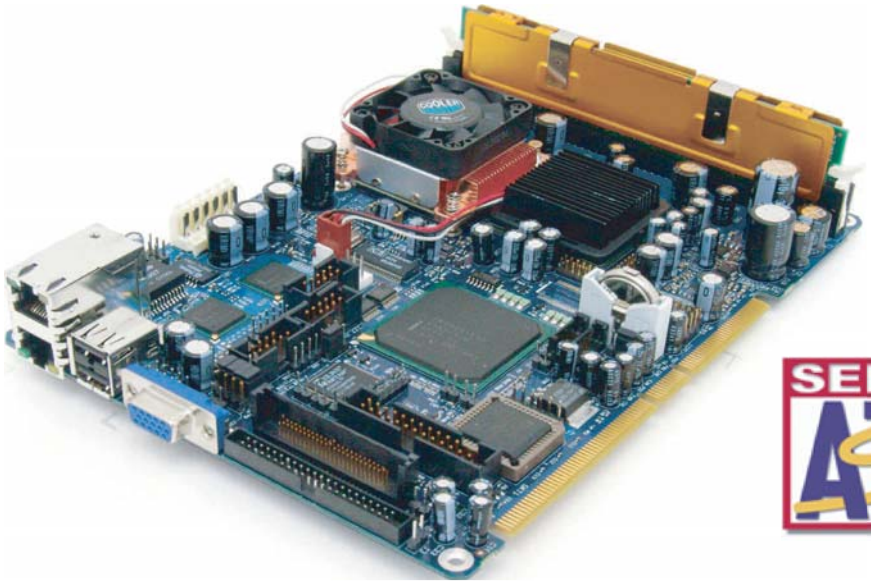
MUNG0560

5.25-inch Embedded SBC with 64-bit I/O bus



Features of the MUNG0560:

- Intel Pentium M or Celeron M processor up to 2.0GHz and up
- Intel 855GME and 6300ESB long life chipsets
- Intel Extreme Graphics 2 controller with dual AGP interface to support LVDS video outputs
- Up to 1GB of DDR 200/266/333 ECC memory
- CompactFlash™ socket for solid state drive
- First small 5.25-inch embedded board with 64-bit PCI-X or 32-bit PCI
- Four USB 2.0 I/O communications
- Dual RS-232 Serial ports
- One 10/100Base-T LAN and one 10/100/1000 Gigabit LAN
- Two SATA and one laptop IDE (44-pin) drive controllers
- Linux®, Windows® 2000/XP support

The MUNG0560 is Kontron's latest highest performance embedded board. Using the latest Intel 855GME and 6300ESB chipsets, the MUNG0560 supports all Intel® Pentium® M and Intel® Celeron M processors in both socketed and soldered CPU offerings. With an Intel® Pentium® M processor, and 64-bit I/O bus, the MUNG0560 provides un-matched performance in embedded applications-- performance comparable to an Intel® Pentium® 4 processor but without the extreme wattage and heat. By using an Intel® Pentium® M processor at 1.1GHz or Intel® Celeron® M processor, the MUNG0560 delivers stellar performance to rougher embedded environments.

I/O Performance

The MUNG0560's modern I/O, such as four USB 2.0 ports, two SATA controllers and one 10/100Base-T and one 10/100/1000 Gigabit Ethernet, provide many advantages over older embedded board designs. The onboard Extreme Graphics 2 supports separate dual video output via a conventional AGP interface to support LVDS flat panels. The most unique feature of the MUNG0560 is its PICMG edge that supports special risers to bring out 64-bit PCI-X slots for high performance I/O applications. Also included is a mini-PCI socket for add-on I/O with 64-bit extension for custom mini-PCI-X solutions, or just conventional 32-bit mini-PCI.

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MUNG0560 Technical Specifications

Processor
- Supports mPGA478 socket Intel® Pentium® M or Intel® Celeron® M processors (Banias &Dothan) 2.0GHz and up
- PCB support of non-socket soldered Intel® Pentium® M or Intel® Celeron® M processors by special request

Chipset
- 855GME and 6300ESB

Bus Interfaces
- PCI 32-bit PICMG edge with 64-bit 33/66MHz edge extension
- 3.3 or 5V compatible multi-slot riser/backplane available
- CPU FSB 400MHz

Memory
- Up to 1GB single DDR 64-bit 184-pin non-registered DDR 266/333
- Supports ECC or non-ECC memory modules

FLASH Memory
- 4Mb FLASH BIOS

I/O
- Four USB 2.0 ports (two as dual stack and two via 10-pin header)
- Supports bootable USB
- Two RS-232 Serial Ports
- Two Serial ATA drives
- ATA/IDE: Primary 44-pin 2.5-inch master/slave drive support up to UDMA/100
- One 10/100 Ethernet
- One 10/100/1000 Ethernet
- CompactFlash™: Secondary IDE or drive using vertical 50-pin CompactFlash Mini-PCI
- 32-bit PCI with optional 64-bit extension (backside)

I/O Options
- USB Expansion Board:
  - Adding net gain of 8 more USB 2.0 ports
  - 4-port module using one existing USB port
- Audio Speaker:
  - support for external speaker
- Audio Expansion Port:
  - AC 97 audio signals, 10-pin header, supports daughter card with Audio Codec, AMP & audio connectors
- Video
  - Integrated Enhanced Graphics 2 Controller
  - One VGA output
  - One dual channel LVDS connection

Connectors (Mounted)
- CRT/VGA (female HDB-15)
- Ethernet (dual stacked RJ-45 with two LEDs)
- USB 2.0 (dual stacked)

BIOS
- AMI Bios

OS Support
- Windows® 2000/XP, Redhat/Fedora 2.6
- Others by special request

Dimensions (W x D)
- Standard 5.25-inch form factor: 5.75 x 8-inch (146.1 x 203.2mm)

Power Requirements
- Input Power Range (max.)
  +5V DC +5%, max i/p current: tbd A +5%
  +12V DC +5%, max i/p current: tbd A +5%
- Input Power
  The maximum steady state input power shall be tbd W +15%

Environmental
- Operating Temperature
  0 ° to 50 °C (32 ° to 122 °F)
- Non-ooperating Temperature
  -40 ° to 70 °C (-40 ° to 158 °F)
- Operating Humidity
  5 to 90% RHNC
- Non-operating Humidity
  5 to 95% RHNC @ (50 °F)
- Operating Altitude
  13,123-feet (4000-meters)
- Non-operating Altitude
  49,212-feet (15,000-meters)

Reliability
- 2-year limited warranty

Ordering Guide
- MUNG0560
  5.25-inch Intel® Pentium® M board without processor

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