

Model SB686P Series



Pentium Pro Single Board Computer



FEATURES

- **Pentium Pro Power**
- **Intel 440FX Chip Set**
- **With or Without SVGA Video**
- **SCSI-3 Controller**
- **To 256MB On-board DRAM**

DESCRIPTION

The SB686P series offer full Pentium Pro processor power and compatibility employing the Intel 440FX chip set. The on-board features include IDE, floppy and SCSI drive support as well as serial and parallel interfaces, and

a PS/2 mouse port. The SB686PV includes an on-board Cirrus Logic SVGA video port with 1MB RAM standard for PCI video performance without the use of an additional expansion slot. The ISA bus drivers offer an enhanced 24mA output to beef up the 440FX chipset standard output.

SPECIFICATIONS

Processors Supported

Intel Pentium Pro Processor

Processor Speeds Supported

180MHz And 200MHz
Upgradable To Future Pin Compatible Processors
"Socket 8" ZIF Socket
Fan Cooled Heat Sink Provided

Chip Set

Intel 80440FX

BIOS

AMI Hiflex Bios, Plug N' Play Compatible
Flash Upgradable

Bus Clock Rate

PCI Bus 33MHz @ 200MHz
PCI 2.1 Compliant
ISA Bus To Run At Fixed Clock Rates,
Dependent Upon Processor Clock Rate.
24ma ISA Bus Drive Current
Support For Bridge To Additional PCI Slots

Cache

256k OR 512k L2 Cache On Processor

Dram

Memory Capacity To Be 8 To 256MB On-Board
DRAM
Four 72 Pin Tin Lead PS/2 Style Sockets,
Two banks of two sockets each
36 Or 32bit SIMMs, 1x3x, 2x3x, 4x3x, 8x3x,
16x3x, 60 Or 70ns
Fast Page Mode Or EDO SIMMs, Automatic
Support
Parity Or Non-Parity supported

SPECIFICATIONS CONT.

CONTROLLERS

EIDE

Dual Controllers, Two Drives Each On PCI Local Bus
PIO Mode 4 Support, Automatic Drive Detection
Can Be Totally Disabled

Floppy Controller

Support For 360K Through 2.88MB Drives
Can Be Totally Disabled

SCSI-3

Adaptec AIC-7880P Ultra Narrow/Wide, Single Ended
256 byte Data FIFO
To 40MB/S Data Throughput
Support 133MHz Burst Data Rate to PCI Bus
68 Pin high density D-shell on board
Can Be Totally Disabled

Video Port (SB686PV Models Only)

VGA Video Output Using Cirrus Logic 64-bit GD5446 Controller.
1MB EDO DRAM Standard, Sockets For 2nd MB EDO DRAM On Board
True Color to 800x600 with 1MB
True Color to 1024x768 with 2MB
To 1280x1024 Non-interlaced with 16k Colors
135MHz Maximum Dot Clock
Connector on the rear panel bracket
DB15S Connector On Rear Bracket. (No Hole On Non-Video Model)

Dual Serial Ports

16C550 Compatible, FIFO Buffer.
Serial Port 1 Connector At Rear Panel (DB-9P)
Serial Port 2, 10 Pin Header To DB9P Connector On Separate Bracket Shared With Parallel Port.
Isolated To 1500VDC
Can Be Totally Disabled

Single Parallel Port

Bi-directional Capability, EPP And EPC Enhanced Printer Port Modes.
Header Connector On-Board; Cable To DB25P On Separate Bracket Shared With COM2.
Can Be Totally Disabled

PS/2 Mouse Port

Mini-Din Connector On Rear Bracket, 5 Pin Header Connector On Board.
Microsoft Compatible.
Can Be Totally Disabled

Keyboard Port

Header Connector On-Board. Self Healing Fuse.

Speaker Port

Header Connector Provided.

Hardware Reset

Header Connector On-Board

Watchdog Timer

User Programmable
Can Be Totally Disabled

Operating Environment

0 to 60°C
5 to 95% R.H., Non-Condensing
Sea Level to 10,000' Altitude

Storage Environment

-40 to +85°C
5 to 95% R.H., Non-Condensing

MTBF

Calculated With Mil-Hdbk-217-f, Ground Benign > 75,000 P.O.H. @ 25°C

Dimensions

Standard AT Feature Board Size In Length And Height

Power Requirements

+5V@6.2 Amps typical
+12V@100 mAmps typical
-12V@100 mAmps typical
VRM (Voltage Regulator Module) Required Specific to Processor
3.3VDC Monitored In Compliance With PCI 2.1

ORDERING GUIDE

Model SB686P200

Pentium Pro Processor, 256k Cache, Fan Cooler, Manual, Driver Disks

Model SB686PV200

Pentium Pro Processor, 256k Cache, SVGA Video, Fan Cooler, Manual, Driver Disks

Model SB686P5200

Pentium Pro Processor, 256k Cache, SVGA Video, Fan Cooler, Manual, Driver Disks

Model SB686PV5200

Pentium Pro Processor, 256k Cache, SVGA Video, Fan Cooler, Manual, Driver Disks

Model 3-274805-0

RAM Expansion for SVGA Video, Two Each Required

