Software Product Description

PRODUCT NAME: DECbridge 500 Software Microcode, Version 3.0 **SPD 32.28.04**

DESCRIPTION

DECbridge 500 Software Microcode is dedicated microcode which runs in the DECbridge 500 FDDI to 802.3 /Ethernet hardware bridge platform. The DECbridge 500 is an ISO model Level 2 protocol-independent bridge that allows users to connect an existing 802.3 /Ethernet LAN to a high speed FDDI network.

DECbridge 500 hardware is shipped from the factory with the DECbridge 500 Software Microcode preloaded. The microcode resides in the bridge's electronically alterable memory, thus allowing subsequent versions of the microcode to be downline loaded. DECbridge 500 Software Microcode is maintained in the hardware base even during power-off states.

Local area network bridges are the building blocks of the extended LAN. An extended LAN is a collection of LANs that are interconnected to logically appear as one large local area network. The bridge interconnects an 802.3/Ethernet LAN to an FDDI LAN allowing only data destined for an adjacent LAN to pass through the device. By performing this traffic control and direction, network bandwidth is maximized since only traffic required on the extended LAN is allowed to traverse the bridge. Additionally, the DECbridge 500 device performs all the necessary data packet conversions to allow FDDI and 802.3/Ethernet to interoperate on the extended LAN.

The general characteristics of DECbridge 500 are:

- Performs initialization and bootstrapping.
- Provides a simple network management protocol (SNMP) agent allowing "show" function requests when made from SNMP management systems.*
- Performs Diagnostic Selftest automatically at power-up and also when it is initiated by network management software.
- Performs filter and forward decisions on incoming data packets.
- Performs bi-directional standard-based translation between FDDI and 802.3/Ethernet data formats, providing direct transparent communications between 802.3/Ethernet and FDDI LANs.
- Performs specialized translation of certain protocols to provide transparent communication between 802.3 /Ethernet and FDDI LANS as specified by IEEE802 /Ethernet LANs.
- Performs IP (TCP, UDP, ICMP, and EGP) data packet fragmentation per RFC 791. Allows transparent forwarding of large FDDI IP packets to 802.3/Ethernet LANs.
- Performs Spanning Tree loop detection in both the IEEE 802.1d implementation as well as in Digital's LAN Bridge implementation mode; automatically configures to Digital LAN Bridge and 802.1d Spanning Tree implementations for backwards compatibility with the installed base of Digital LAN Bridge users.
- Provides flexible filtering (destination, address, protocol) and password access protection for greater network control, increased security and bandwidth utilization, and reduced propagation of network problems.*
- Performs FDDI station management as specified by the ANSI X3T9 SMT V6.2 standard.
- Performs Ring Map functions as per SMT V6.2.*
- Updates all the DECbridge 500 counters and settable parameters.
- Performs failure detection of DECbridge's cooling fans and alerts users through management software.*
- Performs operating system support scheduling, maintains timers and receive requests.

HARDWARE REQUIREMENTS

DECbridge 500 hardware is required to run DECbridge 500 Software Microcode.

* Requires Network Management Software to access this feature.

SOFTWARE LICENSE

The software license required to run DECbridge 500 Software Microcode is included with the hardware.

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

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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