# Software Product Description

PRODUCT NAME: DEC FDDIcontroller/EISA Software

SPD 42.82.03

Microcode, V2.2 for 54-21503-0x Modules; V1.2 for 54-21497-

0x Modules

### **DESCRIPTION**

DEC FDDIcontroller/EISA Software Microcode is dedicated microcode that operates in the DEC FDDIcontroller/EISA. The DEC FDDIcontroller/EISA is a Network Interface Card (NIC) that complies with the Extended Industry Standard Architecture (EISA) bus specification and ANSI X3T9.5 FDDI standards.

The DEC FDDIcontroller/EISA allows computer systems that incorporate the EISA I/O bus to connect to an FDDI local area network. The DEC FDDIcontroller/EISA is offered in three options:

- DEC FDDIcontroller/EISA SAS single attachment station with multimode fiberoptics (DEFEA-AA)
- DEC FDDIcontroller/EISA DAS dual attachment stations with multimode fiberoptics (DEFEA-DA)
- DEC FDDIcontroller/EISA UTP single attachment stations with unshielded twisted pair (DEFEA-UB)

Multiple DEC FDDIcontroller/EISA modules may be used in a computer system, subject to limitations such as the number of EISA slots available, the number and type of other controller cards installed in the system, the system power supply capacity, and individual operating system support.

DEC FDDIcontroller/EISA hardware is shipped from the factory with the DEC FDDIcontroller/EISA Software Microcode preloaded. The microcode resides in electronically alterable memory within DEC FDDIcontroller/EISA hardware, and may be updated if new versions of the microcode are issued. The software microcode is stored in non-volatile memory.

General characteristics of DEC FDDIcontroller/EISA Software Microcode are:

- · Performs device initialization
- Performs Diagnostic Selftest automatically at powerup

- Performs FDDI Station Management (SMT) based on the ANSI X3T9.5 Standard, SMT V7.2
- Implements FDDI Full-Duplex operation in point-topoint links with other Digital FDDI stations
- Supports IETF FDDI MIB, MIB II and DEC MIB objects
- Maintains all DEC FDDIcontroller/EISA counters

There are two versions of the firmware. For modules with hardware revision of 54-21503-0X, Version 2.2 is used. For modules with hardware revision of 54-21497-0x, Version 1.2 is used.

## HARDWARE REQUIREMENTS

DEC FDDIcontroller/EISA hardware is required to run DEC FDDIcontroller/EISA Software Microcode.

The DEC FDDIcontroller/EISA was tested on the following systems: applicationDEC 433MP, DEC 2000 Model 300/500, DECpc 433T, DECpc 433ST, DECpc 450ST, DECpc 466ST, DECpc AXP 150, DECpc 466 MTE, COMPAQ® SystemPRO, COMPAQ DeskPRO® 33MHz, COMPAQ DeskPRO 50MHz, Dell System 425DE, Dell System 433DE, HP® VECTRA® 486/33, AST Premium® 486/33, ALR Business/EISA, Gateway 2000.

Power consumption is ~3.5A MAX @ 5.0V.

I/O bus clock speed either equal to or less than  $8.33 \mathrm{MHz}.$ 

Interrupt Request (IRQ) Selections Supported:

- IRQ9
- IRQ10
- IRQ11
- IRQ15

Note: Most device drivers do not allow shared interrupts to be used.



Memory Address Range Selections Supported:

 C0000 - EFFFF in 0K to 32K buffer sizes, depending on which device driver is used

I/O Address Selections Supported:

EISA-slot specific

DMA Channel Selections Supported:

None. DEC FDDIcontroller/EISA is a DMA Bus Master and does not use a system DMA channel

### **SOFTWARE REQUIREMENTS**

The DEC FDDIcontroller/EISA software microcode operates in conjunction with device drivers that are provided by Digital. Together with these device drivers, the DEC FDDIcontroller/EISA software microcode operates under the following software environments:

- Digital PATHWORKS for DOS Version 4.1
- Digital PATHWORKS for OS/2® Version 2.0
- Microsoft® LAN Manager Version 2.2
- Microsoft Windows NT<sup>TM</sup> Version 3.1 for Intel and Release Candidate Version 1 for Alpha AXP PC
- Microsoft Windows for Workgroups® Version 3.1
- Novell® NetWare® Version 3.11, client and server applications (Novell certified)
- Novell NetWare Version 4.0 Server application (Novell certified) and Version 4.0 client application (pending Novell certification)
- Novell SNMP Management Agent Module NetWare Version 3.11 Server
- OS/2 Version 1.31 and DOS V5.0.
- SCO<sup>™</sup> UNIX® Version 3.2.2 and Version 3.2.4 and Open Desktop<sup>™</sup> (ODT) Version 1.1 and Version 2.0
- SCO MPX Version 1.1 for multiple processor systems

The following driver is bundled with the operating systems:

 DEC OSF/1 for Alpha Version 1.3b for DEFEA-AA /DA

Additional device drivers are periodically made available, extending the list of software operating environments supported.

The driver kit includes a local management utility for upgrading firmware and EISA Configuration utility.

### **SOFTWARE LICENSING**

The Software License required to run DEC FDDIcontroller/EISA Software Microcode is included with the hardware. This license cannot be purchased as an independent line item.

This software is furnished under the licensing provisions of Digital Equipment Corporation's Standard Terms and Conditions. For more information about Digital's licensing terms and policies, contact your local Digital office.

Device drivers are not licensed, and may be obtained through various channels, including, but not limited to:

- Diskettes provided by Digital in the DEC FDDIcontroller/EISA product
- CompuServe® Electronic Bulletin Board Service (GO DECPCI)

More information on DEC FDDIcontroller/EISA device drivers may be obtained by calling:

1-800-DEC-INFO, Ext 33 (U.S. only) or (508) 493-7161 Ext 33 (Outside U.S.)

#### SOFTWARE WARRANTY

Warranty of this software microcode product is provided by Digital with the purchase of a license for the product as defined in the Software Warranty Addendum of this SPD.

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