

Model 686MBPD Series



Pentium II Motherboard



FEATURES

- **High Performance ATX Motherboard**
- **Tested Motherboard Solution for the Intel Pentium II Processor**
- **Complete Integration Solution for Quick Time to Market**
- **Genuine Intel Solution for Quality, Reliability and Support**
- **LANDesk® Client Manager Software and Hardware ASIC for Superior System Manageability**

DESCRIPTION

The Intel Pentium® II processor is changing the shape of business computing. Now, with the Intel PD440FX (“Portland”) Motherboard for system integrators, you can deliver these powerful capabilities to customers who need peak performance for today’s sophisticated business applications running on such complex operating systems as Windows NT and Windows 95/97 - while providing them with the computing power they will need for tomorrow’s even more advanced business software.

The Intel PD440FX Motherboard makes system integration easy because all materials required to install the Pentium II processor are included. So it will help you be quick to market. And quick to meet the needs of customers who look to you - their system integrator - for leading-edge business computing solutions.

Quick to Market with Peak Performance

With the Intel PD440FX Motherboard, you can bring the performance of Pentium II processor-based systems to market quickly and easily. The Pentium II processor combines the power of the Pentium® Pro processor with the capabilities of Intel’s MMX™ media environment technology. So it gives your customers the performance needed for today’s Windows NT, Windows 95 and Unix-based business applications. And for tomorrow’s even more complex 32-bit business software.

Improved Productivity, Lowered Cost of Ownership

Your customers want to reduce downtime through anticipating problems before they arise, and quickly resolving those that do occur. That translates to greater productivity and a lower total cost of ownership. And that is the philosophy behind the design of the PD440FX Motherboard.

The PD440FX includes an on-board hardware management ASIC, plus LANDesk® Client Manager software. By providing real-time health monitoring, automatic polling and hardware condition alerts, and diagnostics of desktop client systems, this hardware-software combination simplifies local and network management and troubleshooting.

Quick, Easy, Tested Integration Solution

The new Pentium II Single Edge Contact (S.E.C.) cartridge packaging technology required changes in the motherboard design as well. The result is different processor integration methods and materials. Combining a PD440FX Motherboard with a Pentium II processor produces a quick, easy, fully compatible integration solution - without the inconvenience and uncertainty of buying, assembling and testing separate components.

The Boxed PD440FX Motherboard Contains:

- PD440FX Motherboard
- Pentium II Processor Retention Mechanism
- Floppy Drive Cable
- IDE Cable
- Quick Start Guide
- Software Drivers and User’s Manual on CD-ROM



DESCRIPTION CONT.

Features

Supports Pentium® II Processor

Intel 82440FX PCI Set

Complete, Tested Integration Kit Solution

LANDesk® Client Manager Software

Hardware Management ASIC

Universal Serial Bus (USB) Connectors

Four 72-Pin SIMM Sockets

ATX 2.01 Form Factor

3 PCI, 2 ISA, and 1 Shared Slot

Error Checking and Correcting (ECC) Memory

Benefits

Delivers the combined power of the Pentium® Pro and the capabilities of Intel's MMX technology

Proven platform for Pentium II processor-based systems

Includes all the necessary materials and documentation to integrate a Pentium II processor

Simplifies local and network management of client desktop systems.

Facilitates hardware monitoring and management for lower cost of ownership

Expands and simplifies PC connectivity to both current and new peripherals

Provides flexibility to support up to 256 MB of extended data out (EDO) memory

Permits easy integration and upgradability

Offers flexibility for custom configuration

Guards against data corruption

SPECIFICATIONS

PROCESSOR/CACHE

Processors Supported

Pentium® II processor in S.E.C. package with 512 KB L2 cache 233 MHz, 266 MHz, and future upgrades

SYSTEM MEMORY

Memory Capacity

Four 72-pin sockets for tin-lead DRAM SIMMs 2 banks (SIMMs filled in pairs for 64 bit bus)

Memory Size

Supports up to 256 MB of memory 8 MB minimum (two 4 MB SIMMs) 256 MB maximum (four 64 MB SIMMs)

SIMM Sizes

4 MB, 8 MB, 16 MB, 32 MB, 64MB

Access Speeds

50ns or 60ns Extended Data Out (EDO), ECC support with ECC and Parity memory

Memory Voltage

5 volts

INTEGRATED AUDIO*

Yamaha OPL3-SA3 (YMF715) Audio Plug and Play with 16-bit addressing

INTEGRATED PCI/ISA IDE XCELERATOR

Dual Channel

2 independent channels

Fast-IDE Interface

4 IDE devices, Mode 0, PIO Mode 3 and Mode 4 IDE Hard Drive and CD-ROM support

USB*

2 standard stacked USB connectors

INTEGRATED SUPER I/O

Controller

National 87307 ISA Plug and Play

Two Serial Ports

Async, RS-232C, PC16C550A compatible

Parallel Port

Compatible / ECP / EPP IEEE 1284 standard

Floppy Controller

1.44 MB, 2.88 MB, 3-Mode support

Keyboard/Mouse Controller

8042A compatible

Real Time Clock

Century Reg. ±13 minutes/year accuracy

APM/APC

Power On, Off, Sleep, Resume features

Infra Red Interface

IrDA compatible and consumer IR compliant



SPECIFICATIONS CONT.

SYSTEMBIOS

BIOS Type

2 Mb Flash EEPROM with Intel BIOS

Special Features

Plug and Play; IDE drive auto-configure; APM 1.2, DMI 2.0, ECC/Parity support; Multilingual support

PCI CHIPSET

Intel 82440FX PCISet
Intel 82441FX PMC
Intel 82442FX DBX
Intel 82371SB PIIX3

JUMPERS AND FRONT PANEL CONNECTORS

Connectors

Speaker, Reset, Power LEDs, HD LED, infrared, power on/off, sleep/resume

Jumpers

Password clear, CMOS clear, setup access, BIOS recovery, CPU/Bus frequency

EXPANSION SLOTS (ALL FULL-LENGTH)

Description

Three dedicated PCI slots Two dedicated ISA slots One shared slot for either ISA or PCI

MECHANICAL

Board Style

ATX standard mounting holes Integrated I/O connectors include: two serial ports, one parallel port, PS/2 style keyboard and mouse connectors, audio stack and two USB connectors

Board size

9.6" x 12.0" (24.4 cm x 30.5cm)
ATX information available at
<http://www.teleport.com/-atx>

BASEBOARD POWER REQUIREMENTS

+3.3V

Tolerance $\pm 5\%$, typical current 0.6A

+5V

Tolerance $\pm 5\%$, typical current 7.0A

+12V

Tolerance $\pm 5\%$, typical current 0.6A

-5V

Tolerance $\pm 10\%$, typical current 0.01A

-12V

Tolerance $\pm 10\%$, typical current 0.1A

ENVIRONMENT

Operating Temperature

0C to +55C

Storage Temperature

-40C to +70C

Relative Humidity

92% RH @ 36°C

REGULATIONS

Safety regulations:

U.S. & Canada UL 1950 - CSA 950-95, U.S. & Canadian recognition component marks Europe UL Classified to IEC 950

EMI/RFI regulations:

Europe CE Mark This product complies with European Directive 89/336/EEC via standards EN 55022 and EN 50 082-1 when tested in a representative chassis.

*All Other brands and names are the property of their respective owners

ORDERING GUIDE

Model 686MBPD266

Motherboard with 266MHz Pentium II Processor

Model 686MBPD233

Motherboard with 233MHz Pentium II Processor

ACCESSORIES

Model 41924-14A

I/O Panel for 7308T, 7408T and 9301-ATX chassis

Model 41865-14A

I/O Panel for 9300-ATX chassis



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