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PROGRAMMING LANGUAGES
DATABASE LANGUAGE SQL
GRAPHICS
GOSIP
POSIX
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

January 1992

(Supersedes October 1991 Issue)

U.S. DEPARTMENT OF COMMERCE
Robert A. Mosbacher, Secretary
NATIONAL INSTITUTE OF STANDARDS
AND TECHNOLOGY
John W. Lyons, Director

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NATIONAL INSTITUTE OF STANDARDS &
TECHNOLOGY
Research Information Center
Gaithersburg, MD 20899

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FOREWORD

The Validated Products List (formerly called the Validated Processor List) is a collection of registers describing implementations of Federal Information Processing Standards (FIPS) that have been validated for conformance to FIPS. The Validated Products List also contains information about the organizations, test methods and procedures that support the validation programs for the FIPS identified in this document.

The Validated Products List is updated quarterly.

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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 the Federal Information Resources Management Regulation (FIRMR) Parts 201.13 and 201.39, 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, and MUMPS
- Database Language SQL
- Graphics
- GOSIP
- POSIX
- Security

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: PB91-937300

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, and Ada programming language processors that have a current validation certificate 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 registered test report for FIPS PUB 127-1 as of the date of this publication.

1.2.3 Graphics

Section 4 lists those Graphics implementations that have a current validation certificate for FIPS PUB 120.

1.2.4 GOSIP

Section 5 contains information regarding GOSIP conformance testing registers.

1.2.5 POSIX

Section 6 identifies accredited POSIX Testing Laboratories and POSIX products that have a current validation certificate for FIPS PUB 151-1.

1.2.6 Computer Security

Section 7 contains information regarding validated products for DES and MAC.

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, must assure 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, 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. MUMPS processors must satisfy the provisions of FIPS PUB 125, MUMPS.
- g. C processors must satisfy the provisions of FIPS PUB 160, C.

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 languages BASIC and C. Conformance testing programs for BASIC and C are being developed.

2.2 Organization of Programming Language Processor Entries

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

- The **VENDOR ID** column contains the name of the Vendor of the processor.
- The **PROCESSOR ID** column contains the Processor identification and the Validation Summary Report (VSR) or certificate number. This 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.
- Derived processors in the **VENDOR & COMPILER** column are Ada processors that have been derived from the processor/hardware/operating system environment used during the testing. In order for derived processors to be listed here, they must be properly registered with the Department of Defense, Ada Joint Program Office (AJPO) by the vendor of the processor.
- The **HARDWARE & OPERATING SYSTEM** column presents the hardware and operating system environment (including pertinent supporting system software) used during the

validation. In the case of Ada processors, those environments for derived processors will appear in this column.

- The EXPIRY DATE column lists the expiration date of the Certificate of Validation. 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 column cites the applicable Federal Subset. For Fortran processors, the LEVEL column specifies the applicable Federal level. For Pascal processors, the ISO 7185 Pascal Standard Level (ISO 7185 Level 0 is equivalent to FIPS 109). This designation is presented in the PROCESSOR ID column.
- The entries in the OTHER ENVIR column are other hardware and operating system environments in which the processor operates. 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 word "Yes" in the NONCONFORMITIES column indicates that the processor did not conform to the applicable FIPS in one or more cases as evidenced by the validation. The Validation Procedures allow for certain processors to be validated with nonconformities, with the stipulation that the nonconformities are corrected and the processor is revalidated within one year. The VSR should be reviewed for details of the nonconformities.

2.3 Validation of Processors

2.3.1 Validation Requirements

In accordance with the requirements referenced in Section 1.1, 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 an Ada processor to receive a Certificate of Validation the processor must successfully pass all applicable tests of the Ada Compiler Validation Capability (ACVC) 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 validated 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 February 1, 1990
Ada Compiler Validation Procedures and Guidelines, Version 2.1, August, 1990
Pascal Validation Policy and Procedures, Version 5.3, February 20, 1991

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 upon expiration 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, MUMPS, 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)

COMPILER VALIDATION SYSTEM [MEDIUM/FORMAT]	VERSION	NTIS ACCESSION NUMBER
COBOL 85 (CCVS85)	3.1	PB91-508002
Fortran (FCVS78)	2.0	PB85-226736
Ada [Tape/Backup]	1.11	ADA212551
Ada [Tape/Tar]	1.11	ADA212437
Ada [Tape ANSI Standard]	1.11	ADA212548
Ada [Disk (MS/DOS)]	1.11	ADA212549
MUMPS [Tape/Backup]	7.61	PB91-507699
MUMPS [Tape/ANSI]	7.61	PB91-507715
MUMPS [Tape/Tar]	7.61	PB91-507723
MUMPS [Disk (MS-DOS)]	7.61	PB91-507707

- b. The current version of the Pascal Validation System (PVS) is Version 5.3 and is available from:

British Standards Institution (BSI)
 Software Engineering Department
 BSI Quality Assurance
 P. O. Box 375
 Milton Keynes
 MK14 6LL
 ENGLAND
 Telephone (011) +44-908-220908 (Voice)
 (011) +44-908-220671 (FAX)

- c. The validation suite for C is the ANSI C Validation Suite (ACVS[™]) and is available from:

Perinial, Inc.
 4699 Old Ironsides Drive
 Suite 210
 Santa Clara, CA 95054
 Telephone (408) 748-290 (Voice)

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.

<u>CODE</u>	<u>ORGANIZATION</u>	<u>CONTACTS</u>	<u>LANGUAGE</u>
S	National Institute of Standards and Technology (NIST) Software Standards Validation Group Building 225, Room A266 Gaithersburg, MD 20899 (301) 975-3274 Telex: 197674 NBS UT Telecopier: (301) 590-0932	L. Arnold Johnson Judy Kailey Woody Schneider Kathryn Miles William Dashiell Carmelo Montanez	All COBOL, Fortran BASIC, SQL Pascal, SQL Ada, MUMPS Ada, MUMPS GKS
N	National Computing Centre Limited (NCC) Oxford Road Manchester M1 7ED ENGLAND (011) +44 (61) 228 6333 +44 (61) 236 4715 (FAX) Telex 668962	Jane Pink Jon Leigh David Bamber	COBOL Fortran Ada GKS
	Gesellschaft fur Mathematik und Datenverarbeitung mbh (GMD) Institut fuer Technologie-Transfer Schloss Birlinghoven D-5205 St Augustin 1 Federal Republic of Germany	Berthold Kirsch	Fortran
	Bureau Inter Administration de Documentation Informatique (BIADI) 21 Rue Bara 92132 Issy France	E. Bialot	COBOL Fortran
	Instituto Italiano del Marchio di Qualita IMQ Via Quintiliano, 43 20138 Milano Italy +39-2-5073266	Angelo Belloni	Fortran COBOL
	JMI Institute 21-25, Kinuta 1-Chome Setagaya-Ku, Tokyo 157 Japan +81 3 3416 9600	Y. Fukui	Fortran COBOL

<u>CODE</u>	<u>ORGANIZATION</u>	<u>CONTACTS</u>	<u>LANGUAGE</u>
	British Standards Institution (BSI) P.O. Box 375 Milton Keynes MK14 6LL ENGLAND (011) +44 0908-220908 Telex: 827682 BSIQAS G	John Souter	Pascal
W	Ada Validation Facility Language Control Facility ASD/SCEL Wright-Patterson AFB, OH 45433-6503 (513) 255-4472	Bobby Evans	Ada
B or A	BNI-AVF AFNOR Tour Europe, Cedex 7 92080 Paris La Defense FRANCE (011) 33-142915960 Telefac: (011) 33-142915656 Telex: AFNOR 611 974 F	Fabrice Garnier de Labareyre	Ada
I	IABG-AVF Industrieanlagen-Betriebsgesellschaft Dept. ITE Einsteinstrasse 20 D-8012 Ottobrunn Federal Republic of Germany +49-89-6088-2477 e-mail: tonndorf@ajpo.sei.cmu.edu	Michael Tonndorf	Ada
	Ada Information Clearinghouse 3D139 1211 S. Fern, C-107 The Pentagon Washington, D.C. 20301-3081 (703) 685-1477		Ada VSR(s)
	National Technical Information Service U.S. Department of Commerce 5285 Port Royal Road Springfield, VA 22161 (703) 487-4650		Ada VSR(s)

2.7 COBOL PROCESSORS

VENDOR	PROCESSOR ID & VSR #	HARDWARE & OPERATING SYSTEM	EXPIRY DATE	SUBSET	OTHER ENVIR HW/OS	NONCON- FORMITIES
Amdahl Corporation	Micro Focus COBOL/2 for Unix Version 1.2 <i>NIST-91/1964</i>	Amdahl 5990-1400 <i>UTS Version 2.1, Release 1</i>	8/1/92	High	Amdahl 73xx, 580-xxx, 58xx, 5990-xxx, 5995-xxx <i>UTS Version 2.1 Release 1</i>	Yes
Bull HN Information Systems, Inc.	COBOLM Release 2.0 <i>NIST-90/1321</i>	DPS 6000 Model 634 <i>GCOS6 HVS Version 2.0</i>	2/1/92	High	DPS6/EMMU Series <i>GCOS6 Mod 400 Release 4.1</i> DPS6 PLUS Series <i>HVS6 PLUS Version 2.0</i> DPS 6000 Series <i>GCOS6 HVS Version 2.0</i>	Yes
	COBOL-85 Version 8C82.2 Update 1 <i>NIST-91/1681</i>	DPS-90 <i>GCOS8 Version 4020 Release 1</i>	6/1/92	High	DPS-9000, DPS-8000 <i>GCOS8 Version 4020 Release 1</i>	Yes
Bull/SA	COBOL/2 Release 1.2 <i>BLA-91/001</i>	DPX/2 210 <i>BOS Version 2.0</i>	7/1/92	High	DPX/2 200 Series; 300 Series <i>BOS Version 2.0</i>	Yes
Control Data Corporation	COBOL/VE Version 1.9 Release 90330 <i>NIST-91/1431</i>	CYBER 180-995 <i>NOS/VE Version 1.5.3 Level 765</i>	4/1/92	High	CYBER 180 Series; CYBER 2000 <i>NOS/VE Version 1.5.3 Level 765</i>	Yes
Digital Equipment Corporation	VAX COBOL Version 4.4 <i>NIST-90/2201</i>	VAX 8800 <i>VAX/VMS Version 5.4</i>	11/1/92	High	VAX 6000 Mod 200, 300, 400; VAX 8200, 8250, 8300, 8350, 8500, 8530, 8550, 8600, 8650, 8700, 8800, 8810, 8820, 8830, 8840, 8842, 8974, 8978, 9000; MicroVAX II, 2000, 3100, 3300, 3400, 3500, 3600, 3800, 3900; VAXstation II, 2000, 3100, 3200, 3500, 3520, 3540, 8000; VAX- server 3100, 3300, 3400, 3500, 3600, 3602, 3800, 3900, 6000- 210, 6000-310, 6000-410, 6000- 420; <i>VAX/VMS Version 5</i>	
Hewlett-Packard Company	COBOL/HP-UX Version X.03.50 <i>NIST-91/1661</i>	HP 9000 Series 840 <i>HP-UX Version 7.0</i>	5/1/92	High	HP 9000 Series 815, 822, 825, 832, 834, 835, 842, 845, 850, 852, 855, 860, 865, 870 <i>HP-UX Version 7.0</i>	Yes
	COBOL/HP-UX Version X.03.01 <i>NIST-91/1662</i>	HP 9000 Series 370 <i>HP-UX Version 7.0</i>	5/1/92	High	HP 9000 Series 318, 319, 320, 330, 332, 340, 350, 360, 370, 375, 400, 425 <i>HP-UX Version 7.0</i>	Yes
	COBOLII/XL Version A.04.02 <i>NIST-91/1663</i>	HP3000 Series 930 <i>MPE XL Version A.40.00</i>	5/1/92	High	HP3000 Series 920, 922, 925, 932, 935, 948, 949, 950, 955, 958, 960, 980/100, 980/200 <i>MPE XL Version A.40.00</i>	Yes

COBOL PROCESSORS *Continued*

VENDOR	PROCESSOR ID & VSR #	HARDWARE & OPERATING SYSTEM	EXPIRY DATE	SUBSET	OTHER ENVIR HW/OS	NONCON- FORMITIES
	COBOLII/V Version A.02.02 <i>NIST-91/1664</i>	HP3000 Series 70 <i>MPE/V Version G.03.09</i>	5/1/92	High	HP3000 Series 37, 40, 42, 48, 54, 58, 64, 68, 70, 3000LX, 3000RX, 3000XE <i>MPE/V Version G.03.09</i>	Yes
IBM Canada, Ltd.	AIX VS COBOL Compiler/6000 & AIX VS COBOL Run Time Env./6000 Version 1 Release 1 <i>NIST-91/1351</i>	IBM RISC System/6000 POWERstation 520 <i>AIX Version 3 for RISC System/6000 Version 3 Release 1</i>	2/1/92	High	IBM RISC System/6000 POWERstations 320, 520, 530, 550, 730; IBM RISC System/6000 POWERservers 320, 520, 530, 540, 930 <i>AIX Version 3 for RISC System/6000 Version 3 Release 1</i>	Yes
	AIX PS/2 VS COBOL Compiler & AIX PS/2 VS COBOL Runtime Environment Version 1.10.0120 Release 1 <i>NIST-91/1901</i>	IBM PS/2 Model 80 <i>AIX for PS/2 Version 1.1</i>	8/1/92	High	IBM PS/2 VS Models 60, 70, 80 <i>AIX for PX/2 Version 1.1</i>	Yes
	COBOL/400 Version 2 Release 1.1 <i>NIST-91/2341</i>	AS/400 <i>OS/400 Version 2 Release 1.1</i>	11/1/92	Intermediate		
IBM Corporation	VS COBOL II Version 1 Release 3.2 <i>NIST-91/1441</i>	IBM 3090 <i>MVS/ESA Version 3 VM/ESA Version ESA, Release 1.0</i>	3/1/92	High	IBM 370, 390, 3000, 4300, 9000 <i>MVS/370 Version 1, MVS/XA Version 2, VM SP Release 6</i>	Yes
	VS COBOL II Version 1 Release 3.2 <i>NIST-91/1442</i>	IBM 4381 <i>VSE/ESA Version 1 Release 1</i>	3/1/92	Intermediate	IBM 370, 390, 3000, 4300, 9000 <i>VSE/ESA Version 1 Release 1</i>	Yes
	IBM SAA AD/CYCLE COBOL/370 Version 1 Release 1 <i>NIST-92/1021</i>	IBM 3090 <i>MVS/ESA Version 3</i>	12/1/92	High	IBM 390, 3000, 4381-T92, 9000 <i>MVS/ESA Version 3</i>	
	IBM SAA AD/CYCLE COBOL/370 Version 1 Release 1 <i>NIST-92/1022</i>	IBM 3090 <i>VM/ESA Version 1.0</i>	12/1/92	High	IBM 390, 3000, 4381-T92, 9000 <i>VM/ESA Version 1.0</i>	
mbp Software and Systems GmbH	Visual COBOL XO Version 3.0 <i>NIST/NCC-91/956</i>	IBM AT <i>MS DOS Version 3.3</i>	9/1/92	High		
	Visual COBOL XO Version 3.0 <i>NIST/NCC-91/957</i>	Convergent Server PC (CTIX 386) <i>UNIX System V/386 Release 3.2</i>	9/1/92	High	Unisys 6000/50 Prime EXL-316 <i>Unix V/386 Release 3.2</i>	

COBOL PROCESSORS *Continued*

VENDOR	PROCESSOR ID & VSR #	HARDWARE & OPERATING SYSTEM	EXPIRY DATE	SUBSET	OTHER ENVIR HW/OS	NONCON- FORMITIES
Micro Focus	Micro Focus COBOL/2 Version 2.5 NIST-91/1961	IBM PS/2 Model 80 <i>OS/2 Version 1.3</i>	8/1/92	High	IBM PS/2 80, 70, 60, 65SX <i>IBM OS/2 Versions 1.2, 1.3</i>	
		IBM PS/2 Model 70 <i>IBM DOS Version 5.0</i>			IBM PS/2 80, 70, 60, 65SX <i>IBM DOS Versions 3.3, 4.0, 5.0</i>	
		IBM PC/AT <i>IBM DOS Version 5.0</i>			IBM PC/AT, PC/XT <i>IBM DOS Versions 3.3, 4.0, 5.0</i>	
	Micro Focus COBOL/2 for Unix Version 1.3 NIST-91/1963	Compaq Deskpro 386/25 <i>SCO Unix System V/386 Release 3.2</i>	8/1/92	High		
Microsoft Corporation	Microsoft COBOL Version 4.5 NIST-91/1962	IBM PS/2 Model 60 <i>IBM DOS Version 5.0</i>	8/1/92	High	IBM PS/2 Model 80 <i>IBM DOS Version 3.3</i>	
		Compaq Deskpro 486 <i>Microsoft OS/2 Version 1.21</i>				
NCR Corporation	Micro Focus COBOL/2 for UNIX Version 1.2 NIST-91/1965	NCR PC 486/MC25, Model 3314 <i>UNIX System V/386 Release 4.0 Version 2</i>	8/1/92	High	NCR 3320, 3321, 3340, 3341, 3345, 3347, 3445, 3447, 3450 <i>UNIX System V/386 Release 4.0 Version 2</i>	Yes
Prime Computer, Inc.	COBOL85 Version 1.1.1-22.0 NIST-90/2281	P9955 - 64V mode machine architecture <i>PRIMOS Version 22.1.3</i>	12/1/92	Intermediate	Prime 50-Series machines 64V-mode machine architecture <i>PRIMOS Version 22.1.1</i>	
Realia, Inc.	Realia COBOL Version 4.1 NIST-91/1421	Compaq 486/25 <i>DOS Version 4.0 OS/2 Version 1.2</i>	2/1/92	Intermediate	Compaq: Systempro, Deskpro 386, Deskpro 286, Portable 386, Portable III, SLT/286, LTE/286; <i>DOS Version 4.0; OS/2 Version 1.2</i>	Yes
		IBM PC/AT <i>DOS Version 4.0 OS/2 Version 1.2</i>			IBM PS/2 55SX, 60, 70, 80, 90; PC/XT <i>DOS Version 4.0; OS/2 Version 1.2</i>	
Ryan McFarland Corporation	RM/COBOL-85 Version 5.00.00 NIST-90/2101	IBM PS/2 Model 80 <i>PC/DOS Version 4.01</i>	10/1/92	High		
	RM/COBOL-85 Version 5.00.00 NIST-90/2102	NCR PC925 <i>SCO Unix System V/386 Release 3.2.0</i>	10/1/92	High	NCR PC925 <i>Interactive Unix System V/386 Release 2.2</i>	
	RM/COBOL-85 Version 5.00.00 NIST-90/2103	NCR PC486/MC <i>AT&T Unix V.4 Version i386 Release 0.00.00.08</i>	10/1/92	High		
	RM/COBOL-85 Version 5.00.00 NIST-90/2104	IBM RISC System/6000 <i>AIX Version 3</i>	10/1/92	High		

COBOL PROCESSORS *Continued*

VENDOR	PROCESSOR ID & VSR #	HARDWARE & OPERATING SYSTEM	EXPIRY DATE	SUBSET	OTHER ENVIR HW/OS	NONCON- FORMITIES
	RM/COBOL-85 Version 5.00.00 <i>NIST-90/2106</i>	HP 9000 Model 325 <i>HP-UX Version 7.0</i>	10/1/92	High		
	RM/COBOL-85 Version 5.00.00 <i>NIST-90/2107</i>	HP 9000 Model 825 <i>HP-UX Version 7.0</i>	10/1/92	High		
	LPI-COBOL Version 06.06.00 <i>NIST-91/1401</i>	NCR PC486/MC (System 3340) <i>UNIX V/386 Release 4.0 Version 01.00.00.08</i>	6/1/92	High		
	LPI-COBOL Version 06.09.01 <i>NIST-91/1402</i>	Prime EXL 320 <i>UNIX V/386 Release 3.1</i>	6/1/92	High	Prime EXL 316 <i>UNIX V/386 Release 3.1</i>	
	LPI-COBOL Version 06.09.01 <i>NIST-91/1403</i>	Everex 386 (AGI 3000D) <i>UNIX V/386 Release 3.2</i>	6/1/92	High		
Tandem Computers Inc.	COBOL85 Version C30 <i>NIST-91/1461</i>	Nonstop VLX <i>Guardian 90 Version C30</i>	3/1/92	High	NonStop Cyclone, NonStop TXP, CLX, EXT <i>Guardian 90 Version C30</i>	Yes
UNISYS Corporation	A Series COBOL ANSI-85, Mark 4.0 2.0 <i>NIST-91/2211</i>	Unisys A10 <i>MCP/AS MARK 4.0</i>	10/1/92	High	Unisys Micro A, A1, A2, A3, A4, A5, A6, A9, A10, A12, A15, A16, A17, A19; <i>MCP/AS MARK 4.0</i>	
	Micro Focus COBOL/2 Version 1.1 Release 2 <i>NIST-91/1241</i>	U6000/70 <i>Unix System V Release 3.2</i>	1/1/92	High	U6000/10 /WS /31 /51 /55 /60 /80 <i>Unix System V Release 3.2</i>	Yes
Wang Laboratories, Inc.	VS COBOL 85 Version 2.12.01 <i>NIST-91/2381</i>	WANG VS 100 <i>VS OS Version 7.30.00</i>	11/1/92	High	VS 5, 6, 15, 25, 45, 65, 85, 90, 100, 300; 5000, 7000, 8000, 10000 Series <i>VS OS Version 7.20.00</i> VS 300; 7000, 8000, 10000 Series <i>VS OS Version 7.30.00</i>	

2.8 FORTRAN PROCESSORS

VENDOR	PROCESSOR ID & VSR #	HARDWARE & OPERATING SYSTEM	EXPIRY DATE	LEVEL	OTHER ENVIR HW/OS	NONCON- FORMITIES
Alliant Computer Systems Company	FX/Fortran Version 4.3 <i>NIST-91/2301</i>	FX/80 <i>Concentrix Version 5.7 with linker/loader:ld version 5.7 libfortran.a version 6.0</i>	11/1/92	Full	FX/1, FX/4, FX/8, FX/40, FX/82; VFX/4, VFX/40, VFX/80, VFX/82 <i>Concentrix Version 5.7</i>	
	FX/Fortran Version 1.2 <i>NIST-91/2302</i>	FX/2800 Model 400 <i>Concentrix Version 2.1.02 with linker/loader:ld ver. 2.1.02</i>	11/1/92	Full	FX/800, SRM/1 Models 200 and 400 <i>Concentrix Version 2.1</i>	
Amdahl Corporation	Amdahl Fortran 77 Version 10 Level 31 <i>NBS/ICST-88/3561A</i>	Amdahl 5860 <i>IBM MVS/SP Version 2.2.0</i>	12/1/92	Full	Amdahl 580, Amdahl Vector Processor <i>IBM MVS/SP Version 2</i>	
	Amdahl Enhanced Fortran 77 Version 10 Level 31 <i>NBS/ICST-88/3565A</i>	Amdahl 5860 <i>UTS Version 1.2</i>	12/1/92	Full	Amdahl 580, 5890, 5990 <i>UTS Version 1.2</i>	
	Amdahl Fortran 77/VP Version 10 Level 30 <i>NBS/ICST-88/3562A</i>	Amdahl 1200E <i>IBM MVS/SP Version 2.2.0</i>	12/1/92	Full	Amdahl 580 Amdahl Vector Processor <i>IBM MVS/SP Version 2</i>	
Apple Computer, Inc.	A/UX Fortran 77 Version 2 Release 2.0.1 <i>NIST-91/1741</i>	Apple Macintosh IIcx w/Motorola MC68030 CPU and MC68882 FPU <i>A/UX Version 2 Release 2.0.1</i>	6/1/92	Full	Macintosh IIci,IIcx,SE30,IIx; Mac IIsi w/MC68882 FPU; Mac II w/MC68882 PMMU <i>A/UX Version 2 Release 2.0.1</i>	
Bull HN	FORTRANA Release R3.0 <i>NIST-90/1322</i>	DPS6 PLUS Model 634 <i>GCOS6 HVS Version 2.0</i>	2/1/92	Full	DPS6/EMMU Series <i>GCOS6 Mod 400 Release 4.1</i> DPS6 PLUS Series <i>HVS6 PLUS Version 2.0</i> DPS 6000 Series <i>GCOS6 HVS Version 2.0</i>	
	Fortran 77-ESV Version 8FV4.1 Update 0 <i>NIST-91/1682</i>	DPS-9000 <i>GCOS8 Version SR40201 (with SR40004)</i>	6/1/92	Full	DPS-90, DPS-8000 <i>GCOS8 Version SR40201 (with SR40004)</i>	
	Fortran SXL-3001 Version 01.00 <i>BIA/90/001</i>	DPX/2 210 <i>B.O.S. Versions 01.01 and 02.00</i>	11/15/92	Full	DPS/2 200 and 300 <i>B.O.S. Versions 01.01 and 02.00</i>	
Concurrent Computer Corporation	SP-2450 (Fortran 77) Version 2.0 <i>NIST-90/1001</i>	MC 5600 w/MC68881 and Lightning floating point hardware <i>RTU Version 5.0</i>	5/1/92	Full	MC5300, MC5400, MC5450, MC5700, w/MC68881 and Lightning floating point hardware <i>RTU Version 5.0</i>	
	SP-2450 (Fortran 77) Version 2.0 <i>NIST-90/1002</i>	MC 6300 w/MC68882 and Lightning floating point hardware <i>RTU Version 5.0</i>	5/1/92	Full	MC6350, MC6400, MC6450, MC6600, MC6700, MC6750 w/MC68882 and Lightning floating point hardware <i>RTU Version 5.0</i>	
	SP-2450 (Fortran 77) Version 1.7 <i>NIST-90/1003</i>	MC 8500 <i>RTU Version 5.1</i>	5/1/92	Full	MC8400 <i>RTU Version 5.1</i>	

FORTRAN PROCESSORS, *Continued*

VENDOR	PROCESSOR ID & VSR #	HARDWARE & OPERATING SYSTEM	EXPIRY DATE	LEVEL	OTHER ENVIR HW/OS	NONCON- FORMITIES
	Fortran VII Z Version R06 Release 00 <i>NIST-90/1501</i>	3280 MPS <i>OS/32 Version R08 Release 03</i>	7/1/92	Full	3205, 3210, 3220, 3230, 3240, 3250, 3230XP, 3230MPS, 3260MPS, 3280E MPS; 8/32; Micro 3200CS*, Micro 3200ES*, Micro 3200 MPS* <i>OS/32 Version R08 Release 03</i>	
	Fortran VII O Version R06 Release 00 <i>NIST-90/1502</i>	3280 MPS <i>OS/32 Version R08 Release 03</i>	7/1/92	Full	3205, 3210, 3220, 3230, 3240, 3250, 3230XP, 3230MPS, 3260MPS, 3280E MPS; 8/32; Micro 3200CS*, Micro 3200ES*, Micro 3200 MPS* <i>OS/32 Version R08 Release 03</i>	
Control Data Corporation	Fortran/VE 1 Version 1.7 Release 90325 <i>NIST-91/1432</i>	CYBER 180-995 <i>NOS/VE Version 1.5.3 Level 765</i>	4/1/92	Full	CYBER 180 Series; CYBER 2000 <i>NOS/VE Version 1.5.3 Level 765</i>	
	Fortran/VE 2 Version 2.5 Release 90325 <i>NIST-91/1433</i>	CYBER 180-995 <i>NOS/VE Version 1.5.3 Level 765</i>	4/1/92	Full	CYBER 180 Series; 2000 <i>NOS/VE Version 1.5.3 Level 765</i>	
Convex Computer Corporation	Convex Fortran Version 6.1 <i>NIST-91/1521</i>	Convex C-240 <i>Convex OS Version 9.0</i>	4/1/92	Full	Convex C-Series <i>Convex OS Version 8.1</i>	
Cray Research, Inc.	CF77 Compiling System Release 4.0.2 <i>NIST-91/1101</i>	Cray X-MP Cray-2S 4/128 Cray Y-MP/832 <i>UNICOS Release 5.1</i> Cray X-MP/48 <i>COS Release 1.17 Rev 1</i>	2/1/92	Full	Cray X-MP EA and Y-MP in X-mode; Cray 1 and X-MP; Cray-2S, Cray-2; Cray Y-MP, Cray X-MP EA <i>UNICOS Release 5.1</i> Cray 1 and X-MP Series <i>COS Release 1.17 Rev 1</i>	
Digital Equipment Corporation	VAX Fortran Version 5.7 <i>NIST-91/2021</i>	VAX 6000-420 <i>VMS Version 5.4</i>	10/1/92	Full	VAX 4000 Mod 200, 300; 6000 Series 200, 300, 400, 500; 8200, 8250, 8300, 8350, 85xx, 8600, 8650, 8700, 8800, 8810, 8820, 8830, 8840; 9000 Mod 210 Ser 400; VAXft 3000-310; VAX-11/730/750/780/785; MicroVAX II, 2000, 3100, 3300, 3400, 3500, 3600, 3800, 3900; VAXstation II, 2000, 3100, 3200, 3500, 3520, 3540; VAX-server 3100, 3300, 3400, 3500, 3600, 3602, 3800, 3900, 4000 Mod 200, 300; 6000 Mod 210/220, 310/320, 410/420, 510/520 <i>VMS Version 5.4</i>	

FORTRAN PROCESSORS, *Continued*

VENDOR	PROCESSOR ID & VSR #	HARDWARE & OPERATING SYSTEM	EXPIRY DATE	LEVEL	OTHER ENVIR HW/OS	NONCON- FORMITIES
	VAX Fortran HPO Version 1.3 <i>NIST-91/2022</i>	VAX 6000-420 <i>VMS Version 5.4</i>	10/1/92	Full	VAX 4000 Mod 200, 300; 6000 Series 200, 300, 400, 500; 8200, 8250, 8300, 8350, 85xx, 8600, 8650, 8700, 8800, 8810, 8820, 8830, 8840; 9000 Mod 210 Ser 400; VAXft 3000-310; VAX-11/730/750/780/785; MicroVAX II, 2000, 3100, 3300, 3400, 3500, 3600, 3800, 3900; VAXstation II, 2000, 3100, 3200, 3500, 3520, 3540; VAX-server 3100, 3300, 3400, 3500, 3600, 3602, 3800, 3900, 4000 Mod 200, 300; 6000 Mod 210/220, 310/320, 410/420, 510/520 <i>VMS Version 5.4</i>	
	VAX Fortran HPO Version 1.3 <i>NIST-91/2023</i>	VAX 6000-420 VP <i>VMS Version 5.4</i>	10/1/92	Full	VAX 4000 Mod 200, 300; 6000 Series 200, 300, 400, 500; 8200, 8250, 8300, 8350, 8500, 8530, 8550, 8600, 8650, 8700, 8800, 8810, 8820, 8830, 8840; 9000-210 -400 -420 -430 - 440; VAXft 3000-310; VAX- 11/730/750/780/785; MicroVAX II, 2000, 3100, 3300, 3400, 3500, 3600, 3800, 3900; VAXstation II, 2000, 3100, 3200, 3500, 3520, 3540; VAX-server 3100, 3300, 3400, 3500, 3600, 3602, 3800, 3900, 4000 Mod 200, 300; 6000 Mod 210/220, 310/320, 410/420, 510/520 <i>VMS Version 5.4</i>	
	VAX Fortran Ultrix Version 5.1 <i>NIST-91/2024</i>	VAX 6000-420 <i>Ultrix Version 4.2</i>	10/1/92	Full	VAX 4000 Mod 200, 300; 6000 Series 200, 300, 400, 500; 8200, 8250, 8300, 8350, 85xx, 8600, 8650, 8700, 8800, 8810, 8820, 8830, 8840; 9000 Mod 210 Ser 400; VAXft 3000-310; VAX-11/730/750/780/785; MicroVAX II, 2000, 3100, 3300, 3400, 3500, 3600, 3800, 3900; VAXstation II, 2000, 3100, 3200, 3500, 3520, 3540; VAX-server 3100, 3300, 3400, 3500, 3600, 3602, 3800, 3900, 4000 Mod 200, 300; 6000 Mod 210/220, 310/320, 410/420, 510/520 <i>VMS Version 5.4</i>	

FORTRAN PROCESSORS, *Continued*

VENDOR	PROCESSOR ID & VSR #	HARDWARE & OPERATING SYSTEM	EXPIRY DATE	LEVEL	OTHER ENVIR HW/OS	NONCON- FORMITIES
	DEC Fortran Version 3.1 <i>NIST-91/2025</i>	DECstation 5000 <i>Ultrix Version 4.2</i>	10/1/92	Full	Decstation 2100, 3100, 3100S; 5000 Mod 200, 200CX, 200PX, 200PXG, 200PXG Turbo; DECsystem 3100, 5000, Mod 200, 5100, 5400, 5500, 5810, 5820, 5830, 5840 <i>Ultrix Version 4.2</i>	
	DEC Fortran Version 3.1 <i>NIST-91/2026</i>	DECstation 3100 <i>Hercules/1 Version 1.0</i>	10/1/92	Full	Decstation 2100, 3100, 3100S; 5000 Mod 200, 200CX, 200PX, 200PXG, 200PXG Turbo; DECsystem 3100, 5000, Mod 200, 5100, 5400, 5500, 5810, 5820, 5830, 5840 <i>Hercules/1, Version 1.0</i>	
Edinburgh Portable Compilers LTD	EPC Fortran 77 Version 2.5 <i>NIST/NCC-90/945</i>	Solbourne Series 5/500 w/Sparc Processor <i>Sun OS Version 4</i>	11/1/92	Full	Solbourne Series 5/600, 5/800, 5E/900, S/4000 <i>Sun OS Version 4</i>	
	EPC Fortran 77 Version 2.5 <i>NIST/NCC-90/947</i>	ICL DRS IXP 95 w/80486/80487 <i>ICL DRS/NX V.4.0 (IXP) Unix</i>	11/1/92	Full		
	EPC Fortran 77 Version 2.5 <i>NIST/NCC-90/948</i>	ICL DRS 6000 <i>ICL DRS/NX V.4.0 UNIX</i>	11/1/92	Full		
Electronic Data Systems Corporation	SVS Fortran/Unix Version 2.8 <i>NIST-91/1401</i>	Prime EXL 320 <i>Prime Unix V/386 Release 3.1</i>	5/1/92	Full		Yes
	SVS Fortran/Unix Version 2.8 <i>NIST-91/1402</i>	Everex AGI System 3000 D <i>Interactive Unix V/386 Release 3.2</i>	5/1/92	Full		Yes
Encore Computer Corporation	Fortran 77 Version 2.1 <i>NIST-91/1551</i>	Multimax 320 <i>UMAX V Version 2.4 MACH Version 1.0 UMAX 4.3 Version R4.1</i>	4/1/92	Full	Multimax 310, 510, 520 <i>UMAX V Version 2.4 MACH Version 1.0 UMAX 4.3 Version R4.1</i>	
	Parallel Fortran Plus Version 1.0 <i>NIST-91/1552</i>	Encore 91 <i>UMAX V Version 3.0</i>	4/1/92	Full		
	Fortran-77 + Version 5.0C <i>NIST-91/1541</i>	Concept 32/97 <i>MPX-32 Version 3.5u01</i>	4/1/92	Full	Concept 32/67, 32/2040, 32/2030, 32/2050 <i>MPX-32 Version 3.5u01</i>	
	GCF Version 2.0 <i>NIST-91/1542</i>	Concept 32/97 <i>MPX-32 Version 3.5u01</i>	4/1/92	Full	Concept 32/67, 32/2040, 32/2030, 32/2050 <i>MPX-32 Version 3.5u01</i>	

FORTRAN PROCESSORS, *Continued*

VENDOR	PROCESSOR ID & VSR #	HARDWARE & OPERATING SYSTEM	EXPIRY DATE	LEVEL	OTHER ENVIR HW/OS	NONCON- FORMITIES
Fujitsu America, Inc.	Fortran 77-M Version 10 Level 31 <i>NBS/ICST-88/3561</i>	Amdahl 5860 <i>IBM MVS/SP Version 2.2.0</i>	12/1/92	Full	Amdahl 580; Amdahl Vector Processor <i>IBM MVS/SP Version 2</i>	
	Fortran 77/VP-M Version 10 Level 30 <i>NBS/ICST-88/3562</i>	Amdahl 1200E <i>IBM MVS/SP Version 2.2.0</i>	12/1/92	Full	Amdahl Vector Processor; Amdahl 580 <i>IBM MVS/SP Version 2</i>	
	Fortran 77 Version 10 Level 31 <i>NBS/ICST-88/3563</i>	Amdahl 1200E <i>VSP Version 10</i>	12/1/92	Full	FACOM M <i>FACOM OS IV/F4 MSP Edition 20</i> FACOM VP; Amdahl Vector Processor <i>VSP Version 10</i>	
	Fortran 77/VP Version 10 Level 30 <i>NBS/ICST-88/3564</i>	Amdahl 1200E, FACOM VP <i>VSP Version 10</i>	12/1/92	Full	FACOM M <i>FACOM OS IV/F4 MSP Edition 20</i> FACOM VP; Amdahl Vector Processor <i>VSP Version 10</i>	
	UTS Fortran 77 Version 10 Level 31 <i>NBS/ICST-88/3565</i>	Amdahl 5890 <i>UTS Version 1.2</i>	12/1/92	Full	Amdahl 580 <i>UTS Version 2.0</i> FACOM M <i>UTS/M Version 10</i> FACOM S3000 <i>UTS/S Version 10</i>	
	UTS Fortran77 EX Version 10 Level 10 <i>NIST-91/1381</i>	Fujitsu M760 <i>UTS/M Version 22 Level 10</i>	2/1/92	Full	Fujitsu M780 <i>UTS/M Version 22 Level 10</i>	
	UTS Fortran77 EX Version 10 Level 10 <i>NIST-91/1382</i>	Amdahl 5990 <i>Amdahl UTS Version 2 Release 1</i>	2/1/92	Full	Amdahl 5990 <i>Amdahl UTS Version 2</i>	
	OSIV/MSP Fortran77 Version 11 Level 10 <i>NIST-91/1383</i>	Fujitsu VP100E <i>OSIV/F4 MSP Edition 20</i>	2/1/92	Full	Fujitsu M780; M760 <i>OSIV/F4 MSP Edition 20</i>	
OSIV/MSP Fortran77 Version 11 Level 10 <i>NIST-91/1384</i>	Amdahl 5990 <i>IBM MVS/SP Version 3 Release 1.3</i>	2/1/92	Full	IBM 3090/200E <i>MVS/SP Version 2 Release 2.3</i>		
HNSX Supercomputers, Inc.	Fortran77/SX (f77sx) Release 020 <i>NIST-92/1161</i>	NEC SX-3 Model 12 <i>SUPER-UX Release 1.22</i>	1/1/93	Full	NEC SX-3 Series; HNSX SX-3 Series <i>SUPER-UX Release 1.22</i>	
Hewlett-Packard Company	HP Fortran 77/HP/UX Version A.08.14 <i>NIST-92/1081</i>	HP9000 Model 835 <i>HP-UX Version A.08.00</i>	1/1/93	Full	HP9000, Models 815, 825, 840, 850, 855, 870 <i>HP-UX Version A.08.00</i>	
	HP 9000 S700 Fortran 77 Version A.08.05 <i>NIST-92/1083</i>	HP9000 Model 750 <i>HP-UX Version 8.05</i>	1/1/93	Full	HP9000, Models 730, 720 <i>HP-UX Version 8.05</i>	

FORTRAN PROCESSORS, *Continued*

VENDOR	PROCESSOR ID & VSR #	HARDWARE & OPERATING SYSTEM	EXPIRY DATE	LEVEL	OTHER ENVIR HW/OS	NONCON- FORMITIES
	HP 9000 S300 Fortran 77 Version B.08.00 <i>NIST-92/1084</i>	HP9000 Model 425 <i>HP-UX Version 8.00</i>	1/1/93	Full	HP9000, Models 400, 433, 345, 380, 385 <i>HP-UX Version 8.00</i>	
	HP Fortran 77/XL Version 4.30 <i>NIST-92/1085</i>	HP3000 Model 930 <i>MPE XL Version A.50.10</i>	1/1/93	Full	HP3000, Models 925, 935, 950, 955, 970 <i>MPE XL Version A.50.10</i>	
	HP Fortran 77/V Version A.02.05 <i>NIST-91/1025</i>	HP3000 Model 68 <i>MPE/V Version G.03.09</i>	1/1/92	Full	HP3000, Models MICRO 3000, MICRO 3000XE, 52, 58, 70, 72 <i>MPE/V Version G.03.09</i>	
Apollo Systems Division of Hewlett-Packard	Domain Fortran Version 10.8 <i>NIST-90/2001</i>	DN10000 <i>Domain OS Version SR10.3</i>	10/1/91	Full	DN300, DN320, DN330, DN460, DN550, DN560, DN570, DN580, DN590, DN660, DN2500, DN3000, DN3500, DN4000 <i>Domain OS Version SR10.3</i>	
IBM Canada, LTD	XL Fortran Compiler /6000 & XL Fortran Run Time Env. /6000 Version 2 Release 1 <i>NIST-91/1341</i>	IBM RISC System/6000 Model 530 <i>AIX V3 for RISC System/6000 Version 3 Release 1</i>	3/1/92	Full	IBM RISC System/6000 Models 320, 520, 540, 550, 730, 930 <i>AIX V3 for RISC System/6000 Version 3 Release 1</i>	
	IBM AIX Fortran Compiler/6000 Version 2 Release 2 <i>NIST-91/2201</i>	IBM AIX RISC System /6000 POWERstation Model 540 <i>AIX V3 for RISC System/6000 Version 3 Release 1</i>	8/1/92	Full	RISC System/6000 POWERstation 320, 320H, 530, 730, 550; POWERserver 320, 520, 530, 540, 930, 950 <i>AIX V3 for RISC System/6000 Version 3 Release 1</i>	
	VS Fortran Version 1 Release 1 <i>NIST-91/1701</i>	IBM RT <i>AIX Version 2 Release 1</i>	5/1/92	Full		
IBM Corporation	VS Fortran Version 2 Release 5 <i>NIST-91/1921</i>	IBM 4381 <i>VM/SP Version 1 Release 5</i>	8/1/92	Full	S/370 30xx, 43xx, 93xx, S/390, ES/9000 <i>VM/XA Version 1, Rel 1, 2 VM/ESA Version 1, Rel 1, 1.1</i>	
	VS Fortran Version 2 Release 5 <i>NIST-91/1922</i>	IBM S/370 3090 <i>MVS/SP Version 4 Release 2</i>	8/1/92	Full	S/370 30xx, 43xx, 93xx, S/390, ES/9000 <i>MVS/SP Version 1, Release 3 MVS/SP Version 2, Release 2 MVS/SP Version 3, Release 1</i>	
	VS Fortran Version 2 Release 5 <i>NIST-90/1823</i>	IBM 3090 <i>AIX/370 Version 1 Release 2</i>	8/1/92	Full	S/370, 30xx, 43xx, 93xx <i>AIX/370 Version 1, Release 2</i>	
	IBM RT PC VS Fortran Version 1.1.0 <i>NIST-89/1441</i>	IBM RT PC <i>IBM RT PC AIX Version 2.2.1</i>	5/1/92	Full		

FORTRAN PROCESSORS, *Continued*

VENDOR	PROCESSOR ID & VSR #	HARDWARE & OPERATING SYSTEM	EXPIRY DATE	LEVEL	OTHER ENVIR HW/OS	NONCON- FORMITIES
Intergraph Corporation	CLIPPER Advanced Optimizing Fortran, Version 1.40 <i>NIST-92/1041</i>	CLIPPER IS4000 <i>CLIX, Version 5.7.3</i>	12/1/92	Full	CLIPPER C300 and C400 Series <i>CLIX, Version 5.7.3</i>	
Language Systems Corporation	Language Systems Fortran Version 3.0 <i>NIST-91/2101</i>	Apple Macintosh IIfx <i>Macintosh OS Version 7.0</i>	9/1/92	Full	Apple Macintosh IIfx <i>Macintosh OS Version 7.0</i>	
Liant Software Corporation	Fortran/400, Version 1 Release 3 <i>NIST-92/1181</i>	IBM AS/400 B4500 <i>IBM OS/400, Version 1</i>	1/1/93	Full		
	Fortran/400, Version 2 Release 1 <i>NIST-92/1182</i>	IBM AS/400 B4500 <i>IBM OS/400, Version 2</i>	1/1/93	Full		
Microsoft Corporation	Microsoft Fortran Version 5.1 <i>NIST-91/1841</i>	IBM PS/2 Model 80/386, 80387 math co-processor <i>MS-DOS Version 5.0</i>	7/1/92	Full		
		COMPAQ DESKPRO 486/25 <i>OS/2 Version 1.2</i>				
		COMPAQ 286, 80287 math co-processor <i>DOS Version 3.31</i>				
		Everex 386, 80287 math co-processor <i>DOS Version 3.31</i>				
MIPS Computer Systems, Inc.	Mips Fortran Version 3.0 Release 3.0 <i>NIST-92/1121</i>	M/120 <i>RISC/os Version 5.0 Release 5.0</i>	1/1/93	Full	M/500, M/800, M/1000, M/2000, M/120, RC3260, RC3260G, RC3240, RC3330, RS3330, RC3350, RC3360, RC2030, RS2030, RC3230, RS3230, RC6260, RC6280, RC6280(scsi base) <i>RISC/os Version 5.0 Rel 5.0</i>	
Modular Computer Systems	MODCOMP GLS-F77 Release A.0 <i>NIST-89/1961</i>	MODCOMP 9730 <i>REAL/IX Release A.0</i>	9/1/92	Full	MODCOMP 9720, 9740 <i>REAL/IX Release A.0</i>	
	MODCOMP Fortran 77/32 Release B.2 <i>NIST-89/1962</i>	MODCOMP 32/87 <i>MAX 32 Release D.0</i>	9/1/92	Full	MODCOMP 32/85, 9230, 9250 <i>MAX 32 Release D.0</i>	
	MODCOMP Fortran 77/16 Release B.2 <i>NIST-89/1963</i>	MODCOMP Classic 7860 <i>MAX IV Release K.0</i>	9/1/92	Full	MODCOMP 32/85, 32/87, 9230, 9250 <i>MAX IV Release K.0</i>	

FORTRAN PROCESSORS, *Continued*

VENDOR	PROCESSOR ID & VSR #	HARDWARE & OPERATING SYSTEM	EXPIRY DATE	LEVEL	OTHER ENVIR HW/OS	NONCON- FORMITIES
Prime Computer, Inc.	Fortran 77 Release T3.0-23.0 <i>NIST-91/1721</i>	Prime Model 9955 <i>Primos Revision 23.0</i>	5/1/92	Full	2350, 2450, 2355, 4050, 4150, 4450, 6150, 6350, 6550, 2550, 2655, 2755, 9650, 9655, 9750, 9755, 9950, 9955-II, 5310, 5320, 5330, 5340 w/32IX-mode arch.; 2350, 2450, 2355, 4050, 4150, 4450, 6150, 6350, 6550, 2250, 2550, 2655, 2755, 9650, 9655, 9750, 9755, 9950, 9955-II, 750, 850, 5310, 5320, 5330, 5340 w/32I-mode arch. 2350, 2450, 2355, 4050, 4150, 4450, 6150, 6350, 6550, 2250, 2550, 2655, 2755, 9650, 9655, 9750, 9755, 9950, 9955-II, 750, 850, 5310, 5320, 5330, 5340 w/64V-mode arch. <i>PRIMOS Revision 23.0</i>	
Salford Software Limited	FTN77/386 Version 2.60 <i>NIST/NCC-91/951</i>	Olivetti M380/XPI <i>MS DOS Version 5.00</i>	9/16/92	Full	Compaq Deskpro 386/16, 386/20, 386/25, 386/33; Dell 310, 320, w/A02 BIOS, G03 m/board, 325; HP Vectra RS/20; IBM Models 70, 80; Toshiba T5100, T5200, 3200SX; Tandon 386, 386SX <i>MS-DOS Ver. 3.30, 4.01, 5.00</i>	
	FTN77/486 Version 2.60 <i>NIST/NCC-91/952</i>	TANDON 486SL <i>MS-DOS Version 5.00</i>	9/16/92	Full	Compaq 486; Dell 425; HP Vectra/486; Olivetti CP486/25 Research Machines VX-486 <i>MS-DOS Ver. 3.30, 4.01, 5.00</i>	
	FTN77/ix Version 1.12 <i>NIST/NCC-91/953</i>	Elonex 386S-200 <i>SCO UNIX System V/386 Release 3.2</i>	9/16/92	Full	Compaq Deskpro 386/16, 386/20, 386/25, 386/33; Compaq 486; Dell 425; <i>SCO UNIX System V/386 Release 3.2</i>	
	PRIME (I-mode) FTN77I Version 233 <i>NIST/NCC-91/954</i>	Prime 9955 Model I <i>PRIMOS Revision 21.0.5q</i>	9/16/92	Full	Prime 50-series w/I-mode instruction set <i>Primos Revision 19.0 to 21.0.5q</i>	
	PRIME (V-mode) FTN77 Version 233 <i>NIST/NCC-91/955</i>	Prime 9955 Model I <i>PRIMOS Revision 21.0.5q</i>	9/16/92	Full	Prime 50-series w/V-mode instruction set <i>Primos Revision 19.0 to 21.0.5q</i>	
Siemens Nixdorf Informations- systeme AG	FOR1 V2.1A <i>GMD/VAL-91-003</i>	Siemens 7.540-W <i>BS2000 V9.54</i> Siemens 7.592-I <i>BS2000 V10.0A</i>	2/1/92	Full		

FORTRAN PROCESSORS, *Continued*

VENDOR	PROCESSOR ID & VSR #	HARDWARE & OPERATING SYSTEM	EXPIRY DATE	LEVEL	OTHER ENVIR HW/OS	NONCON- FORMITIES
	Sinix Fortran 77 V1.1A, V1.2A, V1.2B <i>GMD/VAL-91-009</i>	MX500-F <i>Sinix-F V5.21</i> MX300-H <i>Sinix-H 5.23</i> MX300-L <i>Sinix-L V5.4</i> WX200-K <i>Sinix-ODT V1.5</i>	2/1/93	Full		
Silicon Graphics Computer Systems Inc.	Fortran 4D77 Release S4-FTN 1-4.0 <i>NIST-91/1201</i>	IRIS 4D/25 <i>IRIX 4D1-4.0</i>	3/1/93	Full	IRIS 4D/20, 4D/25, 4D/35, 4D/70, Power Series <i>IRIX 4D1-4.0</i>	
Sun Microsystems, Inc.	Sun Fortran (FOR-1.4-4-3-5) Version 1 Release 4 <i>NIST-91/1301</i>	SUN-3/80 w/MC 68882 <i>SUNOS (SM3-07) Version 4 Release 1</i>	3/1/93	Full	SUN-3/470, SUN-3/480; SUN-3/60, SUN-3/180, SUN 3/260 w/MC 68882 <i>SUNOS (SM3-07) Version 4 Release 1</i>	
	Sun Fortran (FOR-1.4-4-4-5) Version 1 Release 4 <i>NIST-91/1302</i>	SPARCstation 2 (SUN- 4/75) w/FPU (TI TMS390C602A) <i>SUNOS (SS2-07) Version 4 Release 1</i>	3/1/93	Full	SPARCserver 2 (SUN- 4/75X) w/FPU (TI TMS390C602A) <i>SUNOS (SS2-07) Version 4 Release 1</i>	
	Sun Fortran (FOR-1.4-4-4-5) Version 1 Release 4 <i>NIST-91/1303</i>	SPARCserver 330 (SUN- 4/330) w/FPU2 (TI 8847) <i>SUNOS (SS2-07) Version 4 Release 1</i>	3/1/93	Full	SPARCserver 470 (SUN- 4/470) w/FPU2 (TI 8847) <i>SUNOS (SS2-07) Version 4 Release 1</i>	
	Sun Fortran (FOR-1.4-4-4-5) Version 1 Release 4 <i>NIST-91/1304</i>	SPARCserver 490 (SUN- 4/490) w/FPU2 (TI 8847) <i>SUNOS (SS1-07) Version 4 Release 1</i>	3/1/93	Full		
	Sun Fortran (FOR-1.4-4-4-5) Version 1 Release 4 <i>NIST-91/1305</i>	SPARCstation IPC (SUN- 4/40) w/FPU (WEITEK 3172) <i>SUNOS (SS2-07) Version 4 Release 1</i>	3/1/93	Full	SPARCstation SLC (SUN- 4/20); SPARCstation 1+ (SUN-4/65) w/FPU (WEITEK 3172) <i>SUNOS (SS2-07) Version 4 Release 1</i>	
Unisys Corporation	A Series Fortran77 Mark 4.0 <i>NIST-91/2212</i>	Unisys A10 <i>MCP/AS Mark 4.0</i>	10/1/92	Full	Unisys A Series, Micro A, A1, A2, A3, A4, A5, A6, A9, A10, A12, A15, A16, A17, A19 <i>MCP/AS, Mark 4.0</i>	
	SVS Fortran Version 2.8 Release 2 <i>NIST-91/1242</i>	U6000/70 <i>Unix System V Release 3.2</i>	1/1/92	Full	U6000/10 /31 /51 /55 /60 /80 /WS <i>Unix System V Release 3.2</i>	

2.9 Ada PROCESSORS

The following are Ada compilers that have been validated by the Ada Joint Program Office (AJPO). Compilers are listed in order of vendor. The list is updated monthly, and presently includes 197 base compilers and 99 compilers derived from base implementations. For the most current information on validated Ada compilers, please contact the Ada Information Clearinghouse at (703) 685-1477.

(Key: * = Validated through Registration, base system above)

#YYMMDDFX.XXNNN = Certificate Number: YYMMDD = date on-site testing was completed;
 F = Ada Validation Facility;
 X.XX = ACVC Version;
 NNN = sequence number assigned by AVO

All Ada Validation Certificates issued for validations completed with ACVC Version 1.10 expired on December 1, 1990. At the TRI-Ada 1990 meeting in Baltimore, it was announced that the Ada Joint Program Office (AJPO) would be conducting a public review of ACVC 1.12 in the near future. It has been decided to suspend this public review and not to use ACVC 1.12 for validation under Ada 83. The proposed ACVC 1.12 will be provided to the Ada 9X Project as the baseline validation suite for Ada 9X.

The extension of ACVC 1.11 certificates is to "at least" 1 March 1993. The current Ada 9X Transition plan calls for ACVC 1.11 to expire 1 June 1992, with certificates expiring 12 months later (1 June 1993).

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
AETECH, Inc. IntegrAda 386 5.1.0 (#901120W1.11087)	Northgate 386/25 (under Phar Lap/DOS 3.3)	Northgate 386/25 (under MS DOS 3.3)
*Validated by Registration AETECH, Inc. IntegrAda 386 5.1.0 (BASE #901120W1.11087)	Any Computer System Comprising: cpu: Intel 80386, fpu: optional, memory: 4 MByte RAM, disk: 40 MByte hard drive (under MS DOS 3.3)	Any Computer System Comprising: cpu: Intel 80386, fpu: optional, memory: 4 MByte RAM, disk: 40 MByte hard drive (under Phar Lap/DOS 3.3)
AETECH, Inc. IntegrAda 5.1.0 POSIX (#901129W1.11086)	Unisys PW/2 386 (under SCO Unix 3.2)	Same as Host
*Validated by Registration AETECH, Inc. IntegrAda Posix 5.1.0 (BASE #901129W1.11086)	Any Computer System Comprising: cpu: Intel 80386, fpu: optional, memory: 4 MByte RAM, disk: 60 MByte hard drive (under SCO Unix 3.2)	Same as Host
Aitech Defense Systems, Inc. AI-ADA/88K Version 2.4 (#900930W1.11030)	VAXstation 3100 Cluster (under VMS 5.3)	Tadpole TP880V (88100-based VME board) (bare machine)
*Validated by Registration Aitech Defense Systems, Inc. AI-ADA/88K, Version 2.4 (BASE #900930W1.11030)	All DEC MicroVAX, VAXstation, VAXserver, VAX-11, VAX 8xxx & VAX 6xxx series (under VMS versions 5.0, 5.1, 5.2 & 5.3, as supported)	Tadpole TP880V (88100-based VME board) & Motorola MVME181 (88100-based VME board) (bare machines)
Aitech Defense Systems, Inc. AI-ADA/96K, Version 3.0 (#911012W1.11224)	VAXstation 3100 Cluster (under VMS 5.3)	DSP96002 ADS board (bare machine)

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
Aitech Defense Systems, Inc. AI-ADA/96K, Version 3.0 (#911012W1.11225)	Sun-4/330 (under SunOS 4.1.1)	DSP96002 ADS board (bare machine)
Alliant Computer Systems Corporation Alliant FX/Ada-2800 Compiler, Version 1.0 (#901218W1.11105)	Alliant FX/2800 (under Concentrix Release 2.0)	Same as Host
Alliant Computer Systems Corporation Alliant FX/Ada Compiler, Version 2.3 (#901218W1.11106)	Alliant FX/80 (under Concentrix Release 5.7)	Same as Host
Alsys AlsyCOMP_053, Version 1.82 (#900509I1.11009)	VAX 8530 (under VMS, Version 5.1)	Same as Host
Alsys AlsyCOMP_042, Version 5.3 (#900627N1.11013)	IBM 9370 Model 90 (under AIX/370 Version 1.2)	Same as Host
Alsys AlsyCOMP_026, Version 1.82 (#900814I1.11040)	Sun-3/60 (under SunOS, Version 4.0.3)	Same as Host
Alsys AlsyCOMP_025, Version 1.83 (#900814I1.11041)	MIPS M/120-5 (under RISC/os, Version 4.0)	Same as Host
Alsys AlsyCOMP_046, Version 5.3 (#901022A1.11043)	Sony NEWS NWS-1850 (under NEWS-OS 3.3)	Same as Host
*Validated by Registration Alsys AlsyCOMP_046, Version 5.3 (BASE #901022A1.11043)	Sony NEWS series 1250, 15xx, 17xx, 18xx & 19xx (under NEWS-OS versions 3.3 & 3.4)	Any Host
Alsys AlsyCOMP_004, Version 5.3 (#901022A1.11044)	Apollo DN4000 (under Domain/OS SR10.2)	Same as Host
*Validated by Registration Alsys AlsyCOMP_004, Version 5.3 (BASE #901022A1.11044)	Apollo DN3000, DN3500, DN4000 & DN4500 (under Domain/OS SR10.2 & SR10.3)	Any Host

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
Alsys AlsyCOMP_050, Version 5.3 (#901022A1.11045)	Bull DPX/2 320 (under B.O.S. 02.00.05)	Same as Host
*Validated by Registration Alsys AlsyCOMP_050, Version 5.3 (BASE #901022A1.11045)	Bull DPX 2/210, /220, /320, /340 & /360 (under BOS 02.00.05 & 2.00.10)	Any Host
Alsys AlsyCOMP_002, Version 5.3 (#901022A1.11046)	HP 9000s350 (under HP-UX 6.5)	Same as Host
*Validated by Registration Alsys AlsyCOMP_002, Version 5.3 (BASE #901022A1.11046)	HP 9000 Series 300, all models (under HP-UX 6.5 & 7.0)	Any Host
Alsys AlsyCOMP_005, Version 5.3 (#901022A1.11047)	Sun-3/260 (under SunOS 3.2)	Same as Host
*Validated by Registration Alsys AlsyCOMP_005, Version 5.3 (BASE #901022A1.11047)	Sun 3/50, /60, /75, /80, /160, /260, /280, /470 & /480 (under SunOS 3.2, 3.5, 4.0 & 4.1)	Any Host
Alsys AlsyCOMP_035, Version 5.3 (#901022A1.11048)	CETIA Unigraph 6000 (under Unigraph/X 3.1)	Same as Host
*Validated by Registration Alsys AlsyCOMP_035, Version 5.3 (BASE #901022A1.11048)	Unigraph 1000/325, 2000/50, 2000/250, 2000/325, 3000/325-333, 6000/325-333, 7000/325, 8000/325 & 9000 (under Unigraph/X 3.1 & 3.1.1)	Any Host
Alsys AlsyCOMP_016 Version 5.1 (#901102W1.11055)	Compaq Deskpro 386 (under MS-DOS 3.30, Phar Lap 2.0)	Same as Host
Alsys AlsyCOMP_016 Version 5.1 (#901102W1.11056)	CompuAdd 320 (under MS-DOS 3.30, Phar Lap 2.0)	Same as Host
*Validated by Registration Alsys AlsyCOMP_016 Version 5.1 (BASE #901102W1.11056)	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)	Same as Host

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
*Validated by Registration AIsys AIsyCOMP_016, Version 5.1 (BASE #901102W1.11056)	HP Vectra RS/20, RS/20C, RS/25 & RS/25C; AST Premium 386; and Unisys 386 & Desktop III (under MS-DOS 3.30, Phar Lap 2.0)	Any Host
AIsys AIsyCOMP_016 Version 5.1 (#901102W1.11057)	ALR Power Veisa 486 (under MS-DOS 3.30, Phar Lap 2.0)	Same as Host
AIsys AIsyCOMP_003 Version 5.1 (#901102W1.11058)	HP Vectra RS/25C (under MS-DOS 3.30)	Same as Host
*Validated by Registration AIsys AIsyCOMP_003, Version 5.1 (BASE #901102W1.11058)	Unisys Desktop III (under MS-DOS 3.30)	Same as Host
AIsys AIsyCOMP_003 Version 5.1 (#901102W1.11059)	Zenith Z-248 Model 50 (under MS-DOS 3.30)	Same as Host
*Validated by Registration AIsys AIsyCOMP_003, Version 5.1 (BASE #901102W1.11059)	HP Vectra ES/12; and IBM PC/AT (all models) (under MS-DOS 3.30)	Any Host
*Validated by Registration AIsys AIsyCOMP_003, Version 5.1 (BASE #901102W1.11059)	ICS SB286SC/12 (under MS-DOS 3.30)	Same as Host
AIsys AIsycomp_037, Version 5.2 (#901114N1.11065)	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)	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
*Validated by Registration AIsys AIsyCOMP_037, V5.3 (BASE #901114N1.11065)	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)	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; 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

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
Alsys AlyCOMP_012, Version 5.3 (#901116A1.11066)	HP 9000s350 (under HP-UX 6.5)	Motorola MVME101 (68000) (bare machine, using ARTK Version 5.3)
*Validated by Registration AlyCOMP_012, Version 5.3 (BASE #901116A1.11066)	HP 9000 Series 300 (all models) (under HP-UX 6.5 & 7.0)	Motorola M68332EVS Evaluation System Customers (CPU32) (bare machine, using ARTK 5.3)
*Validated by Registration AlyCOMP_012, Version 5.3 (BASE #901116A1.11066)	HP 9000 Series 300, Models 340, 345, 360, 370 & 375 (under HP-UX 6.5 & 7.0)	Motorola MVME101 (68000), MVME121 (68010), MVME135-1 (68020/68881) & MVME147-1 (68030/68882) (bare machines, using ARTK 5.3)
AlyCOMP_036, Version 5.3 (#901116A1.11067)	Apollo DN4000 (under Domain/OS SR10.2)	Motorola MVME147-1 (68030/68882) (bare machine, using ARTK Version 5.3)
*Validated by Registration AlyCOMP_036, Version 5.3 (BASE #901116A1.11067)	Apollo DN 3000, 3500, 4000 & 4500 (under Domain/OS SR10.2 & SR10.3)	Motorola MVME101 (68000), MVME121 (68010), MVME135-1 (68020/68881) & MVME147-1 (68030/68882) (bare machines, using ARTK 5.3)
AlyCOMP_015, Version 5.3 (#901116A1.11068)	Sun 3/260 (under SunOS 3.2) (bare machine, using ARTK Version 5.3)	Motorola MVME121 (68010)
*Validated by Registration AlyCOMP_015, Version 5.3 (BASE #901116A1.11068)	Sun 3/50, /60, /75, /80, /160, /260, /280, /470 & /480 (under SunOS 3.2, 3.5, 4.0 & 4.1)	Motorola MVME101 (68000), MVME121 (68010), MVME135-1 (68020/68881) & MVME147-1 (68030/68882) (bare machines, using ARTK 5.3)
Alycomp_017, Version 5.2 (#901118N1.11064)	MicroVAX II (under VMS V5.3)	INMOS T425 transputer on a B403 TRAM (bare) using the Host running INMOS Iserver 1.3 for file-server support via a CAPLIN QT0 board link
*Validated by Registration AlyCOMP_017, V5.3 (BASE #901118N1.11064)	MicroVAX II (under VMS V5.3)	INMOS T425 transputer on a B403 TRAM (bare) using the Host running INMOS Iserver 1.3 for file-server support via a CAPLIN QT0 board link; INMOS T800 transputer on a B405 TRAM (bare) using the Host running INMOS Iserver 1.3 for file-server support via a CAPLIN QT0 board link
AlyCOMP_018 Version 5.2 (#901120A1.11070)	MicroVAX 3100 (under VMS 5.3)	Same as Host

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
*Validated by Registration Aلسys AلسyCOMP_018, Version 5.2 (BASE #901120A1.11070)	DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 4000, VAX 6000, VAX 8000 & VAX 9000 Series of computers (as supported) (under VMS 5.2 & 5.4)	Any Host
Aلسys AلسyCOMP_006, Version 5.3 (#901125N1.11071)	IBM 9370 Model 90 (under VM/IS CMS release 5.1)	Same as Host
Aلسys AلسyCOMP_023, Version 5.3 (#901125N1.11072)	IBM 370 3084Q (under MVS/XA release 3.2)	Same as Host
Aلسys AلسyCOMP_011, Version 5.3 (#901127A1.11069)	VAX 6210 (under VMS 5.2) (68020/68881) (bare machine, using ARTK Version 5.3)	Motorola MVME135-1
*Validated by Registration Aلسys AلسyCOMP_011, Version 5.3 (BASE #901127A1.11069)	DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 4000, VAX 6000, VAX 8000 & VAX 9000 Series of computers (as supported) (under VMS 5.2, 5.3 & 5.4)	Motorola MVME101 (68000), MVME121 (68010), MVME135-1 (68020/68881) & MVME147-1 (68030/68882) (bare machines, using ARTK 5.3)
Aلسys AلسyCOMP_034, Version 5.1 (#901221W1.11103)	Multitech 1100 (under SCO Unix 3.2)	Same as Host
*Validated by Registration Aلسys AلسyCOMP_034, Version 5.1 (BASE #901221W1.11103)	Any Computer System comprising: cpu: Intel 80386 or 80486; fpu: optional (under a Unix 3.2-based OS)	Each Host, self-targetted
*Validated by Registration Aلسys AلسyCOMP_034, Version 5.1 (BASE #901221W1.11103)	Everex AGI 3000D, Compaq Deskpro 386 & SAI Technologies Army Lightweight Computer Unit (LCU V2) (under Interactive Unix 3.2)	Each Host, self-targetted
*Validated by Registration Aلسys AلسyCOMP_034, Version 5.1 (BASE #901221W1.11103)	Prime MBX (under Prime Unix V.4)	Same as Host
Aلسys AلسyCOMP_043, Version 5.3 (#901221W1.11104)	Apple Macintosh Iicx (under Macintosh System Software 6.0.5)	Same as Host

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
Alsys AlsyCOMP_034 Version 5.1 (#910129W1.11113)	IBM PS/2 Model 80 (under LynxOS Version 2.0 + Threads Release 11)	Same as Host
*Validated by Registration Alsys AlsyCOMP_034, Version 5.1 (BASE #910129W1.11113)	IBM PS/2 Models 70-xxx & 80-xxx (under LynxOS Version 2.0 Release 15)	Any Host
Alsys AlsyCOMP_056, Version 1.82 (#910131I1.11127)	Sun 3/60 (under SunOS, Version 4.0.3)	KWS EB68020 (under OS-9/68020, Version 2.3)
Alsys AlsyCOMP_055, Version 1.82 (#910201I1.11128)	VAX 8530 (under VMS, Version 5.3-1)	KWS EB68020 (under OS-9/68020, Version 2.3)
Alsys AlsyCOMP_029, Version 5.3 (#910323W1.11131)	CompuAdd 325 (under DOS 3.31)	Intel ISBC 386/116 (bare machine, using ARTK 5.3)
Alsys AlsyCOMP_030, Version 5.3 (#910323W1.11132)	MicroVAX II (under VMS 5.2)	Intel ISBC 386/31 (bare machine, using ARTK 5.3)
Alsys AlsyCOMP_033, Version 5.3 (#910323W1.11133)	Sun 3/140 (under SunOS 4.1)	Intel ISBC 386/12 (bare machine, using ARTK 5.3)
Alsys AlsyCOMP_049, Version 1.83 (#910407I1.11144)	VAX 8530 (under VMS Version 5.3-1)	Integrated Device Technology IDT7RS301 System (R3000/R3010) (bare machine)
Alsys AlsyCOMP_057, Version 1.83 (#910625I1.11193)	DECstation 3100 (under ULTRIX Version 4.0)	Same as Host
Alsys AlsyCOMP_024, Version 5.3 (#910809W1.11195)	IBM RISC System 6000, model 520 (under AIX v3.1)	Same as Host
Alsys AlsyCOMP_058, Version 5.3 (#910809W1.11196)	Unisys B39 (under BTOS II, v3.2.0)	Same as Host
Alsys AlsyCOMP_040, Version 5.3 (#910809W1.11197)	HP Vectra RS/25C (under DOS 3.30) v3.2.0)	Unisys B39 (under BTOS II,
Concurrent Computer Corporation C3Ada, Version 0.5 (#900427I1.11008)	Concurrent Computer Corporation 8400 (MIPS R3000/3010) (under RTU Version 5.1)	Same as Host

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
*Validated by Registration Concurrent Computer Corporation C3Ada, Version 0.5 (BASE #90042711.11008)	Concurrent Computer Corporation 8500 (MIPS R3000/R3010) (under RTU Version 5.1)	Same as Host
Concurrent Computer Corporation C3 Ada Version 1.1v (#901130W1.11107)	Concurrent Computer Corporation 6650 with Super Lightning Floating Point (under RTU Version 5.0C)	Same as Host
*Validated by Registration Concurrent Computer Corporation C3 Ada, Version 1.1 (BASE #901130W1.11107)	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)	Same as Host
*Validated by Registration Concurrent Computer Corporation C3 Ada, Version 1.1v (BASE #901130W1.11107)	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)	Any Host
Concurrent Computer Corporation C3 Ada Version R03-00V (#901130W1.11108)	Concurrent Computer Corporation 3280MPS (under OS/32 Version R08-03.2)	Same as Host
*Validated by Registration Concurrent Computer Corporation C3 Ada, Version R03-00V (BASE #901130W1.11108)	Concurrent Computer Corporation Series 3200: 3200 MPS, 3203, 3205, 3210, 3220, 3230, 3250, 3230XP, 3250XP, 3230MPS, 3260MPS, Micro4, and Micro5 (under OS/32 Versions R08-03, R08-03.1 & R08-03.2)	Any Host
Concurrent Computer Corporation C3 Ada Version 1.0v (#901130W1.11109)	Concurrent Computer Corporation 8400 (MIPS R3000/3010) (under RTU Version 5.1)	Same as Host
*Validated by Registration Concurrent Computer Corporation C3 Ada, Version 1.0 (BASE #901130W1.11109)	Concurrent Computer Corporation Series 8000 (MIPS R3000/3010) (under RTU Versions 5.1A, 5.1B & 6.0)	Same as Host

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
*Validated by Registration Concurrent Computer Corporation C3 Ada, Version 1.0v (BASE #901130W1.11109)	Concurrent Computer Corporation Series 8000 (all models) (under RTU Versions 5.1, 5.1A & 5.1B)	Any Host
*Validated by Registration Concurrent Computer Corporation C3 Ada, Version 2.0p (BASE #901130W1.11109)	Concurrent Computer Corporation Series 8000 (R3000/3010), all models (under RTU Versions 5.1A, 5.1B & 6.0)	Same as Host
Concurrent Computer Corporation C3 Ada Version 1.1v (#901130W1.11110)	Concurrent Computer Corporation 6650 with MC68882 Floating Point (under RTU Version 5.0C)	Same as Host
*Validated by Registration Concurrent Computer Corporation C3 Ada, Version 1.1 (BASE #901130W1.11110)	Concurrent Computer Corporation Series 6000 (MC68030/MC68882) & Series 5000 (MC68020/MC68881) (under RTU Versions 5.0A, 5.0B, 5.0C & 6.0)	Same as Host
*Validated by Registration Concurrent Computer Corporation C3 Ada, Version 1.1v (BASE #901130W1.11110)	Concurrent Computer Corporation Series 6000 with an MC68882 fpu, and Series 5000 with an MC68881 fpu (all models) (under RTU Versions 5.0A, 5.0B & 5.0C)	Any Host
*Validated by Registration Concurrent Computer Corporation C3 Ada, Version 1.2 (BASE #901130W1.11110)	Concurrent Computer Corporation Series 7000 (MC68040) (under RTU Version 6.1)	Any Host
CONVEX Computer Corporation CONVEX Ada, Version 2.0 (#900910W1.11027)	CONVEX C220 (under ConvexOS 8.1)	Same as Host
*Validated by Registration CONVEX Computer Corporation CONVEX Ada, Version 2.0 (BASE #900910W1.11027)	CONVEX C120, C201, C202, C210, C210i, C220, C220i, C230, C230i, C240, C3210, C3220, C3230, C3240, C3410, C3420, C3430, C3440, C3450, C3460, C3470, C3480, C3810, C3820, C3830, C3840, C3850, C3860, C3870, C3880 (under ConvexOS versions 8.1, 9.0, 9.1 & 10.0)	Each Host, self-targetted

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
*Validated by Registration CONVEX Computer Corporation CONVEX Ada, Version 2.0 (BASE #900910W1.11027)	CONVEX C120, C201, C202, C210, C220, C230, C240, C210i, C220i & C230i (under ConvexOS, Versions 8.1 and 9.0)	Any Host
Cray Research, Inc. Cray Ada Compiler Release 2.0 (#901112W1.11116)	Cray X-MP/EA (under UNICOS Release 5.0)	Same as Host
*Validated by Registration Cray Research, Inc. Cray Ada Compiler Release 2.0 (BASE #901112W1.11116)	CRAY X-MP & X-MP/EA, all models (under UNICOS Releases 5.1, 6.0 & 6.1)	Same as Host
Cray Research, Inc. Cray Ada Compiler Release 2.0 (#901112W1.11117)	Cray Y-MP (under UNICOS Release 5.0)	Same as Host
*Validated by Registration Cray Research, Inc. Cray Ada Compiler Release 2.0 (BASE #901112W1.11117)	Cray Y-MP, all models (under UNICOS Releases 5.1, 6.0 & 6.1)	Same as Host
Cray Research, Inc. Cray Ada Compiler Release 2.0 (#911006W1.11223)	CRAY-2/4-128 (under UNICOS Release 6.1)	Same as Host
*Validated by Registration Cray Research, Inc. Cray Ada Compiler Release 2.0 (BASE #911006W1.11223)	CRAY-2 (all models) (under UNICOS Release 6.1)	Any Host
DDC International A/S DACS VAX/VMS to 80386 PM Bare Ada Cross Compiler System, Version 4.6 (#901129S1.11074)	VAX 8530 (under VMS Version 5.3)	Intel ISBC 386/21 (bare machine)
DDC International A/S DACS 80386 UNIX V Ada Compiler System, Version 4.6 (#901129S1.11075)	ICL DRS300 (under DRS/NX, Version 3.2 (UNIX System V/386 release 3.2))	Same as Host
DDC International A/S DACS Sun3/SunOS Native Ada Compiler System, Version 4.6 (#901129S1.11076)	Sun-3/60 (under SunOS, Version 4.0_Export)	Same as Host
DDC International A/S DACS VAX/VMS to 80186 Bare Ada Cross Compiler System with Rate Monotonic Scheduling, Version 4.6 (#901129S1.11077)	VAX 8530 (under VMS Version 5.3)	Intel ISBC 186/03 (bare machine)

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
DDC International A/S DACS VAX/VMS to 80386 Bare Ada Cross Compiler System with Rate Monotonic Scheduling, Version 4.6 (#901129S1.11078)	VAX 8530 (under VMS Version 5.3)	Intel ISBC 386/21 (bare machine)
DDC International A/S DACS VAX/VMS to 80186 Bare Ada Cross Compiler System, Version 4.6 (#901129S1.11079)	VAX 8530 (under VMS Version 5.3)	Intel ISBC 186/03 (bare machine)
DDC International A/S DACS 80386 DMS/OS Ada Compiler System, Version 4.6 (#901129S1.11112)	IBM PS/2 Model 80-311 (under LynxOS 386/PS2, Version 2.0A)	Same as Host
DDC International A/S DACS VAX/VMS to 80860 Bare Ada Cross Compiler System, Version 4.6.1 (#910502S1.11158)	VAX 8530 (under VMS Version 5.3)	Tadpole Technology plc TP860M (bare machine)
DDC International A/S DACS Sun-3/SunOS to 68030 Bare Ada Cross Compiler System, Version 4.6.4, MRI IEEE 695 (BASIC_MODE) (#910502S1.11159)	Sun-3/50 (under SunOS Release 4.0_Export)	Motorola MVME143 board (68030/68882) (bare machine)
DDC International A/S DACS Sun-3/SunOS to 68030 Bare Ada Cross Compiler System, Version 4.6.4, MRI IEEE 695 (SECURE_MODE) (#910502S1.11160)	Sun-3/50 (under SunOS Release 4.0_Export)	Motorola MVME143 board (68030/68882) (bare machine)
DDC-I International A/S DACS VAX/VMS Native Ada Compiler System, Version 4.6 (#901129S1.11050)	VAX 8530 (under VMS Version 5.3)	Same as Host
DDC-I International A/S DACS VAX/VMS to 68020 Bare Cross Compiler System, Version 4.6 (#901129S1.11051)	MicroVAX 3100 (under VMS Version 5.3)	Motorola MVME133 board (68020/68881) (bare machine)
*Validated by Registration DDC-I, Inc. DACS VAX/VMS to 80486 PM Bare Ada Cross Compiler System, Version 4.6 (BASE #901129S1.11074)	VAX 8530 (under VMS Version 5.3)	Intel ISBC 486/125 (bare machine)
Digital Equipment Corporation VAX Ada, Version 2.2 (#901109S1.11053)	VAX 8800 (under VMS Version 5.4)	Same as Host

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
<p>*Validated by Registration Digital Equipment Corporation VAX Ada Version 2.2 (BASE #901109S1.11053)</p>	<p>DEC VAX-11, VAXserver, VAXstation, VAXft, MicroVAX, VAX 4000, VAX 6000, VAX 8000 & VAX 9000 Series of computers (as supported); Ratheon Military VAX Computer Model 860; and Norden MilVAX Computer Model MilVAX II (under VMS Version 5.4)</p>	<p>Any Host</p>
<p>Digital Equipment Corporation VAX Ada, Version 2.2 (#901109S1.11054)</p>	<p>VAX 8800 (under VMS Version 5.4)</p>	<p>MicroVAX II (under VAXELN Version 4.1, using VAXELN Ada Version 2.2)</p>
<p>*Validated by Registration Digital Equipment Corporation VAX Ada Version 2.2 (BASE #901109S1.11054)</p>	<p>DEC VAX-11, VAXserver, VAXstation, VAXft, MicroVAX, VAX 4000, VAX 6000, VAX 8000 & VAX 9000 Series of computers (as supported); Ratheon Military VAX Computer Model 860; and Norden MilVAX Computer Model MilVAX II (under VMS Version 5.4)</p>	<p>VAX 4000 Models 200 & 300; VAX 6000 Series 200, 300 & 400; VAX 8200, 8250, 8500, 8530, 8550, 8700, 8800 & 8810; VAX-11/730 & /750; MicroVAX II, 2000, 3100, 3300, 3400, 3500, 3600, 3800 & 3900; VAXstation 2000, 3100, 3150, 3200, 3500 & II/GPX; VAXserver 3100, 3300, 3400, 3500, 3600, 3800, 3900; VAXserver 4000-300; VAXserver 6000 Models 210, 220, 310, 320, 410 & 420; Ratheon Military VAX Computer Models 810 & 860; Norden MilVAX Computer model MilVAX II, I VAX 620 & 630; VAX RTA; KA620-BA & KA800-M; rtVAX 300, 1000, 3200, 3300, 3305, 3400, 3500, 3600, 3800, 4000 Model 300, 8550, 8700, rtVAX 6000 models 200, 300 & 400 Series and rtVAXstation 3100 Models 30 & 38 (under VAXELN Version 4.2, using VAXELN Ada Version 2.2)</p>
<p>*Validated by Registration Digital Equipment Corporation VAX Ada Version 2.2 (BASE #901109S1.11054)</p>	<p>VAX 6000 Model 200, 300 & 400 Series; VAX 8200, 8250, 8300, 8350, 8500, 8530, 8550, 8600, 8650, 8700, 8800, 8810, 8820, 8830, 8840, 8842, 8974 & 8978; VAX-11/730, /750, /780, /785; MicroVAX II, 2000, 3100, 3300, 3400, 3500, 3600, 3800 & 3900; VAXstation II, 2000, 3100 series, 3200, 3500, 3520, 3540 & 8000; VAXserver 3100, 3300, 3400, 3500, 3600, 3602, 3800, 3900; VAXserver 6000-310, 6000-410 & 6000-420; Ratheon Military VAX Computer Model 860 (under VMS Version 5.4)</p>	<p>VAX 6000 Model 200, 300 & 400 Series; VAX 8200, 8250, 8500, 8530, 8550, 8700, 8800 & 8810; VAX-11/730 & /750; MicroVAX II, 2000, 3100, 3300, 3400, 3500, 3600, 3800 & 3900; VAXstation 2000, 3100, 3150, 3200, 3500 & II/GPX; VAXserver 3100, 3300, 3400, 3500, 3600, 3602, 3800, 3900; VAXserver 6000 Models 210 220, 310, 320, 410 & 420; Ratheon Military VAX Computer Models 810 & 860; Norden Systems: Mil Vax II, IVAX 620 & 630; VAX RTA; KA620-BA, rtVAX 300, 1000, 3200, 3300, 3305, 3400, 3500, 3600, 3800, 8550, 8700, rtVAX 6000 Model 200, 300 & 400 Series & rtVAXstation 3100 Models 30 & 38 (under VAXELN Version 4.1 using VAXELN Ada Version 2.2)</p>
<p>Digital Equipment Corporation DEC Ada, Version 1.0 (#911025S1.11226)</p>	<p>DECstation 5000 Model 200 (under ULTRIX 4.2)</p>	<p>Same as Host</p>

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
*Validated by Registration Digital Equipment Corporation DEC Ada, Version 1.0 (BASE #911025S1.11226)	DECstation 2100, 3100, 3100s, 5000 Models 120/125, 120/125CX, 120/125PXG, 120/125PXG TURBO, 200, 200CX, 200PX, 200PXG, 200PXG TURBO; and DECsystem 3100, 5000 Model 200, 5100, 5400, 5500, 5810, 5820, 5830 & 5840 (under ULTRIX Versions 4.0, 4.1 & 4.2)	Any Host
E-Systems/ECI Division Tolerant Ada Development System, Version 6.0 (#901003W1.11039)	Tolerant Eternity (under TX, 5.4.0)	Same as Host
Encore Computer Corporation Parallel Ada Development System, Revision 1.0 (#910130W1.11114)	Encore 91 Series Model 91-0340 (under UMAX 3.0)	Same as Host
*Validated by Registration Encore Computer Corporation Parallel Ada Development System, Revision 1.0 (BASE #910130W1.11114)	Encore 91 Series, all models (under UMAX 3.0)	Any Host
Encore Computer Corporation Parallel Ada Development System, Revision 1.0 (#910130W1.11115)	Encore 91 Series Model 91-0340 (under UMAX 3.0)	Encore 91 Series Model 91-0430 (under uMPX 1.0)
*Validated by Registration Encore Computer Corporation Parallel Ada Development System, Revision 1.0 (BASE #910130W1.11115)	Encore 91 Series, all models (under UMAX 3.0)	Encore 91 Series, all models (under microMPX 1.0)
GSE Gesellschaft fur Software-Engineering mbH Meridian Ada, Version 4.1 (#910711W1.11180)	MIPS M/120 RISComputer (under UMIPS 4.51)	Same as Host
GSE Gesellschaft fur Software-Engineering mbH Meridian Ada, Version 4.1 (#910711W1.11182)	IBM RISC System 6000/520 (under ALX Version 3)	Same as Host
GSE Gesellschaft fur Software-Engineering mbH Meridian Ada, Version 4.1 (#910711W1.11184)	HP 9000 Series 400 Model 400T (under HP-UX 7.03)	Same as Host
GSE Gesellschaft fur Software-Engineering mbH Meridian Ada, Version 4.1 (#910711W1.11186)	Concurrent Computer Corporation M6000 Model 6450 (under RTU 5.0C)	Same as Host

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
GSE Gesellschaft fur Software-Engineering mbH Meridian Ada, Version 4.1 (#910711W1.11187)	Concurrent Computer Corporation M8000 Model 8500 (under RTU 5.1A)	Same as Host
GSE Gesellschaft fur Software-Engineering mbH Meridian Ada, Version 4.1 (#910711W1.11188)	Data General AViON 400 model 402 (under DG/UX 4.31)	Same as Host
GSE Gesellschaft fur Software-Engineering mbH Meridian Ada, Version 4.1 (#910711W1.11190)	HP 9000 Series 700 Model 720 (under HP-UX 8.01)	Same as Host
Harris Corporation, Computer Systems Division Harris Ada 5.1 (#900918W1.11028)	Harris NH-4400 (under CX/UX 5.1)	Same as Host
*Validated by Registration Harris Corporation, Computer Systems Division Harris Ada 5.1 (BASE #900918W1.11028)	Harris NH-4400 (under CX/UX 5.1, CX/RT 5.1, OR CX/SX 5.1)	Any Host
*Validated by Registration Harris Corporation, Computer Systems Division Harris Ada 5.1.1 (BASE #900918W1.11028)	Harris NH-4400 & NH-4800 (under CX/UX 5.3, CX/RT 5.3 & CX/SX 5.3)	Any Host (using either Harris Ada Run-time System or ARMS Run-time System)
*Validated by Registration Harris Corporation, Computer Systems Division Harris Ada Compiler, Version 5.1 (BASE #900918W1.11028)	Harris NH-4400 (under CX/UX 5.2, CX/RT 5.2 & CX/SX 5.2)	Same as Host
Harris Corporation, Computer Systems Division Harris Ada 5.1 (#900918W1.11029)	Harris NH-3800 (under CX/UX 5.1)	Same as Host
*Validated by Registration Harris Corporation, Computer Systems Division Harris Ada 5.1 (BASE #900918W1.11029)	Harris NH-1200, NH-3400 & NH-3800 (under CX/UX 5.1, CX/RT 5.1, OR CX/SX 5.1)	Any Host
*Validated by Registration Harris Corporation, Computer Systems Division Harris Ada 5.1.1 (BASE #900918W1.11029)	Harris NH-1200, NH-3400 & NH-3800 (under CX/UX 5.3, CX/RT 5.3 & CX/SX 5.3)	Any Host

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
*Validated by Registration Harris Corporation, Computer Systems Division Harris Ada Compiler, Version 5.1 (BASE #900918W1.11029)	NH-1200, NH-3400 & NH-3800 (under CX/UX 5.2, CX/RT 5.2 & CX/SX 5.2)	Same as Host
Hewlett-Packard Co./Apollo Systems Division Domain Ada V6.0m (#910411W1.11137)	DN4500 (under Domain/OS SR10.3)	Same as Host
Hewlett-Packard Co./Apollo Systems Division Domain Ada V6.0p (#910411W1.11138)	DN10000 (under Domain/OS SR10.3.p)	Same as Host
Hewlett-Packard Company HP 9000 Series 300 Ada Compiler, Version 5.35 (#901022W1.11049)	HP 9000 Series 300 Model 370 (under HP-UX, Version A.07.00)	Same as Host
*Validated by Registration Hewlett-Packard Company HP 9000 Series 300 Ada Compiler, Version 5.35 (BASE #901022W1.11049)	HP 9000 Series 300 & 400, all models (under HP-UX, Version A.B7.03)	Any Host
*Validated by Registration Hewlett-Packard Company HP 9000 Series 300 Ada Compiler, Version 5.35t (BASE #901022W1.11049)	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)	Any Host from the same Series, under the same OS version
Hewlett-Packard Company HP 9000 Series 700/800 Ada Compiler, Version 5.35 (#911107W1.11227)	HP 9000 Series 700 Model 720 (under HP-UX, Version A.B8.05 (release 8.05))	Same as Host
Hewlett-Packard Company HP 9000 Series 700/800 Ada Compiler, Version 5.35 (#911107W1.11228)	HP 9000 Series 800 Model 835 (under HP-UX, Version A.B8.00 (release 8.00))	Same as Host
IBM Canada, Ltd. AIX Ada/6000 Release 2, Preliminary Version (#901127W1.11085)	RISC System/6000 model 7013-530 (under AIX 3.1)	Same as Host
*Validated by Registration IBM Canada, Ltd. AIX Ada/6000 Release 2.0 (BASE #901127W1.11085)	RISC System/6000 models 7013 -320, -520, -530, -540, -550, -730 & -930 (under AIX 3.1)	Any Host
InterACT Corporation InterACT Ada 1750A Compiler System, Release 3.5 (#910705S1.11191)	MicroVAX 3100 Cluster (under VMS 5.2)	InterACT MIL-STD-1750A Instruction Set Architecture Simulator Release 2.3 (bare machine simulation)

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
InterACT Corporation InterACT Ada MIPS Cross-Compiler System, Release 2.0 (#910705S1.11192)	MicroVAX 3100 Cluster (under VMS 5.2) machine)	Lockheed Sanders STAR MVP R3000/R3010 Board (bare
*Validated by Registration InterACT Corporation InterACT Ada MIPS Cross-Compiler System, Release 2.1 (BASE #910705S1.11192)	MicroVAX 3100 Cluster (under VMS 5.2) machine)	Lockheed Sanders STAR MVP R3000/R3010 Board (bare
Intermetrics, Inc. UTS Ada Compiler, Version 302.03 (#910425W1.11141)	IBM 3083 (under UTS 580 Release 1.2.3)	Same as Host
Intermetrics, Inc. Intermetrics MVS Ada Compiler, Version 7.0 (#910622W1.11170)	Amdahl 5890/180E (under MVS/XA Release 2.2)	Same as Host
International Business Machines Corporation IBM Ada/370, Version 1.1.0 (#901128W1.11091)	IBM 3083 (under VM/SP HPO Release 5.0)	Same as Host
*Validated by Registration International Business Machines Corporation IBM Ada/370, Version 1.1.0 (BASE #901128W1.11091)	IBM 3084 (under VM/ESA Release 1.0 370 Feature)	Same as Host
*Validated by Registration International Business Machines Corporation IBM Ada/370, Version 1.1.0 (BASE #901128W1.11091)	IBM 3090 (under VM/ESA Release 1.0 ESA Feature)	Same as Host
*Validated by Registration International Business Machines Corporation IBM Ada/370, Version 1.1.0 (BASE #901128W1.11091)	IBM 3090 (under VM/SP Release 6.0 HPO 60)	Same as Host
*Validated by Registration International Business Machines Corporation IBM Ada/370, Version 1.1.0 (BASE #901128W1.11091)	IBM 3090 (under VM/XA Release 2.1)	Same as Host
International Business Machines Corporation IBM Ada/370, Version 1.1.0 (#901128W1.11092)	IBM 4381 (under MVS/XA Release 3.8)	Same as Host

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
*Validated by Registration International Business Machines Corporation IBM Ada/370, Version 1.1.0 (BASE #901128W1.11092)	IBM 3090 (under MVS/ESA Release 4.1)	Same as Host
International Business Machines Corporation IBM Ada/370, Version 1.2.0 (optimized) (#910612W1.11166)	IBM 3083 (under VM/SP HPO Release 5.0)	Same as Host
International Business Machines Corporation IBM Ada/370, Version 1.2.0 (optimized) (#910612W1.11167)	IBM 4381 (under MVS/ESA Release 3.1)	Same as Host
International Business Machines Corporation IBM Ada/370, Version 1.2.0 (unoptimized) (#910612W1.11168)	IBM 3083 (under VM/SP HPO Release 5.0)	Same as Host
*Validated by Registration International Business Machines Corporation IBM Ada/370, Version 1.2.0 (BASE #910612W1.11168)	IBM 3084 (under VM/ESA 1.1.0 (370 Feature))	IBM 937x, 43xx, 308x, 3090 & ES/9000 processors (under VM/ESA 1.1.0 (370 Feature))
*Validated by Registration International Business Machines Corporation IBM Ada/370, Version 1.2.0 (BASE #910612W1.11168)	IBM 3090 (under VM/ESA 1.1.0 (ESA Feature))	IBM 937x, 43xx, 308x, 3090 & ES/9000 processors (under VM/ESA 1.1.0 (ESA Feature))
*Validated by Registration International Business Machines Corporation IBM Ada/370, Version 1.2.0 (BASE #910612W1.11168)	IBM 3090 (under VM/ESA 1.1.1)	IBM 937x, 43xx, 308x, 3090 & ES/9000 processors (under VM/ESA 1.1.1)
*Validated by Registration International Business Machines Corporation IBM Ada/370, Version 1.2.0 (BASE #910612W1.11168)	IBM 3090 (under VM/SP HPO 6.0)	IBM 937x, 43xx, 308x, 3090 & ES/9000 processors (under VM/SP HPO 6.0)
*Validated by Registration International Business Machines Corporation IBM Ada/370, Version 1.2.0 (BASE #910612W1.11168)	IBM 3090 (under VM/XA 2.1)	IBM 937x, 43xx, 308x, 3090 & ES/9000 processors (under VM/XA 2.1)

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
International Business Machines Corporation IBM Ada/370, Version 1.2.0 (unoptimized) (#910612W1.11169)	IBM 4381 (under MVS/ESA Release 3.1)	Same as Host
*Validated by Registration International Business Machines Corporation IBM Ada/370, Version 1.2.0 (BASE #910612W1.11169)	IBM 3090 (under MVS/SP XA 2.2)	IBM 937x, 43xx, 308x, 3090 & EX/9000 processors (under MVS/SP XA 2.2)
International Computers Limited VME Ada Compiler VA3,00 (#911003N1.11222)	ICL Series 39 Level 80 (under VME w/ VMEB Environment Option Version SV291)	Same as Host
Irvine Compiler Corporation ICC Ada v7.0.0 (#910510W1.11145)	HP 9000 Model 720 (under HP-UX Release 8.01)	Same as Host
Irvine Compiler Corporation ICC Ada v7.0.0 (#910510W1.11146)	Sun 3/50 (under SunOS V4.0)	Same as Host
Irvine Compiler Corporation ICC Ada v7.0.0 (#910510W1.11147)	HP 9000 Model 400 (under HP-UX Release 7.03)	Same as Host
Irvine Compiler Corporation ICC Ada v7.0.0 (#910510W1.11148)	VAXstation 3100 Model M38 (under VMS 5.3-1)	Intel i80960MC (bare machine)
KRUPP ATLAS ELEKTRONIK GmbH KRUPP ATLAS ELEKTRONIK Ada Compiler VVME 1.82 (#910324I1.11136)	VAX 6000-410 (under VMS Version 5.2) Version 2.1)	KRUPP ATLAS ELEKTRONIK GmbH MPR 2300 (under MOS2300,
Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (#900909W1.11031)	Sun-3/260 (under SunOS, Version 4.1)	Same as Host
Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (#900909W1.11032)	Sun-4/110 (under SunOS, Version 4.1)	Same as Host
*Validated by Registration Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (BASE #900909W1.11032)	Sun Microsystems Sun-4, SPARCserver & SPARCstation computer families (under SunOS Versions 4.1 & 4.1.1)	Any Host

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (#900909W1.11033)	DECstation 3100 (under Ultrix, Version 3.0)	Same as Host
*Validated by Registration Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (BASE #900909W1.11033)	DECstation 2100, 3100 & 5000 (under Ultrix 3.0)	Any Host
Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (#900909W1.11034)	IBM PS/2 Model 60 (with Floating-Point Co-Processor) (under IBM PC-DOS 3.30)	Same as Host
*Validated by Registration Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (BASE #900909W1.11034)	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 3.30	Any Host
Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (#900909W1.11035)	IBM PS/2 Model 30 (with Floating-Point Co-Processor) (under IBM PC-DOS 3.30)	Same as Host
*Validated by Registration Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (BASE #900909W1.11035)	Any Computer System comprising: cpu: any that executes the Intel 8086 instruction set, fpu: Intel 8087 or equivalent, as appropriate, memory: 640 KByte RAM minimum, disk: 20 MByte hard drive, OS: IBM PC-DOS 3.30	Any Host
Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (#900909W1.11036)	ITT XTRA/286 (with Floating-Point Co-Processor) (under MS-DOS 3.20/OS286)	Same as Host
*Validated by Registration Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (BASE #900909W1.11036)	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	Any Host

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (#900909W1.11037)	80 Data 386/25 (under 386/ix 1.0.6)	Same as Host
*Validated by Registration Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (BASE #900909W1.11037)	Any Computer System comprising: cpu: any that executes the Intel 80386 or 80486 Instruction set, fpu: optional Intel 80387 or equivalent, for 80386 cpu, memory: 2 MByte RAM minimum, disk: 40 MByte hard drive, OS: SCO Unix 3.2 or Interactive 386/ix 1.0.6	Any Host machine running the same OS
*Validated by Registration Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (BASE #900909W1.11037)	Sequent Symmetry 2000/40, /200, /400 & /700 (under DYNIX/ptx V1.2.0)	Any Host
Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (#900909W1.11038)	Apple Macintosh II (under System 6.0.3)	Same as Host
*Validated by Registration Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (BASE #900909W1.11038)	Apple Macintosh SE 30 (under System 6.0.3)	Same as Host
Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (#901108W1.11060)	Apple Macintosh II (under A/UX 2.0)	Same as Host
Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (#901108W1.11061)	Stardent Titan P3 (under Stardent/Unix 3.0)	Same as Host
Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (#901108W1.11062)	MicroVAX 3100 (under Ultrix 3.1)	Same as Host
Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (#901108W1.11063)	MicroVAX II (under VMS 5.2)	Same as Host

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
Meridian Software Systems, Inc. Meridian Ada, Version 4.1.1 (#911002W1.11218)	IBM PS/2 Model 80 (with Floating Point Co-Processor) (under IBM PC-DOS 3.30/OS386)	Same as Host
Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (#911002W1.11219)	NeXTstation (under System Release 2.0)	Same as Host
Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (#911002W1.11220)	SGI PowerSeries 4D/310S (under IRIX Sys V 3.3.2)	Mercury MC860 VM (under MC/OS, Version 2.0)
Meridian Software Systems, Inc. Meridian Ada, Version 4.1 (#911002W1.11221)	Sun-4/110 (under SunOS, Version 4.1)	Mercury MC860 VM (under MC/OS, Version 2.0)
MIPS Computer Systems MIPS ASAPP 3.0 (#900619W1.11010)	MIPS M/2000 (under RISC/os 4.50)	R3200-6 CPU board (bare machine)
MIPS Computer Systems MIPS Ada 3.0 (#900619W1.11011)	MIPS M/2000 (under RISC/os 4.50)	Same as Host
NEC Corporation NEC Ada Compiler System for EWS-UX/V (Release 4.0), Version Release 2.1(4.6) (#910918S1.11216)	NEC EWS4800/220 (under EWS-UX/V (Release 4.0) R2.1)	Same as Host
NEC Corporation NEC Ada Compiler System for EWS-UX/V to V70/RX-UX832, Version 1.0 (#910918S1.11217)	NEC EWS4800/60 (under EWS-UX/V R8.1)	NEC MV4000 (under RX-UX832 V1.6)
North China Institute of Computing Technology C_Ada, Version 1.0 (#910902N1.11198)	MicroVAX II (under ULTRIX 3.0)	Same as Host
R.R. Software, Inc. Janus/Ada 2.2.0 Phar Lap/DOS (#901120W1.11088)	IBM PS/2 Model 80 (under Phar Lap/DOS 3.3)	IBM PS/2 Model 80 (under MS DOS 3.3)
*Validated by Registration R.R. Software, Inc. Janus/Ada 2.2.0 Phar Lap/DOS (BASE #901120W1.11088)	Any Computer System Comprising: cpu: Intel 80386, fpu: optional, memory: 4 MByte RAM, disk: 40 MByte hard drive (under Phar Lap/DOS 3.3)	Any Computer System Comprising: cpu: Intel 80386, fpu: optional, memory: 4 MByte RAM, disk: 40 MByte hard drive (under MS DOS 3.3)
R.R. Software, Inc. Janus/Ada 2.2.0 Unix (#901129W1.11089)	Northgate 386/25 (under SCO Unix 3.2)	Same as Host

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
*Validated by Registration R.R. Software, Inc. Janus/Ada 2.2.0 UNIX (BASE #901129W1.11089)	Any Computer System Comprising: cpu: Intel 80386, fpu: optional, memory: 4 MByte RAM, dlisk: 60 MByte hard drive (under Phar Lap/DOS 3.3)	Same as Host
Rational M68020/OS-2000 Cross-Development Facility, Version 7 (#901116W1.11081)	R1000 Series 300 (under Rational Environment Version D_12_24_0)	Phillips PG2100 (OS-2000 Release 2.0)
Rational M68020/Unix Cross-Development Facility, Version 7 (#901116W1.11082)	R1000 Series 300 (under Rational Environment Version D_12_24_0)	HP 9000 Model 370MH (under HP-UX Version 7.0)
Rational M68020/Bare Cross-Development Facility, Version 7 (#901116W1.11083)	R1000 Series 300 (under Rational Environment Version D_12_24_0)	Motorola MVME135 (68020) (bare machine)
Rational Rational Environment, D_12_24_0 (#901116W1.11084)	R1000 Series 300 (under Rational Environment Version D_12_24_0)	Same as Host
*Validated by Registration Rockwell International Corporation DDC-Based Ada/CAPS Compiler, Version 6.1 (BASE #900306W1.11129)	DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 6000, VAX 8000 & VAX 9000 Series of computers (under VMS Versions 5.3-1 & 5.4)	CAPS/AAMP1 (bare machine)
*Validated by Registration Rockwell International Corporation DDC-Based Ada/CAPS Compiler, Version 6.1 (BASE #900306W1.11130)	DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 6000, VAX 8000 & VAX 9000 Series of computers (under VMS Versions 5.3-1 & 5.4)	CAPS/AAMP2 (bare machine)
Rockwell International Corporation DDC-Based Ada/CAPS Compiler, Version 6.0 (#910306W1.11129)	VAX 8650 (under VMS, Version 5.3-1)	CAPS/AAMP1 (bare machine)
Rockwell International Corporation DDC-Based Ada/CAPS Compiler, Version 6.0 (#910306W1.11130)	VAXstation 3100 Model 30 (under VMS 5.4)	CAPS/AAMP2 (bare machine)
SD-Scicon UK Ltd XD Ada MC68020, Version 1.2 (#901007N1.11042)	VAX Cluster (comprising VAXserver 3600, MicroVAX 2000 (2) & MicroVAX II machines) (under VMS Version 5.3)	Motorola MVME133XT board (MC68020) (bare machine)

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
*Validated by Registration SD-Scicon UK Ltd XD Ada MC68020 MVME135 & MVME147, Version 1.2A (BASE #901007N1.11042)	VAX Cluster (comprising VAXserver 3600, MicroVAX 2000 (2) & MicroVAX II machines) (under VMS 5.4)	Motorola MVME135-1 (MC68020) & MVME147S-1 (MC68030) boards (bare machines)
*Validated by Registration SD-Scicon UK Ltd XD Ada MC68020 Version 1.2 (BASE #901007N1.11042)	VAX Cluster (comprising VAXserver 3600, MicroVAX 2000 (2) & MicroVAX II machines) (under VMS 5.3)	Motorola MVME135-1 board (MC68020) and Motorola MVME147S-1 board (MC68030) (bare machines)
*Validated by Registration SD-Scicon UK Ltd XD Ada MC68020, Version 1.2A (BASE #901007N1.11042)	VAX Cluster (comprising VAXserver 3600, MicroVAX 2000 (2) & MicroVAX II machines) (under VMS 5.4)	Motorola MVME133XT board (MC68020) (bare machine)
*Validated by Registration SD-Scicon UK Ltd XD Ada MC68020/EFA, Version 1.2A (BASE #901007N1.11042)	VAX Cluster (comprising VAXserver 3600, MicroVAX 2000 (2) & MicroVAX II machines) (under VMS 5.4)	Motorola MVME135-1 board (MC68020) (bare machine)
SD-Scicon UK Ltd XD Ada MIL-STD-1750A, Version 1.2 (#901214N1.11080)	Local Area VAX Cluster (comprising VAXserver 3600, MicroVAX 2000 (2) & MicroVAX II machines) (under VMS 5.3)	Fairchild F9450 on a SBC-50 board (MIL-STD-1750A) (bare Machine)
SD-Scicon UK Ltd XD Ada MC68000, Version 1.2 (#910314N1.11134)	Local Area VAX Cluster (comprising VAXserver 3600, MicroVAX 2000 (2) & MicroVAX II machines) (under VMS 5.4)	Motorola MC68000 on an MVME117-3FP board (bare machine)
*Validated by Registration SD-Scicon UK Ltd XD Ada MC68000/EFA, Version 1.2 (BASE #910314N1.11134)	Local Area VAX Cluster (comprising VAXserver 3600, MicroVAX 2000 (2) & MicroVAX II machines) (under VMS 5.4)	Motorola MC68000 on an MVME117-3FP board (bare machine)
SD-Scicon UK Ltd XD Ada MC68020/ARTX, Version T1.2 (#910911N1.11199)	Local Area VAX Cluster (comprising VAXserver 3600, MicroVAX 2000 (2) & MicroVAX II machines) (under VMS 5.4)	Motorola MVME147S-1 (MC68030) (bare machine)
Siemens Nixdorf Informations-systeme AG SIEMENS NIXDORF BS2000 Ada Compiler V2.1 (#901119I1.11111)	SIEMENS NIXDORF 7.590G (under BS2000 V9.5)	Same as Host
*Validated by Registration Siemens Nixdorf Informations-systeme AG SIEMENS NIXDORF BS2000 Ada Compiler V2.1 (BASE #901119I1.11111)	SIEMENS NIXDORF 7.530, 7.536, 7.541, 7.550, 7.551, 7.560, 7.561, 7.570, 7.571, 7.580 & 7.590; 7.500-C30, -C40, -H60, -H90 & -H120 (under BS2000 V9.5 & V10.0)	Same as Host

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
Siemens Nixdorf Informations-systeme AG Ada (SINIX) V4.1 (#910711W1.11181)	Siemens Nixdorf WX200 (SINIX-ODT) (under SINIX-ODT V1.0)	Same as Host
*Validated by Registration Siemens Nixdorf Informations-systeme AG Ada (SINIX) V4.1 (BASE #910711W1.11181)	Siemens Nixdorf WX200 (SINIX-ODT) (under SINIX-ODT V1.5)	Same as Host
Silicon Graphics Computer Systems 4D ADA 3.0 (#900703W1.11014)	Iris-4D/380 (under IRIX Release 4D-3.3)	Same as Host
Silicon Graphics Computer Systems 4D ADA 3.0 (#900703W1.11015)	Iris-4D/220S (under IRIX Release 4D-3.3)	Same as Host
Silicon Graphics Computer Systems 4D ADA 3.0 (#900703W1.11016)	Iris-4D/25 (under IRIX Release 4D-3.3)	Same as Host
Silicon Graphics, Inc. VADS SGI-Irix, SC4-ADA-4.0, Version 6.1 (#910920W1.11203)	SGI Indigo (under Irix V4.0)	Same as Host
Silicon Graphics, Inc. VADS SGI-Irix, SC4-ADA-4.0, Version 6.1 (#910920W1.11204)	SGI 4D/440 (under Irix V3.3)	Same as Host
SKY Computers, Inc. Meridian Ada, Version 4.1 (#910711W1.11183)	SGI Personal Iris W-4D25 (under Irix System V 3.3)	SKYbolt 8116-V (under SKYbolt kernel version 2.33)
SKY Computers, Inc. Meridian Ada, Version 4.1 (#910711W1.11185)	SPARCstation 1 (under SunOS release 4.1)	SKYstation 8117-P (under SKYstation kernel version 2.33)
SKY Computers, Inc. Meridian Ada, Version 4.1 (#910711W1.11189)	SGI Personal Iris W-4D25 (under Irix System V 3.3)	Same as Host
Tartan, Inc. Tartan Ada VMS/C30, Version 4.0 (#901210I1.11121)	VAXstation 3100 (under VMS 5.2)	Texas Instruments TMS320C30 Application Board (bare machine)
*Validated by Registration Tartan, Inc. Tartan Ada VMS/C30, Version 4.1 (BASE #901210I1.11121)	VAXstation 3100 (under VMS 5.2)	Texas Instruments TMS320C30 Application Board (bare machine)

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
*Validated by Registration Tartan, Inc. Tartan Ada VMS/C30, Version 4.1.1 (BASE #90121011.11121)	VAXstation 3100 (under VMS 5.2)	Texas Instruments TMS320C30 Application Board, NAVY SEM-D Key Code ADSP (bare machines)
Tartan, Inc. Tartan Ada Sun/960MC, Version 4.0 (#90121011.11122)	Sun 3/60 (under SunOS Version 4.0.3)	Intel ICE960/25 on an Intel EXV80960MC board (bare machine)
Tartan, Inc. Tartan Ada Sun/Sun, Version 4.0 (#90121111.11118)	Sun 3/60 (under SunOS Version 4.0.3)	Same as Host
*Validated by Registration Tartan, Inc. Tartan Ada Sun/Sun, Version 4.1 (BASE #90121111.11118)	Sun 3/60 (under SunOS Version 4.0.3)	Same as Host
*Validated by Registration Tartan, Inc. Tartan Ada Sun/Sun, Version 4.2 (BASE #90121111.11118)	Sun 3/60 (under SunOS Version 4.0.3)	Same as Host
Tartan, Inc. Tartan Ada VMS/960MC, Version 4.0 (#90121211.11120)	VAXstation 3100 (under VMS 5.2)	Intel ICE960/25 on an Intel EXV80960MC board (bare machine)
*Validated by Registration Tartan, Inc. Tartan Ada VMS/960MC, Version 4.1 (BASE #90121211.11120)	VAXstation 3100 (under VMS 5.2)	Intel EXV80960MC board, & Intel ICE960/25 on an Intel EXV80960MC board (bare machines)
Tartan, Inc. Tartan Ada Sun/C30 Version 4.0 (#90121211.11123)	Sun 3/50 (under SunOS Version 4.0.3)	Texas Instruments TMS320C30 Application Board (bare machine)
Tartan, Inc. Tartan Ada VMS/1750A, Version 4.0 (#90121311.11119)	VAXstation 3200 (under VMS 5.2)	Texas Instruments STL VHSIC 1750A (bare machine)
*Validated by Registration Tartan, Inc. Tartan Ada VMS/1750A, Version 4.1 (BASE #90121311.11119)	VAXstation 3200 (under VMS 5.2)	Texas Instruments STL VHSIC 1750A (bare machine)

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
Tartan, Inc. Tartan Ada VMS/680X0, Version 4.1 (#91061311.11171)	VAXstation 3100 (under VMS 5.2)	Motorola MVME134 (MC68020) (bare machine)
TeleSoft TeleGen2 Sun-3 Ada Development System, Version 4.01 (#90052511.11012)	Sun-3/280 (under Sun UNIX 4.2, Release 4.0.3)	Same as Host
TeleSoft TeleGen2 Ada Host Development System, Version 4.1, for SPARCSystems (#901128W1.11090)	Sun-4/280 (under Sun UNIX 4.2, Release 4.1)	Same as Host
TeleSoft TeleGen2 Ada Cross Development System, Version 4.1, for VAX/VMS to 68K (#91012111.11124)	MicroVAX 3800 (under VAX/VMS Version 5.2)	Motorola MVME133A-20 (MC68020) (bare machine)
Validated by Registration TeleSoft TeleGen2 Ada Cross Development System for VAX to 68K, Version 4.1 (BASE #91012111.11124)	DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 6000, VAX 8000 & VAX 9000 Series of computers	Motorola board series MVME133, MVME135*, MVME136* (MC68020); MVME141* & MVME147* (MC68030); and Force CPU-30, CPU-31, CPU-32 & CPU-37 (bare machines)
Validated by Registration TeleSoft TeleGen2 Ada Cross Development System for VAX/VMS to 68K, Version 4.1 (BASE #91012111.11124)	DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 6000, VAX 8000 & VAX 9000 Series of computers (as supported) (under VMS Versions 5.0, 5.1, 5.2, 5.3 & 5.4)	Motorola MVME165 & MVME167* (68040) board families (bare machines)
Validated by Registration TeleSoft TeleSoft TRIAD System for VAX/VMS to 68K, Version 4.1 (BASE #91012111.11124)	DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 6000, VAX 8000 & VAX 9000 Series of computers	Motorola board series MVME147 (MC68030) (bare machines, using TeleAda-Exec)
TeleSoft TeleGen2 Ada Cross Development System, Version 4.1, for VAX/VMS to MIPS (#91012311.11125)	MicroVAX 3800 (under VAX/VMS Version 5.2)	Integrated Device Technology IDT7RS301 System (R3000/R3010) (bare machine)
TeleSoft TeleGen2 Ada Cross Development System, Version 4.1, for SUN-3 to 68K (#91012511.11126)	Sun-3/480 (under Sun UNIX, Release 4.1)	Motorola MVME135-1 (MC68020) (bare machine)
TeleSoft TeleGen2 Ada Cross Development System, Version 3.1 for VAX/VMS to 386 (#91032511.11139)	VAX 6210 (under VMS 5.3)	Intel ISBC 386-120 (80386/387) (bare machine, using TeleAda-EXEC 1.0)

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
TeleSoft TeleGen2 Ada Cross Development System, Version 3.1 for SPARC to 68K (#91032511.11140)	Sun-4/60 (under SunOS 4.1)	Motorola MVME147 (68030) (bare machine, using TeleAda-EXEC 1.0)
Validated by Registration TeleSoft TeleGen2 Ada Cross Development System for SPARC to 68K, Version 4.1 (BASE #91032511.11140)	Sun Microsystems Sun-4, SPARCserver & SPARCstation computer families (under SunOS 4.1)	Motorola MVME133, MVME135*, MVME136* (68020); MVME141* & MVME147* (68030); and MVME165* & MVME167* (68040) board families (bare machines, optionally using TeleAda_Exec 2.0)
TeleSoft TeleGen2 Ada Host Development System, Version 4.1, for MacII Systems (#91072111.11194)	Apple Macintosh IIx (under A/UX 2.0)	Same as Host
TeleSoft TeleGen2 Ada Development System for VAX to 1750A, Version 3.25 (#91102811.11229)	MicroVAX 3800 (under VMS Version 5.4)	MIL-STD-1750A ECSP0 ITS RAID Simulator, Version 6.0 (bare machine simulation, executing on the Host)
Texas Instruments MIPS-Ada, Version 3.0 (#901030W1.11052)	MIPS M/2000 (under RISC/os 4.02)	TI DP32 R3000 Processor (bare machine, using TI DP32 RTE Version 1.0)
Texas Instruments TI Ada, Version 1.0 (#910403W1.11135)	MicroVAX 3400 (under VMS 5.3-1)	TI DP32 R3000 Processor (bare machine, using TI Executive and Runtime Services (EARS) Version 1.0)
U.S. Air Force AFCAS 1750A Ada Compiler, Version 1.0 (#910425W1.11142)	VAXstation 3100 (under VMS Version 5.3)	Air Force RAID MIL-STD-1750A simulator (bare machine simulation, executing on the Host)
U.S. Air Force AFCAS 1750A/XMEM Ada Compiler, Version 1.0 (#910425W1.11143)	VAXstation 3100 (under VMS Version 5.3)	Air Force RAID MIL-STD-1750A simulator (bare machine simulation, executing on the Host)
U.S. NAVY AdaVAX, Version 5.0 (/OPTIMIZE) (#910517S1.11162)	VAX 8600 (under VMS Version 5.3)	Same as Host
U.S. NAVY AdaVAX, Version 5.0 (/NO_OPTIMIZE) (#910517S1.11163)	VAX 8600 (under VMS Version 5.3)	Same as Host
U.S. NAVY AdaVAX, Version 5.0 (/OPTIMIZE) (#910517S1.11164)	VAX-11/785 (under VMS Version 5.3)	Same as Host

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
U.S. NAVY AdaVAX, Version 5.0 (/NO_OPTIMIZE) (#910517S1.11165)	VAX-11/785 (under VMS Version 5.3)	Same as Host
U.S. NAVY Ada/L, Version 4.0 (/OPTIMIZE) (#910626S1.11172)	VAX 8550 (under VMS Version 5.3)	AN/UYK-43 (single cpu) (bare machine)
U.S. NAVY Ada/L, Version 4.0 (/OPTIMIZE) (#910626S1.11173)	VAX 8550 (under VMS Version 5.3)	AN/UYK-43 (EMR) (bare machine)
U.S. NAVY Ada/M, Version 4.0 (/OPTIMIZE) (#910626S1.11174)	VAX 8550 (under VMS Version 5.3)	AN/UYK-44 (EMR) (bare machine)
U.S. NAVY Ada/M, Version 4.0 (/OPTIMIZE) (#910626S1.11175)	VAX 8550 (under VMS Version 5.3)	AN/AYK-14 (bare machine)
U.S. NAVY Ada/L, Version 4.0 (/OPTIMIZE) (#910626S1.11176)	VAX-11/785 (under VMS Version 5.3)	AN/UYK-43 (single cpu) (bare machine)
U.S. NAVY Ada/L, Version 4.0 (/OPTIMIZE) (#910626S1.11177)	VAX-11/785 (under VMS Version 5.3)	AN/UYK-43 (EMR) (bare machine)
U.S. NAVY Ada/M, Version 4.0 (/OPTIMIZE) (#910626S1.11178)	VAX-11/785 (under VMS Version 5.3)	AN/UYK-44 (EMR) (bare machine)
U.S. NAVY Ada/M, Version 4.0 (/OPTIMIZE) (#910626S1.11179)	VAX-11/785 (under VMS Version 5.3)	AN/AYK-14 (bare machine)
UNISYS Corporation UCS Ada, Version 1R1 (#910510S1.11161)	UNISYS 2200/600 (under OS1100, Version 43R2)	Same as Host
*Validated by Registration UNISYS Corporation UCS Ada, Version 1R1 (BASE #910510S1.11161)	UNISYS 1100/90, 2200/100, /200, /400 & /600 (under OS 1100, Version 43R2)	Any Host
Verdix Corporation VAda-110-6161, Version 6.0.2 (#900228W1.11001)	DECstation 3100 (under ULTRIX 3.1)	Same as Host

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
*Validated by Registration Verdix Corporation VAda-110-6161, Version 6.0.2 (BASE #900228W1.11001)	DECstation 2100, 5000; DECsystem 5400, 5810, 5820, 5830, 5840 (under ULTRIX 3.1)	Any Host
*Validated by Registration Verdix Corporation VADS DEC-RISC, Ultrix 4.0, VAda-110-6161, Version 6.0 (BASE #900228W1.11001)	DECstation 2100, 3100, 5000 & 5200; and DECsystem 3100, 5000, 5100, 5200, 5400, 5500, 5810, 5820, 5830 & 5840 (under ULTRIX 4.0)	Any Host
*Validated by Registration Verdix Corporation VADS DEC-RISC, Ultrix 4.1, VAda-110-6161, Version 6.0 (BASE #900228W1.11001)	DECstation 2100, 3100, 5000 & 5200; and DECsystem 3100, 5000, 5100, 5200, 5400, 5500, 5810, 5820, 5830 & 5840 (under ULTRIX 4.1)	Any Host
*Validated by Registration Verdix Corporation VADS DEC-RISC, Ultrix 4.2, VAda-110-6161, Version 6.0 (BASE #900228W1.11001)	DECstation 2100, 3100, 5000 & 5200; DECsystem 3100, 5000, 5100, 5200, 5400, 5500, 5810, 5820, 5830 & 5840 (under Ultrix 4.2)	Any Host
Verdix Corporation VAda-110-0202, Version 6.0 (#900228W1.11002)	VAXsystem 3100 (under ULTRIX 3.1)	Same as Host
*Validated by Registration Verdix Corporation VAda-110-0202, Version 6.0 (BASE #900228W1.11002)	DEC VAX-11, MicroVAX, VAXserver, VAXstation, VAX 6000, VAX 8000 & VAX 9000 series (under ULTRIX 4.0)	Any Host
*Validated by Registration Verdix Corporation VAda-110-0202, Version 6.0 (BASE #900228W1.11002)	DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 6000, VAX 8000 & VAX 9000 Series of computers (under ULTRIX 4.2)	Any Host
Verdix Corporation VADS Sun3 SunOS, VAda-110-1313, Version 6.0 (#900510W1.11003)	Sun 3/280 (under SunOS 4.0)	Same as Host
*Validated by Registration Verdix Corporation VADS Sun-3 Sun OS, VAda-110-1313, Version 6.0 (BASE #900510W1.11003)	Sun-3/50, /60, /80, /150, /160, /260, /280, /470 & /480 (under SunOS 4.0 & 4.1)	Any Host machine (under same OS version)

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
Verdix Corporation VADS IBM PS/2 AIX => Intel 80386, VAda-110-35315, Version 6.0 (#900510W1.11004)	IBM PS/2 Model 80 (under AIX 1.1)	Intel ISBC 386/12 (bare machine)
Verdix Corporation VADS IBM PS/2 AIX => 68K, VAda-110-35125, Version 6.0 (#900510W1.11005)	IBM PS/2 Model 80 (under AIX 1.1)	Motorola MVME133A-20 (MC68020) (bare machine)
Verdix Corporation VADS Sun-4 SunOS, VAda-110-4040, Version 6.0 (#900510W1.11006)	Sun 4/280 (under SunOS 4.0)	Same as Host
*Validated by Registration Verdix Corporation Sun Microsystems Sun Ada, SunOS, ADE-1.0-4-4-21, Version 1.0 (BASE #900510W1.11006)	Sun-4/20, /65, /110, /150, /260 & /280; SPARCserver 330, 370, 390, 470 & 490; SPARCstation SLC, 1, 1+, 2, 330 & 370; and SPARCengine 1 VME, IPC (under SunOS 4.1)	Any Host
*Validated by Registration Verdix Corporation VAda-110-4040, Version 6.0 (BASE #900510W1.11006)	Sun-4/20, /65, /110, /150 & /260; SPARCserver 310, 330, 370, 390, 470 & 490; SPARCstation SLC, 1, 1+, 2, 310, 330 & 370; and SPARCengine 1 VME (under SunOS 4.1)	Any Host
Verdix Corporation VADS Sun3 SunOS => 68K, VAda-110-13125, Version 6.0 (#900510W1.11007)	Sun 3/280 (under SunOS 4.0)	Motorola MVME147 (MC68030) (bare machine)
*Validated by Registration Verdix Corporation VADS Sun3 SunOS => 68K, VAda-110-13125, Version 6.0 (BASE #900510W1.11007)	Sun-3/50, /60, /80, /150, /160, /260, /280, /470 & /480 (under SunOS 4.0 & 4.1)	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, MZ7170, MZ8120 & MZ8130; Sun Microsystems 3E Board Set; Motorola MVME147 Series & MVME141 (MC68030), MVME133 Series, MVME134, MVME135 & MVME136 (MC68020), MVME-110, MVME-165 & MVME-167; Tadpole TP32V & TP33M (bare machines)

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
Verdix Corporation VADS IBM RISC System/6000, AIX 3.1, VAda-110-7171, Version 6.0 (#900726W1.11017)	IBM RISC System/6000 Model 530 (under AIX 3.1)	Same as Host
*Validated by Registration Verdix Corporation VADS IBM RISC System/6000, AIX 3.1, VAda-110-7171, Version 6.0 (BASE #900726W1.11017)	IBM RISC System/6000 Models 320, 520, 540, 730 & 930 (under AIX 3.1)	Any Host
Verdix Corporation VADS HP 9000/300, HP-UX 7.0, VAda-110-1515, Version 6.0 (#900726W1.11018)	HP 9000/350 (under HP-UX 7.0)	Same as Host
*Validated by Registration Verdix Corporation VADS HP 9000/300, HP-UX 7.0, VAda-110-1515, Version 6.0 (BASE #900726W1.11018)	HP 9000 Series 300 Models 310, 320, 330, 340, 350, 360 & 370 (under HP-UX 7.0)	Any Host
Verdix Corporation VADS Prime EXL/320, UNIX System V/386 3.2, VAda-110-3232, Version 6.0 (#900726W1.11019)	Prime EXL/320 (under UNIX System V/386 3.2)	Same as Host
Verdix Corporation VADS VAX/VMS 5.2, VAda-110-0303, Version 6.0 (#900726W1.11020)	MicroVAX 3100 (under VAX/VMS V5.2)	Same as Host
Verdix Corporation VADS VAX/VMS = > 68k, VMS 5.2, VAda-110-03125, Version 6.0 (#900726W1.11021)	MicroVAX 3100 (under VAX/VMS V5.2)	Motorola MVME147 (MC68030) (bare machine)
*Validated by Registration Verdix Corporation VADS VAX/VMS = > 68K, VMS 5.2, VAda-110-03125, Version 6.0 (BASE #900726W1.11021)	DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 6000, VAX 8000 & VAX 9000 Series of computers (under VMS 5.2)	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, MZ7170, MZ8120 & MZ8130; Sun Microsystems 3E Board Set; Motorola MVME147 Series & MVME141 (MC68030), MVME133 Series, MVME134, MVME135 & MVME136 (MC68020), MVME-165 & MVME167; Tadpole TP32V & TP33M (bare machines)

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
Verdex Corporation VADS VAX/VMS = > Intel 386, VMS 5.2, VAda-110-03315, Version 6.0 (#900726W1.11022)	MicroVAX 3100 (under VAX/VMS V5.2)	Intel ISBC 386/32 (bare machine)
Verdex Corporation VADS VAX/Ultrix = > 68k, Ultrix 3.1, VAda-110-02125, Version 6.0 (#900726W1.11023)	MicroVAX 3100 (under Ultrix 3.1)	Tektronix MV System, MV 68020 Support System, using TekDB Version 5.0.2 emulation software (bare Machine simulation)
*Validated by Registration Verdex Corporation VADS VAX/ULTRIX = > 68K, ULTRIX 3.1, VAda-110-02125, Version 6.0 (BASE #900726W1.11023)	DEC VAX-11, VAXserver, VAXstation, MicroVAX, VAX 6000, VAX 8000 & VAX 9000 Series of computers (under Ultrix 3.1)	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, MZ7170, MZ8120 & MZ8130; Sun Microsystems 3E Board Set; Motorola MVME147 Series & MVME141 (MC68030), MVME133 Series, MVME134 & MVME135 (MC68020); Tadpole TP32V & TP33M (bare machines); Tektronix MV System, MV 68020 Support System using TekDB Version 5.0.2 emulation software (bare machine simulation)
Verdex Corporation VADS DEC-RISK = > 68k, Ultrix 3.1, VAda-110-61125, Version 6.0 (#900726W1.11024)	DECstation 3100 (under Ultrix 3.1)	Motorola MVME147 (MC68030) (bare machine)
*Validated by Registration Verdex Corporation VADS DEC-RISC = > 68K, Ultrix 4.0, VAda-110-61125, Version 6.0 (BASE #900726W1.11024)	DECstation 2100, 3100, 5000 & 5200; and DECsystem 3100, 5000, 5100, 5200, 5400, 5500, 5810, 5820, 5830 & 5840 (under ULTRIX 4.0)	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, MZ7170, MZ8120 & MZ8130; Sun Microsystems 3E Board Set; Motorola MVME147 Series (MC68030), MVME133 Series, MVME134 & MVME135 (MC68020); Tadpole TP32V & TP33M (bare machines)

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
Verdix Corporation VADS IBM RISC System/6000 = > 68k, AIX 3.1, VAda-110-71125, Version 6.0 (#900726W1.11025)	IBM RISC System/6000 Model 530 (under AIX 3.1)	Motorola MVME147 (MC68030) (bare machine)
*Validated by Registration Verdix Corporation VADS IBM RISC System/6000 = > 68K, AIX 3.1, VAda-110-71125, Version 6.0 (BASE #900726W1.11025)	IBM RISC System/6000 Models 320, 520, 540, 730 & 930 (under AIX 3.1)	Cyclone CVME 44, CVME 46 & CVME48; 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, MZ7170, MZ8120 & MZ8130; Sun Microsystems 3E Board Set; Motorola MVME133 Series, MVME134, MVME135 & MVME147 Series; and Tadpole TP32V & TP33M (bare machines)
Verdix Corporation VADS IBM RISC System/6000 = > 386, AIX 3.1, VAda-110-71315, Version 6.0 (#900726W1.11026)	IBM RISC System/6000 Model 530 (under AIX 3.1)	Intel iSBC 386/116 (bare machine)
Verdix Corporation VADS VAX/VMS 5.2 = > Intel 80386/WEITEK 3167, VAda-110-03315, Version 6.0 (#901129W1.11094)	MicroVAX 3100 (under VMS Version 5.2)	Intel ISBC 386/116 using a WEITEK 3167 fpu (bare machine)
Verdix Corporation VADS UNIX System V/386, Rel. 4, VAda-110-3232, Version 6.0 (#901129W1.11095)	Intel 302 System (under UNIX System V/386, Release 4)	Same as Host
Verdix Corporation VADS Sequent Balance DYNIX V3.0, VAda-110-2323, Version 6.0 (#901129W1.11096)	Sequent Balance 8000 (under DYNIX Version 3.0)	Same as Host
Verdix Corporation VADS Sun4 = > 68K, Sun OS 4.0, VAda-110-40125, Version 6.0 (#901129W1.11097)	Sun-4/260 (under SunOS 4.0)	Motorola MVME147 (68030) (bare machine)
*Validated by Registration Verdix Corporation VADS Sun4 = > 68K, Sun OS 4.0, VAda-110-40125, Version 6.0 (BASE #901129W1.11097)	Sun-4/20, /65, /110 & /150; SPARCserver 330, 370, 390, 470 & 490; SPARCstation SLC, 1, 1+, 2, 330 & 370; and SPARCengine 1 VME (under SunOS 4.1)	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, MZ7130, MZ7170, MZ8120 & MZ8130; Sun Microsystems 3E Board Set; Motorola MVME110 (MC68000), MVME133 Series, MVME134, MVME135 & MVME136 (MC68020), MVME147 Series & MVME141 (MC68030), MVME-165 & MVME-167 (MC68040); Tadpole TP32V & TP33M (bare machines)

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
Verdix Corporation VADS Sun-4 => Sun-3, Sun OS 4.0, VAda-110-4013, Version 6.0 (#901129W1.11098)	Sun-4/260 (under SunOS 4.0)	Sun-3/260 (under SunOS 4.0)
*Validated by Registration Verdix Corporation VADS Sun-4 => Sun-3, Sun OS 4.0, VAda-110-4013, Version 6.0 (BASE #901129W1.11098)	Sun-4/20, /65, /110, /150, /260 & /280; SPARCserver 330, 370, 390, 470 & 490; SPARCstation SLC, 1, 1+, 2, 330 & 370; and SPARCengine 1 VME (under SunOS 4.1)	Sun-3/50, /60, /80, /150, /160, /260, /280, /470 & /480 (under SunOS 4.1)
Verdix Corporation VADS AT&T 3B2/600G UNIX System V, Release 3.2.2, VAda-110-5151, Version 6.0 (#901129W1.11099)	AT&T 3B2/600G (under UNIX System V, Release 3.2.2)	Same as Host
Verdix Corporation VADS HP-9000/300 => 68K, HP-UX 7.0 VAda-110-15125, Version 6.0 (#901129W1.11100)	HP 9000 Model 350 (under HP-UX 7.0)	Motorola MVME133A (68020) (bare machine)
*Validated by Registration Verdix Corporation VADS HP-9000/300 => 68K, HP-UX 7.0, VAda-110-15125, Version 6.0 (BASE #901129W1.11100)	HP 9000 Series 300 Models 310, 320, 330, 340, 350, 360 & 370 (under HP-UX 7.0)	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, MZ7170, MZ8120 & MZ8130; Sun Microsystems 3E Board Set; Motorola MVME147 Series (MC68030), MVME133 Series, MVME134 & MVME135 (MC68020); Tadpole TP32V & TP33M (bare machines)
Verdix Corporation VADS BCS/88K, AViion DGUX 4.3, VAda-110-8080, Version 6.1 (#901129W1.11101)	Data General AViION Model 5120 (under DG/UX 4.3)	Same as Host
*Validated by Registration Verdix Corporation VADS BCS/88K AViion DGUX 5.4, VAda-110-8080, Version 6.1 (BASE #901129W1.11101)	Data General AViION Models 4000, 4000GHI, 4020, 4100, 4120, 5010, 5200, 5220, 5240, 5300, 5310, 5400, 5402, 5410, 5412, 6200 & 6220 (under DG/UX 5.4)	Any Host
*Validated by Registration Verdix Corporation VADS BCS/88K, AViion DGUX 4.3, VAda-110-8080, Version 6.1 (BASE #901129W1.11101)	DG AViION Models 4000, 4000GHI, 4020, 4100, 4120, 5010, 5200, 5220, 5240, 5300, 5310, 5400, 5402, 5410, 5412, 6200 & 6220 (under DG/UX 4.3)	Any Host

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
Verdix Corporation VADS Sun4 => SPARC, Sun OS 4.1, VAda-110-40440, Version 6.0 (#901129W1.11102)	Sun-4/490 (under SunOS 4.1) machine)	SPARCengine 1E (bare machine)
*Validated by Registration Verdix Corporation VADS Sun4=> SPARC, Sun OS 4.1, VAda-110-40440, Version 6.0 (BASE #901129W1.11102)	Sun-4/20, /65, /110, /150 & /260; SPARCserver 330, 370, 390, 470 & 490; and SPARCstation SLC, 1, 1+, 2, 330 & 370 (under SunOS 4.1)	SPARCengine 1E (bare machine)
Verdix Corporation VADS Sun-3 SunOS => 68k, VAda-110-13140, Version 6.0 (#910517W1.11149)	Sun 3/260 (under SunOS Release 4.0)	Motorola MVME165 (68040) (bare machine)
Verdix Corporation VADS DEC-RISC => MIPS R3000, VAda-110-61620, Version 6.1 (#910517W1.11150)	DECstation 5000-200 (under ULTRIX V4.0)	Lockheed Sanders STAR MVP (R3000) (bare machine)
Verdix Corporation VADS VMS => MIPS R3000, VAda-110-03620, Version 6.1 (#910517W1.11151)	MicroVAX 3600 (under VMS V5.2)	integrated Device Technology IDT7RS302 (bare machine)
Verdix Corporation VADS Sun-4 SunOS => 68k, VAda-110-40140, Version 6.0 (#910517W1.11152)	Sun 4/280 (under SunOS Release 4.0)	Motorola MVME165 (68040) (bare machine)
Verdix Corporation VADS DEC-RISC => 88k, VAda-110-61680, Version 6.1 (#910517W1.11153)	DECstation 2100 (under ULTRIX V4.0)	Motorola MVME181 (bare machine)
Verdix Corporation VADSworks Sun4 => 68k, VAda-115-40800, Version 2.0 (#910517W1.11154)	Sun 4/20 (under SunOS 4.1.1)	Motorola MVME147SA (bare Machine, using vxWorks 5.0)
Verdix Corporation VADS UNIX System V/486, SCO UNIX 3.2, VAda-110-3232, Version 6.0 (#910517W1.11155)	Zenith Z-486/25E (under SCO UNIX i386 release 3.2)	Same as Host
*Validated by Registration Verdix Corporation VADS UNIX System V/486, SCO UNIX 3.2, VAda-110-3232, Version 6.0 (BASE #910517W1.11155)	Zenith Z-486/33E (under SCO UNIX i386 release 3.2)	Same as Host
Verdix Corporation VADS Sun-4 SunOS => AMD 29K, 6.0 VAda-110-40525, Version 6.0 (#910517W1.11156)	Sun 4/280 (under SunOS 4.0.3)	Ironics IV9001 board (AMD 29000) (bare machine)

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
Verdix Corporation VADS UNIX System V/486, SCO UNIX 3.2, VAda-110-3232, Version 6.1 (#910517W1.11157)	Intel 402 (under SCO UNIX 3.2v2.e)	Same as Host
Verdix Corporation VADS MIPS, VAda-110-6262, Version 6.1 (#910920W1.11200)	MIPS RC3230 (under RISC/os 4.52)	Same as Host
Verdix Corporation VADS VAX/VMS => 68040, VAda-110-03140, Version 6.0 (#910920W1.11201)	MicroVAX 3100 (under VMS 5.3)	Motorola MVME165 (68040) (bare machine)
Verdix Corporation VADS IBM RS/6000 => MIPS R3000, VAda-110-71620, Version 6.1 (#910920W1.11202)	IBM RISC System/6000 Model 530 (under AIX 3.1)	IDT 7RS302 (R3000) (bare machine)
Verdix Corporation VADS Sun-4 => MIPS R3000, VAda-110-40620, Version 6.1 (#910920W1.11205)	SPARCserver 490 (under SunOS Release 4.1)	LSI LR33000 Pocket Rocket Evaluation board (R3000) (bare machine)
Verdix Corporation VADS Sun-4 SunOS => MC68000/10, VAda-110-40128, Version 6.0 (#910920W1.11206)	Sun-4/280 (under SunOS Release 4.0.3)	Motorola MVME101 (68000) with MVME222-1 memory board (bare machine)
Verdix Corporation VADS Sun-4 SunOS => CPU32, VAda-110-40150, Version 6.0 (#910920W1.11207)	Sun-4/280 (under SunOS Release 4.0.3)	Motorola CPU32 - M68332EVS Evaluation System (68332) (bare machine)
Verdix Corporation VADS IBM PS/2, AIX 1.1, VAda-110-3535, Version 6.1 (#910920W1.11208)	IBM PS/2 Model 80 (under AIX 1.1)	Same as Host
Verdix Corporation VADS MIPS => MIPS R3000, VAda-110-62620, Version 6.1 (#910920W1.11209)	MIPS RC3230 (under RISC/os 4.52)	Lockheed Sanders STAR MVP (R3000) (bare machine)
Verdix Corporation VADS Sun-3 SunOS => 68020/30 ARTX, VAda-110-13120, Version 6.0 (#910920W1.11210)	Sun-3/280 (under SunOS Release 4.0)	Motorola MVME147 (68030) (bare machine)
Verdix Corporation VADS Sun4 SunOS => 68020/30 ARTX, VAda-110-40120, Version 6.0 (#910920W1.11211)	SPARCstation 2 (under SunOS Release 4.1.1)	Motorola MVME147 (68030) (bare machine)
Verdix Corporation VADS IBM RISC System/6000 AIX => 68020/30 ARTX, VAda-110-71120, Version 6.0 (#910920W1.11212)	IBM RISC System/6000 Model 530 (under AIX 3.1)	Motorola MVME147 (68030) (bare machine)

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
Verdex Corporation VADS SYSTEM V/860 Release 4, VAda-110-9090, Version 6.1 (#910920W1.11213)	Okldata I860 Workstation (under UNIX SYSTEM V/860 RELEASE 4 v1.0)	Same as Host
Verdex Corporation VADS VMS => AMD29000, VAda-110-03525, Version 6.04 (#910920W1.11214)	MicroVAX 3600 (under VMS 5.2)	Ironlcs IV9001 board (AMD 29000) (Am29000 bare VME machine)
Verdex Corporation VADS Sun-3 SunOS => AMD 29K, VAda-110-13525, Version 6.04 (#910920W1.11215)	Sun-3/180 (under SunOS 4.1.1)	Ironlcs IV9001 board (AMD 29000) (Am29000 bare VME machine)
Wang Laboratories, Inc. Wang VS Ada Version 5.00.00 (#901129W1.11093)	Wang VS 8480 (under Wang VSOS 7.30.02)	Same as Host
*Validated by Registration Wang Laboratories, Inc. Wang VS Ada Version 5.00.00 (BASE #901129W1.11093)	Wang VS Models: 100 & 300; 5430, 5440, 5450 & 5460; 7010, 7110, 7120, 7150 & 7310; 8220, 8230, 8260, 8430, 8460, 8470 & 8480; and 10050, 10075 & 10100 (under all VS OS versions 7.21.xx & 7.30.xx)	Same as Host
York Software Engineering Limited York Ada Compiler Environment (ACE) Release 5 (#901127N1.11073)	Intergraph InterPro 3050 Workstation (under CLIX R3.1)	Same as Host
*Validated by Registration York Software Engineering Limited York Ada Compiler Environment (ACE) Release 5 (BASE #901127N1.11073)	InterAct 220, 2020, 3050, 6040, 6080, 6240 & 6280 (under CLIX Release 3.1)	Any Host
*Validated by Registration York Software Engineering Limited York Ada Compiler Environment (ACE) Release 5 (BASE #901127N1.11073)	Intergraph Mobile GIS/C2 (under CLIX Release 3.1)	Same as Host
*Validated by Registration York Software Engineering Limited York Ada Compiler Environment (ACE) Release 5 (BASE #901127N1.11073)	InterPro 125, 225, 340, 360, 2020, 3070, 6040, 6240, 6080 & 6280 (under CLIX Release 3.1)	Any Host

Ada PROCESSORS *Continued*

VENDOR, COMPILER & CERTIFICATE #	HOST MACHINE & (OS)	TARGET MACHINE & (OS)
*Validated by Registration York Software Engineering Limited York Ada Compiler Environment (ACE) Release 5 (BASE #901127N1.11073)	InterServe 200, 300, 2000, 3000, 4200, 5200, 6000, 6105 & 6505 (under CLIX Release 3.1)	Any Host
*Validated by Registration York Software Engineering Limited York Ada Compiler Environment (ACE) Release 5 (BASE #901127N1.11073)	InterView 220 & 3050 (under CLIX Release 3.1)	Any Host

2.10 PASCAL PROCESSORS

VENDOR	PROCESSOR ID VSR # & LEVEL	HARDWARE & OPERATING SYSTEM	EXPIRY DATE	OTHER ENVIR HW/OS	NONCON- FORMITIES
Bull HN, Inc.	Pascal PCVS1.1 Version PCV1.1 Release 1.1 <i>NIST-91/1684</i> Level 0/1	DPS 90 <i>GCOS-8 Version SR4000</i>	6/1/92	DPS 8000, 9000 <i>GCOS-8 Version SR4000</i>	
Control Data Corporation	PASCAL/VE Version 1.7 Release 90337 <i>NIST-91/1434</i> Level 0/1	CYBER 180-995 <i>NOS/VE Version 1.5.3</i> Level 765	6/1/92	Cyber 180 Ser; Cyber 2000 <i>NOS/VE Ver. 1.5.3</i> Level 765	
Digital Equipment Corporation	VAX Pascal, Version 4.2 <i>NIST-91/2027</i> Level 0/1	VAX 6000-350 <i>VAX/VMS Version 5.4</i>	12/1/92	VAX 4000 Mod 200, 300; 6000 Series 200, 300, 400, 500; 8200, 8250, 8300, 8350, 85xx, 8600, 8650, 8700, 8800, 8810, 8820, 8830, 8840; 9000 Mod 210, Ser 400; VAXft 3000-310; VAX-11/730 /750/780/785; MicroVAX II, 2000, 3100, 3300, 3400, 3500, 3600, 3800, 3900; VAXstation II, 2000, 3100, 3200, 3500, 3520, 3540; VAXserver 3100, 3300, 3400, 3500, 3600, 3602, 3800, 3900, 4000 Mod 200, 300; 6000 Mod 210/220, 310/320, 410/420, 510/520 <i>VMS Version 5.4</i>	
Electronic Data Systems Corp.	SVS Pascal Version 2.8 <i>NIST-91/1401</i> Level 0	Everex AGI System 3000D <i>Interactive Unix V/386</i> Release 3.2	5/1/92		
	SVS Pascal Version 2.8 <i>NIST-91/1402</i> Level 0	Prime EXL 320 <i>Prime Unix V/386</i> Release 3.1	5/1/92		
IBM Canada LTD	IBM AIX XL PASCAL Compiler/6000 Version 1 Release 1 <i>NIST-91/1761</i> Level 0	IBM RISC System/6000 POWERstation 530 <i>AIX Version 3 for RISC System/6000</i> Version 3.1	5/1/92	POWERstation 320, 520, 550, 730; POWERserver 320, 520, 530, 550, 730 <i>AIX Version 3 for RISC System/6000</i> Version 3.1	
Intergraph Corporation	Pascal-CLIPPER Version 1.8.4A <i>NIST-92/1042</i> Level 0	CLIPPER IS4000 <i>CLIX Version 5.7.3</i>	12/1/92	CLIPPER C300 and C400 Series <i>CLIX Version 5.7.3</i>	Yes
Siemens Nixdorf Information Systems AG	SNI Pascal-XT Version 2.1A <i>PCVS/0084/UK</i> Level 0/1	SNI H120-I 7.592I-0003 <i>BS2000</i> Version 10.0T20	1/1/92	SNI 7.500 <i>BS2000</i> Version 9.0A-10.10A	
	SNI Pascal-XT Version 2.1A <i>PCVS/0085/UK</i> Level 0/1	SNI MX500 <i>SINLX-F</i> Version 5.21	1/1/92		

PASCAL PROCESSORS, *Continued*

VENDOR	PROCESSOR ID <i>VSR # & LEVEL</i>	HARDWARE & <i>OPERATING SYSTEM</i>	EXPIRY DATE	OTHER ENVIR HW/OS	NONCON- FORMITIES
	SNI Pascal-XT Version 2.1A <i>PCVS/0086/UK Level 0/1</i>	SNI MX300-50 <i>SINIX-L Version 5.4</i>	1/1/92		
	SNI Pascal-XT Version 2.1A <i>PCVS/0087/UK Level 0/1</i>	SNI MX300-30 <i>SINIX-H Version 5.23</i>	1/1/92	SNI MX300-30 <i>SINIX-H Version 5.1B-5.2A</i>	
	SNI Pascal-XT Version 2.1A <i>PCVS/0088/UK Level 0/1</i>	SNI WX200 <i>SINIX-ODT-R Version 1.5</i>	1/1/92		
	SNI Pascal-XT Version 2.1A <i>PCVS/0089/UK Level 0/1</i>	SNI C40-S FALCON 1281 <i>BS2000 Version 9.5A</i>	1/1/92	SNI 7.500 <i>BS2000 Version 9.0A-10.0A</i>	
Sun Microsystems, Inc.	Sun Pascal Version 2.1 <i>NIST-90/2321 Level 0/1</i>	Sun 3/280 <i>SunOS, Version 4.1.1</i>	4/1/92	Sun 3/80, 470, 480, 50, 60, 150, 160, 260 <i>SunOS, Version 4.1.1</i>	
	Sun Pascal Version 2.1 <i>NIST-90/2322 Level 0/1</i>	SPARCstation2 <i>SunOS, Version 4.1.1</i>	4/1/92	SPARCstation IPC, SLC, 1, 1 +, 330, 470 <i>SunOS, Version 4.1.1</i>	
	Sun Pascal Version 2.1 <i>NIST-90/2323 Level 0/1</i>	SPARCserver 490 <i>SunOS, Version 4.1.1</i>	4/1/92		
Unisys Corporation	A Series PASCAL83 Mark 4.0 <i>NIST-91/2213 Level 0</i>	Unisys A10 <i>MCP/AS Mark 4.0</i>	10/1/92	Unisys A Series: Micro A, A1, A2, A3, A4, A5, A6, A9, A10, A12, A15, A16, A17, A19 <i>MCP/AS Mark 4.0</i>	

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, must assure that processors are in accordance with FIPS PUB 127-1, Database Language SQL.

3.2 Organization of Database Language Processor Entries

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

- The **VENDOR ID** column contains the name of the Vendor of the processor.
- The **PROCESSOR ID** column contains the name of the processor, its version number, the **VSR** number, and the Expiry date of the Notification of Registration.
- 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.
- The **HARDWARE & OPERATING SYSTEM** column presents the hardware and operating system environment used during the validation.
- The entries in the **OTHER HW/OS & COMPILERS** 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 may contain a range of versions that are supported.
- The **NONCONFORMITIES** column lists the number of nonconformities for each interface tested (Ada, C, COBOL, Fortran, and Pascal). Schema nonconformities are deficiencies in support for standard schema definition language constructs. "FIPS Flagger" in this column indicates that the FIPS Flagger requirement of FIPS 127-1 was not implemented. Refer to 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

The requirements for validation of database language processors are the same as those for programming language processors, listed in section 2.3.1.

3.4 Registered Report

A registered Validation Summary Report 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 Validation Procedures and Test Suite

SQL processors are tested in accordance with procedures described in the NIST Language Processor Validation Procedures for SQL Validation Service (Trial Use Period). The current version of the SQL Validation System is Version 2.0.2 (2.1 for Ada). The validation procedures and test suite are available from:

National Institute of Standards and Technology (NIST)
Computer Systems Laboratory
Database and Graphics Group
Building 225, Room A266
Gaithersburg, MD 20899
Telephone (301) 975-3258, (301) 975-3267 (Voice)
(301) 590-0932 (FAX)

3.6 SQL PROCESSORS

VENDOR	PROCESSOR ID VSR # & EXPIRY DATE	INTERFACES & COMPILERS	HARDWARE & OPER. SYS.	OTHER HW/OS & COMPILERS	NONCON- FORMITIES
Digital Equipment Corporation	VAX Rdb/VMS Version 4.1 NIST-91/7071 6/1/92 Features Tested: Level 2 ANSI SQL Integrity Enhancement Option FIPS Sizing Defaults FIPS Flagger	Embedded C Module C VAX C Version 3.0 Embedded COBOL Module COBOL VAX COBOL Version 4.4 Embedded Fortran Module Fortran VAX Fortran Version 5.0 Embedded Pascal Module Pascal VAX Pascal Version 4.1 Interactive SQL (FIPS Default)	VAXstation 3500; VAX 6220 VMS Version 5.4-2	VAX, MicroVAX, VAXstation VMS Versions 5.0-5.4 VAX C V 3.0 VAX COBOL V 4.2-4.4 VAX Fortran V 5.0-5.3 VAX Pascal V 3.9-4.1	
	VAX Rdb/VMS Version 4.1 NIST-91/7072 10/1/92 Features Tested: Level 2 ANSI SQL Integrity Enhancement Option FIPS Sizing Defaults FIPS Flagger	Embedded Ada Module Ada VAX Ada Version 2.0	VAXstation 3500 VMS Version 5.4-2	VAX, MicroVAX, VAXstation VMS Versions 5.0-5.4 VAX Ada V2.0-2.2	
IBM Corporation	SQL/DS Version 3 Release 2 NIST-90/7021 1/1/93 Features Tested: Level 2 ANSI SQL FIPS Sizing Defaults FIPS Flagger	Embedded C IBM C/370 Version 1 Release 2 Embedded COBOL IBM VS COBOL II Version 1 Release 3.1 Embedded Fortran IBM VS Fortran Version 2 Release 4.0 Interactive SQL (FIPS Default)	IBM 3090 VM/XA SP Release 2	IBM 30xx, 43xx, 90xx, 93xx VM/ESA Release 1 VM/SP Release 6 VM/XA SP Release 2	
	SQL/DS Version 3 Release 2 NIST-90/7022 1/1/93 Features Tested: Level 2 ANSI SQL FIPS Sizing Defaults FIPS Flagger	Embedded COBOL IBM VS COBOL II Version 1 Release 3.2 Embedded Fortran IBM VS Fortran Version 1 Release 4.1 Interactive SQL (FIPS Default)	IBM 3090 VSE/ESA Release 1	IBM 30xx, 43xx, 90xx, 93xx VSE/ESA Release 1 VSE/SP Release 3 VSE/SP Release 4	
Informix Software Inc.	INFORMIX-OnLine Version 4.10 NIST-91/7031 2/1/92 Features Tested: Level 2 ANSI SQL FIPS Sizing Defaults FIPS Flagger	Schema Processor INFORMIX-SQL Version 4.00 Embedded C INFORMIX-ESQL/C Version 4.10 Sun C 4.1	Sun 4 Model 260 Sun OS 4.1	Sun Model 4/60, 4/100, 4/200; Sun Sparcserver 1, 1+, 330, 370, 390, 490; Sun Sparcstation 300, 330 Sun OS 4.1 Solbourne Series 4/601, 4/602, 4/603, 4/604, 5/601, 5/602, 5/604, 5/671, 5/672, 5/673, 5/674 OS/MP 4.0	1 C

SQL PROCESSORS, *Continued*

VENDOR	PROCESSOR ID VSR # & EXPIRY DATE	INTERFACES & COMPILERS	HARDWARE & OPER. SYS.	OTHER HW/OS & COMPILERS	NONCON- FORMITIES
	INFORMIX-OnLine Version 4.10 NIST-91/7032 2/1/92	Schema Processor INFORMIX-SQL Version 4.00 Embedded C	AT&T 3B2/700 Unix System V Release 3.2.1, Rev. 3	AT&T 3B2 300, 310, 400, 500, 600, 750 Unix System V Release 3.2.1, Rev. 3	1 C
	Features Tested: Level 2 ANSI SQL FIPS Sizing Defaults FIPS Flagger	INFORMIX-ESQL/C Version 4.10 AT&T C 4.2			
	INFORMIX-OnLine Version 4.10 NIST-91/7033 2/1/92	Schema Processor INFORMIX-SQL Version 4.00 Embedded C	HP 9000/825 HP-UX Version A.B7.00	HP 9000/808, 808S, 815, 815S, 822, 825, 825S, 832, 834, 835, 835S, 835SE, 840, 842, 845, 845S, 850, 852, 855 HP-UX A.B7.00	1 C
	Features Tested: Level 2 ANSI SQL FIPS Sizing Defaults FIPS Flagger	INFORMIX-ESQL/C Version 4.10 HPUX C			
	INFORMIX-OnLine Version 4.10 NIST-91/7034 2/1/92	Schema Processor INFORMIX-SQL Version 4.00 Embedded C	Prime EXL320 Unix System V 3.1		1 C
	Features Tested: Level 2 ANSI SQL FIPS Sizing Defaults FIPS Flagger	INFORMIX-ESQL/C Version 4.10 C 4.1			
	INFORMIX-OnLine Version 4.10 NIST-91/7035 2/1/92	Schema Processor INFORMIX-SQL Version 4.00 Embedded C	INTEL WS3000 Interactive Unix System V 3.2.2	Compaq Systempro 486 Compaq Deskpro 386/25; 386/33; 486/25 MDL120; 486/25 MDL 320; 486/25 MDL650; 486/33; Data General Dasher 386/386SX Interactive Unix V/386 2.2 AT&T 6386; 6386/25; 6386/33 Unix System 3.2	1 C
	Features Tested: Level 2 ANSI SQL FIPS Sizing Defaults FIPS Flagger	INFORMIX-ESQL/C Version 4.10 Interactive C 4.1.5			
	INFORMIX-ESQL/C Version AR4.00 NIST-91/7036 2/1/92	Schema Processor INFORMIX-SQL Version 4.00 Embedded C	Concord 386 MS-DOS 3.30	Compaq Deskpro 386/486 MS-DOS 3.30 IBM PC AT MS-DOS 4.0/3.30 Toshiba 3100 SX/3200 MS-DOS 4.01	14 C
	Features Tested: Level 2 ANSI SQL (single-user) FIPS Sizing Defaults FIPS Flagger	INFORMIX-ESQL/C Version AR4.00 Microsoft 6.0 C			
	INFORMIX-OnLine Version 5.0 NIST-91/7037 5/1/92	Embedded C Informix-ESQL/C Sun C as bundled with Sun OS 4.1.1	Sun SPARCserver 470 Sun OS 4.1.1	Sun Model 4/60, 4/100, 4/200, 4/260; Sun Sparcserver 1, 1+, 330, 370, 390; Sun Sparcstation 300, 330 Sun OS 4.1 - 4.1.1	1Schema
	Features Tested: Level 2 ANSI SQL Integrity Enhancement Option FIPS Sizing Defaults FIPS Flagger	Interactive SQL (FIPS Default) Informix-Dbaccess			

SQL PROCESSORS, *Continued*

VENDOR	PROCESSOR ID VSR # & EXPIRY DATE	INTERFACES & COMPILERS	HARDWARE & OPER. SYS.	OTHER HW/OS & COMPILERS	NONCON- FORMITIES
	INFORMIX-OnLine Version 5.0 NIST-91/7038 5/1/92 Features Tested: Level 2 ANSI SQL Integrity Enhancement Option FIPS Sizing Defaults FIPS Flagger	Embedded C Informix-ESQL/C C as bundled with ULTRIX 4.0 rev 179 Interactive SQL (FIPS Default) Informix-Dbaccess	DECSYSTEM 3100 ULTRIX 4.0 rev 179	DECSYSTEM 3100, 5100, 5400, 5500, 5810, 5820, 5830, 5840; DECSTATION 2100, 3100, 5000-200 ULTRIX 4.0 rev 179	1 Schema
	INFORMIX-OnLine Version 5.0 NIST-91/7039 5/1/92 Features Tested: Level 2 ANSI SQL Integrity Enhancement Option FIPS Sizing Defaults FIPS Flagger	Embedded C Informix-ESQL/C C as bundled with Software Development System 4.1.5 Interactive SQL (FIPS Default) Informix-Dbaccess	Zenith 386/33E SCO Unix System V 3.2	Altos Series 5000; Bull HN DPX/Prostation 25I, 25E; Compaq Deskpro 386/25, 20E; Deskpro 386/33, System Pro; Deskpro 386/SX; Deskpro 486/25 MDL 120, 123; Deskpro 486/33 System Pro M; Systempro MDL 485 Dual Proc.; Dec System 316+, 325, 333 SCO Unix System V 3.2	1 Schema
Oracle Systems Corporation	ORACLE RDBMS Version 7.0 NIST-91/7137 10/1/92 Features Tested: Level 2 ANSI SQL Integrity Enhancement Option FIPS Sizing Defaults FIPS Flagger	Embedded Ada Pro*Ada Version 1.5 Verdex Ada Version 6.1.0 Embedded C Pro*C Version 1.5 Gnu C 3.2.1.3 Interactive SQL (FIPS Default) SQL*DBA Version 7.0	Data General AViON 5220 DG/UX Release 5.4 AViON	Data General AViON: AV100, AV210, AV310CD, AV410, AV530, AV4100, AV4120, AV4600, AV4620, AV5200, AV5225, AV5240, AV5520, AV6200, AV6200- 20, AV6225, AV6225-20, AV6240, AV6240-20, AV7000, AV8000 DG/UX Release 5.4 AViON	
	ORACLE RDBMS Version 7.0 NIST-91/7051 4/1/92 Features Tested: Level 2 ANSI SQL Integrity Enhancement Option FIPS Sizing Defaults FIPS Flagger	Embedded C Pro*C Version 1.5 VAX C Version 3.1 Embedded COBOL Pro*COBOL Version 1.5 VAX COBOL Version 4.2 Embedded Fortran Pro*Fortran Version 1.5 VAX Fortran Version 5.2 Embedded Pascal Pro*Pascal Version 1.5 VAX Pascal Version 3.9 Interactive SQL (FIPS Default) SQL*DBA Version 7.0	DEC VAX 6560 VMS Version 5.4	VAX, MicroVAX, VAXStation VMS Versions 5.0 - 5.4	

SQL PROCESSORS, *Continued*

VENDOR	PROCESSOR ID VSR # & EXPIRY DATE	INTERFACES & COMPILERS	HARDWARE & OPER. SYS.	OTHER HW/OS & COMPILERS	NONCON- FORMITIES
	ORACLE RDBMS Version 7.0 NIST-91/7131 10/1/92	Embedded Ada Pro*Ada Version 1.5 VAX Ada Version 2.1	DEC VAX 6560 VMS Version 5.4	VAX, MicroVAX, VAXStation VMS Versions 5.0 - 5.4	
	Features Tested: Level 2 ANSI SQL Integrity Enhancement Option FIPS Sizing Defaults FIPS Flagger				
	ORACLE RDBMS Version 6.0 NIST-91/7052 4/1/92	Embedded C Pro*C Version 1.4 VAX C Version 3.1 Embedded COBOL Pro*COBOL Version 1.4 VAX COBOL Version 4.2 Embedded Fortran Pro*Fortran Version 1.4 VAX Fortran Version 5.2 Embedded Pascal Pro*Pascal Version 1.4 VAX Pascal Version 3.9 Interactive SQL (FIPS Default) SQL*DBA Version 6.0 SQL*Plus Version 3.0	DEC VAX 6560 VMS Version 5.4	VAX, MicroVAX, VAXStation VMS Versions 4.6 - 5.4	2 Schema 14 C 11 COBOL 11 Fortran 11 Pascal 9 Interactive FIPS Flagger
	ORACLE RDBMS Version 6.0 NIST-91/7132 10/1/92	Embedded Ada Pro*Ada Version 1.4 VAX Ada Version 2.1	DEC VAX 6560 VMS Version 5.4	VAX, MicroVAX, VAXStation VMS Versions 4.6 - 5.4	2 Schema 11 Ada FIPS Flagger
	Features Tested: Level 2 ANSI SQL FIPS Sizing Defaults				
	ORACLE RDBMS Version 7.0 NIST-91/7133 10/1/92	Embedded Ada Pro*Ada Version 1.5 HP Ada 800 Version A.04.35 Embedded C Pro*C Version 1.5 HP C Version A.07.10 Interactive SQL (FIPS Default) SQL*DBA Version 7.0	Hewlett-Packard 9000/87 HP-UX Version A.07.05	HP 9000/700 Series and HP 9000/800 Series HP-UX Version A.07.05	
	Features Tested: Level 2 ANSI SQL Integrity Enhancement Option FIPS Sizing Defaults FIPS Flagger				

SQL PROCESSORS, *Continued*

VENDOR	PROCESSOR ID VSR # & EXPIRY DATE	INTERFACES & COMPILERS	HARDWARE & OPER. SYS.	OTHER HW/OS & COMPILERS	NONCON- FORMITIES
	ORACLE RDBMS Version 6.0 NIST-91/7134 10/1/92	Embedded Ada Pro*Ada Version 1.4 HP Ada 800 Version A.04.35	Hewlett-Packard 9000/87 HP-UX Version A.07.05	HP 9000/700 Series and HP 9000/800 Series HP-UX Version A.07.05	2 Schema 11 Ada 14 C 11 COBOL 11 FORTRAN 9 Interactive FIPS Flagger
	Features Tested: Level 2 ANSI SQL FIPS Sizing Defaults	Embedded C Pro*C Version 1.4 HP C Version A.07.10 Embedded COBOL Pro*COBOL Version 1.4 Micro Focus COBOL/2 Version 1.1 Rev.2 Embedded FORTRAN Pro*FORTRAN Version 1.4 HP FORTRAN 77 Version A.07.00 Interactive SQL (FIPS Default) SQL*DBA Version 6.0 SQL*Plus Version 3.0			
	ORACLE RDBMS Version 7.0 NIST-91/7135 10/1/92	Embedded Ada Pro*Ada Version 1.5 Verdix Ada Version 6.0 Rev.3	Sun SPARCstation 1 Sun OS 4.1.1	Sun SPARCstation 300, 330; Sun SPARCserver 1, 1+, 330, 370, 390 Sun OS 4.1 - 4.1.1	
	Features Tested: Level 2 ANSI SQL Integrity Enhancement Option FIPS Sizing Defaults FIPS Flagger	Embedded C Pro*C Version 1.5 Sun ANSI C Version 1.0 Interactive SQL (FIPS Default) SQL*DBA Version 7.0			
	ORACLE RDBMS Version 6.0 NIST-91/7136 10/1/92	Embedded Ada Pro*Ada Version 1.4 Verdix Ada Version 6.0 Rev.3	Sun SPARCstation 1 Sun OS 4.1.1	Sun SPARCstation 300, 330; Sun SPARCserver 1, 1+, 330, 370, 390 Sun OS 4.1 - 4.1.1	2 Schema 11 Ada 14 C 9 Interactive
	Features Tested: Level 2 ANSI SQL FIPS Sizing Defaults	Embedded C Pro*C Version 1.4 Sun C as bundled with Sun OS 4.1.1 Interactive SQL (FIPS Default) SQL*DBA Version 6.0 SQL*Plus Version 3.0			FIPS Flagger
ShareBase Corporation	ShareBase III Release 1 NIST-90/7001 3/1/92	Embedded C Sun UNIX C 4.2 Release 3.4	Client: Sun 3/50 Sun OS 4.2 Release 3.5 Server: Server/8000 Sharebase III Release 1	Client: Sun 3/60 Sun OS 4.2 Release 3.5 Server: Server/8000 ShareBase III Release 1	FIPS Flagger
	Features Tested: Level 2 ANSI SQL Integrity Enhancement Option FIPS Sizing Defaults				
Unisys Corporation	SQLDB Mark 3.9 NIST-90/7011 1/1/93	Module COBOL A Series COBOL ANSI-85, Version 2.0	Unisys A15 Model H MCP/AS Mark 3.9	Unisys Micro A, A1, A2, A3, A4, A5, A6, A9, A10, A12, A15, A16, A17, A19 MCP/AS Mark 3.9	
	Features Tested: Level 2 ANSI SQL FIPS Sizing Defaults FIPS Flagger				

SQL PROCESSORS, *Continued*

VENDOR	PROCESSOR ID VSR # & EXPIRY DATE	INTERFACES & COMPILERS	HARDWARE & OPER. SYS.	OTHER HW/OS & COMPILERS	NONCON- FORMITIES
	SQLDB Mark 4.0 NIST-91/7111 10/1/92	Module COBOL A Series COBOL ANSI-85, Mark 4.0	Unisys A15 Model H MCP/AS Mark 4.0	Unisys Micro A, A1, A2, A3, A4, A5, A6, A9, A10, A12, A15, A16, A17, A19 MCP/AS Mark 3.9 - 4.0	
	Features Tested: Level 2 ANSI SQL Integrity Enhancement Option FIPS Sizing Defaults FIPS Flagger				

4. GRAPHICS CONFORMANCE TESTING

4.1 FIPS Graphics Standards

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.

GKS is the first Federal Information Processing Standard Publication (FIPS PUB) registered for computer graphics systems as FIPS PUB 120-1. 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 Federal agencies to use the NIST Test Suite to ensure that a particular GKS-FORTRAN implementation meets the specifications of the FIPS.

4.2 Organization of GKS Entries

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

- The **VENDOR ID** column contains the name of the Vendor of the implementation.
- The **GKS NAME** column contains the name of the implementation, its version number, the **VSR** number, and the **Expiry** date of the certificate 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 **GKS LEVEL** column indicates the level of GKS that was validated.
- The entries in the **OTHER HW/OS** column include other hardware and operating system environments in which the processor operates.
- The **NONCONFORMITIES** column indicates whether or not the GKS implementation conforms to the applicable FIPS in one or more cases as evidenced by the validation. The **VSR** should be reviewed for details of the nonconformities.

GKS PROCESSORS

VENDOR	GKS NAME EXPIRY & VSR #	HARDWARE & OP. SYSTEM	GRAPHICS DEVICES	GKS LEVEL	OTHER HW/OS	NONCON- FORMITIES
Advanced Technology Center	GRAFFPAK-GKS Release 3.30.01 9/1/92 NIST/NCC-91/950	IBM RS/6000 Model 320 AIX 3.1	X Window System V11 PostScript Portrait Oriented Workstation	2C including GKSM Input, GKSM Output, and Workstation Independent Segment Storage		Yes
Rutherford Appleton Laboratory	RAL GKS V1.34 5/1/92 NIST/NCC-91/949	Sun 3/60 SUNOS Release 4.0.3	PostScript Portrait Oriented Workstation Sun 3/60 Monochrome Workstation running SunView Tektronix 4014-1	2B including RAL GKSM Input, RAL GKSM Output, and Workstation Independent Segment Storage		No

5.3 U.S. GOSIP TESTING PROGRAM REGISTER DATABASE SYSTEM

(GRD)

DESCRIPTION

The United States Government Open Systems Interconnection Profile (GOSIP) Testing Program was defined to permit Federal Agencies to substantiate claims of GOSIP compliance. As a result of this program, Federal Agencies can ensure that GOSIP compliant products can be effectively tested for conformance to the Open Systems Interconnection (OSI) standards and for interoperability with other OSI implementations.

A document produced by the National Institute of Standards and Technology (NIST) entitled "GOSIP Conformance and Interoperation Testing and Registration" establishes the framework by which Federal Agencies can ensure that procured GOSIP products are compliant with the GOSIP specifications. The vehicle by which this determination can be made is a set of registers. These include registers for Test Suites, Test Systems (Means of Testing), Conformance Testing Laboratories, and Interoperability Testing Services.

U.S. GOSIP REGISTER DATABASE (GRD)

The U.S. GOSIP Register Database (GRD) is an online database facility developed by NIST. It provides up-to-date reference information for the following list of registers:

1. U.S. GOSIP Abstract Test Suites (ATS).
2. Assessed Means of Testing (MOT).
3. NVLAP Accredited Test Laboratories.
4. Conformance Tested GOSIP Products.
5. Interoperability Test Suites (ITS) for OSI Products.
6. Reference Entities for Means of Testing Assessment(s).
7. Interworking GOSIP Products.
8. Interoperability Test and Registration Services.

These registers are fully described in the GRD.

HOW TO ACCESS THE GOSIP REGISTER DATABASE (GRD)

The GRD can be accessed in two ways.

1. Using the Internet address 129.6.48.100 and logging on under the user-name "gossip-db". No password is necessary.
2. Via a modem by dialing the phone number (301) 869-0096. Log in using the user-name "gossip-db". No password is necessary. (Recommended modem configuration is 8-bits, 1 stop bit, no parity and baud rates of 1200 or 2400 speed.)

Currently, when using a modem, the GRD system allows for two simultaneous users only. If connection is not established please hang up and try again later.

U.S. GOSIP REGISTER DATABASE SYSTEM, *Continued*

Once connected the user will immediately be put into an introduction screen. After hitting the return key, a screen is presented to allow the user to select the appropriate terminal type. Enter the corresponding number from the list provided. After this the user is put into the main application menu. It is recommended to read the help option ("GRD Operation Information") first before performing any queries. The "GRD Operation Information" option is option three of the main menu. Option four, "U.S. GOSIP Register Information", gives general information about the U.S. GOSIP Testing Program and the contents of the registers. Option five, "Register Directory", lists the registers and in turn allows the user to perform queries on the register contents.

FUTURE CHANGES

After 31 December 1991, The Joint Interoperability Test Center (Ft. Huachuca, Arizona) will take over the GRD and the access phone number will change. Contact John Ryan (602) 538-5022.

For any questions, problems or comments dealing with the GRD please contact:

John J. Garguilo
NIST
Building 225, Room B141
Gaithersburg, Maryland 20899
(301) 975-3623

For questions concerning the U.S. GOSIP Testing Program please contact:

Stephen Nightingale
NIST
Building 225, Room B141
Gaithersburg, Maryland 20899
(301) 975-3616

OR

Jean-Philippe Favreau
(Same address)
(301) 975-3634

6. POSIX CONFORMANCE TESTING

6.1 FIPS POSIX Standard

The National Institute of Standards and Technology through its Computer Systems Laboratory (NIST/CSL), has established a Conformance Testing policy for the Federal Information Standard for POSIX (FIPS 151-1). This standard is based on the IEEE POSIX Std 1003.1-1988. The testing model is made up of a Certification Authority, Accredited Testing Laboratories, Clients, and the official NIST POSIX Conformance Test Suite (NIST-PCTS). The Certification Authority is under the auspices of the Director of NIST/CSL. Testing labs are accredited by the National Voluntary Laboratory Accreditation Program (NVLAP), also an arm of NIST. The test suite is the NIST-PCTS:151-1 developed at NIST/CSL, and is based on the test assertions specified by the IEEE 1003.3 working group on test methods.

6.2 POSIX Test Labs

On May 1, 1991, seven POSIX test labs were accredited by NVLAP to do POSIX testing. 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.

6.3 POSIX Test Suite

The NIST-PCTS is available from the National Technical Information Services (NTIS), 5825 Port Royal Road, Springfield, VA 22161, (703) 487-4650, for \$2500 in the U.S. It will be the base PCTS for the life of FIPS 151-1. Occasional fixes to the PCTS will be made by NIST/CSL. These "fixes" are automatically sent to the accredited labs, and will be available from NIST/CSL to all owners of the NIST/PCTS:151-1.

6.4 POSIX Test Reports

An accredited lab may submit a "clean" test report to NIST/CSL for evaluation in anticipation of a Certificate of Validation being issued. "Clean" implies no test assertion failures. However, recognizing that errors could exist in either the FIPS 151-1, the test assertions in IEEE 1003.3, or in the NIST-PCTS, any "failures" must be resolved to acceptable "Resolved Test Codes" as listed in the NIST test method documentation. 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. It will contain information on the product tested, the hardware/software environment used for testing, supplier, testing lab, and the PCTS. Additional information on conditional features supported, configuration details, and resolved test codes will be available from NIST/CSL as referenced by a file number on the Certificate. These certificates will be issued by NIST/CSL through the testing lab. Fees for services by the testing labs will be established by the respective labs.

6.5 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.

Applications Software Incorporated
1656 Gryc Court
Mendota Heights, MN 55118

Contact: Mr. Robin Ehrlich
Phone: 612-456-5364

DataFocus Incorporated
12500 Fair Lakes Circle, Suite 160
Fairfax, VA 22033-3821

Contact: Mr. James Hegerty
Phone: 703-631-6770

Hewlett-Packard Company
Hewlett-Packard POSIX Conformance Test Center
250 Apollo Drive
Chelmsford, MA 01824

Contact: Ms. Linda DeYoung
Phone: 508-256-6600

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

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

National Computing Centre Ltd
Oxford Road
Manchester, M1 7ED, ENGLAND

Contact: Ms. A. E. J. Pink
Phone: +44 61 228-6333

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

Contact: Mr. Barry E. Hedquist
Phone: 408-748-2900

UniSoft Corporation
6121 Hollis Street
Emeryville, CA 94608-2092

Contact: Ms. Barb Moran
Phone: 415-420-6400

6.6 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).

PRODUCT SUPPLIERS

Apple Computer Inc.
 AT&T
 Control Data Corporation
 Data General Corporation
 Digital Equipment Corporation
 International Business Machines Inc.
 Interactive Systems Corp.
 Santa Cruz Operation Inc.
 Sequent Computer Systems Inc.
 UNISYS Corporation

REFERENCE FILE #

APP2482, APP7235, APP8616
 ATT1566
 CDC5574, CDC5750
 DGC2542, DGC8016, DGC8703, DGC9391
 DEC5794, DEC7917, DEC9418
 IBM1344, IBM2592
 INT5154
 SCO5199, SCO6748, SCO9875
 SEC8754
 UNI9080

SYSTEM SUPPLIERS

Apple Computer Inc.
 AT&T
 Compaq Computer Corporation
 Control Data Corporation
 Data General Corporation
 Digital Equipment Corporation
 International Business Machines Inc.
 Sequent Computer Systems Inc.
 UNISYS Corporation
 Zenith Data Systems

REFERENCE FILE #

APP2482, APP7235, APP8616
 ATT1566
 INT5154
 CDC5574, CDC5750
 DGC2542, DGC8016, DGC8703, DGC9391, SCO6748
 DEC5794, DEC7917, DEC9418
 IBM1344, IBM2592
 SEC8754
 UNI9080, SCO9875
 SCO5199

Reference File #: APP2482**Product Supplier: Apple Computer Inc.****Product Tested: A/UX Version: 2.0.1 Release: 01/30/1991****System Supplier: Apple Computer Inc.****System Hardware: Macintosh Model: IIfx****C Compiler: A/UX native C compiler (cc) Version: 1.21 Release: 01/13/1991****PCTS: 151-1 Version: 1.1 - 04/26/91****APTL: 0342 Mindcraft, Inc. Date Issued: 05/24/91**Reference File #: APP7235**Product Supplier: Apple Computer Inc.****Product Tested: A/UX Version: 2.0.1 Release: 01/30/1991****System Supplier: Apple Computer Inc.****System Hardware: Macintosh Model: IIci****C Compiler: A/UX native C compiler (cc) Version: 1.21 Release: 01/13/1991****PCTS: 151-1 Version: 1.1 - 04/26/91****APTL: 0342 Mindcraft, Inc. Date Issued: 05/24/91**Reference File #: APP8616**Product Supplier: Apple Computer Inc.****Product Tested: A/UX Version: 2.0.1 Release: 01/30/1991****System Supplier: Apple Computer Inc.****System Hardware: Macintosh Model: IIsi****C Compiler: A/UX native C compiler (cc) Version: 1.21 Release: 01/13/1991****PCTS: 151-1 Version: 1.1 - 04/26/91****APTL: 0342 Mindcraft, Inc. Date Issued: 05/24/91**

Reference File #: ATT1566

Product Supplier: AT&T

Product Tested: AT&T UNIX System V Version: Release 4 Release: 4.0.3

System Supplier: AT&T

System Hardware: AT&T 3B2 R3 Series Model: 3B2/600 GR

C Compiler: AT&T 3B2/RISC C 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 #: CDC5574

Product Supplier: Control Data Corporation

Product Tested: EP/IX Version: 1.3.1 Release: 03/21/1991

System Supplier: Control Data Corporation

System Hardware: Control Data 4000 Model: 4330-250

C Compiler: EP/IX C Language RISCompiler Version: 2.11 Release: July 1990

PCTS: 151-1 Version: 1.1 - 04/26/91

APTL: 0356 Applications Software Incorporated Date Issued: 05/24/91

Reference File #: CDC5750

Product Supplier: Control Data Corporation

Product Tested: EP/IX Version: 1.3.1 Release: 03/21/1991

System Supplier: Control Data Corporation

System Hardware: Control Data 4000 Model: 4680

C Compiler: EP/IX C Language RISCompiler Version: 2.11 Release: 07/16/1990

PCTS: 151-1 Version: 1.1 - 04/26/91

APTL: 0356 Applications Software Incorporated Date Issued: 05/24/91

Reference File #: DEC5794

Product Supplier: Digital Equipment Corporation

Product Tested: ULTRIX Version: 4.2 Release: May 31, 1991

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 #: DEC7917

Product Supplier: Digital Equipment Corporation

Product Tested: the ULTRIX Operating System Version: 4.2A Release: November 18, 1991

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 #: DEC9418

Product Supplier: Digital Equipment Corporation

Product Tested: ULTRIX Version: 4.2 Release: May 31, 1991

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 #: DGC2542

Product Supplier: Data General Corporation
Product Tested: DG/UX Version: 5.4
System Supplier: Data General Corporation
System Hardware: AViiON 5000 Model: AV/5240
C Compiler: GNU C Compiler for AViiON 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 #: DGC8016

Product Supplier: Data General Corporation
Product Tested: DG/UX Version: 5.4
System Supplier: Data General Corporation
System Hardware: AViiON 400/4000 Model: AV/4100
C Compiler: GNU C Compiler for AViiON 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: AViiON 400/4000 Model: AV/412
C Compiler: GNU C Compiler for AViiON 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 #: DGC9391

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

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 Version: 3.0

PCTS: 151-1 Version: 1.1 - 09/11/91

APTL: 0345 UniSoft Corporation Date Issued: 10/16/91

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 #: SCO9875

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/ptx 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 #: 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

For further information on the NIST/CSL POSIX validation program contact James A. Hall, Computer Systems Laboratory, B266 Technology Bldg., NIST, Gaithersburg, MD 20899. Telephone: 301-975-3273, fax: 301-590-0932, e-mail: hall@swe.ncsl.nist.gov.

7. COMPUTER SECURITY

7.1 FIPS Computer Security Standards

NIST validates products for compliance to the following computer information security standards:

- a. Data Encryption Standard (DES), FIPS PUB 46-1, and
- b. Message Authentication Code (MAC), FIPS PUB 113.

7.2 Validation Procedures

Procedures for validation of implementations of the above standards are published in the following documents:

- a. NBS Special Publication 500-61, Maintenance Testing for the Data Encryption Standard,
- b. NBS Special Publication 500-156, Message Authentication Code (MAC) Validation System: Requirements and Procedures.

7.3 Validated Devices

For information about submitting products for validation or to obtain a list of devices validated under either standard, please contact:

Manager, Security Technology Group
Computer Security Division
National Computer Systems Laboratory
Building 225, Room A266
National Institute of Standards and Technology
Telephone (301) 975-2920

Plans are to include the list of validated DES and MAC devices in the next issue of the VPL.

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.

<u>TOPIC</u>	<u>STANDARD</u>	<u>CONTACT</u>	<u>PRODUCT/SERVICE</u>
COBOL	FIPS PUB 21-3	Judy Kailey NIST, Bldg. 225, Rm. A266 Gaithersburg, MD 20899 (301) 975-3259	T, S, C
Fortran	FIPS PUB 69-1	Judy Kailey NIST, Bldg. 225, Rm. A266 Gaithersburg, MD 20899 (301) 975-3259	T, S, C
Pascal	FIPS PUB 109	Kathryn Miles NIST, Bldg. 225, Rm. A266 Gaithersburg, MD 20899 (301) 975-3156	T, S, C
C	FIPS PUB 160	Kathryn Miles NIST, Bldg. 225, Rm. A266 Gaithersburg, MD 20899 (301) 975-3156	T
Ada	FIPS PUB 119	William Dashiell NIST, Bldg. 225, Rm. A266 Gaithersburg, MD 20899 (301) 975-2490	T, S, C
MUMPS	FIPS PUB 125	William Dashiell NIST, Bldg. 225, Rm. A266 Gaithersburg, MD 20899 (301) 975-2490	T, S, C
SQL	FIPS PUB 127-1	Joan Sullivan NIST, Bldg. 225, Rm. A266 Gaithersburg, MD 20899 (301) 975-3258	T, S, C

<u>TOPIC</u>	<u>STANDARD</u>	<u>CONTACT</u>	<u>PRODUCT/SERVICE</u>
GKS	FIPS PUB 120	Susan (Quinn) Sherrick NIST, Bldg. 225, Rm. A266 Gaithersburg, MD 20899 (301) 975-3268	T, S, C
CGM	FIPS PUB 128 MIL-D-28003	Lynne Rosenthal NIST, Bldg. 225, Rm. A266 Gaithersburg, MD 20899 (301) 975-3353	T, S, C
POSIX	FIPS PUB 151-1	Jim Hall NIST, Bldg. 225, Rm. B266 Gaithersburg, MD 20899 (301) 975-3273	T, S, C
Message Authentication	FIPS PUB 113	Miles Smid NIST, Bldg. 225, Rm. A216 Gaithersburg, MD 20899 (301) 975-2938	T, S, C
Key Management Validation	ANSI X9.17	Miles Smid NIST, Bldg. 225, Rm. A216 Gaithersburg, MD 20899 (301) 975-2938	T, S, C
Data Encryption Standard	FIPS PUB 46-1	Miles Smid NIST, Bldg. 225, Rm. A216 Gaithersburg, MD 20899 (301) 975-2938	T, S, C
GOSIP	FIPS PUB 146	Stephen Nightingale NIST, Bldg. 225, Rm 141 Gaithersburg, MD 20899 (301) 975-3616	T, S
1984 X25	CCITT X.25-1984 ISO 7776, ISO 8208 ISO 8882, ISO 9646 FIPS PUB 100-1 FIPS PUB 122(planned)	David Su NIST, Bldg. 223, Rm. B364 Gaithersburg, MD 20899	T
ISDN Data Link Layer	Q921.LAPD ANSI T1.602	David Su NIST, Bldg. 223, Rm. B364 Gaithersburg, MD 20899 (301) 975-6194	T

<u>TOPIC</u>	<u>STANDARD</u>	<u>CONTACT</u>	<u>PRODUCT/SERVICE</u>
ISDN Physical Layer	S/T Interface ANSI T1.605 (S/T Interface) ANSI T1.601 (U Interface)	David Su NIST, Bldg. 223, Rm. B364 Gaithersburg, MD 20899 (301) 975-6194	T (abstract)
ISDN Network Layer	Q931 ANSI T1.607 ANSI T1.608 FIPS PUB (planned)	David Su NIST, Bldg. 223, Rm. B364 Gaithersburg, MD 20899 (301) 975-6194	T
FDDI	ANSI X3T9 FIPS PUB (planned)	David Su NIST, Bldg. 223, Rm. B364 Gaithersburg, MD 20899 (301) 975-6194	T

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10. SUPPLEMENTARY NOTES				
11. ABSTRACT (A 200-WORD OR LESS FACTUAL SUMMARY OF MOST SIGNIFICANT INFORMATION. IF DOCUMENT INCLUDES A SIGNIFICANT BIBLIOGRAPHY OR LITERATURE SURVEY, MENTION IT HERE.)				
<p>The Validated Products List (VPL) identifies those COBOL, Fortran, Ada, and Pascal programming language processors that have a current validation certificate and those SQL language processors that have a registered test report, referencing the applicable Federal Information Processing Standard (FIPS) as of the date of this publication. This List also includes GOSIP Conformance Testing Registers; and POSIX Conformance testing Laboratories and Validated products. The testing of language processors to determine the degree to which they conform to the Federal Standards is 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. This List is updated and published quarterly.</p>				
12. KEY WORDS (6 TO 12 ENTRIES; ALPHABETICAL ORDER; CAPITALIZE ONLY PROPER NAMES; AND SEPARATE KEY WORDS BY SEMICOLONS)				
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