

1.4Ghz Pentium III System On Module

MICRO-P3

SYSTEM ON A MODULE W/ LAN - AUDIO - VIDEO

The Shortest path from ideas...to product.

Features

- Choice of ultra low power Tualatin Pentium III / Celeron CPU from 500Mhz to 1.4Ghz with 256K/512 KB L2 cache
- Small form factor 5.0" X 3.6"
- 10/100Base-T & CRT/LCD interfaces
- 2 serial ports, 4 USB ports, 256 Bytes EEPROM, 64-bit unique electronic ID
- Intelligent thermal management with independent microcontroller
- Over 200,000 hours MTBF
- 5 year product availability guarantee
- Less than 4 second boot up time

Applications

- Robotic
- Medical
- Test & Measurement
- Transportation
- Avionics
- Mil/Aerospace
- e-Kiosks
- Industrial Automation
- Inventory Management
- Point Of Sale Terminal

4 Seconds boot time

Over 200,000 H MTBF



Technical Data

System

CPU	Ultra low power Tualatin (Celeron/Pentium III) processors 500Mhz to 1.4 GHz with 256 KB/512 KB L2 cache
SYSTEM MEMORY	SODIMM socket supports 64, 128/256 or 512 MBytes
CHIPSET	Intel 815E embedded chipset
BIOS	Customized emdedded BIOS on 256KB flash memory
Audio	AC 97 sound
WATCHDOG TIMER	Software enable/disable/programmable 2s. to 120 s.
BUS	PCI BUS supports 4 BUS master devices
POWER CONSUMPTION	Typical: 5V @ 2.2 A, 3.3V @ .7A [900Mhz CPU] 5V @ 6.0A, 3.3V @ 1A [1.4Ghz CPU]
SIZE	3.6" x 5.0"
TEMPERATURE	-0°C ~ 65°C operating
OPERATING HUMIDITY	0% ~ 90% relative humidity, non-condensing

I/O

Standard I/O	2 x EIDE (Ultra DMA100), 1 x FDD, 1 x K/B, 1 x Mouse, 2 x serial, 1 x LPT, 4 USB ports (USB 1.0 compliant)
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ETHERNET	10/100BASE-T (Intel 82562ET)
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Display

CHIPSET	Built in the Intel 815E embedded North Bridge
DISPLAY MEMORY SIZE	Share with Main memoy, up to 8 MBytes
RESOLUTION	1280x1024 CRT and TFT LCD display

Discription

MICRO-P3 is a very high performance computer system implemented on a small module (5.0" X 3.6"), onboards features includes; 500Mhz - 1.4Ghz CPU, LAN, Audio, Video, 64M-512Mbytes SDRAM, EIDE, USB, etc.... All I/O and PCI BUS signals are brought out to a high density connector so that OEM can design a simple board with form factor and connectors that well fits their own applications, such board can also be designed by TME in less than 4 weeks

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Features Description

CPU	Socket 370 supports ultra power Intel Tualitan (0.13 micron technology) Celeron and Pentium III with low core voltage L1 Cache - 16 KB instruction, 16 KB write-back data L2 Cache - 256 KB for Tualitin Celeron CPU, 512 KB for Tualitin Pentium III CPU Core voltage - 1.2V - 1.5V Higher performance than dual 1 GHz Pentium III with Intel 440BX chipset Passive heatsink for processor speeds less than 900 MHz
Chipset	Intel 815e embedded chipset
BUS Speed	PCI 2.2 compliance PCI BUS supports 4 BUS master devices on 400-pin High density I/O Connector (HIC) 66-133 MHz FSB
BIOS	BIOS designed for embedded applications with 4 second boot up time, integrated VIDEO BIOS. CMOS setup is stored on eeprom to prevent the system failure due to battery loss. The Embedded BIOS can be customized with customer's features
SYSTEM MEMORY (SDRAM)	One 144-pin SODIMM socket supports 3.3V SDRAM 32 to 512 MBytes (PC-100 and PC-133)
Audio Interface	AC'97 2.2
Video Interface	Intel 815e embedded with 8 MB UMA share memory CRT mode up to 1280 X 1024 @ 24-bit color resolution LCD mode up to 1024 X 768 @ 24-bit color resolution Full 2D/3D DirectX acceleration Hardware motion compensation assist for software Mpeg/DVD decoders
Network Interface	Intel 82562ET chipset IEEE 802.3u 100 Base-T Fast Ethernet
EIDE Interface	Integrated dual channel enhanced IDE interface. Support for up to four IDE devices. Support for Ultra DMA/100/66/33 synchronous DMA mode transfers at up to 133 MB/sec
Floppy Disk Interface	Supports two floppy drives on HIC connector
COM1-2 Interface	16C550 compatible, 115K baud max
LPT Interface	Bi-directional/EPP/ECP compatible
USB Interface	4 USB ports (USB 1.0)
Peripheral I/O	All peripheral I/O on high density I/O connector (HIC located on back of board)
Other Embedded Features	64-bit Electronic ID System Management Bus (SMBus) Independant microcontroller for thermal management of CPU and ambient temperature with dual redundant CPU fans Serial EEPROM - supports batteryless boot capability 128 Bytes EEPROM available for OEM use ESD 10,000V MTBF 200,000 Hours Software enable/disable/programmable 2s. to 120 s.

Ordering Information

MP3-14-P	Very high performance with 1.4Ghz Pentium III Tualatin (0.13 micron), 512 KB L2 cache, 0°C TO +65°C
MP3-12-P	High performance with Pentium III Tualatin 1.26 GHz (0.13 micron), 512 KB L2 cache CPU, 0°C TO +65°C
MP3-12-C	Low cost with Tualatin Celeron 1.2Ghz, 256 KB L2 cache CPU, 0°C TO +65°C
MP3-09-C	Low cost , low power, passive heat sink with Tualatin Celeron 900Mhz, 256 KB L2 cache CPU, 0°C TO +75°C
MP3-05-C	Low cost , Ultra low power, passive heat sink with Tualatin Celeron 500Mhz, 256 KB L2 cache CPU, 0°C TO +75°C
MP3-09-E	Ultra low power with Tualatin Celeron 900Mhz, 256 KB L2 cache CPU, -40°C TO +85°C OPERATING TEMPERATURE

