Verdix Corporation
  * Compiler Type: Derived
  * Validation Certificate #: 900228W1.11002 (BASE)
  * Compiler Name: VAda-110-0202, Version 6.0
  * Host: DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 8000, VAX 8000 & VAX 9000 Series of computers (under ULTRIX 4.2)
  * Target: Any Host

* Compiler Vendor: Verdix Corporation
  * Compiler Type: Base
  * Validation Certificate #: 900510W1.11003
  * Compiler Name: VADS Sun3 SunOS, VAda-110-1313, Version 6.0
  * Host: Sun 3/280 (under SunOS 4.0)
  * Target: Same as Host

* Compiler Vendor: Verdix Corporation
  * Compiler Type: Derived
  * Validation Certificate #: 900510W1.11003 (BASE)
  * Compiler Name: VADS Sun-3 Sun OS, VAda-110-1313, Version 9.0.
  * Host: Sun-3/50, /80, /100, /150, /250, /280, /480 (under SunOS 4.0 & 4.1)
  * Target: Any Host machine (under same OS version)

* Compiler Vendor: Verdix Corporation
  * Compiler Type: Base
  * Validation Certificate #: 900510W1.11004
  * Compiler Name: VADS IBM PS/2 AUX => Intel 80386, VAda-110-35315, Version 6.0
  * Host: IBM PS/2 Model 80 (under AIX 1.1)
  * Target: Intel ISBC 386/12 (bare machine)

* Compiler Vendor: Verdix Corporation
  * Compiler Type: Base
  * Validation Certificate #: 900510W1.11005
  * Compiler Name: VADS IBM PS/2 AUX => 68K, VAda-110-35315, Version 6.0
  * Host: IBM PS/2 Model 80 (under AIX 1.1)
  * Target: Motorola MVME133A-20 (MC68020) (bare machine)

* Compiler Vendor: Verdix Corporation
  * Compiler Type: Base
  * Validation Certificate #: 900510W1.11006
  * Compiler Name: VADS Sun-4 SunOS, VAda-110-4040, Version 6.0
  * Host: Sun 4/280 (under SunOS 4.0)
  * Target: Same as Host

* Compiler Vendor: Verdix Corporation
  * Compiler Type: Derived
  * Validation Certificate #: 900510W1.11008 (BASE)
  * Compiler Name: VAda-110-4040, Version 6.0
  * Host: Sun-4/20, /65, /110, /150 & /280; SPARCserver 310, 330, 370, 390, 470 & 490; SPARCstation SLC, 1, 1+, 2, 3, 310, 330 & 370; and SPARCengine 1 VME (under SunOS 4.1)
  * Target: Any Host

* Compiler Vendor: Verdix Corporation
  * Compiler Type: Base
  * Validation Certificate #: 900510W1.11007
  * Compiler Name: VADS Sun3 SunOS => 68K, VAda-110-13125, Version 6.0
  * Host: Sun 3/280 (under SunOS 4.0)
  * Target: Motorola MVME147 (MC68030) (bare machine)

* Compiler Vendor: Verdix Corporation
  * Compiler Type: Derived
  * Validation Certificate #: 900510W1.11007 (BASE)
  * Compiler Name: VADS Sun3 SunOS => 68K, VAda-110-13125, Version 6.0
  * Host: Sun 3/80, /80, /150, /160, /260, /280, /470 & /480 (under SunOS 4.0 & 4.1)
  * Target: Cyclone CVME 44, CVME 48 & CVME 48; Force CPU 21, CPU 29, CPU 30, CPU 31, CPU 32, CPU 37 & Golden Triangle Firepower; Heurikon HK68/V30 Series, V2E Series & V2F Series; Integrated Solutions VM/68k20, VME68k30, VME68k25 & Liberator SBC; Matrix MS-CPUJ220 & MS-CPUJ320; Mizar M7Z120, M7Z122, M7Z124, M7Z130, M7Z180, M7Z130; Sun Microsystems 3E Board Set; Motorola MVME147 Series & MVME141 (MC68030), MVME133 Series, MVME134, MVME135, & MVME136 (MC68020), MVME110, MVME185 & MVME167; Tadpole TP32V & TP33M (bare machines)

* Compiler Vendor: Verdix Corporation
  * Compiler Type: Base
  * Validation Certificate #: 900728W1.11017
  * Compiler Name: VADS IBM RISC System/6000, AIX 3.1, VAda-110-7171, Version 6.0
  * Host: IBM RISC System/6000 Model 530 (under AIX 3.1)
  * Target: Same as Host

* Compiler Vendor: Verdix Corporation
  * Compiler Type: Derived
  * Validation Certificate #: 900728W1.11017 (BASE)
  * Compiler Name: VADS IBM RISC System/6000, AIX 3.1, VAda-110-7171, Version 6.0
  * Host: IBM RISC System/6000 Models 220, 320, 320H, 340, 350, 520, 520H, 530H, 540, 550, 560, 730, 930, & 950 (under AIX 3.2)
  * Target: Any Host

* Compiler Vendor: Verdix Corporation
  * Compiler Type: Derived
  * Validation Certificate #: 900728W1.11017 (BASE)
  * Compiler Name: VADS IBM RISC System/6000, AIX 3.1, VAda-110-7171, Version 6.0
  * Host: IBM RISC System/6000 Models 320, 520, 540, 730 & 930 (under AIX 3.1)
  * Target: Any Host

* Compiler Vendor: Verdix Corporation
  * Compiler Type: Base
  * Validation Certificate #: 900728W1.11017
  * Compiler Name: VADS IBM RISC System/6000, AIX 3.1, VAda-110-7171, Version 6.0
  * Host: IBM RISC System/6000 series of computers (under AIX 3.1 & 3.2)
  * Target: Any Host

* Compiler Vendor: Verdix Corporation
  * Compiler Type: Base
  * Validation Certificate #: 900728W1.11018
  * Compiler Name: VADS HP 9000/300, HP-UX 7.0, VAda-110-1515, Version 6.0
  * Host: HP 9000/350 (under HP-UX 7.0)
  * Target: Same as Host
Ada PROCESSORS, Continued

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 900726W1.11018 (BASE)
  Compiler Name: VADS HP 9000/300, HP-UX 7.0, VAda-110-1515
  Host: HP 9000 Series 300 Models 310, 320, 330, 340, 350, 360 & 370 (under HP-UX 7.0)
  Target: Any Host

* Compiler Vendor: Verdix Corporation
  Compiler Type: Base
  Validation Certificate #: 900726W1.11019
  Compiler Name: VADS Prime EXL320, UNIX System V386 3.2, VAda-110-3232, Version 6.0
  Host: Prime EXL320 (under UNIX System V/386 3.2)
  Target: Same as Host

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 900726W1.11020
  Compiler Name: VADS VAX/VMS 5.2, VAda-110-0303, Version 6.0 & 6.2
  Host: MicroVAX 3100 (under VAX/VMS V5.2)
  Target: Same as Host

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 900726W1.11020 (BASE)
  Compiler Name: VADS VAX/VMS 5.3, VAda-110-0303, Version 6.0 & 6.2
  Host: DEC VAX-11, VAXstation, and VAX 6000, 8000, & 9000 series of computers (under VMS 5.0, 5.2, & 5.3)
  Target: Any Host

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 900726W1.11021
  Compiler Name: VADS VAX/VMS => 68k, VMS 5.2, VAda-110-03125, Version 6.0
  Host: MicroVAX 3100 (under VAX/VMS V5.2)
  Target: Motorola MVME147 (MC68030) (bare machine)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 900726W1.11021 (BASE)
  Compiler Name: VADS VAX/VMS => 68k, VMS 5.2, VAda-110-03125, Version 6.0
  Host: DEC VAX-11, VAXstation, MicroVAX, VAX 6000, VAX 8000 & VAX 9000 Series of computers (under VMS 5.3)
  Target: Any Host

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 900726W1.11022
  Compiler Name: VADS VAX/VMS => Intel 386, VMS 5.2
  Host: MicroVAX 3100 (under VAX/VMS V5.2)
  Target: Intel ISBC 386/32 (bare machine)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 900726W1.11022 (BASE)
  Compiler Name: VADS VAX/VMS => Intel 386, VMS 5.3
  Host: VAda-110-03315, Version 6.0 & 6.2
  Target: DEC VAX-11, VAXstation, MicroVAX, VAX 6000, VAX 8000 & VAX 9000 Series of computers (under VMS 5.3)
  Target: Intel ISBC 386/32 (bare machine)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 900726W1.11023
  Compiler Name: VADS VAX/VMS => 68k, ULTRIX 3.1, VAda-110-02125, Version 6.0
  Host: DEC VAX-11, VAXstation, MicroVAX, VAX 6000, VAX 8000 & VAX 9000 Series of computers (under Ultrix 3.1)
  Target: Cyclone CVME 44, CVME 46 & CVME 48; Force CPU 21, CPU 29, CPU 30, CPU 31, CPU 32, CPU 37 & Golden Triangle Firepower; Heurikon HK88/V30 Series, V2E Series & V2F Series; Integrated Solutions VME68K20, VME68K30, VME68225 & Liberator SBC; Matrix MS-CPU220 & MS-CPU320; Mizar MZ7120, MZ7124, MZ7130, MZ8120, MZ8130; Sun Microsystems 3E Board Set; Motorola MVME147 Series & MVME141 (MC68030), MVME133 Series, MVME134, MVME135, & MVME136 (MC68020), MVME185 &MVME187; Tadpole TP32V & TP33M (bare machines)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 900726W1.11023 (BASE)
  Compiler Name: VADS VAX/VMS => 68k, ULTRIX 3.1, VAda-110-02125, Version 6.0
  Host: DEC VAX-11, VAXstation, MicroVAX, VAX 6000, VAX 8000 & VAX 9000 Series of computers (under Ultrix 3.1)
  Target: Cyclone CVME 44, CVME 46 & CVME 48; Force CPU 21, CPU 29, CPU 30, CPU 31, CPU 32, CPU 37 & Golden Triangle Firepower; Heurikon HK88/V30 Series, V2E Series & V2F Series; Integrated Solutions VME68K20, VME68K30, VME68225 & Liberator SBC; Matrix MS-CPU220 & MS-CPU320; Mizar MZ7120, MZ7124, MZ7130, MZ8120, MZ8130; Sun Microsystems 3E Board Set; Motorola MVME147 Series & MVME141 (MC68030), MVME133 Series, MVME134, MVME135, & MVME136 (MC68020), MVME185 &MVME187; Tadpole TP32V & TP33M (bare machines); Tektronix MV System, MV8020 Support System using TekDB Version 5.0.2 emulation software (bare machine simulation)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Base
  Validation Certificate #: 900726W1.11023
  Compiler Name: VADS VAX/Ultrix => 68k, VMS 5.2, VAda-110-02125, Version 6.0
  Host: MicroVAX 3100 (under Ultrix 3.1)
  Target: Tektronix MV System, MV8020 Support System, using TekDB Version 5.0.2 emulation software (bare machine simulation)
* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 900725W1.11023 (BASE)
  Compiler Name: VADS VAX/ULTRIX => 68K, ULTRIX 3.1, VAda-110-02125, Version 6.0
  Host: DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 6000, VAX 8000, and VAX 9000 Series of computers (under ULTRIX 4.0, 4.1, & 4.2)
  Target: Cyclone CVME 48, Force CPU 21, CPU 29, CPU 30, CPU 31, CPU 32, CPU 37; Heurikon HK68/V2Fb Series, HK68/V30 Series, & HK68/V3E Series; Matrix MS-CPU220, MS-CPU320, & MS-CPU330; Mizar MZ7122, MZ7124, MZ7130, MZ8120, MZ8130; Motorola MVME147 Series & MVME141 (MC68030), MVME153 Series, MVME134, MVME135, & MVME147 Series; Radstone CPU-2A; SBE VCOM-24; Tadpole TP32V; & Tektronic MV System, MV68200 Support System using TekDB Version 5.0.2 emulation software (bare machine simulation) (bare machines)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Base
  Validation Certificate #: 900725W1.11024
  Compiler Name: VADS DEC-REL <= 68K, Ultrix 3.1, VAda-110-01125, Version 6.0
  Host: DECstation 3100 (under Ultrix 3.1)
  Target: Motorola MVME147 (MC68030) (bare machine)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 900725W1.11024 (BASE)
  Compiler Name: VADS DEC-REL <= 68K, Ultrix 4.0, VAda-110-01125, Version 6.0
  Host: DECstation 3100, 3100, 5000 & 5200; and DECsystem 3100, 5000, 5100, 5200, 5400, 5500, 5610, 5820, 5830 & 5840 (under ULTRIX 4.0)
  Target: Cyclone CVME 44, CVME 46 & CVME 48; Force CPU 21, CPU 29, CPU 30, CPU 31, CPU 32, CPU 37 & Golden Triangle Firepower; Heurikon HK68/V30 Series, V2E Series & V2F Series; Integrated Solutions VME68K20, VME68K30, VME68225 & Liberator SBC; Matrix MS-CPU220 & MS-CPU320; Mizar MZ7120, MZ7122, MZ7124, MZ7130, MZ8120, MZ8130; Sun Microsystems 3E Board Set; Motorola MVME147 Series (MC68030), MVME133 Series, MVME134 & MVME135 (MC68020); Tadpole TP32V & TP33M (bare machines)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 900725W1.11024 (BASE)
  Compiler Name: VADS DEC-REL <= 68K, Ultrix 3.1, VAda-110-01125, Version 6.0
  Host: Digital Equip. Corp. DECstation & DECsystem series of MIPS-based computers (under ULTRIX 3.1, 4.0, 4.1, 4.2, & 4.3)
  Target: Cyclone CVME 48; Force CPU 21, CPU 29, CPU 30, CPU 31, CPU 32, CPU 37; Heurikon HK68/V2Fb Series, HK68/V30 Series, & HK68/V3E Series; Matrix MS-CPU220, MS-CPU320, & MS-CPU330; Mizar MZ7122, MZ7124, MZ7130, MZ8120, MZ8130; Motorola MVME147 Series & MVME141 (MC68030), MVME133 Series, MVME134, MVME135, & MVME147 Series; Radstone CPU-2A; SBE VCOM-24; & Tadpole TP32V (bare machines)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Base
  Validation Certificate #: 900725W1.11025
  Compiler Name: VADS IBM RISC System/6000 => 68K, VAda-110-01135, Version 6.0
  Host: DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 6000, VAX 8000, and VAX 9000 Series of computers (under VMS 5.0, 5.2, & 5.3)
  Target: Cyclone CVME 48; Force CPU 21, CPU 29, CPU 30, CPU 31, CPU 32, CPU 37; Heurikon HK68/V2Fb Series, HK68/V30 Series, HK68/V3E Series; Matrix MS-CPU220, MS-CPU320, & MS-CPU330; Mizar MZ7122, MZ7124, MZ7130, MZ8120, & MZ8130; Motorola MVME133 Series, MVME134, MVME135, & MVME147 Series; Radstone CPU-2A; & Tadpole TP32V (bare machine)
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<td>Compiler Name</td>
<td>VADS IBM RISC System/6000=&gt;386, AIX 3.1, VAda-110-71315, Version 6.0</td>
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<tr>
<td>Host</td>
<td>IBM RISC System/6000 Models 320, 520, 540, 730 &amp; 930 (under AIX 3.1)</td>
</tr>
<tr>
<td>Target</td>
<td>Intel ISBC 386/118 (bare machine)</td>
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<td>Compiler Name</td>
<td>VADS IBM RISC System/6000=&gt;386, AIX 3.1, VAda-110-71315, Version 6.0</td>
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<tr>
<td>Host</td>
<td>IBM RISC System/6000 Models 320, 320H, 340, 350, 520, 520H, 530H, 540, 550, 560, 730, 930, &amp; 950 (under AIX 3.2)</td>
</tr>
<tr>
<td>Target</td>
<td>Intel ISBC 496/125 (bare machine)</td>
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<tr>
<td>Compiler Name</td>
<td>VADS Sun Microsystems Sun-4, Sparcstation, &amp; Sparcserver computer families (under SunOS 4.0, 4.1, &amp; 4.2)</td>
</tr>
<tr>
<td>Host</td>
<td>Cyclone CVME 48; Force CPU 21, CPU 29, CPU 30, CPU 31, CPU 32, CPU 37; Heurikon HK68/V2Fb Series, HK68/V30 Series, HK68/V3E Series; Matrix MS-CPU320, MS-CPU320; &amp; MS-CPU3300; Tadpole MZ7122, MZ7124, MZ7130, MZ8120, &amp; MZ8130; Motorola MVME133 Series, MVME134, MVME135, &amp; MVME147 Series; Radstone CPU-2A; &amp; Tadpole TP32V</td>
</tr>
<tr>
<td>Target</td>
<td>Intel ISBC 386/116 or 3167 fpu (bare machine)</td>
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<tr>
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<th>Verdix Corporation</th>
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<td>VADS VAX/VMS 5.2 =&gt; Intel 80386/Weitek 3167, VAda-110-03315, Version 6.0</td>
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<td>Host</td>
<td>MicroVAX 3100 (under VMS Version 5.2)</td>
</tr>
<tr>
<td>Target</td>
<td>Intel ISBC 386/116 or 3167 fpu (bare machine)</td>
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<tr>
<th>* Compiler Vendor</th>
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<td>Compiler Name</td>
<td>VADS VAX/VMS 5.3 =&gt; Intel 80386/Weitek 3167, VAda-110-03315, Version 6.0</td>
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<tr>
<td>Host</td>
<td>DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 8000, VAX 8000 &amp; VAX 9000 Series of computers (under VMS 5.3)</td>
</tr>
<tr>
<td>Target</td>
<td>Intel ISBC 386/116 or 3167 fpu (bare machine)</td>
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<td>Intel 302 System (under UNIX System V/386, Release 4)</td>
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<td>VADS UNIX System V/386/486, VAda-110-3232, Version 6.0, 6.1, &amp; 6.2</td>
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<td>Host</td>
<td>Any computer that executes the Intel 80386 or 80486 Instruction set (under NCR UNIX System V Release 4.0, UNIX System V/486 Release 4.0, 486 Sunsoft Interactive UNIX Release 4.0, 486 Interactive UNIX Release 3.01R3.2)</td>
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<td>Target</td>
<td>Motorola MVME147 (68030) (bare machine)</td>
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Ada PROCESSORS, Continued

* Compiler Vendor: VerdiX Corporation
  Compiler Type: Derived
  Validation Certificate #: 901129W1.11097 (BASE)
  Compiler Name: VADS Sun4 => 68K, Sun OS 4.1, VAda-110-40125, Version 6.0
  Host: Sun Microsystems Sun-4, SPARCserver, SPARCstation, & SPARCeingenie computer families (under SunOS 4.1)
  Target: Cyclone CVME 44, CVME 46 & CVME 48; Force CPU 21, CPU 29, CPU 30, CPU 31, CPU 32, CPU 37 & Golden Triangle Firepower; Heurikon HK68/V30 Series, V2E Series & V2F Series; Integrated Solutions VME68K20, VME68K30, VME68225 & Liberator SBC; Matrix MS-CPU220 & MS-CPU320; Mizar MZ7120, MZ7122, MZ7124, MZ7130, MZ8130, MZ8130, & CPU330;Motorola MVME133 Series, MVME134, MVME135, & MVME147 Series; Sun Microsystems 3E Board Set; & Tadpole Technology TP32V & TP33M (bare machines)

* Compiler Vendor: VerdiX Corporation
  Compiler Type: Base
  Validation Certificate #: 901129W1.11098
  Compiler Name: VADS Sun-4 => Sun-3, Sun OS 4.0, VAda-110-4013, Version 6.0
  Host: Sun-4/260 (under SunOS 4.0)
  Target: Sun-3/260 (under SunOS 4.0)

* Compiler Vendor: VerdiX Corporation
  Compiler Type: Derived
  Validation Certificate #: 901129W1.11099
  Compiler Name: VADS Sun-4 => Sun-3, Sun OS 4.0, VAda-110-4013, Version 6.0
  Host: Sun-4/20, /85, /110, /150, /260 & /280; SPARCserver 330, 370, 390, 470 & 490; SPARCeation SLC, 1, 1+, 2, 330 & 370; and SPARCeingenie 1 VM (under SunOS 4.1)
  Target: Sun-3/50, /80, /150, /180, /260, /280, /470 & /480 (under SunOS 4.1)

* Compiler Vendor: VerdiX Corporation
  Compiler Type: Base
  Validation Certificate #: 901129W1.11100
  Compiler Name: VADS AT&T 382/600G UNIX System V, Release 3.2.2, VAda-110-5151, Version 6.0
  Host: AT&T 382/600G (under UNIX System V, Release 3.2.2)
  Target: Same as Host

* Compiler Vendor: VerdiX Corporation
  Compiler Type: Derived
  Validation Certificate #: 901129W1.11101
  Compiler Name: VADS BCS/86K, Avlion DGUX 4.3, VAda-110-6080, Version 6.1
  Host: Data General AviON Model 5120 (under DG/UX 4.3)
  Target: Same as Host

* Compiler Vendor: VerdiX Corporation
  Compiler Type: Derived
  Validation Certificate #: 901129W1.11110
  Compiler Name: VADS BCS/86K Avlion DGUX 5.4, VAda-110-6080, Version 6.1
  Host: Data General AviON Models 4000, 4000GHI, 4020, 4100, 4120, 5010, 5200, 5220, 5240, 5300, 5310, 5400, 5402, 5410, 5412, 6200 & 6220; MOCOMP Real Star Family (under DG/UX 5.4)
  Target: Any Host

* Compiler Vendor: VerdiX Corporation
  Compiler Type: Derived
  Validation Certificate #: 901129W1.11111
  Compiler Name: VADS BCS/86K, Avlion DGUX 4.3, VAda-110-6080, Version 6.1
  Host: Data General AviON Models 4000, 4000GHI, 4020, 4100, 4120, 5010, 5200, 5220, 5240, 5300, 5310, 5400, 5402, 5410, 5412, 6200 & 6220 (under DG/UX 4.3)
  Target: Any Host
* Compiler Vendor: Veridix Corporation
  Compiler Type: Derived
  Validation Certificate #: 001129W1.11101 (BASE)
  Host: Data General AViON computer series (under DG/UX 4.3 & 5.4)
  Target: Any Host

* Compiler Vendor: Veridix Corporation
  Compiler Type: Derived
  Validation Certificate #: 001129W1.111101 (BASE)
  Compiler Name: VADS BCS/88K, VAda-110-8080, Version 6.1
  Host: MODCOMP Real Star Family (under REAL/IX C.0.2)
  Target: Any Host

* Compiler Vendor: Veridix Corporation
  Compiler Type: Derived
  Validation Certificate #: 001129W1.11102 (BASE)
  Compiler Name: VADS Sun4 => SPARC, Sun OS 4.1, VAda-110-40440, Version 6.0
  Host: Sun-4/490 (under SunOS 4.1)
  Target: SPARCengine 1E (bare machine)

* Compiler Vendor: Veridix Corporation
  Compiler Type: Derived
  Validation Certificate #: 001129W1.11102 (BASE)
  Compiler Name: VADS Sun4 => SPARC, Sun OS 4.1, VAda-110-40440, Version 6.0
  Host: Sun-4/20, 85, /110, /150 & /260; SPARCserver 330, 370, 390, 470 & 490; and SPARCstation SLC, 1, 1+, 2, 330 & 370 (under SunOS 4.1)
  Target: SPARCengine 1E (bare machine)

* Compiler Vendor: Veridix Corporation
  Compiler Type: Derived
  Validation Certificate #: 001129W1.11102 (BASE)
  Compiler Name: VADS Sun4 => SPARC, Sun OS 4.1, VAda-110-40440, Version 6.0 & 6.1
  Host: Sun Microsystem Sun-4, SPARCstation, & SPARCserver computer families (under SunOS 4.0, 4.1, & 4.2)
  Target: SPARCengine 1E & Ironics IV-SPARC-33A (bare machines)

* Compiler Vendor: Veridix Corporation
  Compiler Type: Derived
  Validation Certificate #: 910517W1.11149
  Compiler Name: VADS Sun-3 SunOS => 68k, VAda-110-13140, Version 6.0
  Host: Sun 3/260 (under SunOS Release 4.0)
  Target: Motorola MVME165 (68040) (bare machine)

* Compiler Vendor: Veridix Corporation
  Compiler Type: Derived
  Validation Certificate #: 010517W1.11149 (BASE)
  Compiler Name: VADS Sun-3 SunOS => 68k, VAda-110-13140, Version 6.0
  Host: Sun Microsystems Sun-3 computer family (under SunOS 4.1)
  Target: Motorola MVME165 (MC68040) (bare machine)

* Compiler Vendor: Veridix Corporation
  Compiler Type: Derived
  Validation Certificate #: 010517W1.11150 (BASE)
  Compiler Name: VADS DEC-RISC => MIPS R3000, VAda-110-81620, Version 6.1
  Host: DECstation 5000-200 (under ULTRIX V4.0)
  Target: Lockheed Sanders STAR MVP (R3000) (bare machine)

* Compiler Vendor: Veridix Corporation
  Compiler Type: Derived
  Validation Certificate #: 010517W1.11151
  Compiler Name: VADS VMS => MIPS R3000, VAda-110-03620, Ver 6.1
  Host: MicroVAX 3600 (under VMS V5.2)
  Target: Integrated Device Technology IDT77RS302 (bare machine)

* Compiler Vendor: Veridix Corporation
  Compiler Type: Derived
  Validation Certificate #: 010517W1.11150 (BASE)
  Compiler Name: VADS DEC-RISC => MIPS R3000, VAda-110-81620, Version 6.1
  Host: DECstation & DECsystem computer fam (under ULTRIX 4.0)
  Target: Lockheed Sanders STAR MVP (R3000) (bare machine)

* Compiler Vendor: Veridix Corporation
  Compiler Type: Derived
  Validation Certificate #: 010517W1.11151
  Compiler Name: VADS VAX/VMS => MIPS R3000, VAda-110-03620, Version 6.1 & 6.2
  Host: DECstation & DECsystem computers (under ULTRIX 4.0)
  Target: Lockheed Sanders STAR MVP (R3000) (bare machine)

* Compiler Vendor: Veridix Corporation
  Compiler Type: Derived
  Validation Certificate #: 910517W1.11151
  Compiler Name: VADS VAX/VMS => MIPS R3000, VAda-110-03620, Version 6.1 & 6.2
  Host: DEC VAX-11, VAXserver VAXstation MicroVAX, VAX 8000, VAX 8000, & VAX 9000 Ser of computers (under VMS 5.0, 5.2, & 5.3)
  Target: Heurikon HKMIPS/V3500; LSI Logic LR33000/LR33050 Pocket Rocket; any MIPS R2000-based & R5000-based computers; Omnistyle VR3000; and Pulsar 3000 (bare machine)
Ada PROCESSORS, Continued

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 910517W1.11151 (BASE)
  Compiler Name: VADS VMS => MIPS R3000, VAda-110-03020, Version 0.1
  Host: DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 6000, VAX 8000 & VAX 9000 Series of computers (under VMS 5.3)
  Target: Integrated Device Technology IDT7R302 (bare machine)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 910517W1.11152
  Compiler Name: VADS Sun-4 SunOS => 68k, VAda-110-40140, Version 6.0
  Host: Sun 4/280 (under SunOS Release 4.0)
  Target: Motorola MVME165 (68040) (bare machine)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 910517W1.11152 (BASE)
  Compiler Name: VADS Sun-4 SunOS => 68040, VAda-110-40140, Versions 6.0 & 6.2
  Host: Sun Microsystems Sun-4, SPARCserver, & SPARCstation computer families (under SunOS 4.0, 4.1, & 4.2)
  Target: 4 Systems SWXE-114; Force CPU-40 Series/Eagle I; Motorola MVME165, MVME167, MVME167A; PEP Modular Computer VM40; and Tadpole TP41V

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 910517W1.11153
  Compiler Name: VADS DEC-RISC => 68k, VAda-110-61680, Version 6.1
  Host: DECstation 2100 (under ULTRIX V4.0)
  Target: Motorola MVME181 (bare machine)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 910517W1.11153 (BASE)
  Compiler Name: VADS DEC-RISC => 68k, VAda-110-61680, Version 6.1
  Host: DEC DECstation & DECsystem computer families (under ULTRIX 4.0)
  Target: Motorola MVME181 (68000) (bare machine)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 910517W1.11153 (BASE)
  Compiler Name: VADS DEC-RISC => 68k, VAda-110-61680, Versions 6.1 & 6.2
  Host: DECstation & DECsystem (MIPS-based) computer families (under ULTRIX 3.1, 4.0, 4.1, 4.2, & 4.3)
  Target: Hughes Real-time Embedded Ada Processor (REAP) (bare machine)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 910517W1.11154
  Compiler Name: VADSWorks Sun4 => 68k, VAda-115-40800, Version 2.0
  Host: Sun 4/20 (under SunOS 4.1.1)
  Target: Motorola MVME1475A (bare machine, using vxWorks 5.0)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 910517W1.11154 (BASE)
  Compiler Name: VADSWorks Sun4 => 68k, VAda-115-40800, Version 2.0
  Host: Sun Microsystems Sun-4, SPARCserver & SPARCstation computer families (under SunOS 4.1)
  Target: Force CPU 21, CPU 29, CPU 30, CPU 31, CPU 32, CPU 33, CPU 37, & Golden Triangle Firepower; General Microsystems GMSV17 & GMSV37; Heurikon HK88/V20, /V2E, /V2F, /V2FA, /V30, /V30XE, /V3E, & /V3F; Ironics IV-3201a, 3204a, 3220, & 3220; Matrix MS-CPU320; Mizar MZ7122 & MZ7124; Motorola MVME133 Series, MVME135 MVME13A, MVME141, MVME143, & MVME147; Radstone PME 58-25 & 68-31; SBE VL30 & VP30; Sun Microsystems 3E; & Tadpole Technology TP32V-4MB (bare machines, using vxWorks 5.0)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 910517W1.11155
  Host: ZENITH Z-486/25E (under SCO UNIX i386 release 3.2)
  Target: Same as Host

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 910517W1.11155 (BASE)
  Compiler Name: VADS 386/486 System V, Rel. 3.2, VAda-110-3232, Version 6.0
  Host: Any Computer System Comprising: cpu: any that executes the Intel 80386/486 instruction set (under Any operating system compatible with Unix System V Release 3.2)
  Target: Same as Host

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 910517W1.11155
  Host: ZENITH Z-488/53E (under SCO UNIX i386 release 3.2)
  Target: Same as Host

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 910517W1.11155 (BASE)
  Host: Any computer that executes the Intel 80386 or 80486 instruction set (under SCO UNIX Release 3.2 running SecureWare CM+V/386 v2)
  Target: Same as Host

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<th>Compiler Vendor</th>
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<td>Host:</td>
<td>Any computer that executes the Intel 80386 or 80486 instruction set (under 486 SCO ODT v1.1 &amp; v2 R3.1, NCR UNIX System V Release 4.0, and UNIX System V/486 Release 4.0)</td>
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<td>Target:</td>
<td>Ironics IV9001 board (AMD 29000) (bare machine)</td>
<td>Target:</td>
<td>Same as Host</td>
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* Compiler Vendor: Veridex Corporation
* Compiler Type: Derived
* Validation Certificate #: 010517W1.11156
* Compiler Name: VADS IBM RISC System/6000 => 68K, VAda-110-71125, Versions 6.0, 6.1, & 6.2
* Host: Sun Microsystems Sun-4, SPARCstation & SPARCServer series of computers (under SunOS 4.0, 4.1, & 4.2)
* Target: Ironics IV9001 board (AMD 29000) (bare machine)
Ada PROCESSORS, Continued

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 010920W1.11202 (BASE)
  Compiler Name: VADS IBM RS/6000 => MIPS R3000, VAda-110-71620, Versions 6.1 & 6.2
  Host: IBM RISC/System 6000 Series (under AUX 3.1 & 3.2)
  Target: Heurikon HKMIPS/V95000; LSI Logic/LSR33000/LSR33050 Pocket Rocket; any MIPS R2000-based & R3000-based computers; Omnibyte VR3000; & Pulsar 3000 (bare machines)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 010920W1.11202 (BASE)
  Compiler Name: VADS IBM RS/6000 AIX 3.1, VAda-110-71620, Version 6.1
  Host: IBM RISC System/6000 Models 320, 520, 540, 730, & 930 (under AUX 3.1)
  Target: IDT 7RS302 (R3000) (bare machine)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 010920W1.11205
  Compiler Name: VADS Sun-4 => MIPS R3000, VAda-110-40620, Version 6.1
  Host: Sun Microsystems Sun-4, SPARCServer, & SPARCstation computer families (under SunOS 4.1)
  Target: LSI LR33000 Pocket Rocket Evaluation board (R3000) (bare machine)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 010920W1.11205 (BASE)
  Compiler Name: VADS Sun-4 => MIPS R3000, VAda-110-40620, Version 6.1
  Host: Sun Microsystems Sun-4, SPARCServer, & SPARCstation computer families (under SunOS 4.1)
  Target: LSI LR33000 Pocket Rocket Evaluation board (R3000) (bare machine)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 010920W1.11206 (BASE)
  Compiler Name: VADS Sun-4 SunOS => MC68000/10, VAda-110-40128, Version 6.0
  Host: Sun Microsystems Sun-4, SPARCServer, & SPARCserver series of computers (under SunOS 4.0, 4.1, & 4.2)
  Target: Heurikon HKMIPS/V95000; LSI Logic/LSR33000/LSR33050 Pocket Rocket; any MIPS R2000-based & R3000-based computers; Omnibyte VR3000; & Pulsar 3000 (bare machines)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 010920W1.11206
  Compiler Name: VADS Sun-4 SunOS => MC68000/10, VAda-110-40128, Version 6.0
  Host: Sun Microsystems Sun-4, SPARCServer, & SPARCserver series of computers (under SunOS 4.0, 4.1, & 4.2)
  Target: Motorola MVME101 (68000) with MVME222-1 memory board (bare machine)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 010920W1.11207
  Compiler Name: VADS Sun-4 => MC68000/10, SunOS, VAda-110-40128, Version 6.0
  Host: Sun Microsystems Sun-4, SPARCServer, & SPARCserver computer families (under SunOS 4.0, 4.1, & 4.2)
  Target: Motorola MVME101, Motorola 88302, Philips-Signetics 68070, & Toshiba 68301 single-board computers (bare machines)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 010920W1.11207
  Compiler Name: VADS Sun-4 => MC68000/10, SunOS, VAda-110-40128, Version 6.0
  Host: Sun Microsystems Sun-4, SPARCServer, & SPARCserver computer families (under SunOS 4.0, 4.1, & 4.2)
  Target: Motorola MVME101 (68000) with MVME222-1 memory board (bare machine)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 010920W1.11207 (BASE)
  Compiler Name: VADS Sun-4 => CPU32, VAda-110-40150, Version 6.0
  Host: Sun-4/280 (under SunOS Release 4.0.3)
  Target: Motorola CPU32 - M88332EV Evaluation System (68332) (bare machine)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 010920W1.11207 (BASE)
  Compiler Name: VADS Sun-4 => CPU32, SunOS, VAda-110-40150, Versions 6.0 & 6.2
  Host: Sun Microsystems Sun-4, SPARCServer, & SPARCserver computer families (under SunOS 4.0, 4.1, & 4.2)
  Target: Motorola CPU32-68331, -68333, & -68340 Evaluation Systems (bare machine)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 010920W1.11207 (BASE)
  Compiler Name: VADS Sun-4 => CPU32, SunOS, VAda-110-40150, Versions 6.0 & 6.2
  Host: Sun Microsystems Sun-4, SPARCServer, & SPARCserver computer families (under SunOS 4.0, 4.1, & 4.2)
  Target: Motorola CPU32 - M88332EV Evaluation System (68332) (bare machine)
Ada PROCESSORS, Continued

* Compiler Vendor: Verdi Corporation
  Compiler Type: Derived
  Validation Certificate #: 910920W1.11207 (BASE)
  Compiler Name: VADS Sun-4 SunOS => CPU32, VAda-110-40150, Version 6.0
  Host: Sun Microsystems Sun-4, SPARCserver SPARCstation, & SPARCengine computer families (under SunOS 4.1)
  Target: Motorola CPU32-68331, -68333, & -68340 Evaluation Systems (bare machines)

* Compiler Vendor: Verdi Corporation
  Compiler Type: Derived
  Validation Certificate #: 910920W1.11208
  Compiler Name: VADS IBM PS/2, AIX 1.1, VAda-110-3535, Version 6.1
  Host: IBM PS/2 Model 80 (under AIX 1.1)
  Target: Same as Host

* Compiler Vendor: Verdi Corporation
  Compiler Type: Derived
  Validation Certificate #: 910920W1.11209
  Compiler Name: VADS MIPS => MIPS R3000, VAda-110-62620, Version 6.1
  Host: MIPS R3230 (under RISC/OS 4.52)
  Target: Lockheed Sanders STAR MVP (R3000) (bare machine)

* Compiler Vendor: Verdi Corporation
  Compiler Type: Derived
  Validation Certificate #: 910920W1.11210
  Compiler Name: VADS Sun-3, SunOS => 68020/30 ARTX, VAda-110-13120, Version 6.0
  Host: Sun-3/280 (under SUNOS Release 4.0)
  Target: Motorola MVME147 (68030) (bare machine)

* Compiler Vendor: Verdi Corporation
  Compiler Type: Derived
  Validation Certificate #: 910920W1.11210 (BASE)
  Compiler Name: VADS Sun-3 SunOS => 68020/30 ARTX, VAda-110-13120, Version 6.0
  Host: Sun Microsystems Sun-3 computer family (under SunOS 4.1)
  Target: Cyclone CVME 44, CVME 46 & CVME 48; Force CPU 21, CPU 29, CPU 30, CPU 31, CPU 32, CPU 37 & Golden Triangle Firepower; Heurikon HK68/V30 Series, AV2E Series & V2F Series; Integrated Solutions VME68K20, VME68K30, VME68225 & Liberator SBC; Matrix MS-CPU220 & MS-CPU320; Mizar MZ7122, MZ7124, MZ7130, MZ8120, & MZ8130; Motorola MVME133 Series, MVME134, MVME135, MVME136, MVME141, & MVME147 Series; Sun Microsystems 3E Board Set; & Tadpole Technology TP32V & TP32M (bare machines)

* Compiler Vendor: Verdi Corporation
  Compiler Type: Derived
  Validation Certificate #: 910920W1.11211
  Compiler Name: VADS Sun4 SunOS => 68020/30 ARTX, VAda-110-40120, Version 6.0
  Host: Sun Microsystems Sun-4, SPARCserver, & SPARCstation computer families (under SunOS 4.1)
  Target: Motorola MVME147 (68030) (bare machine)

* Compiler Vendor: Verdi Corporation
  Compiler Type: Derived
  Validation Certificate #: 910920W1.11211 (BASE)
  Compiler Name: VADS Sun4 SunOS => 68020/30 ARTX, VAda-110-40120, Version 6.0
  Host: Sun Microsystems Sun-4, SPARCserver, & SPARCstation computer families (under SunOS 4.1)
  Target: Motorola MVME147 (68030) (bare machine)

* Compiler Vendor: Verdi Corporation
  Compiler Type: Derived
  Validation Certificate #: 910920W1.11212
  Compiler Name: VADS IBM RISC System/6000 AIX => 68020/30 ARTX, VAda-110-71120, Version 6.0
  Host: IBM RISC System/6000 Model 530 (under AIX 3.1)
  Target: Motorola MVME147 (68030) (bare machine)

* Compiler Vendor: Verdi Corporation
  Compiler Type: Derived
  Validation Certificate #: 910920W1.11212 (BASE)
  Compiler Name: VADS IBM RISC System/6000 AIX => 68020/30 ARTX, VAda-110-71120, Version 6.0
  Host: IBM RISC System/6000 Models 320, 520, 540, 730, & 930 (under AIX 3.1)
  Target: Motorola MVME147 (68030) (bare machine)

* Compiler Vendor: Verdi Corporation
  Compiler Type: Derived
  Validation Certificate #: 910920W1.11213
  Compiler Name: VADS SYSTEM V/860 RELEASE 4, VAda-110-9090, Version 6.1
  Host: Okidata860 Workstation (under UNIX SYSTEM V/860 RELEASE 4 v1.0)
  Target: Same as Host
* Compiler Vendor: Verdix Corporation
  Compiler Type: Base
  Validation Certificate #: 010920W1.11214
  Compiler Name: VADS VMS => AMD26000, VAda-110-03525, Version 6.04
  Host: DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 8000, & VAX 9000 Series of computers (under VMS 5.3)
  Target: Ironics IV9001 board (AMD 29000) (Am29000 bare VME machine)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 010920W1.11214 (BASE)
  Compiler Name: VADS VAX VMS => AMD 29K, VAda-110-03525, Version 6.04
  Target: Ironics IV9001 board (AMD 29000) (Am29000 bare VME machine)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Base
  Validation Certificate #: 010920W1.11215
  Compiler Name: VADS Sun-3 SunOS => AMD 29K, VAda-110-13525, Version 6.04
  Host: Sun Microsystems Sun-3 computer family (under SunOS 4.1)
  Target: Ironics IV9001 board (AMD 29000) (Am29000 bare VME machine)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Base
  Validation Certificate #: 020513W1.11252
  Compiler Name: VADS AT&T 3B2/600GR UNIX System V, Release 4.0, VAda-110-5363, Version 6.1
  Host: AT&T 3B2/600GR (under UNIX System V, Release 4.0)
  Target: Same as Host

* Compiler Vendor: Verdix Corporation
  Compiler Type: Base
  Validation Certificate #: 020513W1.11253
  Compiler Name: VADS IBM RISC System/6000 => IBM RISC System/6000, VAda-110-71710, Version 6.2
  Host: IBM RISC System/6000 Model 530 (under AIX 3.2)
  Target: IBM RISC System/6000 Model 320 (bare machine)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 020513W1.11253 (BASE)
  Compiler Name: VADS IBM RISC System/6000, VAda-110-71710, Version 6.2
  Host: IBM RISC System/6000 series of computers (under AIX 3.1 & 3.2)
  Target: Any Host

* Compiler Vendor: Verdix Corporation
  Compiler Type: Base
  Validation Certificate #: 020513W1.11254
  Compiler Name: VADS BCS => 88K, VAda-110-80880, Version 6.1
  Host: Motorola MVME187 (88000) (bare machine)
  Target: Motorola MVME187 (88000) (bare machine)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 020513W1.11256 (BASE)
  Compiler Name: VADSworks Sun4 => 68K, VAda-115-40800, Version 2.0
  Host: Sun Microsystems Sun-4, SPARCserver & SPARClntel computer family (under SunOS 4.0, 4.1, & 4.2)
  Target: DY 4 Systems SVME-144; Force CPU-40 Series; Motorola MVME162, MVME165, MVME167, & MVME167A; PEP Modular Computer VM40; and Tadpole TP41V (bare machine, using VxWorks 5.0)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 020513W1.11257
  Compiler Name: VADSworks Sun4 => SPARC, VAda-115-40850, Version 2.0
  Host: Sun Microsystems Sun-4, SPARCserver & SPARClntel computer family (under SunOS 4.0, 4.1, & 4.2)
  Target: Sun SPARCengine 1e (bare machine, using VxWorks v5.0)

* Compiler Vendor: Verdix Corporation
  Compiler Type: Derived
  Validation Certificate #: 020513W1.11257 (BASE)
  Compiler Name: VADSworks Sun4 => SPARC, VAda-115-40850, Version 2.0
  Host: Sun Microsystems Sun-4, SPARCserver, & SPARClntel computer family (under SunOS 4.0, 4.1, & 4.2)
  Target: Sun SPARCengine 1e (bare machine, using VxWorks v5.0)
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<th>Validation Certificate #</th>
<th>Compiler Name</th>
<th>Host</th>
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<td>* Verdix Corporation</td>
<td>Base</td>
<td>020515W1.11258</td>
<td>VADS Sun SPARC 386, VAda-110-40315, Version 6.2</td>
<td>Sun-4260 (under SunOS, Version 4.1.2)</td>
<td>Intel ISBC 386/20p (bare machine)</td>
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<td>* Verdix Corporation</td>
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<td>020515W1.11258 (BASE)</td>
<td>VADS Sun SPARC 386, VAda-110-40315, Version 6.2</td>
<td>Sun Microsystems Sun-4, SPARcserver, &amp; SPARcstation computer families (under SunOS 4.0, 4.1, &amp; 4.2)</td>
<td>Intel ISBC 386/20p (bare machine)</td>
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<td>* Verdix Corporation</td>
<td>Base</td>
<td>020104W1.11277</td>
<td>VADSworks DEC-RISC 386, VAda-110-40315, Version 6.2</td>
<td>Sun Microsystems Sun-4, SPARcserver, &amp; SPARcstation computer families (under SunOS 4.1 &amp; 4.2)</td>
<td>Any single-board computer that executes the Intel 80386 or i486 instruction set (bare machine)</td>
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<td>* Verdix Corporation</td>
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<td>020104W1.11277 (BASE)</td>
<td>VADSworks DEC-RISC 386, VAda-110-40315, Version 6.2</td>
<td>SUN Microsystems DECstation &amp; DECsystem (MIPS-based) computer families (under ULTRIX 4.1, 4.2, &amp; 4.3)</td>
<td>Lockheed Sanders STAR MVP board (bare machine, using vxWorks 5.0)</td>
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<td>* Verdix Corporation</td>
<td>Base</td>
<td>020104W1.11278</td>
<td>VADS/IBM RISC System/6000 VAda-110-4040, Version 6.2</td>
<td>DECstation &amp; DECsystem (MIPS-based) computer families (under ULTRIX 4.1, 4.2, &amp; 4.3)</td>
<td>Heurikon HKMIPS/V3500; SLS Logic LR33000/LR33050 Pocket Rocket; any MIPS R2000-based &amp; R3000-based computers; Omnibyte VR3000; &amp; Pulsar 3000 (bare machines, using vxWorks 5.0 &amp; 5.1))</td>
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<tr>
<td>* Verdix Corporation</td>
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<td>020104W1.11278 (BASE)</td>
<td>VADS/IBM RISC System/6000 VAda-110-4040, Version 6.2</td>
<td>DECstation &amp; DECsystem (MIPS-based) computer families (under ULTRIX 4.1, 4.2, &amp; 4.3)</td>
<td>Heurikon HKMIPS/V3500; SLS Logic LR33000/LR33050 Pocket Rocket; any MIPS R2000-based &amp; R3000-based computers; Omnibyte VR3000; &amp; Pulsar 3000 (bare machines, using vxWorks 5.0 &amp; 5.1))</td>
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<td>VADS/IBM RISC System/6000 VAda-110-4040, Version 6.2</td>
<td>DECstation &amp; DECsystem (MIPS-based) computer families (under ULTRIX 4.1, 4.2, &amp; 4.3)</td>
<td>Heurikon HKMIPS/V3500; SLS Logic LR33000/LR33050 Pocket Rocket; any MIPS R2000-based &amp; R3000-based computers; Omnibyte VR3000; &amp; Pulsar 3000 (bare machines, using vxWorks 5.0 &amp; 5.1))</td>
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<td>DECstation &amp; DECsystem (MIPS-based) computer families (under ULTRIX 4.1, 4.2, &amp; 4.3)</td>
<td>Heurikon HKMIPS/V3500; SLS Logic LR33000/LR33050 Pocket Rocket; any MIPS R2000-based &amp; R3000-based computers; Omnibyte VR3000; &amp; Pulsar 3000 (bare machines, using vxWorks 5.0 &amp; 5.1))</td>
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<tr>
<td>* Verdix Corporation</td>
<td>Base</td>
<td>020104W1.11278</td>
<td>VADS/IBM RISC System/6000 VAda-110-4040, Version 6.2</td>
<td>DECstation &amp; DECsystem (MIPS-based) computer families (under ULTRIX 4.1, 4.2, &amp; 4.3)</td>
<td>Heurikon HKMIPS/V3500; SLS Logic LR33000/LR33050 Pocket Rocket; any MIPS R2000-based &amp; R3000-based computers; Omnibyte VR3000; &amp; Pulsar 3000 (bare machines, using vxWorks 5.0 &amp; 5.1))</td>
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<td>* Verdix Corporation</td>
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<td>VADS/IBM RISC System/6000 VAda-110-4040, Version 6.2</td>
<td>DECstation &amp; DECsystem (MIPS-based) computer families (under ULTRIX 4.1, 4.2, &amp; 4.3)</td>
<td>Heurikon HKMIPS/V3500; SLS Logic LR33000/LR33050 Pocket Rocket; any MIPS R2000-based &amp; R3000-based computers; Omnibyte VR3000; &amp; Pulsar 3000 (bare machines, using vxWorks 5.0 &amp; 5.1))</td>
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<td>* Verdix Corporation</td>
<td>Base</td>
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<td>VADS/IBM RISC System/6000 VAda-110-4040, Version 6.2</td>
<td>DECstation &amp; DECsystem (MIPS-based) computer families (under ULTRIX 4.1, 4.2, &amp; 4.3)</td>
<td>Heurikon HKMIPS/V3500; SLS Logic LR33000/LR33050 Pocket Rocket; any MIPS R2000-based &amp; R3000-based computers; Omnibyte VR3000; &amp; Pulsar 3000 (bare machines, using vxWorks 5.0 &amp; 5.1))</td>
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<td>* Verdix Corporation</td>
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<td>DECstation &amp; DECsystem (MIPS-based) computer families (under ULTRIX 4.1, 4.2, &amp; 4.3)</td>
<td>Heurikon HKMIPS/V3500; SLS Logic LR33000/LR33050 Pocket Rocket; any MIPS R2000-based &amp; R3000-based computers; Omnibyte VR3000; &amp; Pulsar 3000 (bare machines, using vxWorks 5.0 &amp; 5.1))</td>
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<td>* Verdix Corporation</td>
<td>Base</td>
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<td>VADS/IBM RISC System/6000 VAda-110-4040, Version 6.2</td>
<td>DECstation &amp; DECsystem (MIPS-based) computer families (under ULTRIX 4.1, 4.2, &amp; 4.3)</td>
<td>Heurikon HKMIPS/V3500; SLS Logic LR33000/LR33050 Pocket Rocket; any MIPS R2000-based &amp; R3000-based computers; Omnibyte VR3000; &amp; Pulsar 3000 (bare machines, using vxWorks 5.0 &amp; 5.1))</td>
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<td>DECstation &amp; DECsystem (MIPS-based) computer families (under ULTRIX 4.1, 4.2, &amp; 4.3)</td>
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<td>Compiler Vendor</td>
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<td>Verdix Corporation</td>
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<td>021004W1.11285 (BASE)</td>
<td>SPARCworks Professional Ada, Version 2.0</td>
<td>Sun Microsystems Sun-4, SPARCstation &amp; SPARCserver computer families (under Solaris 2.1 &amp; 2.2)</td>
<td>Any Host</td>
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<tr>
<td>Verdix Corporation</td>
<td>Base</td>
<td>021004W1.11286</td>
<td>VADS Sun SPARC Solaris 2.1, VAda-110-4040, Version 6.2</td>
<td>SPARCstation 10 model 30 (under Solaris 2.1)</td>
<td>Same as Host</td>
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<td>Verdix Corporation</td>
<td>Base</td>
<td>021004W1.11287</td>
<td>VADS Sun SPARC Solaris 2.1, VAda-110-4040, Version 6.2</td>
<td>SPARCstation 10 model 41 (under Solaris 2.1)</td>
<td>Same as Host</td>
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<td>Verdix Corporation</td>
<td>Base</td>
<td>021004W1.11288</td>
<td>VADS Sun SPARC Solaris 2.1, VAda-110-4040, Version 6.2</td>
<td>SPARCstation 10 model 42 (under Solaris 2.1)</td>
<td>Same as Host</td>
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<td>Verdix Corporation</td>
<td>Base</td>
<td>021004W1.11289</td>
<td>VADS Sun SPARC Solaris 2.1, VAda-110-4040, Version 6.2</td>
<td>Sun SPARCServer 690 (under Solaris 2.1)</td>
<td>Same as Host</td>
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<td>Verdix Corporation</td>
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<td>021004W1.11290</td>
<td>VADS MP Sun SPARC Solaris 2.1, VAda-110-4141, Version 6.2</td>
<td>Sun SPARCServer 690 (under Solaris 2.1)</td>
<td>Same as Host</td>
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<td>Verdix Corporation</td>
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<td>VADS MP Sun SPARC, Solaris 2.0, VAda-110-4141, Version 6.2</td>
<td>Sun Microsystems Sun-4, SPARCServer, &amp; SPARCstation computer families (under Solaris 2.0 &amp; 2.1)</td>
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<td>Verdix Corporation</td>
<td>Base</td>
<td>021004W1.11291</td>
<td>VADS Silicon Graphics Self, VAda-110-8464, Version 6.2</td>
<td>Silicon Graphics IRIS 4D/440 (under IRIX 4.0.1)</td>
<td>Same as Host</td>
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<td>Verdix Corporation</td>
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<td>021004W1.11292</td>
<td>VADS MP Silicon Graphics, VAda-110-6555, Version 6.2</td>
<td>Silicon Graphics IRIS 4D/440 (under IRIX 4.0.1)</td>
<td>Same as Host</td>
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<td>Verdix Corporation</td>
<td>Base</td>
<td>030226W1.11311</td>
<td>VADSeIf HP 9000 Series 700 VAda-110-7575, Version 6.2</td>
<td>HP 9000/720 (under HP-UX 8.0,7)</td>
<td>Same as Host</td>
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<td>Verdix Corporation</td>
<td>Derived</td>
<td>030226W1.11312</td>
<td>VADSeIf HP 9000 Series 700 VAda-110-7575, Version 6.2</td>
<td>Sun-4/20 (under SunOS Release 4.1.1)</td>
<td>Heurikon HKMIPS/3500 (R3000) board (bare machine, using vxWorks 5.0)</td>
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<tr>
<td>Heurikon</td>
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<td>030226W1.11312 (BASE)</td>
<td>VADSeIf HP 9000 Series 700 VAda-110-7575, Version 6.2</td>
<td>Sun-4/20 (under SunOS Release 4.1.1)</td>
<td>Heurikon HKMIPS/3500 (bare machine, using vxWorks 5.0)</td>
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<td>Verdix Corporation</td>
<td>Base</td>
<td>030228W1.00426</td>
<td>VADS Sun-4 =&gt; MIPS R3000 VAda-110-40640, Version 2.0</td>
<td>Sun-4/20 (under Solaris 2.2)</td>
<td>Lockheed Sanders STAR MVP (R3000) (bare machine)</td>
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<td>Verdix Corporation</td>
<td>Base</td>
<td>030901W1.11323</td>
<td>VADS Sun-4 =&gt; MIPS R3000, VAda-110-42620, Version 6.2</td>
<td>Sun SPARCstation 2 (under Solaris 2.2)</td>
<td>Lockheed Sanders STAR MVP (R3000) (bare machine)</td>
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<td>Verdix Corporation</td>
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<td>030901W1.11324</td>
<td>VADS Sun-4 =&gt; MIPS R4000, VAda-110-40630, Version 6.2</td>
<td>Sun SPARCstation 2 (under SunOS 4.1.2)</td>
<td>Lockheed Sanders STAR MVP (R4000) (bare machine)</td>
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**Ada PROCESSORS, Continued**

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<td>Base</td>
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<td>Base</td>
<td>930001W1.11326</td>
<td>VADS SYSTEM V/88 RELEASE, VAda-110-8080, Version 6.2</td>
<td>Motorola Delta 8840 (under UNIX System V/88 Release 4.0)</td>
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<td><strong>Verdix Corporation</strong></td>
<td>Base</td>
<td>940110W1.11337</td>
<td>VADS Windows NT/486, VAda-110-36315, Version 6.2</td>
<td>Compudyne 486 (under Windows NT 3.1)</td>
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<td>Wang VS Ada, Version 5.00.00</td>
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<td>Intergraph InterPro 3050 Workstation (under CLIX R3.1)</td>
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<td>York Ada Compiler Environment (ACE), Rel 5</td>
<td>InterAct 220, 2020, 3050, 6040, 6080, 6240 &amp; 6280 (under CLIX Release 3.1)</td>
<td>Any Host</td>
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<td>York Ada Compiler Environment (ACE), Rel 5</td>
<td>InterPro 125, 225, 340, 350, 2020, 3070, 6040, 6240, 6080 &amp; 6280 (under CLIX Release 3.1)</td>
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<td><strong>York Software Engineering Limited</strong></td>
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<td>901127N1.11073 (BASE)</td>
<td>York Ada Compiler Environment (ACE), Rel 5</td>
<td>InterServe 200, 300, 2000, 3000, 4200, 5200, 6000, 6105 &amp; 6505 (under CLIX Release 3.1)</td>
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<td>InterView 220 &amp; 3050 (under CLIX Release 3.1)</td>
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<td>VAX! Models 110, 310, 410, 610, 612; 4000 Models 100, 200, 300, 400, 500, 600; 6000 Models 200, 300, 400, 500, 600; 7000 Model 600; 8200, 8250, 8300, 8350, 8500, 8530, 8550, 8600, 8650, 8700, 8800, 8810, 8820, 8830, 8840; 9000 Models 110, 210, 300 series, 400 series; 10000 Models 600 series; VAX-11/730, /750, /780, /785; MicroVAX II; 2000; 3100 Models 10/10E, 20/20E, 30, 40, 80, 90; 3300, 3400, 3500; 3600; 3800; 3900; VAXstation II; 2000, 3100 Models 30, 38, 40, 48, 75, 3200, 3500, 3520, 3540, 4000 Models 60, 90, VLC; VAXserver 3100, 3300, 3400, 3500, 3600, 3600, 3900, 4000 Models 200, 300, 500; 6000 Models 210, 220, 310, 320, 410, 420, 510, 520, 610, 620, 630; OpenVMS VAX; Version 6.0</td>
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<td>Apple Quadra 630; Macintosh OS Version 7 Release 1.2P</td>
<td>Apple Power Book 520, 540; Macintosh OS Version 7.1.1 Apple Quadra 650; Macintosh OS Version 7.1.2</td>
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<td>UNISYS Government Systems</td>
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<td>Intel Classic R+ Workstation; Microsoft Windows NT Workstation Version 3.5</td>
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### 2.7.5 C PROCESSORS

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<td>NCR System 3000 Model 3550; NCR UNIX SVR4 MP-RAS Release 2 Version 2</td>
<td>NCR System 3000 Models 3335, 3340, 3345, 3350, 3360, 3410, 3430, 3445, 3447, 3450, 3455, 3470, 3475, 3520, 3525, 3555, 3570, 3575, 3600; NCR UNIX SVR4 MP-RAS Rel. 2</td>
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<td>DEC OSF/1 C Compiler Version 3.0; NIST-94/2007; 9/1/95</td>
<td>DEC 3000 Model 400 AXP; DEC OSF/1 Version 3.0</td>
<td>DEC 2000 models 300 AXP, 500 AXP, 2100 Server A500MP, A600MP; 3000 models 300 AXP, 300L, 300X, 300LX, 400 AXP, 400S, 500 AXP, 500S, 600 AXP, 600S, 800 AXP, 800S; 4000 models 610 AXP, 710; 7000 model 610 AXP; 10000 model 610 AXP; DEC OSF/1 Version 3.0</td>
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<td>DEC 2000 Model 300S AXP; 3000 Models 300 AXP, 300L AX, 300LX AXP, 400 AXP, 400S AXP, 600 AXP, 600S AXP, 800 AXP, 800S AXP; Digital 2100 A600/600 MP; DEC 4000 Models 600 AXP, 700 AXP; DEC 7000 Models 600 AXP; 10000 Model 600 AXP; OpenVMS AXP, Version 6.1</td>
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<td>Clipper C300 and C400; CLIX Version 7.5</td>
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<td>MIPS/NEX Model</td>
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<td>Microsoft Visual C++ Version 2.0; NIST-94/2141; 10/1/95</td>
<td>Image RISCStation; Microsoft Windows NT Version 3.5</td>
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<td>Microsoft C/C++ Optimizing Compiler Version 9.00; Release</td>
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<td>Pyramid Technology Corp.</td>
<td>DC/OSx ANSI C, Version 3.11 Release c07x; NIST-94/1541; 5/1/95</td>
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<td>MiServer-S; DC/OSx Version 1.1 Release c07x</td>
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<td>SCO Canada, Inc.</td>
<td>SCO XPG4 Development System Supplement Version 1.0; NIST-94/1661; 4/1/95</td>
<td>DELL 486 Model 450DE/2 DGX; SCO UNIX Version 3.2 Release 4.2</td>
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<td>Sequent Computer Systems, Inc.</td>
<td>ptx/C Version 4.0; NIST-95/1242; 2/1/96</td>
<td>SE20; DYNIX/ptx Version 4.0</td>
<td>S2000/290, 490, 790, SE60, SE90, ELS, SE30, SE70, SE100; DYNIX/ptx Version 4.0</td>
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<td>Sunsoft, A Sun Microsystems, Inc. Business</td>
<td>SPARCompiler C Version 3.0; NIST-93/2184; 2/1/95</td>
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<td>Voyager, SPARCstation 10, SPARCserver 1000, SPARCcenter 2000; Solaris Version 2.4</td>
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<td>Sunsoft, A Sun Microsystems, Inc. Business</td>
<td>SPARCompiler C Version 3.0.1; NIST-94/1744; 9/1/95</td>
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<td>Sunsoft, A Sun Microsystems, Inc. Business</td>
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<td>Tandem Computers Incorporated</td>
<td>C Release D30; NIST-94/2182; 12/1/95</td>
<td>Himalaya Range Model K10000 Open System Services on NonStop Kernel Release D30</td>
<td>Himalaya Range K100, K1000; Open System Services on NonStop Kernel Release D30</td>
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<td>Himalaya Range K100, K1000; Guardian on NonStop Kernel Release D30</td>
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<td>Unisys</td>
<td>UCS C (UC) Version 4R3 Release SB5R3; NIST-95/1043; 1/1/96</td>
<td>2200 Model 900; 2200 OS EXEC Version 44R3 Release SB5R3</td>
<td>2200 Model 500 2200 OS EXEC Version 44R3 Release SB5R3</td>
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2.7.6 M[UMPS] PROCESSORS

No entries at this time.
2.8 LANGUAGE PROCESSORS
WITH REGISTERED REPORTS ONLY

No entries at this time.
3. DATABASE LANGUAGE (SQL)

3.1 FIPS Database Language Standards

As specified by the FIPS, FIRMR and the associated Federal ADP and Telecommunications Standards Index, Federal agencies, when acquiring SQL processors, are responsible for assuring that processors are in accordance with the applicable FIPS PUB 127, Database Language SQL. On December 3, 1993, FIPS PUB 127-2 superseded FIPS PUB 127-1.

3.2 Organization of Database Language Processor Entries

Each entry in the VPL is a very limited extract from the Validation Summary Report (VSR) available from the Software Standards Validation Group at NIST. See 3.4 and 3.5 below.

Products validated for conformance to FIPS PUB 127-2 are listed. Products that demonstrated one or more nonconformities, as assessed by the SQL Validation System, are listed separately at the end. (These products are considered "provisionally" validated, pending correction of nonconformities.) The entries in the VPL for database language processors are presented as follows:

• The VENDOR column contains the name of the Vendor of the processor.

• The second column contains the name of the processor, its version number, the VSR number, the Expiry date of the Validation Certificate or the Registered VSR, and the hardware and operating system on which the testing was done. The term "Pre-release" means that the vendor has designated the SQL processor as "not commercially available" at the time of validation. The product is listed to assist users in planning for future procurements. The term "Vendor-Tested Port" means the Vendor has complied with CSL procedures for self-testing a ported version of a registered SQL processor. NIST has reviewed Vendor test results and determined them to be equivalent to those in the referenced BASE VSR.

• The INTERFACES & COMPILERS column contains the names of associated interactive SQL or programming language interfaces, and identification of the programming language compilers that interface with the SQL processor. A listing in the COMPILERS column is not an indication that the compiler has been validated for the applicable programming language standard. See the preceding "Programming Languages" Section for a list of validated compilers.

• The last column entries column include other hardware and operating system environments in which the processor operates, and the programming language compilers that interface with the SQL processor. The listings of the compilers and operating systems may contain a range of versions that are supported. Rebadged or renamed software are also listed here. This column is restricted to binary-compatible hardware environments. This column also lists the number and type of nonconformities for each programming language interface tested. "Schema" nonconformities are deficiencies in support for standard schema definition language constructs. "FIPS Flagger" in this column indicates that the mandatory FIPS Flagger requirement of FIPS 127 was not implemented. Refer to the VSR for details. The number of nonconformities is only one limited measure of the quality of an SQL interface. It is more important to analyze the nature of each individual nonconformity and its impact on meeting user requirements.

3.3 Validation Requirements

Refer to Database Language SQL Validation Procedures. The requirements for validation of database language processors are the same as those for programming language processors, listed in section 2.3.1,
with several exceptions. Expired VSRs are deleted from the VPL to motivate vendors to test new releases of their SQL processors and to demonstrate conformance to more comprehensive versions of the SQL Test Suite. Information about expired VSRs or vendor self-testing with the SQL Test Suite may be available from the vendor.

3.4 Certificate of Validation

A Certificate of Validation is issued for those SQL processors that have been tested and are considered to be in compliance with FIPS as specified by the FIPS, by the FIRMR, and the associated Federal ADP and Telecommunications Standards Index.

3.5 Registered Report

A Validation Summary Report (VSR) that indicates that the SQL processors did not meet the criteria for a Certificate of Validation may be registered by the Computer Systems Laboratory. A VSR is considered registered by CSL when it contains a signed notice that the VSR will be listed in the CSL Validated Products List (VPL).

3.6 Validation Procedures

SQL processors are tested in accordance with the procedures described in the NIST Database Language SQL Validation Procedures. To request a copy of the validation procedures and/or to request the validation of an SQL processor, contact:

National Institute of Standards and Technology
Computer Systems Laboratory
Software Standards Validation Group
Building 225, Room A266
Gaithersburg, Maryland 20899  (U.S.A.)
Telephone (301) 975-2490 (Voice)
(301) 975-3274 (Voice)
(301) 948-6213 (FAX)
e-mail:  dashiell@speckle.ncsl.nist.gov (INTERNET)

3.7 SQL Validation System

To request a copy of the SQL Validation System and/or to submit questions regarding the SQL Validation System, contact:

National Institute of Standards and Technology
Computer Systems Laboratory
Database Languages Group
Building 225, Room A266
Gaithersburg, Maryland 20899  (U.S.A.)
Telephone (301) 975-3258 (Voice)
(301) 975-3263 (Voice)
(301) 948-6213 (FAX)
e-mail:  sullivan@speckle.ncsl.nist.gov (INTERNET)
3.8 Availability of Validation Summary Report by FTP

ASCII formatted Validation Summary Reports are available in electronic media using the following instructions:

1. Type: `ftp speckle.ncsl.nist.gov` (internet address is 129.6.59.2)
2. Login as user ftp
3. Type your e-mail address preceded by a dash (-) as the password
4. Type: `cd sql-testing/VSRs`
5. Type: `ascii`
6. Type: `get` and the name of the file you want, e.g., `README.TXT`.

The README.TXT file contains disclaimer information; read this file for important information regarding potentially missing information from the VSR.
### 3.8 SQL Processors

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<th>Other HW/SW Environments</th>
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<td>AT&amp;T Global Information Solutions</td>
<td>Teradata DBS, Version 5.5.0 (Pre-release); NIST-94/7150; 12/31/95; Client: Amdahl 5890-600E; IBM MVS XA, V. 2.2.0 Server: DBC/1012 Model 4 DBMS runs native to hardware</td>
<td>Embedded SQL C C Preprocessor 2, V. 5.2 (Pre-release) Embedded COBOL COBOL Preprocessor 2, V. 5.2 (Pre-release) Interactive SQL (FIPS Default)</td>
<td>Features Tested: Entry FIPS 127-2 FIPS Sizing Defaults</td>
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**FIPS 127-2: Zero Nonconformities**

[Entry FIPS 127-2 exceeds requirements for FIPS 127-1 with Integrity Enhancement Option]
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<td>Ingres, An ASK Company</td>
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<td>Embedded Ada SUN Ada, Version 1.0 Embedded C SUN C Version 2.0.1 Embedded FORTRAN SUN Fortran Version 2.0.1</td>
<td>ESQL/Ada, Rel. 1.0 ESQL/C Rel. 1.0 ESQL/FORTRAN Rel. 1.0</td>
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<td>OpenINGRES SQL, Release 1.0, OpenINGRES Intelligent Database; NIST-94/7122; 5/1/95; DEC VAXstation 3100, Model 38; VAX/VMS Version 5.5</td>
<td>Embedded Ada VAX Ada, V. 3.0.7 Embedded C VAC C, V. 3.2-044 Embedded FORTRAN VAX Fortran, V. 6.0-1</td>
<td>ESQL/Ada, Rel. 1.0 ESQL/C, Rel. 1.0 ESQL/FORTRAN, Rel. 1.0</td>
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<td>OpenINGRES SQL, Release 1.0, OpenINGRES Intelligent Database; NIST-94/7123; 5/31/95; IBM RISC System 6000, Model 530; IBM AIX for RISC System 6000 Version 3.2</td>
<td>Embedded Ada Verdix Ada, V. 6.1 Embedded C IBM XL C Compiler V. 1.2 Embedded FORTRAN IBM XL FORTRAN Compiler V.2.3</td>
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<td>Embedded C Pro*C, V. 1.6 SPARCompiler C Rel. 3.0</td>
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- FIPS Sizing Defaults
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<td>Pro*C, V. 1.6, 2.0</td>
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<td>SPARCompiler C</td>
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<td>VAX 4000 Models 100, 200, 300, 400, 500, 600; VAX 6000 Models 200, 300, 400, 500, 600; VAX 7000 Model 600; VAX 8200, 8250, 8300, 8350, 8500, 8530, 8550, 8598, 8600, 8650, 8700, 8800, 8810, 8820, 8830, 8840; VAX 9000 Models 110, 210, 300, 400, 500; VAX 10000 Model 600; VAXt 3000 Models 110, 310, 410, 610, 612; VAX-11/730, VAX-11/750, VAX-11/780, VAX-11/785; MicroVAX's II, 2000, 3100 Models 10/10E, 20/20E, 30, 40, 80, 90, MicroVAX's 3200, 3300, 3400, 3500, 3600, 3800, 3900; VAXstation's II, 2000, 3100 Models 30, 38, 40, 48, 76; VAXstation's 3200, 3500, 3520, 3540, 4000 Models 60, 90, VL; VAXservers 3100, 3200, 3300, 3400, 3500, 3600, 3800, 3900, 4000 Models 200, 300, 400, 500, 600, 700; VAXserver 6000 Models 200, 300, 400, 500, 600 Series; VAXservers 8200, 8250, 8300, 8350, 8500, 8600, 8650, 8700, 8800, 8810, 8830, 8840; OpenVMS VAX, Vers. 5.4, 5.5, 6.0</td>
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<td>OTHER HW/SW ENVIRONMENTS</td>
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<td>Embedded Ada Module Ada DEC Ada for OpenVMS AXP, Version 3.0 Embedded C Module C DEC C for OpenVMS AXP, Version 1.3 Embedded COBOL Module COBOL DEC COBOL for OpenVMS AXP, Version 1.1 Embedded FORTRAN Module FORTRAN DEC FORTRAN for OpenVMS AXP, V.6.1 Embedded PASCAL Module PASCAL DEC Pascal for OpenVMS AXP, Version 5.1 Interactive SQL (FIPS Default)</td>
<td>DEC 2000 Model 300, DEC 3000 Models 300, 400 AXP Workstation, DEC 3000 Model 400 AXP Server, DEC 3000 Model 500 AXP Workstation, DEC 3000 Model 500 AXP Server, DEC 4000 Model 610 AXP System, DEC 7000 Model 610 AXP System, DEC 10000 Model 610 AXP System OpenVMS AXP Ver. 1.5</td>
<td>DEC Ada for OpenVMS AXP V.3.0 DEC C for OpenVMS AXP V. 1.3-1.4 DEC COBOL for OpenVMS AXP V. 1.1-2.0 DEC Fortran for OpenVMS AXP V.6.1-6.2 DEC Pascal for OpenVMS AXP V.5.0-5.1</td>
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<td>Software AG ADABAS D, Version 6.1.1 Pre-release; NIST-94/7171; 10/31/95; HP 9000/847 G30 HP-UX Version 9.00</td>
<td>Schema Processor LOAD, utility bundled with ADABAS D</td>
<td>DEC 2000 Model 300, DEC 3000 Models 300, 400 AXP Workstation, DEC 3000 Model 400 AXP Server, DEC 3000 Model 500 AXP Workstation, DEC 3000 Model 500 AXP Server, DEC 4000 Model 610 AXP System, DEC 7000 Model 610 AXP System, DEC 10000 Model 610 AXP System OpenVMS AXP Ver. 1.5</td>
<td>DEC Ada for OpenVMS AXP V.3.0 DEC C for OpenVMS AXP V. 1.3-1.4 DEC COBOL for OpenVMS AXP V. 1.1-2.0 DEC Fortran for OpenVMS AXP V.6.1-6.2 DEC Pascal for OpenVMS AXP V.5.0-5.1</td>
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<td>ADABAS D, Version 6.1.1 Pre-release; NIST-94/7172; 10/31/95; HP 9000/847 G30 HP-UX Version 9.00</td>
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<td>INTERFACES &amp; COMPILERS</td>
<td>OTHER HW/SW ENVIRONMENTS</td>
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<td>Sybase, Inc.</td>
<td>Sybase System 10 GA Release 10.0.1; NIST-94/7131; 4/30/96; Client: Sun 4/25 SunOS V. 4.1.3 Server: Sun 4/25 SunOS V. 4.1.3</td>
<td>Schema Processor Interactive SQL (isql) Release 10.0.1 Embedded C Sybase System 10 Embedded SQL/C GA 10.0.1 gcc version 2.3.1</td>
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**FIPS 127-2: ONE OR MORE NONCONFORMITIES**

[Entry FIPS 127-2 exceeds requirements for FIPS 127-1 with Integrity Enhancement Option]

No entries for this quarter.
4. GRAPHICS CONFORMANCE TESTING

4.1 FIPS GKS Standard

The Graphical Kernel System (GKS) is a two-dimensional graphics tool box which provides for the display and manipulation of pictures and graphical input from the operator. The purpose of GKS is to promote portability of graphics applications for use on a variety of graphics workstations. It provides a functional interface between an application program and a configuration of graphical devices. The interface is at such a level of abstraction that hardware peculiarities are shielded from the application program.

FIPS PUB 120-1, GKS, is the first Federal Information Processing Standard Publication (FIPS PUB) registered for computer graphics systems. In accordance with FIPS PUB 120-1, two-dimensional graphics toolbox packages acquired for Federal use after November 3, 1986 should implement FIPS GKS. Conformance testing of GKS implementations protects Federal investment by ensuring adherence to the graphics standard. FIPS PUB 120-1 requires that GKS implementations offered to Federal agencies be tested using the NIST Test Suite to ensure that a particular implementation meets the specifications of the FIPS. The GKS Validation Test Suite (Fortran) is available from:

Ms. Susan Sherrick
National Institute of Standards and Technology
Building 225, Room A266
Gaithersburg, MD 20899
(301) 975-3268

4.1.1 Organization of GKS Entries

The entries in the VPL for GKS implementations are presented as follows:

- The VENDOR column contains the name of the Vendor of the implementation.
- The next column contains the name of the implementation, its version number, the Expiry date of the certificate of validation, the VSR number, and level of GKS that was validated.
- The HARDWARE & OP. SYSTEM column presents the hardware and operating system environment used during the validation.
- The last column includes the graphics devices that were validated, and any other environments that have been registered.

4.2 FIPS PHIGS Standard

PHIGS stands for Programmer’s Hierarchical Interactive Graphics System. PHIGS is a system for interactive 3-dimensional (3D) graphics applications that provides programmers with a set of features enabling them to manipulate and display complex 3D objects. It is called hierarchical because the complex objects can be built up from simpler objects. PHIGS also provides a rich set of facilities for real-time interaction with the user. While it borrows many concepts from the Graphical Kernel System (GKS) standard, it also introduces many new features, such as a "graphics data base" (the centralized structure store), and support for modeling and viewing.
In accordance with FIPS PUB 153, (PHIGS), 3D graphics packages acquired for Federal use should implement FIPS PHIGS. Conformance testing of PHIGS implementations protects Federal investment by ensuring adherence to the graphics standard. FIPS PUB 153 requires that PHIGS implementations offered to Federal agencies be tested using the NIST PVT (PHIGS Validation Tests) test suite. The test suite ensures that a particular implementation meets the specifications set forth in the FIPS. The PHIGS PVT test suite is available from:

Project Leader, PHIGS Validation Tests  
National Institute of Standards and Technology  
Computer Systems Laboratory  
Bldg. 225, Room A-266  
Gaithersburg, MD 20899  
phone: (301) 975-3265  
e-mail: phigs@speckle.ncsl.nist.gov

4.2.1 Organization of PHIGS Entries

The entries in the VPL for PHIGS implementations are as follows:

- The VENDOR column contains the name of the vendor of the implementation.
- The PHIGS name column contains the name of the implementation, its version number, the Validation Summary Report (VSR) number, and the expiry date of the certification of validation.
- The HARDWARE & OP.SYSTEM column presents the hardware and operating system environment used during the validation.
- The GRAPHICS DEVICES column includes the graphics devices that were validated.
- The entries in the REGISTERED ENVIRONMENTS HW/OS column includes registered hardware and operating systems for the implementation tested. The vendor of the implementation has certified that the identified processor, when operating under the environments included in this column, produces the same test results exhibited during the validation. Test results and other information from these environments may be required as evidence for entries to be included in this column.
- The NONCONFORMITIES column indicates whether or not the PHIGS implementation conforms to the FIPS in one or more cases as evidenced by the validation. The VSR should be reviewed for more details of the nonconformities.

4.3 FIPS CGM Standard

Federal Information Processing Standard Publication (FIPS PUB) 128-1, Computer Graphics Metafile (CGM), is a data interchange standard for the storage and retrieval of picture information in a device independent manner. The purpose of the CGM is to facilitate the transfer of graphical information among different computer systems, graphical devices, and/or applications.

The FIPS PUB 128-1 requires the use of application profiles. In particular, FIPS PUB 128-1 requires the use of military specification MIL-D-28003A, commonly known as the Continuous Acquisition and Life-Cycle Support (CALS) CGM Application Profile (AP). FIPS PUB 128-1 should be used when the representation of graphical information in digital form is to be used in
technical illustrations and publications, and when the use of a general-purpose, graphical interchange mechanism is required.

The NIST CGM Validation Test Service is divided into three testing programs: metafile, generator, and interpreter testing. The purpose of the Test Service is to determine the degree to which the metafile, CGM generator, or CGM interpreter conforms to the FIPS 128-1, and subsequently the CALS CGM AP. Presently, the NIST CGM Validation Test Service addresses only CGM Version 1.

4.3.1 Validation Procedures and Test Suite

CGM files, generators, and interpreters are tested in accordance with procedures described in the NIST Procedures for CGM Testing, NISTIR 5372. The current version of the CGM Generator Test Suite is 1.0; the current version of the Validation Test Software is 5.02. The CGM Interpreter Test Suite is issued as Release 1.1. The validation procedures and test suites are available from:

National Institute of Standards and Technology (NIST)
Computer Systems Laboratory
CGM Test Service
Room A266, Technology Building
Gaithersburg, MD 20899
Telephone: (301) 975-3265

4.3.2 Certificate of Validation

Conformance testing of metafiles focuses on testing an instance of a CGM for conformance to Version 1 CGM as specified in the FIPS PUB 128-1. If the CGM tested is in compliance with the FIPS 128-1, a Certificate of Validation will be issued. The certificate is valid indefinitely; i.e., it does not expire. If a metafile is modified in any way, it will be considered a 'new' CGM and thus, not covered by the certificate. Conformance of a metafile does NOT necessarily imply conformance of a CGM generator, interpreter, or other CGMs created on the same system.

For CGM generator and interpreter testing, a certificate of validation is issued for an implementation that has been tested and is compliant with the FIPS PUB 128-1.

4.3.3 Validated Metafiles

The metafiles identified in Section 4.5 have been tested for conformity with FIPS 128-1. Each entry in the VPL is a very limited extract from the Validation Summary Report (VSR) available from NIST/CSL.

4.4 Raster Graphics Standards

FIPS PUB 150 adopts EIA-538 which defines the facsimile coding schemes and their control functions for Group 4 facsimile apparatus, i.e., ITU-T (formerly CCITT) Recommendation T.6. It defines a standard compression algorithm (T.6 - Group 4) suitable for the storage, retrieval, and interchange of raster graphics images.

Military Specification MIL-R-28002 specifies the structure and encoding of raster data files to be delivered to the government. It specifies the use of the standard compression algorithm defined
in FIPS PUB 150. It also specifies the use of standard file headers which are defined in MIL-STD-1840. MIL-STD-1840 standardizes the format and structure of digital technical data files for the purpose of interchange between organizations or systems.

4.4.1 Certificate of Validation

The Raster Graphics Validation Test Service tests an implementation’s capability of both receiving and generating raster graphics data conforming to the specifications in FIPS PUB 150 and MIL-R-28002.

A certificate of validation is issued for an implementation that passes the validation test and conforms to FIPS PUB 150 and MIL-R-28002.

4.4.2 Information Pack

Upon request, a Raster Graphics Validation Test Information Pack is available from:

National Institute of Standards and Technology (NIST)
Computer Systems Laboratory
Raster Graphics Validation Test Service
Technology Building, Room A266
Gaithersburg, MD 20899
### 4.5 GKS IMPLEMENTATIONS

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<td>Motif Workstation PostScript Workstation (using DEC LN03-A2 Laser Printer):</td>
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<td>Digital Equipment</td>
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<td>DEC System 3000/500; DEC OSF/1 AXP Version 2.0</td>
<td>Motif Workstation PostScript Workstation (using DEC LN03-A2 Laser Printer):</td>
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### 4.6 COMPUTER GRAPHICS METAFILES

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<td>Interleaf, Inc</td>
<td>Interleaf Inc NIST-M-92/003-001 9/2/92; 1/1</td>
<td>asg.cgm 8880 8/31/92; Interleaf Inc MDL/G</td>
<td>Interleaf 5 v5.3, HP9000/700, HP UX v6.07</td>
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<td>El Segundo, CA</td>
<td>Interleaf Inc NIST-M-92/005-002 10/23/92; 5/5</td>
<td>gcgm_i220.cgm 5280 10/27/92; GRAFPAK-CGM 1.1.2</td>
<td>IBM RS6000 Model 220, AIX 3.2</td>
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<td>IBM Corporation</td>
<td>IBM RS6000 Model 530, AIX 3.2</td>
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<td>ESRI</td>
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<td>Boulder CO</td>
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<td>demo8.cgm 3840 1/28/93; GRAFPAK-GKS 4.0</td>
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No entries at this time.
5. NIST POSIX CONFORMANCE TESTING

5.1 FIPS POSIX Standard

The National Institute of Standards and Technology through its Computer Systems Laboratory (NIST/CSL) has established a conformance testing program for the Federal Information Standard for POSIX (FIPS 151-1 and FIPS 151-2). FIPS 151-2 replaced FIPS 151-1 in its entirety on October 15, 1993. These standards are based on the IEEE POSIX Std. 1003.1-1988 (FIPS 151-1) and ISO/IEC 9945-1:1990 (FIPS 151-2). The testing model includes a Certification Authority, NVLAP Accredited Testing Laboratories, Clients and the official NIST POSIX Conformance Test Suites. The Certification Authority is the Director of NIST/CSL. The National Voluntary Laboratory Accreditation Program (NVLAP), part of NIST, accredits the testing laboratories. The test suites NIST-PCTS:151-1 and NIST-PCTS:151-2 were developed by NIST/CSL and are based on the test assertions specified by the IEEE Standard for Information Technology — Test Methods for Measuring Conformance to POSIX, IEEE Std. 1003.3-1991 (NIST-PCTS:151-1) and the IEEE Standard for Information Technology — Test Methods for Measuring conformance to POSIX.1, IEEE Std 2003.1-1992 (NIST-PCTS:151-2).

5.2 POSIX Test Procedures

There are Accredited POSIX Testing Laboratories (APTLs) accredited by NVLAP for using one or both test suites. NVLAP accreditation is renewable after one year, and identifies the specific testing procedures which the lab is authorized to run. The labs provide testing and analysis services to their clients and may forward the final test results to NIST/CSL for evaluation and subsequent issuance of a Certificate of Validation by NIST/CSL.

Testing policy documents and registers of validated products and accredited laboratories and available on an electronic mail (email) file server system. For most email systems, send an email message to posix@nist.gov (mail posix@nist.gov). The first line of the message should contain a command to send index (send index). After issuing the send command and a carriage return, end the email message. A listing of all of the available files will be returned via email to the requesting email address.

5.3 POSIX Test Suite

The NIST-PCTS:151-2 is available from NIST/CSL, POSIX Certification Authority, Building 225 Room B266, National Institute of Standards and Technology, Gaithersburg, MD 20899.

5.4 Validation Requirements

An accredited lab may submit a "clean" test report to NIST/CSL for evaluation in anticipation of a Certification of Validation being issued. "Clean" implies no test assertion failures. The Certificate of Validation will confirm that the stated product has been tested using the official NIST-PCTS and that the test results have been validated by NIST/CSL. The Certificate of Validation and the Test Results Summary contain information on the product tested, the implementation that was tested, the suppliers, conditional features that were tested, configuration details and the identification of the testing laboratory. These certificates are issued by NIST/CSL through the testing lab. Fees for services by the testing labs are established by the labs.
5.5 TESTING LABORATORIES for NIST POSIX (FIPS 151-1)

The National Voluntary Laboratory Accreditation Program (NVLAP) has accredited the following laboratories to test computer operating system interfaces for conformance with the Federal Information Processing Standard 151-1 (FIPS 151-1) using the NIST POSIX Conformance Test Suite (NIST-PCTS:151-1). Only accredited laboratories may submit test reports to NIST/CSL for validation.

ACCREDITED NIST POSIX TESTING LABORATORIES

The National Voluntary Laboratory Accreditation Program (NVLAP) has accredited the following laboratories to test computer operating system interfaces for conformance with the Federal Information Processing Standard 151-1 (FIPS 151-1) using the NIST POSIX Conformance Test Suite (NIST-PCTS:151-1). Only accredited laboratories may submit test reports to NIST/CSL for validation.

BULL S.A. / Laboratoire POSIX
1 rue de Provence / BP208
38432 ECHIROLLES CEDEX (France)

Contact: Mr. Georges Chardon
Phone: (33) 76 39 75 93

DataFocus Incorporated
12450 Fair Lakes Circle, Suite 400
Fairfax, VA 22033-3831

Contact: Mr. Glen McPherson
Phone: 703-631-6770

Mindcraft, Inc.
410 Cambridge Avenue
Palo Alto, CA 94306

Contact: Mr. Bruce Weiner
Phone: 415-323-9000

PERENNIAL
4699 Old Ironsides Drive, Suite 210
Santa Clara, CA 95054

Contact: Mr. Barry E. Hedquist
Phone: 408-748-2900
5.6 VALIDATED PRODUCTS for NIST POSIX (FIPS 151-1)

**NIST POSIX VALIDATED PRODUCTS**

The following products have been tested by an Accredited POSIX Testing Laboratory (APTL) using the official National Institute of Standards and Technology POSIX Conformance Test Suite (NIST-PCTS:151-1) for the Federal Information Processing Standards Publication 151-1 (FIPS PUB 151-1). A Certificate of Validation has been issued by NIST/CSL. Additional information is available from NIST/CSL on conditional features supported, configuration details, and resolved test codes (if appropriate).

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<tr>
<th>PRODUCT SUPPLIERS</th>
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<tr>
<td>Amdahl Corporation</td>
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<td>Apple Computer Inc.</td>
<td>APP2482, APP3355, APP7204, APP7224, APP7235, APP8616, APP9125, APP9165</td>
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<td>Control Data Corporation</td>
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<td>CONVEX Computer Corporation</td>
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<td>Cray Research, Inc.</td>
<td>CRA2641</td>
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<td>Data General Corporation</td>
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<td>IBM0320, IBM0458, IBM1344, IBM2592, IBM3697</td>
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<td>SCO3664, SCO3832, SCO4102, SCO5199, SCO6748, SCO8054, SCO9875</td>
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<td>Silicon Graphics, Inc.</td>
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<td>SUN1065, SUN1442, SUN2031, SUN2277, SUN2930, SUN3272, SUN3402, SUN5684, SUN5782, SUN5970, SUN6602, SUN7188, SUN7793</td>
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<td>Unisys Corporation</td>
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<td>UNIX System Laboratories</td>
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<th>SYSTEM SUPPLIERS</th>
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<td>AGI Computer, Inc.</td>
<td>EVR9091</td>
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<td>Amdahl Corporation</td>
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<td>Apple Computer Inc.</td>
<td>APP2482, APP3355, APP7204, APP7224, APP7235, APP8616, APP9125, APP9165</td>
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<td>AST Research, Inc.</td>
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<td>AT&amp;T BULL S.A.</td>
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<td>Control Data Corporation</td>
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<td>CON2022, CON2551, CON6027</td>
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<td>Cray Research, Inc.</td>
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<td>Data General Corporation</td>
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<td>DEC0319, DEC0638, DEC4670, DEC5794, DEC7386, DEC7833, DEC7917, DEC8003, DEC9418, DEC9672</td>
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<td>Diamond Flower Incorporated</td>
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<td>Zenith Data Systems</td>
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Reference File #: AMD5998
Product Supplier: Amdahl Corporation
Product Tested: UTS System Version: 4 Release: 1
System Supplier: Amdahl Corporation
System Hardware: Macintosh Model: IIix
C Compiler: A/UX native C compiler (cc) Ver: 1.23 Rel: 1/13/1991
PCTS: 151-1 Version: 1.1 - 04/26/91
APTL: 0342 Mindcraft, Inc. Date Issued: 07/23/93

Reference File #: APP2482
Product Supplier: Apple Computer Inc.
System Supplier: Apple Computer Inc.
System Hardware: Workgroup Server Model: 80
C Compiler: A/UX native C compiler (cc) Ver: 1.23 Rel: 9/22/91
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0342 Mindcraft, Inc. Date Issued: 04/16/92

Reference File #: APP3355
Product Supplier: Apple Computer Inc.
Product Tested: A/UX Version: 3.0 Release: March 9, 1992
System Supplier: Apple Computer Inc.
System Hardware: Workgroup Server Model: Iiix
C Compiler: A/UX native C compiler (cc) Ver: 1.23 Rel: Feb 9, 1992
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0342 Mindcraft, Inc. Date Issued: 06/24/93

Reference File #: APP7224
Product Supplier: Apple Computer Inc.
Product Tested: A/UX Version: 3.0 Release: March 9, 1992
System Supplier: Apple Computer Inc.
System Hardware: Macintosh Model: Quadra 700
C Compiler: A/UX native C compiler (cc) Ver: 1.23 Rel: Feb 9, 1992
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0342 Mindcraft, Inc. Date Issued: 05/14/92

Reference File #: APP7235
Product Supplier: Apple Computer Inc.
Supplier: Apple Computer Inc. Hardware: Macintosh Model: Iiix
C Compiler: A/UX native C compiler (cc) Ver: 1.21 Rel: 01/13/1991
PCTS: 151-1 Version: 1.1 - 04/25/91
APTL: 0342 Mindcraft, Inc. Date Issued: 05/24/91

Reference File #: APP8616
Product Supplier: Apple Computer Inc.
Supplier: Apple Computer Inc. Hardware: Macintosh Model: Iiix
C Compiler: A/UX native C compiler (cc) Ver: 1.21 Rel: 01/13/1991
PCTS: 151-1 Version: 1.1 - 04/25/91
APTL: 0342 Mindcraft, Inc. Date Issued: 05/24/91

Reference File #: APP9125
Product Supplier: Apple Computer Inc.
Product Tested: A/UX Version: 3.0 Release: March 9, 1992
System Supplier: Apple Computer Inc.
System Hardware: Macintosh Model: Quadra 700
C Compiler: A/UX Developer's Tools (c89) Ver: 1.1 Rel: April 1, 1992
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 08/11/92

Reference File #: APP9165
Product Supplier: Apple Computer Inc.
Product Tested: A/UX Version: 3.0 Release: March 9, 1992
System Supplier: Apple Computer Inc.
System Hardware: Macintosh Model: Quadra 950
C Compiler: A/UX Developer's Tools (c89) Ver: 1.1 Rel: April 1, 1992
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 08/11/92

Reference File #: ATT1566
Product Supplier: AT&T
Product Tested: AT&T UNIX System V Version: 4.0.3 System Supplier: AT&T
System Hardware: AT&T 3B2 R3 Series Model: 3B2/600 GR
C Compiler: AT&T 3B2/RISC Development System Version: 1.0
PCTS: 151-1 Version: 1.1 - 09/11/91
APTL: 0343 DataFocus Incorporated Date Issued: 11/06/91

Reference File #: BUL2387
Product Supplier: BULL S.A.
Product Tested: BOS Version: 2 Release: 1 System Supplier: BULL S.A.
System Hardware: DPX/2 Model: 200
C Compiler: BULL C Compiler Version: 72 Release: 1
PCTS: 151-1 Version: 1.1 - 09/21/92
APTL: 0373 BULL S.A./Laboratoire POSIX Date Issued: 2/24/93

Reference File #: BUL6051
Product Supplier: Control Data Corporation
System Supplier: Control Data Corporation
System Hardware: Control Data 4000 Model: 4680MP
PCTS: 151-1 Version: 1.1 - 09/11/91
APTL: 0356 Applications Software Incorporated Date Issued: 1/29/92

Reference File #: CDC1101
Product Supplier: Control Data Corporation
System Supplier: Control Data Corporation
System Hardware: Control Data 4000 Model: 4680MP
PCTS: 151-1 Version: 1.1 - 09/11/91
APTL: 0356 Applications Software Incorporated Date Issued: 05/24/91

Reference File #: CDC5574
Product Supplier: Control Data Corporation
System Supplier: Control Data Corporation
System Hardware: Control Data 4000 Model: 4680MP
PCTS: 151-1 Version: 1.1 - 09/11/91
APTL: 0356 Applications Software Incorporated Date Issued: 05/24/91
Reference File #: CON0202
Product Supplier: CONEX Computer Corporation
Product Tested: ConvexOS Version: 10.1 Release: C200 Series
System Supplier: CONEX Computer Corporation
System Hardware: C2 Model: C220
C Compiler: CONEX C Version: 4.3.2
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0343 DataFocus Incorporated Date Issued: 05/11/92

Reference File #: CON2551
Product Supplier: CONEX Computer Corporation
Product Tested: ConvexOS Version: 10.1 Release: C3800 Series
System Supplier: CONEX Computer Corporation
System Hardware: C38 Model: C3810
C Compiler: CONEX C Version: 4.3.2
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0343 DataFocus Incorporated Date Issued: 05/11/92

Reference File #: CON6027
Product Supplier: CONEX Computer Corporation
Product Tested: ConvexOS Version: 10.1 Release: C3400 Series
System Supplier: CONEX Computer Corporation
System Hardware: C34 Model: C3440
C Compiler: CONEX C Version: 4.3.2
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0343 DataFocus Incorporated Date Issued: 05/11/92

Reference File #: CRA2641
Product Supplier: Cray Research, Inc.
Product Tested: UNICOS Version: 7.0.5.bu Release: 7.0
System Supplier: Cray Research, Inc.
System Hardware: Cray Y-MP Model: YMP2E/232-4
C Compiler: Cray Standard C Compiler Release: 3.0.5 (5/20/93)
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0343 DataFocus Incorporated Date Issued: 10/14/93

Reference File #: DEC0319
Product Supplier: Digital Equipment Corporation
Product Tested: DEC OSF/1 Version: 1.2 Release: March 1993
System Supplier: Digital Equipment Corporation
System Hardware: DEC/300 Model: 500
C Compiler: DEC OSF/1 for AXP C Compiler Version: 1 Release: March 1993
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 03/10/93

Reference File #: DEC0638
Product Supplier: Digital Equipment Corporation
Product Tested: VMS Version: 5 Release: 5 (with VMS POSIX, version 1.0)
System Supplier: Digital Equipment Corporation
System Hardware: VAXStation Model: 3100 M76
C Compiler: VAX C Version: 3 Release: 2
PCTS: 151-1 Version: 1.1 - 09/11/91
APTL: 0343 DataFocus Incorporated Date Issued: 01/29/92

Reference File #: DEC4670
Product Supplier: Digital Equipment Corporation
System Supplier: Digital Equipment Corporation
System Hardware: DECstation Model: 5000/150
C Compiler: MIPS C Compiler Version: 3.0
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 06/24/93

Reference File #: DEC5794
Product Supplier: Digital Equipment Corporation
System Supplier: Digital Equipment Corporation
System Hardware: VAXstation II Model: GPX
C Compiler: pcc Version: 4.2
PCTS: 151-1 Version: 1.1 - 04/26/91
APTL: 0342 Mindcraft, Inc. Date Issued: 06/17/91

Reference File #: DEC7386
Product Supplier: Digital Equipment Corporation
System Supplier: Digital Equipment Corporation
System Hardware: DECstation Model: 5000/200
C Compiler: MIPS C Compiler Version: 2.10
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 09/18/92

Reference File #: DEC7383
Product Supplier: Digital Equipment Corporation
Product Tested: OpenVMS VAX Version: 6 Release: 0 (with OpenVMS VAX POSIX, Version X1.2-35E)
System Supplier: Digital Equipment Corporation
System Hardware: DECstation Model: 3100 M76
C Compiler: VAX C Version: 3 Release: 2
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0343 DataFocus Incorporated Date Issued: 10/14/93

Reference File #: DEC7917
Product Supplier: Digital Equipment Corporation
System Supplier: Digital Equipment Corporation
System Hardware: DECstation Model: 3100
C Compiler: MIPS C Compiler Version: 2.10
PCTS: 151-1 Version: 1.1 - 09/11/91
APTL: 0342 Mindcraft, Inc. Date Issued: 12/06/91

Reference File #: DEC8003
Product Supplier: Digital Equipment Corporation
System Supplier: Digital Equipment Corporation
System Hardware: DECstation Model: 5000/260
C Compiler: MIPS C Compiler Version: 3.0
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 06/24/93

Reference File #: DEC9148
Product Supplier: Digital Equipment Corporation
System Supplier: Digital Equipment Corporation
System Hardware: DECstation Model: 3100
C Compiler: MIPS C Compiler Version: 2.10
PCTS: 151-1 Version: 1.1 - 04/26/91
APTL: 0342 Mindcraft, Inc. Date Issued: 06/17/91

Reference File #: DEC9672
Product Supplier: Digital Equipment Corporation
System Supplier: Digital Equipment Corporation
System Hardware: DECstation Model: 5000/200
C Compiler: MIPS C Compiler Version: 2.10
PCTS: 151-1 Version: 1.1 - 09/11/91
APTL: 0342 Mindcraft, Inc. Date Issued: 02/12/92
NIST POSIX VALIDATED PRODUCTS, Continued

Reference File #: DGC2542
Product Supplier: Data General Corporation
Product Tested: DG/UX Version: 5.4
System Supplier: Data General Corporation
System Hardware: Avion 5000 Model: AV/5240
C Compiler: GNU C Compiler for AViON Systems Version: 1.37.23
PCTS: 151-1 Version: 1.1 - 07/01/91
APTL: 0342 Mindcraft, Inc. Date Issued: 09/10/91

Reference File #: DGC4767
Product Supplier: Data General Corporation
Product Tested: DG/UX Version: 5.4.2 Release: August 1992
System Supplier: Data General Corporation
System Hardware: Avion AV/530/4500 Model: AV/532
C Compiler: GNU C Compiler for AviON Systems Version: DG-2.2.3
Release: August 1992
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 09/10/91

Reference File #: DGC8016
Product Supplier: Data General Corporation
Product Tested: DG/UX Version: 5.4
System Supplier: Data General Corporation
System Hardware: Avion 400/4000 Model: AV/4100
C Compiler: GNU C Compiler for AviON Systems Version: 1.37.23
PCTS: 151-1 Version: 1.1 - 07/01/91
APTL: 0342 Mindcraft, Inc. Date Issued: 09/10/91

Reference File #: DGC8703
Product Supplier: Data General Corporation
Product Tested: DG/UX Version: 5.4
System Supplier: Data General Corporation
System Hardware: Avion 400/4000 Model: AV/412
C Compiler: GNU C Compiler for AviON Systems Version: 1.37.23
PCTS: 151-1 Version: 1.1 - 07/01/91
APTL: 0342 Mindcraft, Inc. Date Issued: 09/10/91

Reference File #: DGC8931
Product Supplier: Data General Corporation
Product Tested: DG/UX Version: 4.32
System Supplier: Data General Corporation
System Hardware: Avion AV/400/4000 Model: AV/410
C Compiler: GNU C Compiler for AviON Systems Version: 1.37.23
PCTS: 151-1 Version: 1.1 - 04/26/91
APTL: 0342 Mindcraft, Inc. Date Issued: 05/24/91

Reference File #: DGC9574
Product Supplier: Data General Corporation
Product Tested: DG/UX Version: 5.4.2 Release: August 1992
System Supplier: Data General Corporation
System Hardware: Avion AV/8000 Model: AV/6240
C Compiler: GNU C Compiler for AviON Systems Version: DG-2.2.3
Release: August 1992
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 11/03/92

Reference File #: ENC6897
Product Supplier: Encore Computer Corporation
Product Tested: UMAX V Release: 3.0.6
System Supplier: Encore Computer Corporation
System Hardware: 91 Series Model: 91-02427
C Compiler: Green Hills Software, Inc. C Release: 1.1
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0345 UniSoft Corporation Date Issued: 3/12/92

Reference File #: EVR0901
Product Supplier: ESIX/everex Systems, Inc.
System Supplier: AGI Computer, Inc.
System Hardware: AGI Model: 486/33
C Compiler: ESIX ANSI C Compiler Version: 5.0
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0343 DataFocus Incorporated Date Issued: 05/28/92

Reference File #: EVR9749
Product Supplier: ESIX/everex Systems, Inc.
System Supplier: ESIX/everex Systems, Inc.
System Hardware: everex Model: 3000S 386/33
C Compiler: ESIX ANSI C Compiler Version: 5.0
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0343 DataFocus Incorporated Date Issued: 05/28/92

Reference File #: HAR5240
Product Supplier: Harris Corporation
Product Tested: CX/UX Release: 5.3
System Supplier: Harris Corporation, Computer Systems Division
System Hardware: Night Hawk Model: NH4802
C Compiler: Harris C Compiler Release: 5.3
PCTS: 151-1 Version: 1.1 - 09/11/91
APTL: 0342 Mindcraft, Inc. Date Issued: 12/16/91

Reference File #: HPC0115
Product Supplier: Hewlett-Packard Company
Product Tested: HP-UX Version: 8.02 Release: 10/06/91
System Supplier: Hewlett-Packard Company
System Hardware: HP9000 Series 800 Model: 8675
C Compiler: HP C Compiler Version: A.08.71 Release: 10/06/91
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 12/08/92

Reference File #: HPC0303
Product Supplier: Hewlett-Packard Company
Product Tested: HP-UX Version: 8.02 Release: 10/06/91
System Supplier: Hewlett-Packard Company
System Hardware: HP9000 Series 800 Model: 8675
C Compiler: HP C Compiler Version: A.08.17 Release: 10/06/91
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0346 Hewlett-Packard POSIX Conformance Test Center Date Issued: 09/09/92

Reference File #: HPC0535
Product Supplier: Hewlett-Packard Company
System Supplier: Hewlett-Packard Company
System Hardware: Domain Series 4000 Model: DN4500
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0346 Hewlett-Packard POSIX Conformance Test Center Date Issued: 09/22/92

Reference File #: HPC0603
Product Supplier: Hewlett-Packard Company
System Supplier: Hewlett-Packard Company
System Hardware: HP9000 Series 700 Model: 735
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 2/19/93
NIST POSIX Validated Products, Continued

Reference File #: HPC1581
Product Supplier: Hewlett-Packard Company
Product Tested: HP-UX Version: 8.02 Release: 10/06/91
System Supplier: Hewlett-Packard Company
System Hardware: HP9000 Series 800 Model: 827S
C Compiler: HP C Compiler Version: A 06.71 Release: 10/06/91
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 12/08/92

Reference File #: HPC1992
Product Supplier: Hewlett-Packard Company
System Supplier: Hewlett-Packard Company
System Software: HP9000 Series 800 Model: 827S
C Compiler: HP C Compiler Version: A 06.71 Release: 10/06/91
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 12/08/92

Reference File #: HPC2540
Product Supplier: Hewlett-Packard Company
System Supplier: Hewlett-Packard Company
System Software: HP9000 Series 700 Model: 720
PCTS: 151-1 Version: 1.1 - 09/11/91
APTL: 0346 Hewlett-Packard POSIX Conformance Test Center Date Issued: 01/29/92

Reference File #: HPC2696
Product Supplier: Hewlett-Packard Company
Product Tested: HP-UX Version: 8.02 Release: 10/06/91
System Supplier: Hewlett-Packard Company
System Software: HP9000 Series 800 Model: 817S
C Compiler: HP C Compiler Version: A 06.71 Release: 10/06/91
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 12/08/92

Reference File #: HPC2952
Product Supplier: Hewlett-Packard Company
System Supplier: Hewlett-Packard Company
System Software: Domain Series 400 Model: 433s
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0346 Hewlett-Packard POSIX Conformance Test Center Date Issued: 09/2/92

Reference File #: HPC3574
Product Supplier: Hewlett-Packard Company
System Supplier: Hewlett-Packard Company
System Software: HP9000 Series 400 Model: 433S
C Compiler: HP C Compiler Version: B2371B.08.00 Internal Revision 70.2 Release: October 7, 1992
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 2/19/93

Reference File #: HPC3760
Product Supplier: Hewlett-Packard Company
Product Tested: HP-UX Version: 8.02 Release: 10/06/91
System Supplier: Hewlett-Packard Company
System Software: HP9000 Series 800 Model: 847S
C Compiler: HP C Compiler Version: A 08.71 Release: 10/06/91
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 12/08/92

Reference File #: HPC3897
Product Supplier: Hewlett-Packard Company
System Supplier: Hewlett-Packard Company
System Software: HP9000 Series 800 Model: 847S
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 1/07/93

Reference File #: HPC4246
Product Supplier: Hewlett-Packard Company
System Supplier: Hewlett-Packard Company
System Software: HP9000 Series 800 Model: 807S
C Compiler: HP C Compiler Version: A 08.71 Release: 10/06/91
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 12/08/92

Reference File #: HPC6904
Product Supplier: Hewlett-Packard Company
System Supplier: Hewlett-Packard Company
System Software: HP9000 Series 700 Model: 720
C Compiler: HP C Compiler Ver: HP92453-01 A.09.19 Rel: Dec, 1992
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 2/19/93

Reference File #: HPC6891
Product Supplier: Hewlett-Packard Company
Product Tested: HP-UX Version: 8.00 with PHCO_0600 (Patch) Release: January 91, January 92 (Patch)
System Supplier: Hewlett-Packard Company
System Software: HP9000 Series 400 Model: 400S
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0346 Hewlett-Packard POSIX Conformance Test Center Date Issued: 04/17/92

Reference File #: HPC6837
Product Supplier: Hewlett-Packard Company
System Supplier: Hewlett-Packard Company
System Software: HP9000 Series 800 Model: 817S
C Compiler: HP C Compiler Version: A 06.71 Release: 10/06/91
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 12/08/92

Reference File #: HPC6906
Product Supplier: Hewlett-Packard Company
System Supplier: Hewlett-Packard Company
System Software: HP9000 Series 700 Model: 715
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 2/19/93

Reference File #: HPC7051
Product Supplier: Hewlett-Packard Company
System Supplier: Hewlett-Packard Company
System Software: HP9000 Series 800 Model: 867S
C Compiler: HP C Compiler Version: A 08.71 Release: 10/06/91
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 12/08/92
Reference File #: HPC7716
Product Supplier: Hewlett-Packard Company
System Supplier: Hewlett-Packard Company
System Hardware: HP9000 Series 800 Model: 8475
C Compiler: HP C Compiler Version: A 08.71 Release: 10/06/91
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 12/08/92

Reference File #: HPC8098
Product Supplier: Hewlett-Packard Company
Product Tested: HP-UX Version: 8.02 Release: 10/06/91
System Supplier: Hewlett-Packard Company
System Hardware: HP9000 Series 800 Model: 8075
C Compiler: HP C Compiler Version: A 08.71 Release: 10/06/91
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 12/08/92

Reference File #: HPC5185
Product Supplier: Hewlett-Packard Company
Product Tested: HP-UX Version: 8 Release: 5/6/91
System Supplier: Hewlett-Packard Company
System Hardware: HP9000 Series 800 Model: 835
PCTS: 151-1 Version: 1.1 - 09/11/91
APTL: 0346 Hewlett-Packard POSIX Conformance Test Center Date Issued: 12/18/91

Reference File #: IBM0320
Product Supplier: International Business Machines Inc.
Product Tested: AIX Version 3 for RISC System/6000 Version: 3 Release: 2
System Supplier: International Business Machines Inc.
System Hardware: RISC System/6000 Model: 530H
C Compiler: xlc Version: 1 Release: 2
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0342 Mindcraft, Inc. Date Issued: 02/25/92

Reference File #: IBM0458
Product Supplier: International Business Machines Inc.
Product Tested: AIX Version 3 for RISC System/6000 Version: 3 Release: 2
System Supplier: International Business Machines Inc.
System Hardware: RISC System/6000 Model: 320
C Compiler: xlc Version: 3 Release: 1
PCTS: 151-1 Version: 1.1 - 04/25/91
APTL: 0342 Mindcraft, Inc. Date Issued: 05/24/91

Reference File #: IBM1344
Product Supplier: International Business Machines Inc.
Product Tested: AIX Version: 3 Release: 1
System Supplier: International Business Machines Inc.
System Hardware: RISC System/6000 Model: 320
C Compiler: xlc Version: 3 Release: 1
PCTS: 151-1 Version: 1.1 - 04/25/91
APTL: 0342 Mindcraft, Inc. Date Issued: 05/24/91

Reference File #: IBM2592
Product Supplier: International Business Machines Inc.
Product Tested: AIX Version: 3 Release: 1
System Supplier: International Business Machines Inc.
System Hardware: RISC System/6000 Model: 530
C Compiler: xlc Version: 3 Release: 1
PCTS: 151-1 Version: 1.1 - 04/25/91
APTL: 0342 Mindcraft, Inc. Date Issued: 05/24/91

Reference File #: IBM3697
Product Supplier: International Business Machines Inc.
Product Tested: AIX Version 3 for RISC System/6000 Version: 3 Release: 2
System Supplier: International Business Machines Inc.
System Hardware: RISC System/6000 Model: 320
C Compiler: xlc Version: 1 Release: 2
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0342 Mindcraft, Inc. Date Issued: 02/25/92

Reference File #: INT4675
Product Supplier: Intergraph Corporation
Product Tested: CLIX Version: 06.02.01 Release: 3.1
System Supplier: Intergraph Corporation
System Hardware: Intergraph 6440 Series Workstation Model: 6450
C Compiler: CLIPPER Advanced Optimizing C Compiler Version:
06.00.01.43 Release: 28-JAN-1992
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0343 DataFocus Incorporated Date Issued: 05/28/92

Reference File #: INT5154
Product Supplier: Interactive Systems Corp.
Product Tested: Interactive UNIX Operating System Version: 3.0 Release: 3.2
System Supplier: Compaq Computer Corporation
System Hardware: Compaq Model: System Pro
C Compiler: Interactive UNIX Software Development System Ver: 3.0
PCTS: 151-1 Version: 1.1 - 09/11/91
APTL: 0345 UniSoft Corporation Date Issued: 10/16/91

Reference File #: LNX2076
Product Supplier: Lynx Real-Time Systems, Inc.
Product Tested: LynxOS Version: 2 Release: 2.2.0
System Supplier: Compaq Computer Corporation
System Hardware: ProLinea Model: 4/33
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 10/14/93

Reference File #: MOD4817
Product Supplier: Modular Computer Systems, Inc.
Product Tested: REAL/IX Version: V.3 Release: D.0
System Supplier: Modular Computer Systems, Inc.
System Hardware: REAL/STAR Model: 1000
C Compiler: GNU C Compiler for REAL/IX Systems Version: 1.37
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0342 Mindcraft, Inc. Date Issued: 05/05/92

Reference File #: MOT1086
Product Supplier: Motorola Computer Group
Product Tested: UNIX® System V/88 Release 4.0 Version: 3 Release: 4.0
System Supplier: Motorola Computer Group
System Hardware: Motorola Series 8000 Model: 8x40
C Compiler: Software Development System Version: T302.0 Release: 12/2/92
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0343 DataFocus, Inc. Date Issued: 2/19/93

Reference File #: MOT5618
Product Supplier: Motorola Computer Group
Product Tested: UNIX® System V/88 Release 4.0 Version: 3 Release: 4.0
System Supplier: Motorola Computer Group
System Hardware: Motorola Series 8000 Model: 8x20
C Compiler: Software Development System Version: T320.0 Rel: 12/2/92
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0343 DataFocus, Inc. Date Issued: 2/19/93
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<td>System Hardware: NeXTstation Model: Color Turbo</td>
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<td>Product Supplier: Pyramid Technology Corporation</td>
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<td>System Hardware: MlServer Model: MIS-2T</td>
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NIST POSIX VALIDATED PRODUCTS, Continued

Reference File #: PYR4970
Product Supplier: Pyramid Technology Corporation
Product Tested: DataCenter/OSx Version: dconx Rel: 1.1-92c027
System Supplier: Pyramid Technology Corporation
System Hardware: MIServer Model: 4S
C Compiler: DataCenter/OSx C Compiler Release: 1.1-92c027
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0343 DataFocus Incorporated Date Issued: 09/09/92

Reference File #: PYR9563
Product Supplier: Pyramid Technology Corporation
Product Tested: OSX Version: 5.1a Release: 0318t
System Supplier: Pyramid Technology Corporation
System Hardware: MIServer Model: MIS-4T
C Compiler: Microsoft C Version: 5.1
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0343 DataFocus Incorporated Date Issued: 05/28/92

Reference File #: SCO3664
Product Supplier: Santa Cruz Operation Inc.
Product Tested: SCO Open Desktop Version: 2.0
System Supplier: Zenith Data Systems
System Hardware: Z Station Model: 433DEh
C Compiler: Microsoft C Version: 5.1
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0343 DataFocus Incorporated Date Issued: 11/02/92

Reference File #: SCO3932
Product Supplier: Santa Cruz Operation Inc.
Product Tested: SCO UNIX System V/386 Version: Release 3.2
System Supplier: Zenith Data Systems
System Hardware: 2 Station Model: 486SX/25
C Compiler: Microsoft C Version: 5.1
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0343 DataFocus Incorporated Date Issued: 09/28/92

Reference File #: SCO4102
Product Supplier: Santa Cruz Operation, Inc.
Product Tested: SCO UNIX System V/386 Version: Release 3.2
System Supplier: AST Research, Inc.
System Hardware: Premium Series Model: 486/33
C Compiler: Microsoft C Version: 5.1
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0343 DataFocus, Inc. Date Issued: 07/01/92

Reference File #: SCO5199
Product Supplier: Santa Cruz Operation Inc.
Product Tested: SCO UNIX System V/386 Version: 3.2
System Supplier: Zenith Data Systems
System Hardware: Zenith Data Systems Supersport Laptop Model: Supersport SX
C Compiler: Microsoft C Version: 5.1
PCTS: 151-1 Version: 1.1 - 07/01/91
APTL: 0343 DataFocus Incorporated Date Issued: 09/17/91

Reference File #: SCO6748
Product Supplier: Santa Cruz Operation Inc.
Product Tested: SCO UNIX System V/386 Version: 3.2 Release: 2
System Supplier: Data General Corporation
System Hardware: Walkabout/SX Model: G2763
C Compiler: Microsoft C Optimizing Compiler Version: 5.1
PCTS: 151-1 Version: 1.1 - 07/01/91
APTL: 0342 Mindcraft, Inc. Date Issued: 09/10/91

Reference File #: SCO8054
Product Supplier: Santa Cruz Operation Inc.
Product Tested: SCO Open Desktop Version: 2.0
System Supplier: Diamond Flower Incorporated
System Hardware: DFI Model: 486/33
C Compiler: Microsoft C Version: 5.1
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0343 DataFocus Incorporated Date Issued: 11/02/92

Reference File #: SCO8975
Product Supplier: Santa Cruz Operation Inc.
Product Tested: SCO UNIX System V/386 Version: 3.2
System Supplier: UNISYS Corporation
System Hardware: PW2 Advantage 3000 Series Model: 3256
C Compiler: Microsoft C Version: 5.1
PCTS: 151-1 Version: 1.1 - 09/11/91
APTL: 0343 DataFocus Incorporated Date Issued: 11/01/91

Reference File #: SEC8754
Product Supplier: Sequent Computer Systems Inc.
Product Tested: DYNIX/pxt Operating System Version: 1.3.0
System Supplier: Sequent Computer Systems Inc.
System Hardware: Symmetry Series II Model: S27
C Compiler: C Tools Version: 1.12p
PCTS: 151-1 Version: 1.1 - 09/11/91
APTL: 0345 UniSoft Corporation Date Issued: 12/09/91

Reference File #: SG15507
Product Supplier: Silicon Graphics, Inc.
Product Tested: IRIX Version: 4.0.5
System Supplier: Silicon Graphics, Inc.
System Hardware: IRIX Model: Crimson
C Compiler: IRIX Development Option Version: 2.20
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0342 Mindcraft Inc. Date Issued: 06/15/92

Reference File #: SG19297
Product Supplier: Silicon Graphics, Inc.
Product Tested: IRIX Version: 4.0.5
System Supplier: Silicon Graphics, Inc.
System Hardware: IRIX Model: Indigo
C Compiler: IRIX Development Option Version: 2.20
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0342 Mindcraft Inc. Date Issued: 06/15/92

Reference File #: SUN0617
Product Supplier: SunSoft, Inc.
Product Tested: Solaris Version: 1.0.1 Release: PC
System Supplier: Sun Microsystems Computer Corporation, Inc.
System Hardware: SPARCstation IPC Model: GX
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0343 DataFocus Incorporated Date Issued: 08/27/92

Reference File #: SUN1065
Product Supplier: Sun Microsystems Computer Corporation, Inc.
Product Tested: Solaris 2.1 for x86 Version: 2.1 Release: May 1993
System Supplier: Dell Computer Corporation
System Hardware: 450 Model: DE
C Compiler: ProCompiler C Version: 2.0.1 for x86 Rel: May 1993
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft Inc. Date Issued: 05/20/93
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<td>System Supplier: Compaq Computer Corporation</td>
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NIST POSIX VALIDATED PRODUCTS, Continued

Reference File #: SUN6002
Product Supplier: Sun Microsystems Computer Corporation, Inc.
Product Tested: Solaris Version: 2.2 Release: May 28, 1993
System Supplier: Sun Microsystems Computer Corporation, Inc.
System Hardware: SPARC Center 2000 Model: 01
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 05/28/93

Reference File #: SUN6635
Product Supplier: SunSoft, Inc.
Product Tested: Solaris Version: 1.0.1 Release: PC
System Supplier: Sun Microsystems Computer Corporation, Inc.
System Hardware: SPARCserver 690 Model: 140
C Compiler: Solaris C Compiler Version: 1.0.1 Release April 4, 1991
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0342 Mindcraft, Inc. Date Issued: 02/19/92

Reference File #: SUN6859
Product Supplier: SunSoft, Inc.
Product Tested: INTERACTIVE UNIX Operating System V/386 Version: 4.0 Release: 3.2
System Supplier: Compaq Computer Corporation
System Hardware: DeskPro Model: 66M
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 07/15/93

Reference File #: SUN7188
Product Supplier: Sun Microsystems Computer Corporation, Inc.
Product Tested: Solaris Version: 1.1 Release: August 24, 1992
System Supplier: Sun Microsystems Computer Corporation, Inc.
System Hardware: SPARCstation 10 Model: GX-30
C Compiler: Solaris C Compiler Version: 1.1 Release: August 24, 1992
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 08/27/92

Reference File #: SUN7793
Product Supplier: Sun Microsystems Computer Corporation, Inc.
Product Tested: Solaris Version: 2.1 Release: August 4, 1992
System Supplier: Sun Microsystems Computer Corporation, Inc.
System Hardware: SPARCserver 10 Model: 42
C Compiler: Sun C Compiler Version: 2.0 Release: June 30, 1992
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 10/08/92

Reference File #: SUN8720
Product Supplier: SunSoft, Inc.
System Supplier: Sun Microsystems Computer Corporation, Inc.
System Hardware: SPARCstation Model: 4/30
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 10/14/93

Reference File #: SUN9763
Product Supplier: SunSoft, Inc.
Product Tested: Solaris Version: 1.0.1 Release: PC
System Supplier: Sun Microsystems Computer Corporation, Inc.
System Hardware: SPARCstation 2 Model: GX
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0342 Mindcraft, Inc. Date Issued: 02/19/92

Reference File #: UNI5056
Product Supplier: Unisys Corporation
Product Tested: UNIX System V Release 4 Version: Revision 1.0.2
System Supplier: Unisys Corporation
System Hardware: Unisys U 6000 Series Model: U 6000/15
C Compiler: UNIX System V Release 4 Standard C Development Environment Version: 1.0.2
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0342 Mindcraft, Inc. Date Issued: 04/30/92

Reference File #: UNI8950
Product Supplier: Unisys Corporation
Product Tested: UNIX System V Release 4 Version: Revision 1.0.2
System Supplier: Unisys Corporation
System Hardware: Unisys U 6000 Series Model: U 6000/65
C Compiler: UNIX System V Release 4 Standard C Development Environment Version: 1.0.2
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0342 Mindcraft, Inc. Date Issued: 05/12/92

Reference File #: UNI5690
Product Supplier: Unisys Corporation
System Supplier: Unisys Corporation
System Hardware: Unisys U 6000 Series Model: U6000/65
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 09/28/92

Reference File #: UNI5711
Product Supplier: Unisys Corporation
Product Tested: UNIX System V Release 4 Version: Revision 1.0.2
System Supplier: Unisys Corporation
System Hardware: Unisys U 6000 Series Model: U 6000/60
C Compiler: UNIX System V Release 4 Standard C Development Environment Version: 1.0.2
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0342 Mindcraft, Inc. Date Issued: 05/12/92

Reference File #: UNI9063
Product Supplier: Unisys Corporation
Product Tested: UNIX System V Release 4 Version: Revision 1.0.2
System Supplier: Unisys Corporation
System Hardware: Unisys U 6000 Series Model: U 6000/35
C Compiler: UNIX System V Release 4 Standard C Development Environment Version: 1.0.2
PCTS: 151-1 Version: 1.1 - 01/22/92
APTL: 0342 Mindcraft, Inc. Date Issued: 05/12/92

Reference File #: UNI9080
Product Supplier: Unisys Corporation
Product Tested: CTOS II Version: 3 Release: 3
System Supplier: Unisys Corporation
System Hardware: Unisys B-Series Model: NGEN
C Compiler: Microsoft C Version: 6.0
PCTS: 151-1 Version: 1.1 - 07/01/91
APTL: 0343 DataFocus Incorporated Date Issued: 09/17/91

5 - 12
NIST POSIX VALIDATED PRODUCTS, Continued

Reference File #: UNV0529
Product Supplier: Univel
Product Tested: UnixWare Version: 1.0 Release: June 1993
System Supplier: Unisys Corporation
System Hardware: Unisys U 6000/DT Series/PW² Advantage Plus
Series Model: U6000/DT1 (MPE 4332)
C Compiler: Optimizing C Compilation Sys Ver: 2.0 Rel: Nov 2, 1992
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 05/18/93

Reference File #: UNV2014
Product Supplier: Univel
Product Tested: UnixWare Version: 1.0 Release: June 1993
System Supplier: Unisys Corporation
System Hardware: Unisys U 6000/DT Series/PW² Advantage Plus
Series Model: U6000/DT2 (MPE 4663)
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 05/18/93

Reference File #: UNV3055
Product Supplier: Univel
Product Tested: UnixWare Application Server Version: 1.0 Release: October 1992
System Supplier: AST Research, Inc.
System Hardware: Premium 486/33 Model: 3V
C Compiler: UnixWare Software Development Kit Version: 1.0 Release: October 1992
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 10/08/93

Reference File #: UNV3978
Product Supplier: Univel
Product Tested: UnixWare Version: 1.0 Release: June 1993
System Supplier: Unisys Corporation
System Hardware: Unisys PW² Advantage Series
Model: MPI 4336)
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 05/18/93

Reference File #: UNV9180
Product Supplier: Univel
Product Tested: UnixWare Personal Edition Version: 1.0 Release: October 1992
System Supplier: AST Research, Inc.
System Hardware: Premium 486/33 Model: 3V
C Compiler: UnixWare Software Development Kit Version: 1.0 Release: October 1992
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 10/08/93

Reference File #: USL3610
Product Supplier: UNIX System Laboratories, Inc.
Product Tested: UNIX® System V Release 4 for the Intel 386™ Architecture Version: 4
Release: July 1991
System Hardware: AT&T
System Hardware: AT&T 6386/25 WGS Model: CPU 311 PC3B
PCTS: 151-1 Version: 1.1 - 09/11/91
APTL: 0342 Mindcraft, Inc. Date Issued: 12/12/91

Reference File #: USL6259
Product Supplier: UNIX System Laboratories, Inc.
Product Tested: UNIX® System V/386 Release 4 Version: 4.0T Release: August 1992, with PATCH #1 (Package Date: 11/20/92)
System Supplier: AST Research, Inc.
System Hardware: Premium 486/33 Model: 3V
PCTS: 151-1 Version: 1.1 - 05/21/92
APTL: 0342 Mindcraft, Inc. Date Issued: 2/12/93
5.7 TESTING LABORATORIES AND VALIDATED PRODUCTS
for NIST POSIX (FIPS 151-2)

ACCREDITED NIST POSIX TESTING LABORATORIES

The National Voluntary Laboratory Accreditation Program (NVLAP) has accredited the following laboratories to test computer operating system interfaces for conformance with the Federal Information Processing Standard 151-2 (FIPS 151-2) using the NIST POSIX Conformance Test Suite (NIST-PCTS:151-2). FIPS 151-2 replaced FIPS 151-1 in its entirety on October 15, 1993. Only accredited laboratories may submit test reports to NIST/CSL for validation.

BULL SA / Laboratoire POSIX
1 rue de Provence / BP 208
38432 ECHIROLLES CEDEX

Contact: Mr. Georges Chardon
Phone: (33) 76 39 75 93
email: lab@frec.bull.fr

DataFocus Incorporated
12450 Fair Lakes Circle, Suite 400
Fairfax, VA 22033-3831

Contact: Mr. Matt Einseln
Phone: 703-631-6770
email: mte@datafocus.com

Mindcraft, Inc.
410 Cambridge Avenue
Palo Alto, CA 94306

Contact: Mr. Bruce Weiner
Phone: 415-323-9000
email: sales@mindcraft.com

PERENNIAL
4699 Old Ironsides Drive, Suite 210
Santa Clara, CA 95054

Contact: Mr. Barry E. Hedquist
Phone: 408-748-2900
email: info@peren.com

NIST POSIX VALIDATED PRODUCTS

The following products have been tested by an Accredited POSIX Testing Laboratory (APTL) using the official National Institute of Standards and Technology POSIX Conformance Test Suite (NIST-PCTS:151-2) for the Federal Information Processing Standards 151-2 (FIPS PUB 151-2). A Certificate of Validation has been issued by NIST/CSL. Additional information is available from NIST/CSL on conditional features supported, configuration details, and resolved test codes (if appropriate).

Information in this listing includes product information on the implementation, system tested and type of implementation. FIPS 151-2 supports three types of implementations, native, hosted, and cooperating. A native implementation "refers to an implementation of POSIX.1 that interfaces directly to an operating system kernel." A cooperating implementation "refers to an implementation of POSIX.1 that interfaces directly to an operating system kernel but the load modules are not produceable on this implementation." A hosted implementation "refers to an implementation of POSIX.1 that is accomplished through interfaces from the POSIX.1 services to some alternate form of operating system kernel services."

Information is also provided on the following primary conditional features: General Terminal Interface devices (GTI), Mountable File System (MFS), Modern Control (MC), and Appropriate Privileges (AP). If a Certificate of Validation has been corrected or amended there are two issue dates, the original date [in brackets] and the reissue date, listed for the product.
### PRODUCT SUPPLIERS

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<td>Cray Research Superservers, Inc.</td>
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<td>Hewlett-Packard Company</td>
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PRODUCTS

151-2AMDD001 Issued: 03/18/94 Type: Native
Product Supplier: AMDahl Corporation
Product: UTS Version 4 Release 2
PCD: UTS 4.2 POSIX.1 and FIPS 151-2 Conformance Document GTI - Not Provided by Product MC - Not Provided by Product MFS - Supported by Product AP - Supported by Product Computer Hardware Supplier: AMDahl Corporation
APTL: 0342 Mindcraft, Inc.

151-2CRA001 Issued: 09/07/94 Type: Native
Product Supplier: Cray Research Superservers, Inc.
Product: Solaris 2.3 CRAY Version R Maintenance Update 1 with Patch 10647-03
PCD: Cray Solaris 2.3 POSIX.1 Conformance Document GTI - Not Provided by Product MC - Supported by Product MFS - Supported by Product AP - Supported by Product Computer Hardware Supplier: Cray Research Superservers, Inc.
Computer Hardware Product: Cray SUPERSERVER 6400 C Compiler: Sun C Compiler Version 2.0.1, Released October 3, 1992
APTL: 0342 Mindcraft, Inc.

151-2DEC001 Issued: 08/12/93 Type: Hosted
Product Supplier: Digital Equipment Corporation
Product: POSIX for Open VMS AXP Version X1.0-041
PCD: POSIX 1003.1-1990 Conformance Document for Open VMS AXP (July 1993)
GTI - Not Provided by Product MC - Not Provided by Product MFS - Supported by Product AP - Not Provided by Product Computer Hardware Supplier: Digital Equipment Corporation
Computer Hardware Product: DECSYSTEM, Model 4000/610 Host Operating System Supplier: Digital Equipment Corporation
Host Operating System: OpenVMS AXP Version 1.5 C Compiler: DEC C Version 1, Release 3
APTL: 0343 DataFocus Incorporated

151-2DEC002 Issued: 02/28/94 Type: Native
Product Supplier: Digital Equipment Corporation
Product: DEC OSF/1 Version 2.0, released March, 1994
PCD: DEC OSF/1 POSIX.1 Conformance Document (Order Number: AA-PS35B-TE)
GTI - Supported by Product MC - Not Provided by Product MFS - Supported by Product AP - Supported by Product Computer Hardware Supplier: Digital Equipment Corporation
Computer Hardware Product: DEC 3000, Model 400 C Compiler: DEC OSF/1 C Compiler, Version 2.0
APTL: 0342 Mindcraft, Inc.

151-2DEC003 Issued: 08/05/94 Type: Hosted
Product Supplier: Digital Equipment Corporation
Product: POSIX for Open VMS AXP Version 2.0
PCD: POSIX 1003.1-1990 Conformance Document for Open VMS AXP, June 1994
GTI - Not Provided by Product MC - Not Provided by Product MFS - Supported by Product AP - Supported by Product Computer Hardware Supplier: Digital Equipment Corporation
Computer Hardware Product: DECSYSTEM, Model 4000/610 Host Operating System Supplier: Digital Equipment Corporation
Host Operating System: OpenVMS AXP, Version 6.1 C Compiler: DEC C for OpenVMS AXP Version 4.0
APTL: 0343 DataFocus Incorporated

151-2DEC004 Issued: 08/05/94 Type: Hosted
Product Supplier: Digital Equipment Corporation
Product: POSIX for Open VMS VAX, Version 2.0
PCD: POSIX 1003.1-1990 Conformance Document for Open VMS AXP, June 1994
GTI - Not Provided by Product MC - Not Provided by Product MFS - Supported by Product AP - Supported by Product Computer Hardware Supplier: Digital Equipment Corporation
Computer Hardware Product: DECSYSTEM, Model 4000-500 Host Operating System Supplier: Digital Equipment Corporation
Host Operating System: OpenVMS VAX, Version 6.1 C Compiler: DEC C for OpenVMS VAX Version 4.0
APTL: 0343 DataFocus Incorporated

151-2DEC005 Issued: 08/17/94 Type: Native
Product Supplier: Digital Equipment Corporation
Product: DEC OSF/1 Version 3.0, released August, 1994
PCD: DEC OSF/1 POSIX.1 Conformance Document (Order Number: AA-PS35C-TE) GTI - Supported by Product MC - Not Provided by Product MFS - Supported by Product AP - Supported by Product Computer Hardware Supplier: Digital Equipment Corporation
Computer Hardware Product: DEC 2100 model A500MP C Compiler: DEC OSF/1 C Compiler, Version 3.0
APTL: 0342 Mindcraft, Inc.

151-2DG001 Issued: 04/12/94 Type: Native
Product Supplier: Data General Corporation
Product: DG/US 5.4 Release 3.00 MU01
PCD: POSIX.1 Conformance Document for the DG/UX System Revision 04, March 1994
GTI - Supported by Product MC - Supported by Product MFS - Supported by Product AP - Supported by Product Computer Hardware Supplier: Data General Corporation
Computer Hardware Product: Data General AVIION AV8500 Model G70595 C Compiler: gcc 2.4.5.6
APTL: 0342 Mindcraft, Inc.

151-2HPC001 Issued: 05/12/94 Type: Native
Product Supplier: Hewlett-Packard Company
Product: HP-UX Release 9.09 with patches PHCO_3669, PHCO_4152, and PHKL_4149
APTL: 0342 Mindcraft, Inc.

151-2HPC002 Issued: 05/12/94 Type: Native
Product Supplier: Hewlett-Packard Company
Product: HP-UX Release 9.09 with patches PHCO_3669, PHCO_4152, and PHKL_4149
Computer Hardware Product: Series 9000 Model 725 C Compiler: HP C Compiler Version A.09.33
APTL: 0342 Mindcraft, Inc.
NIST POSIX VALIDATED PRODUCTS, Continued

151-2HPC003 Issued: 06/01/94 Type: Native
Product Supplier: Hewlett-Packard Company
Product: HP-UX Release 9.05 with patches PHKL_4110, and PHNE_4111
G1I - Supported by Product MC - Supported by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Hewlett-Packard Company
Computer Hardware Product: Series 9000 Model 735
C Compiler: HP C Compiler Version A.09.33
APTL: 0342 Mindcraft, Inc.

151-2HPC004 Issued: 06/01/94 Type: Native
Product Supplier: Hewlett-Packard Company
Product: HP-UX Release 9.05 with patches PHKL_4110, and PHNE_4111
G1I - Supported by Product MC - Supported by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Hewlett-Packard Company
Computer Hardware Product: Series 9000 Model 725
C Compiler: HP C Compiler Version A.09.33
APTL: 0342 Mindcraft, Inc.

151-2HPC005 Issued: 07/01/94 Type: Native
Product Supplier: Hewlett-Packard Company
Product: HP-UX Release 10.00 S1
G1I - Supported by Product MC - Supported by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Hewlett-Packard Company
Computer Hardware Product: Series 9000 Model 770
C Compiler: HP C Compiler Version X.10.23
APTL: 0342 Mindcraft, Inc.

151-2HPC006 Issued: 07/01/94 Type: Native
Product Supplier: Hewlett-Packard Company
Product: HP-UX Release 10.00 S1
G1I - Supported by Product MC - Supported by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Hewlett-Packard Company
Computer Hardware Product: Series 9000 Model 712
C Compiler: HP C Compiler Version X.10.23
APTL: 0342 Mindcraft, Inc.

151-2HPC007 Issued: 07/01/94 Type: Native
Product Supplier: Hewlett-Packard Company
Product: HP-UX 10.09 S1
G1I - Supported by Product MC - Supported by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Hewlett-Packard Company
Computer Hardware Product: Series 9000 Model 712
C Compiler: HP C Compiler Version X.10.18
APTL: 0342 Mindcraft, Inc.

151-2HPC008 Issued: 07/01/94 Type: Native
Product Supplier: Hewlett-Packard Company
Product: HP-UX 10.09 S1
G1I - Supported by Product MC - Supported by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Hewlett-Packard Company
Computer Hardware Product: Series 9000 Model 770
C Compiler: HP C Compiler Version X.10.18
APTL: 0342 Mindcraft, Inc.

151-2HPC009 Issued: 03/02/95 Type: Native
Product Supplier: Hewlett-Packard Company
Product: HP-UX Release 10.00
G1I - Supported by Product MC - Supported by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Hewlett-Packard Company
Computer Hardware Product: HP 9000 Series 700 Model J210
C Compiler: HP C Compiler Version A.10.03
APTL: 0342 Mindcraft, Inc.

151-2HPC010 Issued: 03/02/95 Type: Native
Product Supplier: Hewlett-Packard Company
Product: HP-UX Release 10.00
G1I - Supported by Product MC - Supported by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Hewlett-Packard Company
Computer Hardware Product: HP 9000/829 K400
C Compiler: HP C Compiler Version A.10.03
APTL: 0342 Mindcraft, Inc.

151-2HPC011 Issued: 03/02/95 Type: Native
Product Supplier: Hewlett-Packard Company
Product: HP-UX Release 10.00
G1I - Supported by Product MC - Supported by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Hewlett-Packard Company
Computer Hardware Product: HP 9000/829 K400
C Compiler: HP C Compiler Version A.10.03
APTL: 0342 Mindcraft, Inc.

151-2IBM001 Issued: 03/08/94 Type: Native
Product Supplier: International Business Machines Corporation
Product: MVS/ESA 4.3 OpenEdition™ 1.0
PCD: OpenEdition MVS POSIX.1 Conformance Document, Document Number SC23-3011-00
G1I - NOT Provided by Product MC - NOT Provided by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: International Business Machines Corporation
Computer Hardware Product: ES/9000-570
C Compiler: IBM SAA AD/Cycle® C/370 Version 1 Release 2
APTL: 0342 Mindcraft, Inc.
NIST POSIX VALIDATED PRODUCTS, Continued

151-2IBM002 Issued: 02/17/94 Type: Native
Product Supplier: International Business Machines Corporation
Product: AIX Version 3.2.5 for RISC System/6000 with PTFs: U423984, U424399, U424507, U424590, U424546, U424587, U425984, U425998, U425997, U426001, U426014, U425858
PCD: AIX Version 3.2 POSIX Conformance Document
GTI - Supported by Product MC - Supported by Product MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: International Business Machines Corporation
Computer Hardware Product: RISC System/6000, Model 590
C Compiler: XLC Version 1, Release 3
APTL: 0342 Mindcraft, Inc.

151-2IBM003 Issued: 02/17/94 Type: Native
Product Supplier: International Business Machines Corporation
Product: AIX Version 3.2.5 for RISC System/6000 with PTFs: U423984, U424399, U424507, U424590, U424546, U424587, U425984, U425998, U425997, U426001, U426014, U425858
PCD: AIX Version 3.2 POSIX Conformance Document
GTI - Supported by Product MC - Supported by Product MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: International Business Machines Corporation
Computer Hardware Product: RISC System/6000, Model 590
C Compiler: XLC Version 1, Release 3
APTL: 0342 Mindcraft, Inc.

151-2IBM004 Issued: 02/17/94 Type: Native
Product Supplier: International Business Machines Corporation
Product: AIX Version 3.2.5 for RISC System/6000 with PTFs: U423984, U424399, U424507, U424590, U424546, U424587, U425984, U425998, U425997, U426001, U426014, U425858
PCD: AIX Version 3.2 POSIX Conformance Document
GTI - Supported by Product MC - Supported by Product MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: International Business Machines Corporation
Computer Hardware Product: RISC System/6000, Model 350
C Compiler: XLC Version 1, Release 3
APTL: 0342 Mindcraft, Inc.

151-2IBM005 Issued: 04/29/94 Type: Native
Product Supplier: International Business Machines Corporation
Product: AIX Version 3.2.5 for RISC System/6000 with PTFs: U423984, U424399, U424507, U424590, U424546, U424587, U425984, U425998, U425997, U426001, U426014, U427208, U427727, U427892
GTI - Supported by Product MC - Supported by Product MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: International Business Machines Corporation
Computer Hardware Product: RISC System/6000, Model 350
C Compiler: XLC Version 1, Release 3
APTL: 0342 Mindcraft, Inc.

151-2IBM006 Issued: 04/29/94 Type: Native
Product Supplier: International Business Machines Corporation
Product: AIX Version 3.2.5 for RISC System/6000 with PTFs: U423984, U424399, U424507, U424590, U424546, U424587, U425984, U425998, U425997, U426001, U426014, U427208, U427727, U427892
GTI - Supported by Product MC - Supported by Product MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: International Business Machines Corporation
Computer Hardware Product: RISC System/6000, Model 570
C Compiler: XLC Version 1, Release 3
APTL: 0342 Mindcraft, Inc.

151-2IBM007 Issued: 11/08/94 Type: Native
Product Supplier: International Business Machines Corporation
Product: MVS/ESA 5.1.0
PCD: OpenEdition MVS POSIX.1 Conformance Document, Document Number GC23-3011-02
GTI - Not Provided by Product MC - Not Provided by Product MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: International Business Machines Corporation
Computer Hardware Product: ES/9000/610
C Compiler: IBM SAA AD/Cycle* C/370 Version 1 Release 2
APTL: 0342 Mindcraft, Inc.

151-2INT001 Issued: 07/08/94 Type: Native
Product Supplier: Intergraph Corporation
Product: CLIX UNIXBOOT, Version 07.05.17.00, Release 22-FEB-1994
PCD: CLIX POSIX Conformance Document, July 1994
GTI - Supported by Product MC - NOT Provided by Product MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Intergraph Corporation
Computer Hardware Product: Intergraph 2800 Series Workstation, Model 2830
C Compiler: CLIPPER Advanced Optimizing C Compiler, Version 07.05.01.61, Release 03-MAR-1994
APTL: 0343 DataFocus Incorporated

151-2MSC001 Issued: 04/12/94 Type: Cooperating Hosted
Product Supplier: Microsoft Corporation
Product: Microsoft Windows NT POSIX Subsystem Version 3.1
PCD: Microsoft Windows NT POSIX Subsystem POSIX Conformance Document
GTI - NOT Provided by Product MC - NOT Provided by Product MFS - NOT Provided by Product AP - NOT Provided by Product
Computer Hardware Supplier: Olivetti
Computer Hardware Product: M700-10 Host & Development Operating System Supplier: Microsoft Corporation
Host & Development Operating System: Windows NT Version 3.1
C Compiler: Microsoft® C Centaur Optimizing Compiler Version 8.00.081
APTL: 0342 Mindcraft, Inc.

151-2MSC002 Issued: 04/12/94 Type: Cooperating Hosted
Product Supplier: Microsoft Corporation
Product: Microsoft Windows NT POSIX Subsystem Version 3.1
PCD: Microsoft Windows NT POSIX Subsystem POSIX Conformance Document
GTI - NOT Provided by Product MC - NOT Provided by Product MFS - NOT Provided by Product AP - NOT Provided by Product
Computer Hardware Supplier: Compaq
Computer Hardware Product: Deskpro 4/66i
Host & Development Operating System Supplier: Microsoft Corporation
Host & Development Operating System: Windows NT Version 3.1
APTL: 0342 Mindcraft, Inc.
NIST POSIX VALIDATED PRODUCTS, Continued

151-2MSC003 Issued: 04/12/94 Type: Cooperating Hosted
Product Supplier: Microsoft Corporation
Product: Microsoft Windows NT POSIX Subsystem Version 3.1
PCD: Microsoft Windows NT POSIX Subsystem POSIX Conformance Document
GTI - NOT Provided by Product MC - NOT Provided by Product
MFS - NOT Provided by Product AP - NOT Provided by Product
Computer Hardware Supplier: Olivetti
Computer Hardware Product: M700-10
Host & Development Operating System Supplier: Microsoft Corporation
Host & Development Operating System: Windows NT Advanced Server Version 3.1
C Compiler: Microsoft® C Centaur Optimizing Compiler Version 8.00.081
APTL: 0342 Mindcraft, Inc.

151-2MSC004 Issued: 04/12/94 Type: Cooperating Hosted
Product Supplier: Microsoft Corporation
Product: Microsoft Windows NT POSIX Subsystem Version 3.1
PCD: Microsoft Windows NT POSIX Subsystem POSIX Conformance Document
GTI - NOT Provided by Product MC - NOT Provided by Product
MFS - NOT Provided by Product AP - NOT Provided by Product
Computer Hardware Supplier: Compaq
Computer Hardware Product: Deskpro 4/66i
Host & Development Operating System Supplier: Microsoft Corporation
Host & Development Operating System: Microsoft Windows NT Advanced Server Version 3.1
APTL: 0342 Mindcraft, Inc.

151-2MSC005 Issued: 05/12/94 Type: Cooperating Hosted
Product Supplier: Microsoft Corporation
Product: Microsoft® Windows NT® POSIX Subsystem Version 3.1
PCD: Microsoft® Windows NT® POSIX Subsystem POSIX Conformance Document
GTI - NOT Provided by Product MC - NOT Provided by Product
MFS - NOT Provided by Product AP - NOT Provided by Product
Computer Hardware Supplier: Digital Equipment Corporation
Computer Hardware Product: DECpc AXP/150
Host & Development Operating System Supplier: Microsoft Corporation
Host & Development Operating System: Microsoft® Windows NT® Version 3.1
C Compiler: Microsoft® C/C++ Optimizing Compiler Version 8.00.9B
APTL: 0342 Mindcraft, Inc.

151-2MSC006 Issued: 05/12/94 Type: Cooperating Hosted
Product Supplier: Microsoft Corporation
Product: Microsoft® Windows NT® POSIX Subsystem Version 3.1
PCD: Microsoft® Windows NT® POSIX Subsystem POSIX Conformance Document
GTI - NOT Provided by Product MC - NOT Provided by Product
MFS - NOT Provided by Product AP - NOT Provided by Product
Computer Hardware Supplier: Digital Equipment Corporation
Computer Hardware Product: DECpc AXP/150
Host & Development Operating System Supplier: Microsoft Corporation
Host & Development Operating System: Microsoft® Windows NT® Advanced Server Version 3.1
C Compiler: Microsoft® C/C++ Optimizing Compiler Version 8.00.9B
APTL: 0342 Mindcraft, Inc.

151-2MSC007 Issued: 10/05/94 Type: Cooperating Hosted
Product Supplier: Microsoft Corporation
Product: Microsoft® Windows NT® POSIX Subsystem Version 3.5
PCD: Microsoft® Windows NT® POSIX Subsystem POSIX Conformance Document, February 1994
GTI - NOT Provided by Product MC - NOT Provided by Product
MFS - NOT Provided by Product AP - NOT Provided by Product
Computer Hardware Supplier: Intel
Computer Hardware Product: Intel Classic R Plus, i486DX/33
Host & Development Operating System Supplier: Microsoft Corporation
Host & Development Operating System: Microsoft® Windows NT® Workstation Version 3.5, Release Candidate 1
C Compiler: Microsoft® 32-bit C/C++ Optimizing Compiler, Version 8.50.4136 for 80x86
APTL: 0343 DataFocus, Inc.

151-2MSC008 Issued: 11/17/94 [10/13/94] Type: Cooperating Hosted
Product Supplier: Microsoft Corporation
Product: Microsoft® Windows NT® POSIX Subsystem Version 3.5
PCD: Microsoft® Windows NT® POSIX Subsystem POSIX Conformance Document, February 1994
GTI - NOT Provided by Product MC - NOT Provided by Product
MFS - NOT Provided by Product AP - NOT Provided by Product
Computer Hardware Supplier: Intel
Computer Hardware Product: Intel Xpress, i486DX2/66
Host & Development Operating System Supplier: Microsoft Corporation
Host & Development Operating System: Microsoft® Windows NT® Server, Version 3.5
C Compiler: Microsoft® 32-bit C/C++ Optimizing Compiler, Version 8.50.4136 for 80x86
APTL: 0343 DataFocus, Inc.

151-2MSC009 Issued: 10/25/94 Type: Cooperating Hosted
Product Supplier: Microsoft Corporation
Product: Microsoft® Windows NT® POSIX Subsystem Version 3.5
PCD: Microsoft® Windows NT® POSIX Subsystem POSIX Conformance Document, February 1994
GTI - NOT Provided by Product MC - NOT Provided by Product
MFS - NOT Provided by Product AP - NOT Provided by Product
Computer Hardware Supplier: Intel
Computer Hardware Product: Intel Xpress, Pentium/60
Host & Development Operating System Supplier: Microsoft Corporation
Host & Development Operating System: Microsoft® Windows NT® Server, Version 3.5
C Compiler: Microsoft® 32-bit C/C++ Optimizing Compiler, Version 8.50.4136 for 80x86
APTL: 0343 DataFocus, Inc.

151-2MSC010 Issued: 11/17/94 [10/13/94] Type: Cooperating Hosted
Product Supplier: Microsoft Corporation
Product: Microsoft® Windows NT® POSIX Subsystem Version 3.5
PCD: Microsoft® Windows NT® POSIX Subsystem POSIX Conformance Document, February 1994
GTI - NOT Provided by Product MC - NOT Provided by Product
MFS - NOT Provided by Product AP - NOT Provided by Product
Computer Hardware Supplier: Intel
Computer Hardware Product: Intel Classic R Plus, i486DX33
Host & Development Operating System Supplier: Microsoft Corporation
Host & Development Operating System: Microsoft® Windows NT® Workstation, Version 3.5
C Compiler: Microsoft® 32-bit C/C++ Optimizing Compiler, Version 8.50.4136 for 80x86
APTL: 0343 DataFocus, Inc.
NIST POSIX VALIDATED PRODUCTS, Continued

151-2MSC0011 Issued: 10/13/94 Type: Cooperating Hosted
Product Supplier: Microsoft Corporation
Product: Microsoft® Windows NT™ POSIX Subsystem Version 3.5
PCD: Microsoft® Windows NT™ POSIX Subsystem POSIX
Conformance Document, February 1994
GTI - Not Provided by Product MC - Not Provided by Product
MFS - Not Provided by Product AP - Not Provided by Product
Computer Hardware Supplier: AST
Computer Hardware Product: PowerExec 4/33SL
Host & Development Operating System Supplier: Microsoft Corporation
Host & Development Operating System: Microsoft® Windows NT™ Workstation, Version 3.5
C Compiler: Microsoft® 32-bit C/C++ Optimizing Compiler, Version 8.50.4136 for 80x86
APTL: 0343 DataFocus, Inc.

151-2MSC0012 Issued: 11/17/94 Type: Cooperating Hosted
Product Supplier: Microsoft Corporation
Product: Microsoft® Windows NT™ POSIX Subsystem Version 3.5
PCD: Microsoft® Windows NT™ POSIX Subsystem POSIX
Conformance Document, February 1994
GTI - Not Provided by Product MC - Not Provided by Product
MFS - Not Provided by Product AP - Not Provided by Product
Computer Hardware Supplier: Intel Corporation
Computer Hardware Product: Intel Xpress Dual Pentium 66
Host & Development Operating System Supplier: Microsoft Corporation
Host & Development Operating System: Microsoft® Windows NT™ Server, Version 3.5
C Compiler: Microsoft® 32-bit C/C++ Optimizing Compiler, Version 8.50.4136 for 80x86
APTL: 0343 DataFocus, Inc.

151-2MSC0013 Issued: 11/17/94 Type: Cooperating Hosted
Product Supplier: Microsoft Corporation
Product: Microsoft® Windows NT™ POSIX Subsystem Version 3.5
PCD: Microsoft® Windows NT™ POSIX Subsystem POSIX
Conformance Document, February 1994
GTI - Not Provided by Product MC - Not Provided by Product
MFS - Not Provided by Product AP - Not Provided by Product
Computer Hardware Supplier: Intel Corporation
Computer Hardware Product: Intel Xpress I486DX33
Host & Development Operating System Supplier: Microsoft Corporation
Host & Development Operating System: Microsoft® Windows NT™ Server, Version 3.5
C Compiler: Microsoft® 32-bit C/C++ Optimizing Compiler, Version 8.50.4136 for 80x86
APTL: 0343 DataFocus, Inc.

151-2MSC0014 Issued: 11/17/94 Type: Cooperating Hosted
Product Supplier: Microsoft Corporation
Product: Microsoft® Windows NT™ POSIX Subsystem Version 3.5
PCD: Microsoft® Windows NT™ POSIX Subsystem POSIX
Conformance Document, February 1994
GTI - Not Provided by Product MC - Not Provided by Product
MFS - Not Provided by Product AP - Not Provided by Product
Computer Hardware Supplier: Intel Corporation
Computer Hardware Product: Classic R Plus I486DX2/66
Host & Development Operating System Supplier: Microsoft Corporation
Host & Development Operating System: Microsoft® Windows NT™ Workstation, Version 3.5
C Compiler: Microsoft® 32-bit C/C++ Optimizing Compiler, Version 8.50.4136 for 80x86
APTL: 0343 DataFocus, Inc.

151-2MSC0015 Issued: 11/17/94 Type: Cooperating Hosted
Product Supplier: Microsoft Corporation
Product: Microsoft® Windows NT™ POSIX Subsystem Version 3.5
PCD: Microsoft® Windows NT™ POSIX Subsystem POSIX Conformance Document, February 1994
GTI - Not Provided by Product MC - Not Provided by Product
MFS - Not Provided by Product AP - Not Provided by Product
Computer Hardware Supplier: Intel Corporation
Computer Hardware Product: Classic R Plus I486SX33
Host & Development Operating System Supplier: Microsoft Corporation
Host & Development Operating System: Microsoft® Windows NT™ Workstation, Version 3.5
C Compiler: Microsoft® 32-bit C/C++ Optimizing Compiler, Version 8.50.4136 for 80x86
APTL: 0343 DataFocus, Inc.

151-2NOV001 Issued: 05/03/94 Type: Native
Product Supplier: Novell, Inc.
Product: UnixWare™ Application Server Version 1.1 with UnixWare Update 1.1.1 and PTF604
PCD: UnixWare™ Programmer's Guide: POSIX.1 Conformance (First Edition)
GTI - Not Provided by Product MC - Not Provided by Product
MFS - Not Provided by Product AP - Not Provided by Product
Computer Hardware Supplier: AST Research, Inc.
Computer Hardware Product: Premium 486/33 model 3V
C Compiler: UnixWare™ SDK/Personal Utilities Version 1.1
APTL: 0342 Mindcraft, Inc.

151-2NOV002 Issued: 05/03/94 Type: Native
Product Supplier: Novell, Inc.
Product: UnixWare™ Personal Edition Version 1.1 with UnixWare Update 1.1.1 and PTF604
PCD: UnixWare™ Programmer's Guide: POSIX.1 Conformance (First Edition)
GTI - Not Provided by Product MC - Not Provided by Product
MFS - Not Provided by Product AP - Not Provided by Product
Computer Hardware Supplier: AST Research, Inc.
Computer Hardware Product: Premium 486/33 model 3V
C Compiler: UnixWare™ SDK/Personal Utilities Version 1.1
APTL: 0342 Mindcraft, Inc.

151-2NOV003 Issued: 10/21/94 Type: Native
Product Supplier: Novell, Inc.
Product: UnixWare™ Personal Edition Version 1.1.2, with PTF621
PCD: UnixWare™ Programmer's Guide: POSIX.1 Conformance (First Edition)
GTI - Not Provided by Product MC - Not Provided by Product
MFS - Not Provided by Product AP - Not Provided by Product
Computer Hardware Supplier: AT&T
Computer Hardware Product: Globalyst 515
C Compiler: UnixWare™ SDK/Personal Utilities Version 1.1
APTL: 0342 Mindcraft, Inc.

151-2NOV004 Issued: 10/25/94 Type: Native
Product Supplier: Novell, Inc.
Product: UnixWare™ Personal Edition Version 1.1.2, with PTF621 and
PCI SCSI driver 517-0002476
PCD: UnixWare™ Programmer's Guide: POSIX.1 Conformance (First Edition)
GTI - Not Provided by Product MC - Not Provided by Product
MFS - Not Provided by Product AP - Not Provided by Product
Computer Hardware Supplier: AT&T
Computer Hardware Product: Globalyst 600
C Compiler: UnixWare™ SDK/Personal Utilities Version 1.1
APTL: 0342 Mindcraft, Inc.
NIST POSIX VALIDATED PRODUCTS, Continued

151-2NOV005 Issued: 10/25/94 Type: Native
Product Supplier: Novell, Inc.
Product: UnixWare, Personal Edition Version 1.1.2, with PTF621
and PCI SCSI driver 517-0002476
PCD: UnixWare Programmer's Guide: POSIX.1 Conformance (First
Edition)
GI - Supported by Product MC - Supported by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: AT&T
Computer Hardware Product: Globalyst 550
C Compiler: UnixWare SDK/Personal Utilities Version 1.1
APTL: 0342 Mindcraft, Inc.

151-2SCO001 Issued: 11/17/94 [10/21/94] Type: Native
Product Supplier: The Santa Cruz Operation, Inc.
Product: SCO UNIX, Release 3.2, Version 4.2
PCD: SCO UNIX System V/386 Release 3.2.4 POSIX.1 Conformance
Document, October 1994
GI - Supported by Product MC - Not Provided by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: American Megatrends, Inc.
Computer Hardware Product: AMI SBS 6400 Super Voyager VLB-III,
Intel 486DX2/66
C Compiler: SCO ODT Development System Release 3.0 C Compiler,
with SCO XPG4 Supplement, Release 1.0
APTL: 0343 DataFocus, Inc.

151-2SCO002 Issued: 10/21/94 Type: Native
Product Supplier: The Santa Cruz Operation, Inc.
Product: SCO UNIX, Release 3.2, Version 4.2
PCD: SCO UNIX System V/386 Release 3.2.4 POSIX.1 Conformance
Document, October 1994
GI - Supported by Product MC - Not Provided by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Compaq Computer Corporation
Computer Hardware Product: Compaq ProLiant 2000, Model 5/66
C Compiler: SCO ODT Development System Release 3.0 C Compiler,
with SCO XPG4 Supplement, Release 1.0
APTL: 0343 DataFocus, Inc.

151-2SCO003 Issued: 11/15/94 Type: Native
Product Supplier: The Santa Cruz Operation, Inc.
Product: SCO UNIX, Release 3.2, Version 4.2, with SCO MPX
Multi-processor extension Release 3.0
PCD: SCO UNIX System V/386 Release 3.2.4 POSIX.1 Conformance
Document, October 1994
GI - Supported by Product MC - Not Provided by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Compaq Computer Corporation
Computer Hardware Product: Compaq ProLiant 2000, Model 5/90
C Compiler: SCO ODT Development System Release 3.0 C Compiler,
with SCO XPG4 Supplement, Release 1.0
APTL: 0343 DataFocus, Inc.

151-2SCO004 Issued: 11/15/94 Type: Native
Product Supplier: The Santa Cruz Operation, Inc.
Product: SCO UNIX, Release 3.2, Version 4.2
PCD: SCO UNIX System V/386 Release 3.2.4 POSIX.1 Conformance
Document, October 1994
GI - Supported by Product MC - Not Provided by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Compaq Computer Corporation
Computer Hardware Product: Compaq ProLiant 2000, Model 5/90
C Compiler: SCO ODT Development System Release 3.0 C Compiler,
with SCO XPG4 Supplement, Release 1.0
APTL: 0343 DataFocus, Inc.

151-2SCO005 Issued: 11/15/94 Type: Native
Product Supplier: The Santa Cruz Operation, Inc.
Product: SCO UNIX, Release 3.2, Version 4.2
PCD: SCO UNIX System V/386 Release 3.2.4 POSIX.1 Conformance
Document, October 1994
GI - Supported by Product MC - Not Provided by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Compaq Computer Corporation
Computer Hardware Product: Compaq ProLiant 1000, Model 486DX2/66
C Compiler: SCO ODT Development System Release 3.0 C Compiler,
with SCO XPG4 Supplement, Release 1.0
APTL: 0343 DataFocus, Inc.

151-2SCO006 Issued: 11/15/94 Type: Native
Product Supplier: The Santa Cruz Operation, Inc.
Product: SCO UNIX, Release 3.2, Version 4.2
PCD: SCO UNIX System V/386 Release 3.2.4 POSIX.1 Conformance
Document, October 1994
GI - Supported by Product MC - Not Provided by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: American Megatrends, Inc.
Computer Hardware Product: AMI SBS 6400 Super Voyager VLB-III,
Intel 486DX4/100
C Compiler: SCO ODT Development System Release 3.0 C Compiler,
with SCO XPG4 Supplement, Release 1.0
APTL: 0343 DataFocus, Inc.

151-2SCO007 Issued: 11/23/94 Type: Native
Product Supplier: The Santa Cruz Operation, Inc.
Product: SCO UNIX, Release 3.2, Version 4.2
PCD: SCO UNIX System V/386 Release 3.2.4 POSIX.1 Conformance
Document, October 1994
GI - Supported by Product MC - Not Provided by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Microlog Corporation
Computer Hardware Product: Intela R100, Intel 486DX33
C Compiler: SCO ODT Development System Release 3.0 C Compiler,
with SCO XPG4 Supplement, Release 1.0
APTL: 0343 DataFocus, Inc.

151-2SCO008 Issued: 11/23/94 Type: Native
Product Supplier: The Santa Cruz Operation, Inc.
Product: SCO UNIX, Release 3.2, Version 4.2
PCD: SCO UNIX System V/386 Release 3.2.4 POSIX.1 Conformance
Document, October 1994
GI - Supported by Product MC - Not Provided by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Microlog Corporation
Computer Hardware Product: Intela R100, Intel Pentium* 766
C Compiler: SCO ODT Development System Release 3.0 C Compiler,
with SCO XPG4 Supplement, Release 1.0
APTL: 0343 DataFocus, Inc.

151-2SEQ001 Issued: 04/12/94 Type: Native
Product Supplier: Sequenct Computer Systems Inc.
Product: DYNIX/ptx Version 4.0.0
PCD: DYNIX/ptx POSIX.1 Conformance Specification Part Number 1003-49622-04
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MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Sequenct Computer Systems Inc.
Computer Hardware Product: Sequenct Symmetry Systems SE20
C Compiler: ptx/C (Version 4.0.0)
APTL: 0342 Mindcraft, Inc.
NIST POSIX VALIDATED PRODUCTS, Continued

151-2SEQ002 Issued: 04/12/94 Type: Native
Product Supplier: Sequent Computer Systems Inc.
Product: DYNIX/ptx POSIX.1 Conformance Specification Part Number
1003-49622-03a
PCD: DYNIX/pxt POSIX.1 Conformance Specification
GTI - Supported by Product MC - Supported by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Sequent Computer Systems Inc.
Computer Hardware Product: Sequent Symmetry Systems SE50
C Compiler: ptx/C (Version 2.1.1)
APTL: 0342 Mindcraft, Inc.

151-2SGI001 Issued: 03/07/95 Type: Native
Product Supplier: Silicon Graphics, Inc.
Product: IRIX 5.3 with patches 278, 279, and 280
PCD: IRIX 5.3 POSIX.1 Conformance Document
GTI - Supported by Product MC - Not provided by product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Silicon Graphics, Inc.
Computer Hardware Product: Indigo 2
C Compiler: IRIX Development Option 5.3 (SC4-IDO-5.3)
APTL: 0342 Mindcraft, Inc.

151-2SGI002 Issued: 03/07/95 Type: Native
Product Supplier: Silicon Graphics, Inc.
Product: IRIX 5.3 with patches 278, 279, and 280
PCD: IRIX 5.3 POSIX.1 Conformance Document
GTI - Supported by Product MC - Not provided by product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Silicon Graphics, Inc.
Computer Hardware Product: Challenge L
C Compiler: IRIX Development Option 5.3 (SC4-IDO-5.3)
APTL: 0342 Mindcraft, Inc.

151-2SGI003 Issued: 03/07/95 Type: Native
Product Supplier: Silicon Graphics, Inc.
Product: IRIX 5.3 with patches 278, 279, and 280
PCD: IRIX 5.3 POSIX.1 Conformance Document
GTI - Supported by Product MC - Not provided by product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Silicon Graphics, Inc.
Computer Hardware Product: Integrity NR4404
C Compiler: IRIX Development Option 5.3 (SC4-IDO-5.3)
APTL: 0342 Mindcraft, Inc.

151-2SGI004 Issued: 03/07/95 Type: Native
Product Supplier: Silicon Graphics, Inc.
Product: IRIX 5.3 with patches 278, 279, and 280
PCD: IRIX 5.3 POSIX.1 Conformance Document
GTI - Supported by Product MC - Not provided by product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Tandem Computers Incorporated
Computer Hardware Product: Integrity NR401
C Compiler: IRIX Development Option 5.3 (SC4-IDO-5.3)
APTL: 0342 Mindcraft, Inc.

151-2SGI005 Issued: 03/07/95 Type: Native
Product Supplier: Silicon Graphics, Inc.
Product: IRIX 5.3 with patches 278, 279, and 280
PCD: IRIX 5.3 POSIX.1 Conformance Document
GTI - Supported by Product MC - Not provided by product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Tandem Computers Incorporated
Computer Hardware Product: Integrity NR401
C Compiler: IRIX Development Option 5.3 (SC4-IDO-5.3)
APTL: 0342 Mindcraft, Inc.

151-2SUN001 Issued: 12/23/93 Type: Native
Product Supplier: SunSoft, Inc.
Product: Solaris 2.3 with patch 101294-01
PCD: Solaris 2.3 Standards Conformance Guide, Chapter 5: POSIX.1 Part
No: 801-5263-10
GTI - Supported by Product MC - Supported by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Sun Microsystems Computer Corp., Inc.
Computer Hardware Product: SPARCcenter 2000, model 2204
C Compiler: Sun C Compiler Version 2.0.1, Released Oct. 3, 1992
APTL: 0342 Mindcraft, Inc.

151-2SUN002 Issued: 12/23/93 Type: Native
Product Supplier: SunSoft, Inc.
Product: Solaris 2.3 with patch 101294-01
PCD: Solaris 2.3 Standards Conformance Guide, Chapter 5: POSIX.1 Part
No: 801-5263-10
GTI - Supported by Product MC - Supported by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Sun Microsystems Computer Corp., Inc.
Computer Hardware Product: SPARCstation 10SX, model 40
C Compiler: Sun C Compiler Version 2.0.1, Released Oct. 3, 1992
APTL: 0342 Mindcraft, Inc.

151-2SUN003 Issued: 12/23/93 Type: Native
Product Supplier: SunSoft, Inc.
Product: Solaris 2.3 with patch 101294-01
PCD: Solaris 2.3 Standards Conformance Guide, Chapter 5: POSIX.1 Part
No: 801-5263-10
GTI - Supported by Product MC - Supported by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Sun Microsystems Computer Corp., Inc.
Computer Hardware Product: SPARCstation 10, model 52
C Compiler: Sun C Compiler Version 2.0.1, Released Oct. 3, 1992
APTL: 0342 Mindcraft, Inc.

151-2SUN004 Issued: 12/23/93 Type: Native
Product Supplier: SunSoft, Inc.
Product: Solaris 2.3 with patch 101294-01
PCD: Solaris 2.3 Standards Conformance Guide, Chapter 5: POSIX.1 Part
No: 801-5263-10
GTI - Supported by Product MC - Supported by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Sun Microsystems Computer Corp., Inc.
Computer Hardware Product: SPARCserver 670MP, model 54
C Compiler: Sun C Compiler Version 2.0.1, Released Oct. 3, 1992
APTL: 0342 Mindcraft, Inc.

151-2SUN005 Issued: 3/30/94 Type: Native
Product Supplier: SunSoft, Inc.
Product: Solaris 2.3 Edition II with patch 101294-01 and 101498-02
PCD: Solaris 2.3 Standards Conformance Guide, Chapter 5: POSIX.1 Part
No: 801-5263-11
GTI - Supported by Product MC - Supported by Product
MFS - Supported by Product AP - Supported by Product
Computer Hardware Supplier: Sun Microsystems Computer Corp., Inc.
Computer Hardware Product: SPARCstation 5
C Compiler: Sun C Compiler Version 2.0.1, Released Oct. 3, 1992
APTL: 0342 Mindcraft, Inc.
### NIST POSIX Validated Products, Continued

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<td>--------------</td>
</tr>
<tr>
<td>151-2SUN016</td>
<td>10/13/94</td>
<td>Native</td>
<td>SunSoft, Inc.</td>
<td>Solaris 2.4</td>
</tr>
<tr>
<td>151-2SUN017</td>
<td>10/13/94</td>
<td>Native</td>
<td>SunSoft, Inc.</td>
<td>Solaris 2.3 with patch 101294-01</td>
</tr>
<tr>
<td>151-2SUN021</td>
<td>01/24/95</td>
<td>Native</td>
<td>SunSoft, Inc.</td>
<td>Solaris 2.4 Hardware: 11/94 Plus SMCC Hardware: 11/94</td>
</tr>
<tr>
<td>151-2SUN022</td>
<td>03/07/95</td>
<td>Native</td>
<td>SunSoft, Inc.</td>
<td>Solaris 2.4 Hardware: 11/94 Plus SMCC Hardware: 11/94</td>
</tr>
<tr>
<td>151-2SUN023</td>
<td>03/02/95</td>
<td>Native</td>
<td>SunSoft, Inc.</td>
<td>Solaris 2.4 Hardware: 11/94 Plus SMCC Hardware: 11/94</td>
</tr>
<tr>
<td>151-2TEN001</td>
<td>10/25/94</td>
<td>Native</td>
<td>Tenon Intersystems</td>
<td>MachTen Version 4.0.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>151-2TEN002</td>
<td>10/25/94</td>
<td>Native</td>
<td>Tenon Intersystems</td>
<td>MachTen Version 4.0.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### NIST POSIX VALIDATED PRODUCTS, Continued

<table>
<thead>
<tr>
<th>Code</th>
<th>Date</th>
<th>Type</th>
<th>Product</th>
<th>Supplier</th>
<th>PCD</th>
<th>Guide Part Number</th>
<th>Operating System</th>
<th>Supplier</th>
<th>Product</th>
<th>Hardware Model</th>
<th>C Compiler</th>
<th>APTL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>151-2UNI003</td>
<td>11/15/94</td>
<td>Native</td>
<td>Product: DYNIX/ptx Release 4.0.0</td>
<td>Unisys Corporation</td>
<td>PCD: DYNIX/ptx POSIX Conformance Specification Part Number: 7441-0861-000</td>
<td></td>
<td></td>
<td></td>
<td>DYNIX/ptx</td>
<td>U6000/500 Model 50</td>
<td>C Compiler: ptx/ 4.0.0</td>
<td>0342 Mindcraft, Inc.</td>
<td></td>
</tr>
</tbody>
</table>

For further information on the NIST/CSL POSIX validation program contact Martha M. Gray, Computer Systems Laboratory, B266 Technology Bldg., NIST, Gaithersburg, MD 20899. Telephone: 301-975-3276, fax: 301-590-0932, e-mail: gray@sst.ncsl.nist.gov.

This register is also available on an electronic mail (email) file server system. To use the service, you must be able to send and receive email via the Internet. For most email systems, send an email message (mailto:posix@nist.gov) with the first line of the message containing a command to send 151-2reg and a carriage return. The next line should simply end your email message (on some systems a period and a carriage return). This register will be returned via email to your email address. There is also a register for FIPS 151-1 accredited laboratories and validated products. For this register use the command send 151-1reg.
6. COMPUTER SECURITY TESTING

6.1 Cryptographic Standards

The lists in Sections 6.6, 6.7 and 6.8 provide technical information about products that have been validated as conforming to the following computer security FIPS:

a. Data Encryption Standard (DES), FIPS PUB 46-2,

b. Message Authentication Code (MAC), FIPS PUB 113, and


6.2 Data Encryption Validation Tests

FIPS PUB 46-2 specifies a cryptographic algorithm that converts plaintext to ciphertext using a 56-bit key. Testing procedures for the validation of devices as conforming to FIPS PUB 46-2 are described in the NBS Special Publication 500-20, Validating the Correctness of Hardware Implementations of the NBS Data Encryption Standard. The validation of a device is performed by running the Monte Carlo test described in the publication. The Monte-Carlo test consists of eight million encryptions and four million decryptions, with two encryptions and one decryption making up a single test. The test is designed to use the Electronic Codebook Mode (ECB) of DES. Although the actual test described in NBS Special Publication 500-20 is the same test used to validate devices today, the procedures for administering the test have changed. Currently, the test is performed by the vendor using initial values supplied by NIST. The vendor uses the supplied information to run the Monte-Carlo test and sends the results to NIST.

6.3 Message Authentication Code (MAC) Validation System

FIPS PUB 113, Computer Data Authentication, specifies a Data Encryption Algorithm which may be used to detect unauthorized intentional and accidental modifications to data. This process is known as data authentication. The algorithm is based on DES and is used to authenticate an entire binary message. FIPS PUB 113 is compatible with ANSI X9.9 which provides methods for authenticating an entire binary message as well as all or parts of a message which are in a coded character format. Procedures for the validation of products which implement FIPS PUB 113 and ANSI X9.9 are described in NBS Special Publication 500-156, Message Authentication Code (MAC) Validation System: Requirements and Procedures.

6.4 Key Management Validation System (KMVS)

FIPS PUB 171 adopts ANSI X9.17 for Federal Government use. ANSI X9.17, Financial Institution Key Management (Wholesale), provides procedures and protocols for the secure generation, distribution, storage, entry, use and destruction of symmetric cryptographic keying material (e.g., DES). It provides key management solutions for a variety of operational environments, and as such, ANSI X9.17 contains a number of options. FIPS PUB 171 specifies a particular set of options whenever keying material is distributed using the protocols of ANSI X9.17. Procedures for the validation of products which conform to a subset of the options selected in FIPS PUB 171 are described in the Key Management Validation System: Point-to-Point Validation System document which is available from the Manager of the Security Group (see Section 6.5).
6.5 General

6.5.1 Request for Validation

To validate a product, a vendor should send a formal request for validation which includes a clear indication of the product to be tested. The request must also include the name, address, and telephone number of the person within the vendor's organization who will be responsible for the validation testing. The request should be sent to:

Manager, Security Technology Group
Computer Security Division
National Computer Systems Laboratory
Building 225, Room A216
National Institute of Standards and Technology
Gaithersburg, MD 20899
Telephone (301) 975-2920

6.5.2 Information about Validated Products

It should be noted that the purpose of the following lists (see Sections 6.6, 6.7 and 6.8) is to provide technical information about products that have been validated as conforming to the FIPS Standards listed in Section 6.1. NIST has made every attempt to provide complete and accurate information about the products described in the following lists. However, due to the possibility of changes made within individual companies, NIST cannot guarantee that this document reflects the current status of each product.

6.5.3 Validation Documentation

Copies of the above FIPS and Special Publications are for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161. The KMVS validation requirements document discussed in Section 6.4 can be obtained by contacting the Manager of the Security Technology Group at the above address.
6.6 DES Validated Devices

NOTE: The purpose of this document is to provide technical information about devices that have been validated as conforming to Federal Information Processing Standard Publication 46-2, Data Encryption Standard. The National Institute of Standards and Technology (NIST) has made every attempt to provide complete and accurate information about the devices described in this document. However, due to the possibility of changes made within individual companies, NIST cannot guarantee that this document reflects the current status of each product.

<table>
<thead>
<tr>
<th>MANUFACTURER ADDRESS</th>
<th>PRODUCT</th>
<th>VALIDATION DATE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Engineering Concepts, Inc. 1198 Pacific Coast Highway #D-505 Seal Beach, CA 90740 -Mark Olson (310) 379-1189</td>
<td>MODEM LOCK version 1.0 (firmware) and KEYXL8 version 1.0 (software) (Encryption Only)</td>
<td>5/26/94</td>
<td>MODEM LOCK/KEYXL8 is a firmware/software combination that is intended to be connected between a computer and an external modem; encrypts the modem data stream; works with most computers and most common existing modems; weighs 8oz, small enough for a shirt pocket, runs up to 40 hours on a 9-volt battery, also has an AC adapter.</td>
</tr>
<tr>
<td>Advanced Micro Devices, Inc. 4115 Friederich Lane Mail Stop 135 Austin, TX 78744 -Patrick Soheli (408) 749-2161</td>
<td>AmZ8068 (also known as Am9518)</td>
<td>1/28/81</td>
<td>One 40-pin DIP package; n-channel Si-gate technology; ECB, CBC and 8-bit CFB modes; separate ports for key input, clear data and enciphered data; concurrent input, output and deciphering activities; external DMA control; interfaces with AmZ8000 CPU bus directly, and with the 2900, 8080, 8085 and 8048 families with minimum throughput greater than 1 Mbytes per second; greater than 1 Mbytes per second.</td>
</tr>
<tr>
<td>American Telephone and Telegraph Company (AT&amp;T) 6612 E. 75th Street P.O. Box 1008 Indianapolis, IN 46206 -Ken Zempol (908) 658-6870</td>
<td>AT&amp;T Smart Card Version 2.11/DES</td>
<td>5/3/91</td>
<td>N-channel silicon gate LSI product containing the circuitry necessary to encrypt and decrypt data; can be used in dedicated controllers, communication concentrators, terminals and peripheral task processors in general processor systems; can be used in CFB, ECB, or CBC operating modes; separate ports for key input, clear data, and enciphered data enhanced security; interface directly to the 1APX86, 88 bus; interfaces with 2900 and 8051 families with minimal external logic.</td>
</tr>
<tr>
<td>American Telephone and Telegraph AT&amp;T Guilford Center I-85 &amp; Mt. Hope Church Road McLeansville, NC 27160 -B.F. Bailey (910) 279-3779 -M. Zugay (910) 279-3779</td>
<td>AT&amp;T Mark E DES Key Generator, PN ON493049-1X</td>
<td>6/3/92</td>
<td>Card is part of a smart card based Computer Security System (CSS). The card is carried by an authorized user and permits the user to gain access to host computer systems that are protected by the CSS.</td>
</tr>
<tr>
<td></td>
<td>AT&amp;T Mark ET DES Key Generator Part No. AN10014-1</td>
<td>11/2/92</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

This version of the AT&T Smart Card is designed to closely follow developments in the international standards arena in areas of card communication protocols, commands and file structures. It is a general purpose smart card that supports multiple applications and uses the DES as a basic part of its operating system.
<table>
<thead>
<tr>
<th>MANUFACTURER ADDRESS</th>
<th>PRODUCT</th>
<th>VALIDATION DATE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Analytic Sciences Corporation 700 Boulevard South, Suite 201 Huntsville, AL 35802 -James Moore (205) 726-6718</td>
<td>DESafe version 1.0 (software)</td>
<td>8/26/94</td>
<td>DESafe is integrated with a commercial Bulletin Board System (BBS) to protect information during transmission to and from the BBS. DESafe permits cleartext file storage on the BBS by performing encryption/decryption &quot;on the fly&quot; during the file transfer. A stand-alone version of DESafe is employed by BBS users to encrypt (decrypt) downloaded (uploaded) files.</td>
</tr>
<tr>
<td>AT&amp;T Whippany Road Whippany, N.J. 07981 -William Oeschger (201) 898-1198</td>
<td>AT&amp;T T7000A Digital Encryption Processor</td>
<td>4/22/86</td>
<td>Manufactured using CMOS technology; 40-pin DIP; encryption modes include ECB, CBC, CFB, and OFB; throughput 1.882 Mbytes/second on-chip RAM and ROM program memory.</td>
</tr>
<tr>
<td>AT&amp;T Bell Laboratories 25 Lindsay Drive Room 2B-309 Morristown, N.J. 07960 -William Oeschger (201) 898-1198</td>
<td>DEP229ER (WE229ER)</td>
<td>9/6/83</td>
<td>3.5 micron NMOS technology; 40-pin DIP; encryption modes - ECB, CBC, OFB, CFB1, CFB8, CFB64; throughput rate of 117K ciphering operation/second.</td>
</tr>
<tr>
<td>Arkansas Systems Inc. 8901 Kanis Road Little Rock, AR 72205-6498 -David H. Bishop (501) 227-8471</td>
<td>DES-MATE</td>
<td>7/6/89</td>
<td>Provides data encryption for messages sent and received on-line between an ATM/EFT Network switch processor and an IBM host participant in that network. DES key management is automatic and under system control.</td>
</tr>
<tr>
<td>Burroughs Corporation Federal and Special Systems Group P.O. Box 517 Paoli, PA 19301 (215) 648-2556</td>
<td>PN 2664-9723</td>
<td>3/16/78</td>
<td>Not Available</td>
</tr>
<tr>
<td>Chase Manhattan Bank, N.A. 199 Water Street 12th Floor New York, New York 10081</td>
<td>Chase Encryption Device 1</td>
<td>7/24/84</td>
<td>Not Available</td>
</tr>
<tr>
<td>Collins Telecommunications Collins Defense Communications 350 Collins Road, NE Mail Stop 120-105 Cedar Rapids, Iowa 52498 -Jim Perkins (319) 395-5773</td>
<td>765-5914-001</td>
<td>10/15/77</td>
<td>pMOS chip with 40 sec algorithm execution time; chip has approximately a 50 nsec state change; can perform I/O functions while the chip is in operation; part of network stand-alone encryptor.</td>
</tr>
<tr>
<td>CryptCard</td>
<td>1/12/93</td>
<td>Chip designed for high speed (12 Megabytes/sec data rates) encryption and decryption. ECB, CBC, CFB and OFB modes of DES supported as well as MAC generation. Available as a 120 Pin Flat Pack.</td>
<td></td>
</tr>
<tr>
<td>Cottonwood Software 3448 Orange Street Los Alamos, NM 87544 -Jeffrey Saltzman (505) 661-6701</td>
<td>Cottonwood Software DES Class Library v. 1.05 (software)</td>
<td>8/26/94</td>
<td>Cottonwood Software DES Class Library v. 1.05 is available for license and is the basis of &quot;Data Encryption Standard for Windows&quot; (DE4WIN). DE4WIN offers an efficient, easy to use interface for the Data Encryption Standard within a Windows environment; portable format, clipboard or file encryption/decryption, and complete file erasure.</td>
</tr>
</tbody>
</table>
### DES Validated Devices, Continued

<table>
<thead>
<tr>
<th>MANUFACTURER ADDRESS</th>
<th>PRODUCT</th>
<th>VALIDATION DATE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylink Corporation</td>
<td>CY1045</td>
<td>1/28/87</td>
<td>Not Available - Note: The device CY1045 was originally validated under the name CYDES45M.</td>
</tr>
<tr>
<td>110 South Wolfe Road Sunnyvale, California 94086</td>
<td>Cylink Faxdes</td>
<td>7/1/87</td>
<td>Not Available</td>
</tr>
<tr>
<td>-Les Nightingill (408) 735-5800</td>
<td>12035-001,DESS2M</td>
<td>6/3/92</td>
<td>Not Available</td>
</tr>
<tr>
<td></td>
<td>12422-001,DESS2M1CFB</td>
<td>8/27/92</td>
<td>Not Available</td>
</tr>
<tr>
<td>Data Critical Corporation</td>
<td>DCCDES.LIB for DOS/WINDOWS (software)</td>
<td>1/18/95</td>
<td>The DCCDES.LIB modules for DOS/WINDOWS and OS/2 are both used in the Secure Page+ product line. Secure Page+ provides secure, reliable data transmission over existing paging networks; features Image-APB for Secure Broadcast of Images (Mug Shots, Missing Children, etc); provides the capability to send virtually any type of data to a hand-held, car-mounted or desktop computers over existing paging networks.</td>
</tr>
<tr>
<td>120 N. Robinson, Suite 1520 Oklahoma City, OK 73102</td>
<td>H8-310 ASACS Smart Card</td>
<td>7/2/92</td>
<td>ASACS is an advanced smart card access control system designed jointly by Datakey, Inc. and the Security Technology Group at NIST. The ASACS hardware consists of a credit-card sized smart card with an embedded Hitachi H8/310 microprocessor and a readerwriter interface which provides an RS-232 serial connection to a host computer. The smart card functions are implemented in firmware which is stored in the memory of the card’s microprocessor.</td>
</tr>
<tr>
<td>-David Albert (405) 236-4441</td>
<td>Docutel/Olivetti Corporation</td>
<td>Docutel Nordisk Sparadata Cash Dispensing Terminal</td>
<td>Firmware implementation of DES in ROM for 106 PIN/communications security.</td>
</tr>
<tr>
<td>106 Decker Court Suite 300 Irving, Texas 75062</td>
<td>EXCRYPT DEB-64-KM (originally EXCLUDE DEB-64-KM)</td>
<td>1/26/89</td>
<td>Encrypts and decrypts data; generates random keys; supports up to six security processor boards that can be run in parallel to enhance throughput; has storage capacity for up to 4000 DES keys; developed for secure financial transactions.</td>
</tr>
<tr>
<td>Division of International Marketing (214) 550-5400</td>
<td>ADI DES revision 1.0</td>
<td>4/22/94</td>
<td>Software implementation of DES in OFB mode; Provides digital voice encryption for communications between mobile radios, portable radios, and dispatch control consoles in an EDACS Land Mobile Radio Communications System.</td>
</tr>
<tr>
<td>Ericsson G.E., Mobile Communications 1 Mountain View Road Lynchburg, VA 24502</td>
<td>15395 SE 30th Place Bellevue, WA 98007</td>
<td>9414 Chip Set</td>
<td>12/20/78</td>
</tr>
<tr>
<td>-Dan Schwed (804) 948-6055</td>
<td>EXCRYPT DEB-64-KM</td>
<td>1/26/89</td>
<td>Encrypts and decrypts data; generates random keys; supports up to six security processor boards that can be run in parallel to enhance throughput; has storage capacity for up to 4000 DES keys; developed for secure financial transactions.</td>
</tr>
<tr>
<td>The Exchange</td>
<td>Datakey, Inc.</td>
<td>726-8064 PROM Device</td>
<td>12/1/86</td>
</tr>
<tr>
<td>15395 SE 30th Place Bellevue, WA 98007</td>
<td>Docutel/Olivetti Corporation</td>
<td>Docutel Nordisk Sparadata Cash Dispensing Terminal</td>
<td>Firmware implementation of DES in ROM for 106 PIN/communications security.</td>
</tr>
<tr>
<td>-Patricia Lenti-Crane (206) 644-7000</td>
<td>ADI DES revision 1.0</td>
<td>4/22/94</td>
<td>Software implementation of DES in OFB mode; Provides digital voice encryption for communications between mobile radios, portable radios, and dispatch control consoles in an EDACS Land Mobile Radio Communications System.</td>
</tr>
<tr>
<td>Fairchild Semiconductor 2000 Century Plaza</td>
<td>The Exchange</td>
<td>15395 SE 30th Place Bellevue, WA 98007</td>
<td>9414 Chip Set</td>
</tr>
<tr>
<td>Columbia, MD 21044 Sales Department (301) 730-1510</td>
<td>2000 Century Plaza Columbia, MD 21044</td>
<td>9414 Chip Set</td>
<td>12/20/78</td>
</tr>
</tbody>
</table>
### DES Validated Devices, Continued

<table>
<thead>
<tr>
<th>MANUFACTURER</th>
<th>PRODUCT</th>
<th>VALIDATION DATE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEC-Marconi Limited Ltd.</td>
<td>DM800 (Encryption Only)</td>
<td>3/1/93</td>
<td>The DM800 is a module that can be added to an ordinary analogue radio in order to provide communication security by digital encryption.</td>
</tr>
<tr>
<td>Brown's Lane, The Airport</td>
<td></td>
<td></td>
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<tr>
<td>Portsmouth, Hampshire</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PO3 5PH England</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>-Roger Madden</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyocom Corporation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(703) 352-4741</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEMPLUS CARD International</td>
<td>MCOS16K EEPROM/DES</td>
<td>3/18/91</td>
<td>A multi-application smart card which complies with the ISO standard 7816 (parts 1, 2, and 3) for Integrated Circuit cards with contacts.</td>
</tr>
<tr>
<td>656 Quince Orchard Road</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suite 610</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gaithersburg, MD 20878</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Gilles Lisimaque</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(301) 990-8800</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Electric Company</td>
<td>Part Number 19B801375</td>
<td>6/28/85</td>
<td>The GE DES IC is a microprocessor controlled, low speed asynchronous CMOS IC using DES. Intended to provide secure voice in commercial grade mobile radio applications.</td>
</tr>
<tr>
<td>Mountain View Road</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lynchburg, VA 24502</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Jim Elder</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(804) 948-6187</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glenco Engineering, Inc.</td>
<td>Glen-DES PN GL306051</td>
<td>5/8/92</td>
<td>The Glen-DES is a compact 20 pin design, using low power CMOS technology, operating at 3 s using a 16 MHz clock. The DES chip features nonvolatile internal memory, an external key and a combined key. It is available with a simple CPU interface and it supports both PCMCIA and DOS printer port implementations.</td>
</tr>
<tr>
<td>270 Lexington Drive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buffalo Grove, IL 60089-6930</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-D. Wade Clark</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(708) 808-0300</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GTE Sylvania</td>
<td>Mark IV Firmware DES</td>
<td>2/27/79</td>
<td>Uses AMD-2901, 4-bit slice, bipolar uP.</td>
</tr>
<tr>
<td>77 &quot;A&quot; Street</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Needham Heights, MA 02194</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Harold Manley</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(617) 449-2000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IBM Corporation</td>
<td>4402182</td>
<td>11/1/77</td>
<td>This card used in terminal equipment; the chip uses technology with PLA control to implement CBC.</td>
</tr>
<tr>
<td>Federal Systems Division WK4/988</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P.O. Box 100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kingston, NY 12401</td>
<td>P/N 8270094 using DES Chip</td>
<td>8/25/78</td>
<td>This card is used in 3845 and 3846 equipment for 8-bit CFB.</td>
</tr>
<tr>
<td>-Robert Elander</td>
<td>P/N 5898057 (originally 8269206)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(914) 385-6692</td>
<td>Two TTL cards - 8632242 and</td>
<td>9/21/79</td>
<td>Will operate at least at 1.5 Mbytes 360 channel rate; card set is used in 3848 cryptographic unit; uses &quot;Emerald-5&quot; technology.</td>
</tr>
<tr>
<td></td>
<td>8679176</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IBM Corporation</td>
<td>4754 Security Interface Unit</td>
<td>10/10/90</td>
<td>Devices are used in a transaction security system to protect the privacy and integrity of data using a common cryptographic interface. The security interface unit communicates with the Personal Security Card and the cryptographic adaptor, if present. The Personal Security Card is an integrated-circuit chip card that contains a single chip security processor.</td>
</tr>
<tr>
<td>1001 W.T. Harris Blvd. West</td>
<td>and the Personal Security Card</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charlotte, NC 28257</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-William Rohland</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(704) 594-8250</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IBM Corporation</td>
<td>IBM ES9000 Integrated</td>
<td>2/26/93</td>
<td>The Integrated Cryptographic Feature is available for inclusion on the IBM ES9000 processors in support of IBM's cryptographic architecture.</td>
</tr>
<tr>
<td>P.O. Box 950</td>
<td>Crypto-graphic Feature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poughkeepsie, NY 12602</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Robert Granell</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(914) 435-5751</td>
<td></td>
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</tr>
</tbody>
</table>

6 - 6
## DES Validated Devices, Continued

<table>
<thead>
<tr>
<th>MANUFACTURER ADDRESS</th>
<th>PRODUCT</th>
<th>VALIATION DATE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM Corporation Branch Delivery Systems Dept. 04V, Bldg. 204 1001 W.T. Harris Blvd. Charlotte, NC 28257 -Todd Arnold (704) 594-8253</td>
<td>IBM BDS Portable-C DES, version 1.0 (software)</td>
<td>7/1/94</td>
<td>Portable C-language implementation of DES, used in products developed by IBM Branch Delivery Systems.</td>
</tr>
<tr>
<td>Information Security Corporation 1141 Lake Cook Rd., Suite D Deerfield, IL 60015 -Michael Markowitz (708) 405-0500</td>
<td>DES module/Intel, version 3.0 (software)</td>
<td>8/9/94</td>
<td>An extremely high speed module implemented in 386 assembly language. Used in SecretAgent for DOS, Windows and UNIX System V/386. Available as an object module library or DLL, or as one component of the AT&amp;T Surity Cryptographic Development Kits on those platforms.</td>
</tr>
<tr>
<td></td>
<td>DES module/68K, version 3.0 (software)</td>
<td>8/9/94</td>
<td>An extremely high speed module implemented in 68020 assembly language. Used in SecretAgent for Macintosh. Available as an object module library for MPW or Think C, or as one component of the AT&amp;T Surity Cryptographic Development Kits for Macintosh.</td>
</tr>
<tr>
<td></td>
<td>DES module/C, version 2.0 (software)</td>
<td>8/16/94</td>
<td>A portable DES module implemented in C/C++. Used in SecretAgent for UNIX (except on Intel platforms). Available as an object module library, or as one component of the AT&amp;T Surity Cryptographic Development Kits for Sun, DEC, HP and other UNIX platforms.</td>
</tr>
<tr>
<td>Intel 1900 Prairie City Road Folsom, CA 95630 -Joe Dragony (916) 351-5250</td>
<td>8294</td>
<td>1/3/78</td>
<td>Algorithm is microcode which is burned into a 1 Kbyte ROM on a 5 volt, 40-pin chip driven by a 8042 microprocessor.</td>
</tr>
<tr>
<td></td>
<td>8294A</td>
<td>6/20/82</td>
<td>Same as the 8294 except for a maximum data transfer rate of 400 bytes per second.</td>
</tr>
<tr>
<td>John E. Holt &amp; Associates 2714 Key Boulevard Arlington, VA 22201 -John Holt (703) 524-2923</td>
<td>Krypton Firmware</td>
<td>2/12/86</td>
<td>ROM chips for the standard IBM PC family include eight 3722 chips, four 2764 chips and one 27256 chip; 1024-bit CBC chaining; encryption speed dependent on clock of PC; ROM can plug directly into ROM slot.</td>
</tr>
<tr>
<td>Jones Futurex 3715 Atherton Road Rocklin, CA 95765 -Steve DeRosa (916) 632-3456</td>
<td>SAFE 300</td>
<td>8/12/93</td>
<td>The SAFE 300 is a stand-alone fax encryptor that provides both public network security and office privacy with automatic fax encryption, confidential fax mailbox, and misalignment protection.</td>
</tr>
<tr>
<td>Lexicon ICOT Corporation 3801 Zanker Road P.O. Box 5143 San Jose, CA 95150-5143 -Bob Lynch (408) 433-3300</td>
<td>LEX-POS (Model 600)</td>
<td>11/28/84</td>
<td>A Personal Identification Number (PIN) entry device; used in conjunction with financial transaction devices, 16 key keyboard, 20 character display, RS-232 compatible; Lexicon sold LEX-POS to ICOT Corporation.</td>
</tr>
<tr>
<td>Logimens Inc. 1080 Beaver Hall, Room 300 Montreal, Quebec H2Z 1S8 -Normand Delisle (514) 876-3646</td>
<td>DESDLL.DLL 2.0 E/D Engine (software)</td>
<td>7/25/94</td>
<td>DESDLL.DLL is the software cryptoengine for WinDES 2.0; WinDES provides easy to use encryption/decryption as well as other file protection features for pc-compatible systems running under MS Windows; supports drag &amp; drop capabilities, file compression, Defense-related secure file deletion, etc.</td>
</tr>
</tbody>
</table>
### DES Validated Devices, Continued

<table>
<thead>
<tr>
<th>MANUFACTURER ADDRESS</th>
<th>PRODUCT</th>
<th>VALUATION DATE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PcDES 2.0 (software)</td>
<td>7/25/94</td>
<td>PeDES 2.0 (software) provides easy to use data encryption/decryption (manual and batch modes) as well as other file protection features for pc-compatible systems running under DOS; supports Defense-related secure file deletion, etc.</td>
<td></td>
</tr>
<tr>
<td>LSI Logic/Dataco AS</td>
<td>Dataco L5A4043 2030025402</td>
<td>1/12/90</td>
<td>Custom DES IC was manufactured by LSI Logic for Dataco. The DES chip is designed for optional use in SeaNet local area network products.</td>
</tr>
<tr>
<td>Matsushita Electronic Components Co. EBC 1642 IC Card High Frequency Products Division One Panasonic Way Secaucus, NJ 07094 -Dursun Sakarya (201) 348-7767</td>
<td>3/13/91</td>
<td>Card is designed to be a high security external storage media housing an 8 bit CPU and 64 Kbit EEPROM.</td>
<td></td>
</tr>
<tr>
<td>Micro Card Technologies, Inc. 14070 Proton Road Dallas, TX 75244 -Jeff Lang (214) 788-4055</td>
<td>Micro Card TB100 Integrated Circuit Card</td>
<td>9/19/90</td>
<td>A multi-application integrated circuit card which can simultaneously support several application data files. Ciphering and deciphering functions may be used to encrypt or decrypt external messages using DES.</td>
</tr>
<tr>
<td>Morse Security Group, Inc. 12960 Bradley Avenue Sylmar, CA 91342-0128 -Nalin Chheda (800) 423-5669; (818) 367-5951</td>
<td>TRAP 5200 System</td>
<td>4/17/90</td>
<td>Touch response alarm processor system, including a receiver processor located in a data gathering center and a series of transponders located at remote locations, contains DES to produce encrypted data that flows along a communication path.</td>
</tr>
<tr>
<td>Motorola Microprocessor Products Division 6501 William Cannon Drive West Austin, TX 78735-8598 -Don Ponder (512) 440-2956</td>
<td>MC6859 (originally MGD68NE)</td>
<td>2/11/80</td>
<td>Si-gate depletion mode, nMOS 24-pin DIP using single 5 volt power supply; implements ECB and CFB.</td>
</tr>
<tr>
<td>Motorola 1309 East Algonquin Road Schaumburg, IL 60196 -James Osborn (312) 576-2251 -Kelly Mann (708) 576-3610</td>
<td>TSW-2</td>
<td>11/12/81</td>
<td>Special purpose for internal use only.</td>
</tr>
<tr>
<td>Newbridge Microsystems 603 March Road Kanata, Ontario K2K 2M5 DES Product Manager (613) 592-0714</td>
<td>CA95C</td>
<td>9/8/93</td>
<td>Implementation uses the PIC16C57 microcontroller from Microchip; operates in ECB, 64-bit CBC, and 64-bit OFB modes; this product will be used in secure radio systems to augment existing secure communications capabilities in Motorola Land Mobile Product Sector. The CA95C Data Ciphering Processor implements the DES using the ECB, CFB, or CBC modes of operation. The CA95C provides a high throughput rate up to 11 Mbytes/second. Separate ports for key input, clear data and enciphered data are available.</td>
</tr>
</tbody>
</table>
## DES Validated Devices, Continued

<table>
<thead>
<tr>
<th>MANUFACTURER ADDRESS</th>
<th>PRODUCT</th>
<th>VALIDATION DATE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newnet S.A. Alsina 430 Buenos Aires 1087 Argentina -Daniel Ramos 54 1 334 9732</td>
<td>Data Security Device (DSD 9612)</td>
<td>7/2/91</td>
<td>This device is based on an eight bit INTEL microprocessor with 8 Kbytes of EPROM. Transfer data at speeds of 1200 to 9600 bps and communicates with other devices via EIA RS-232-C ports.</td>
</tr>
<tr>
<td>Nixdorf Computer Corporation 168 Middlesex Turnpike Burlington, MA 01803 -Kevin Madden (617) 890-3600</td>
<td>VEM Module</td>
<td>1/7/80</td>
<td>The plug-in module is used with the Nixdorf 8864 CPU for encrypting data transmission blocks and file protection; may be used in terminal applications in the financial community; uses TTL.</td>
</tr>
<tr>
<td>Northern Telecom 3703 35th St. NE Calgary, Alberta T1Y 6C2 -Paul Provenal Bell Northern Research (613) 763-8014</td>
<td>BNR 64-bit Cipher Feedback Mode Module, version 1.0 (firmware)</td>
<td>7/19/94</td>
<td>The validated firmware is used in the PowerTouch 350 (Vista 350), an advanced screen telephone that connects to standard analog phone lines. PowerTouch 350 has an 8 line by 21 character display and supports the Bellcore ADSI protocol; uses the DES in 64-bit CFB mode to provide data encryption targeted for banking applications.</td>
</tr>
<tr>
<td>-Roland Lockhart Bell Northern Research, Ltd. (613) 763-5367</td>
<td>Entrust DES 32-2/64K Software Module, Version 1.1</td>
<td>9/13/94</td>
<td>DES 32-2/64K is used in the Entrust family of cryptographic products. Entrust provides encryption and digital signature services enterprise-wide, with fully automated key management that scales from small workgroups to 100,000+ users. Entrust is supported across platforms such as Windows, UNIX, Macintosh and mainframes.</td>
</tr>
<tr>
<td>Racal-Milgo P.O. Box 407044 Ft. Lauderdale, FL 33340-7044 -Richard Abbruscato (305) 476-6800</td>
<td>Datacryptor</td>
<td>1/7/80</td>
<td>Stand alone equipment with public key management remote distribution of master keys.</td>
</tr>
<tr>
<td>Research In Motion 180 Columbia Street West Waterloo, Ontario N2L 3L3 -Herb Little (519) 888-7465</td>
<td>Research In Motion DES Library, version 1.0 (software)</td>
<td>12/16/94</td>
<td>RIM DES Library is a software module DES implementation; it's intended to be used in a variety of wireless communication products such as portable terminals, point of sale equipment, and gateways to ensure privacy of user data.</td>
</tr>
<tr>
<td>Rothenbuhler Engineering P.O. Box 708 2191 Rhodes Road Sedro Woolley, WA 98284-0708 -Andrew Benson (206) 856-0836</td>
<td>CLS Series 5200 Encryption Module</td>
<td>3/19/91</td>
<td>The CLS Series 5200 Encryption Module is used in a system which communicates 8 channels of electronic security information between a client and a central monitoring facility.</td>
</tr>
</tbody>
</table>

A high performance WD20C03A compatible DES data encryption processor with data transfer rates up to 4 Mbytes per second. Supports electronic code book and cipher block chaining modes of operation. Battery backup capability of internal key register. PLCC and PDIP packaging available.
<table>
<thead>
<tr>
<th>MANUFACTURER ADDRESS</th>
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<th>VALIDATION DATE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secur-Data Systems, Inc.</td>
<td>DESPLEX</td>
<td>2/2/89</td>
<td>Used in a CFB configuration as part of a firmware operating system for processing and transmission of alarm sensor data as well as receiving and annunciating data in an alarm monitoring facility.</td>
</tr>
<tr>
<td>Omega Center</td>
<td></td>
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<tr>
<td>7340 Executive Way, Suite R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frederick, MD 21701</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Ronald Baum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(301) 698-9955</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secure Computing Corporation</td>
<td>sctc_desc, version 1.7</td>
<td>4/22/94</td>
<td>Software implementation of DES that is used in LOCKout products; LOCKout uses DES-based challenge-response to provide protection for networks, support remote user dial-in authentication, and provide Internet Firewall protection for host computers.</td>
</tr>
<tr>
<td>2675 Long Lake Road</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Roseville, MN 55113</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>-Ron Bohn</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(612) 628-2725</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Texas Instruments, Inc.</td>
<td>TMS 99541</td>
<td>2/28/82</td>
<td>Preprogrammed TMS7020 8-bit single chip microprocessor; 40-pin DIP plastic package I/O pins are TTL compatible; master and active key registers.</td>
</tr>
<tr>
<td>P.O. Box 1443, M/S 736</td>
<td></td>
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<tr>
<td>Houston, TX 77001</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>-Mike Polen</td>
<td></td>
<td></td>
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<tr>
<td>(713) 274-3635</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>TimeStep Corporation</td>
<td>TS95C40</td>
<td>12/16/94</td>
<td>32Mbps DES engine - operates in ECB, CBC, 1-bit and 8-bit CFB modes; 32KB of EEPROM, random bit generator, time-of-day logic; implemented in the PERMIT 1010, a 28-pin, fully encapsulated hybrid device that plugs into boot ROM socket of PC LAN Adapters; enabling technology for network layer encryption, access control, and file integrity applications.</td>
</tr>
<tr>
<td>600 March Road</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P.O. Box 15600</td>
<td></td>
<td></td>
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<tr>
<td>Kanata, Ontario K2K 2E6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Tony Rosati</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(613) 599-3600</td>
<td></td>
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</tr>
<tr>
<td>Transcrypt International, Inc.</td>
<td>Transcrypt DES Subroutine &amp; Key Schedule v 1.00 (software)</td>
<td>11/14/94</td>
<td>Transcrypt DES Subroutine is used in Transcrypt’s DME 9600 Dual Mode Encryptor, which connects between the handset and base of a landline telephone, and provides analog scrambling or digital encryption of the conversation. Backwards compatible with Transcrypt’s analog cellular and landline voice privacy products.</td>
</tr>
<tr>
<td>4800 NW First Street</td>
<td></td>
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<tr>
<td>Lincoln, NE 68521</td>
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<td></td>
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<tr>
<td>-Jim Gilley</td>
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<td></td>
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<tr>
<td>(402) 474-4800</td>
<td></td>
<td></td>
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<tr>
<td>UNIVAC</td>
<td>End-End/Mass Storage Encryptor</td>
<td>1/29/80</td>
<td>Prototype device for testing purposes only.</td>
</tr>
<tr>
<td>P.O. Box 3942</td>
<td></td>
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</tr>
<tr>
<td>St. Paul, MN 55165</td>
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<td></td>
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</tr>
<tr>
<td>-Jim Nelson</td>
<td></td>
<td></td>
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<tr>
<td>(612) 631-6728</td>
<td></td>
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<tr>
<td>Virtual Open Network Environment Corp.</td>
<td>V-ONE DES Module (software)</td>
<td>7/25/94</td>
<td>Smart card system for PC security, file encryption and decryption, user authentication, secure remote system logon, personal identification, and multilevel system access.</td>
</tr>
<tr>
<td>12300 Twinbrook Parkway</td>
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<tr>
<td>Rockville, MD 20852</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>-George Thornton</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(301) 881-2297</td>
<td></td>
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<tr>
<td>VLSI Technology, Inc.</td>
<td>VM007 - Data Encryption Processor</td>
<td>1/6/92</td>
<td>The VM007 Data Encryption Processor is a programmable integrated circuit that provides a complete cryptographic system on a single chip; contains a hardware implementation of the DES, RISC-based sequencer, data storage registers, and ROM-based microprogram. Designed to provide very high data and key processing rates (up to 190 Mbits/sec), flexible I/O interfacing, advanced security features, and supports all DES modes of operation; manufactured using 1.0 micron CMOS technology; available in a 84-pin leaded ceramic chip carrier.</td>
</tr>
<tr>
<td>8375 S. River Parkway</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Tempe, AZ 85284</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Ray Slusarczyk</td>
<td></td>
<td></td>
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<tr>
<td>(602) 752-8574</td>
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<th>MANUFACTURER ADDRESS</th>
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<th>VALIDATION DATE</th>
<th>DESCRIPTION</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>VM009 Data Encryption Processor</td>
<td>1/11/93</td>
<td>The VM009 Data Encryption Processor is a programmable integrated circuit that provides a complete cryptographic system on a single chip. Contains a hardware implementation of the DES, and data storage registers. Designed to provide very high data and key processing rates (up to 100 Mbits/sec), flexible I/O interfacing, advanced security features, and supports all DES modes of operation; manufactured using 1.0 micron CMOS technology; available in a 40 lead plastic DIP and 44 lead plastic leaded chip carrier.</td>
</tr>
<tr>
<td>Vobach Systems, Inc. 11114 Ashcroft Houston, TX 77096 -Dr. Miles Smither Circuit Concepts, Inc. (713) 331-2744</td>
<td>Shades DES, version 1.0 (software)</td>
<td>1/20/95</td>
<td>Used in Shades products to provide a source of pseudo-random numbers for two purposes. The pseudo-random numbers may be used to 1) encode a plaintext message or ciphertext, and 2) generate substitution or permutation tables for the numerical codings of plaintext characters.</td>
</tr>
<tr>
<td>Wells Fargo Security Products A Unit of Baker Protective Services 1010 North Glebe Road, Suite 680 Arlington, VA 22201 -William Martin (703) 247-4250</td>
<td>WP PN 5286/WP PN 5287</td>
<td>5/26/89</td>
<td>The monitor panels are intended for use in a monitoring station of a proprietary intrusion detection alarm system.</td>
</tr>
<tr>
<td></td>
<td>WD20C03 DES Device</td>
<td>5/19/87</td>
<td>Uses Si-gate CMOS, TTL compatible; ECB and CBC, speeds of up to 403 Kbytes/second, 645 Kbytes/second and 807 Kbytes/second in ECB. and 807 Kbytes/second in ECB.</td>
</tr>
</tbody>
</table>
### 6.7 FIPS 113, Computer Data Authentication Message Authentication Code (MAC) Implementations

<table>
<thead>
<tr>
<th>Vendor/Contact</th>
<th>Implementation</th>
<th>Validated Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ACS Communications Systems Inc.</td>
<td>Personal Computer Security Module, PCSM-T</td>
<td>BINARY OPTION (FIPS 113)</td>
</tr>
<tr>
<td>Don Cole, (703) 471-0892</td>
<td></td>
<td>May 16, 1986</td>
</tr>
<tr>
<td>2. Federal Reserve Bank of Cleveland</td>
<td>BINARY OPTION (FIPS 113)</td>
<td>CODED CHARACTERS; ENTIRE MESSAGE; NO EDITING</td>
</tr>
<tr>
<td>Jones Futurae PC Encryption Board</td>
<td>BINARY OPTION (FIPS 113)</td>
<td>CODED CHARACTERS; ENTIRE MESSAGE; NO EDITING</td>
</tr>
<tr>
<td>P.O.B. 6387</td>
<td></td>
<td>CODED CHARACTERS; ENTIRE MESSAGE; EDITING</td>
</tr>
<tr>
<td>Cleveland, Ohio 44101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dave Rich, (216) 572-2221</td>
<td></td>
<td>October 26, 1986</td>
</tr>
<tr>
<td>Out of Business</td>
<td></td>
<td>January 16, 1987</td>
</tr>
<tr>
<td>LITRONICS Information Systems</td>
<td></td>
<td>February 20, 1987</td>
</tr>
<tr>
<td>2650 Redhill Avenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costa Mesa, CA 92626</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bob Gray, (714) 557-3444</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Jones Futurae, inc. 10033 Trade Center Drive Rancho Cordova, CA 95670</td>
<td>MAC-310 Message Authenticator</td>
<td>BINARY OPTION (FIPS 113)</td>
</tr>
<tr>
<td>Don Thompson, (916) 635-3972</td>
<td></td>
<td>February 27, 1987</td>
</tr>
<tr>
<td>6. Informax Securities 6974 Sandpiper Place Carlsbad, CA 92009</td>
<td>Protecom Crypto Processor Protecom Device Driver &amp; Utilities, Version 0.5</td>
<td>BINARY OPTION (FIPS 113)</td>
</tr>
<tr>
<td>David Howard, (619) 931-8787</td>
<td></td>
<td>March 27, 1987</td>
</tr>
<tr>
<td>7. Inter-Quest, inc. 16508 E. Laser Drive Fountain Hills, AZ 85268</td>
<td>PORT-OF-ENTRY Computer Security System Vers. 1.1 (Software)</td>
<td>BINARY OPTION (FIPS 113)</td>
</tr>
<tr>
<td>Charles Redding, (480) 948-2500</td>
<td></td>
<td>May 8, 1987</td>
</tr>
<tr>
<td>8. Informax Securities 6974 Sandpiper Place Carlsbad, CA 92009</td>
<td>Protecom Crypto Processor Protecom Device Driver &amp; Utilities, Version 0.6</td>
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<td>David Howard, (619) 631-8787</td>
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<td>May 11, 1987</td>
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<td>James J. McKeeff, (212) 577-7230</td>
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<td>10. Sytek, inc. MACbox</td>
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<td>Rights transferred to aAT Research, Inc. on January 29, 1986 - see entry 17</td>
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<td>11. aAT Research 675 North First Street Suite 800 San Jose, CA 95112</td>
<td>PORT-OF-ENTRY Computer Security System Vers. 1.2 (Software)</td>
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<td>Linden Feldman, (406) 275-0520</td>
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<td>August 17, 1987</td>
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<td>13. The Chase Manhattan Bank, N.A. 1 Seaport Plaza 11th Floor New York, New York 10038</td>
<td>C-FIMAS 16 Software, Version 1.0</td>
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<td>Bob Martin, (212) 797-4038</td>
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<td>Dale Hopkins, (408) 435-8550</td>
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<td>CYCOM SCI AX3, S.01, Version 1.0</td>
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<td>4520 East-West Highway</td>
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<td>Suite 550</td>
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<td>22.0, Rockville.</td>
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<td>Angel Bailey, (301) 852-6790</td>
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<td>55 Kooh Road/PO Box 7045</td>
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<td>Steve Lawrence, (603) 864-3445</td>
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<td>30. Information Security Corporation</td>
<td>DES Module used in SpyProof</td>
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<td>1141 Lake Cook Road Suite D</td>
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<td>Deerfield, IL 60015</td>
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<td>Michael Markowitz, (708) 405-0500</td>
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<td>33. The Exchange Systems 15305 SE 30th Place Bellevue, WA 98007-6594</td>
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<td>John Gill, (617) 692-6005</td>
<td>September 23, 1988</td>
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<td>Bob Gray, (714) 545-5649</td>
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<td>James Prohaska, (703) 900-9008</td>
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APPENDIX A

FIPS CONFORMANCE TESTING
PRODUCTS AND SERVICES
APPENDIX A

FIPS CONFORMANCE TESTING
PRODUCTS AND SERVICES

The purpose of this appendix is to provide information about products and services that are available to Federal Agencies for assessing products for conformance to FIPS.

The entries in this list identify the topic, the standard tested, the NIST contact, and the product or service offered. The letters T, S, or C in the Product/Service column indicate a test method, testing service, or certificate/registered report respectively.

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