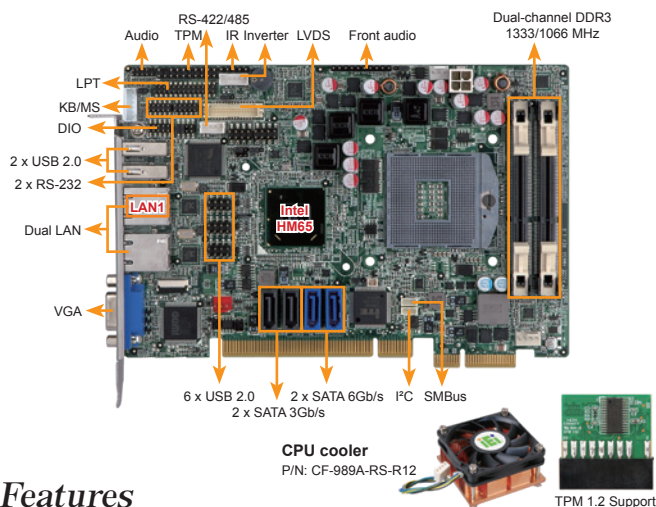


PIC0e-HM650

Half-size PCIe CPU Card supports Socket 988B Intel® Mobile Core™ i7/i5/i3 or Celeron® CPU with Intel® HM65, DDR3, VGA, LVDS, Dual PCIe GbE, SATA 6Gb/s, HD Audio and RoHS



Features

- Half-size PCIe CPU card supports Socket G2 32nm Intel® Core™ i7/i5/i3 or Celeron® processor
- Up to 16 GB 1333/1066 MHz dual-channel DDR3 SDRAM
- Supports 18/24-bit dual-channel LVDS and analog CRT output
- High-speed I/O interface provided through the 2nd gen PCIe add-on card and SATA 6Gb/s connectors
- Rich media acceleration for hardware encoding and decoding
- TPM V1.2 hardware security provided by the TPM module
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery

Specifications

- ◆ CPU: Socket 988B Intel® Mobile Core™ i7/i5/i3 or Celeron® CPU
- ◆ Chipset: Intel® HM65
- ◆ Memory: Two 204-pin 1333/1066 MHz dual-channel DDR3 SDRAM unbuffered DIMMs support up to 16 GB
- ◆ BIOS: UEFI
- ◆ Graphics Engine: Intel® HD Graphics Gen 6 supports DX10.1 and OpenGL 3.0
- ◆ Display Output: Full MPEG2, VC1, AVC Decode
- ◆ Display Output: Dual display supported
- ◆ Ethernet: LAN1: Realtek RTL8111E GbE controller with ASF 2.0 support
- ◆ External I/O Interface: 2 x USB 2.0
- ◆ Internal I/O Interface: 1 x KB/MS (1x6 pin), 2 x SATA 3Gb/s, 2 x SATA 6Gb/s, 2 x RS-232 (2x5pin, P=2.0), 6 x USB 2.0 (2x4 pin, P=2.54)
- ◆ Audio: Supports 7.1-channel HD Audio by IEI AC-KIT-892HD-R10 kit
- ◆ Front Panel: 1 x Front panel connector (1x10 pin, power LED, HDD LED, speaker, power button, reset button)
- ◆ TPM: 1 x TPM (2x10 pin)
- ◆ SMBus: 1 x SMBus (1x4 pin)
- ◆ PC: 1 x PC (1x4 pin)
- ◆ Expansion: PCIe signal and PCI signal via golden finger
- ◆ Watchdog Timer: Software programmable supports 1~255 sec. system reset
- ◆ Digital I/O: 8-bit digital I/O (2x5 pin)
- ◆ Fan Connector: 1 x CPU smart fan (1x4 pin), 1 x System smart fan (1x4 pin)
- ◆ Power Supply: 5V/12V, AT/ATX support
- ◆ Power Consumption: 5W@3.99A, 12V@0.43A, Vcore_12V@3.80A, 5VSB@0.06A
- ◆ Operating Temperature: -20°C ~ 60°C
- ◆ Storage Temperature: -20°C ~ 70°C
- ◆ Operating Humidity: 5% ~ 95%, non-condensing
- ◆ Dimensions: 185 mm x 122 mm
- ◆ Weight: GW: 1000g / NW: 260g
- ◆ CE/FCC compliant

Packing List

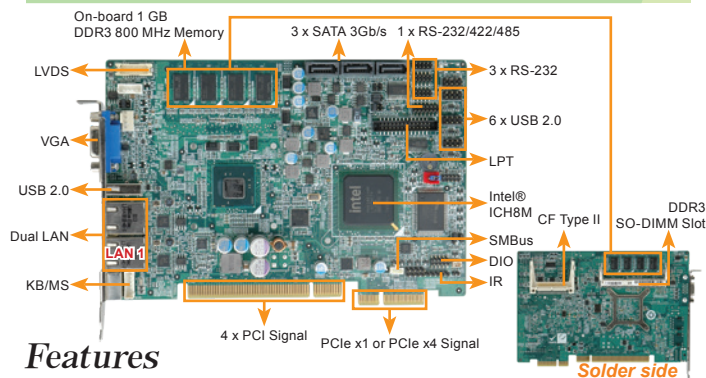
| | |
|---------------------------------------|----------------------|
| 1 x PIC0e-HM650 single board computer | 2 x SATA cable |
| 1 x Dual RS-232 cable | 1 x Mini jumper pack |
| 1 x USB cable | 1 x QIG |

Ordering Information

| Part No. | Description |
|---------------------|---|
| PIC0e-HM650-R10 | Half-size PCIe CPU card supports Socket 988B Intel® Mobile Core™ i7/i5/i3 or Celeron® CPU with Intel® HM65, DDR3, VGA, LVDS, dual PCIe GbE, SATA 6Gb/s, HD Audio and RoHS |
| 19800-000075-RS | PS/2 KB/MS cable with bracket, 220mm, P=2.0 |
| 32102-000100-200-RS | SATA power cable, MOLEX 5264-4P to SATA15P |
| 32200-015100-RS | LPT flat cable, 240mm, P=2.54 |
| 32205-003800-300-RS | RS-422/485 cable, 200mm, P=2.0 |
| AC-KIT-892HD-R10 | 7.1-channel HD Audio kit with Realtek ALC892 supports dual audio streams |
| CF-989A-RS-R12 | CPU cooler for mobile socket 989 and 55W CPU |
| CF-989B-RS-R11 | CPU cooler for mobile socket 989 and 50W CPU |
| SAIDE-KIT01-R10 | SATA to IDE/CF converter board |
| TPM-IN01-R20 | 20-pin Infineon TPM module, software management tool, firmware v3.17 |

PIC0e-PV-D4251/N4551/D5251

Half-size PCIe CPU Card with Intel® Atom™ D425/N455/D525, DDR3, 1 GB Memory on Board, VGA, LVDS, Dual PCIe GbE, USB 2.0, SATA 3Gb/s, Audio and RoHS



Features

- PCIe CPU card supports four PCIe x1 or one PCIe x4, and four PCI
- Intel® Atom™ D525/D425/N455 processor
- 1 GB of DDR3 800 MHz SDRAM on board and one expansion SO-DIMM slot support
- Supports VGA and 18-bit single-channel LVDS with dual display support
- I/O includes three RS-232, one RS-232/422/485, seven USB 2.0 and three SATA 3Gb/s
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery

Specifications

- ◆ CPU: Intel® Atom™ Dual Core D525 processor (1.80GHz with 1MB L2 cache), Intel® Atom™ Single Core N455 processor (1.66GHz with 512K L2 cache), Intel® Atom™ Single Core D425 processor (1.80GHz with 512K L2 cache)
- ◆ Chipset: ICH8M
- ◆ BIOS: UEFI BIOS
- ◆ Memory: One 204-pin 800 MHz single-channel DDR3 SDRAM unbuffered DIMMs support up to 3 GB (D525/D425) or 1GB (N455), On-board 1 GB DDR3 800 MHz memory
- ◆ Graphics Engine: GMA 3150, Gen3.5 DX9, 400 MHz for D525/D425, Gen3.5 DX9, 200 MHz for N455
- ◆ Display Output: 1 x VGA (up to 2048x1536(D525/D425) or 1024x768(N455)@60Hz), 1 x 18-bit single channel LVDS (up to 1366x768(D525/D425) or 1024x768(N455)@60Hz)
- ◆ Ethernet: LAN1: Realtek RTL8111E GbE controller with ASF 2.0 support, LAN2: Realtek RTL8111E GbE controller
- ◆ External I/O Interface: 1 x KB/MS, 1 x USB 2.0
- ◆ Internal I/O Interface: 1 x CF Type II, 1 x KB/MS (1x6 pin), 1 x LPT (2x13 pin), 2 x SATA 3Gb/s, 1 x RS-232/422/485 (2x7 pin, P=2.0), 3 x RS-232 (2x5pin, P=2.0), 6 x USB 2.0 (2x4 pin, P=2.54)
- ◆ Digital I/O: 8-bit digital I/O (2x5 pin)
- ◆ SMBus: 1 x SMBus (1x4 pin)
- ◆ Infrared Interface: 1 x Infrared Interface (1x5 pin)
- ◆ Fan Connector: 1 x CPU smart fan (1x4 pin), 1 x System smart fan (1x4 pin)
- ◆ Expansion: 4 x PCI, 4 x PCIe x1 or 1 x PCIe x4
- ◆ Audio: Supports 7.1-channel HD Audio by IEI AC-KIT-892HD-R10 kit
- ◆ Watchdog Timer: Software programmable supports 1~255 sec. system reset
- ◆ Power Consumption: 5V@3.38A, 12V@0.54A (Intel® Dual Core Atom™ D525 1.80GHz with 1 GB DDR3 800 MHz memory on board), 5V@3.28A, 12V@0.43A (Intel® Single Core Atom™ D425 1.80GHz with 1 GB DDR3 800 MHz memory on board), 5V@3.13A, 12V@0.32A (Intel® Single Core Atom™ N455 1.66GHz with 1 GB DDR3 800 MHz memory on board)
- ◆ Power Supply: 5V/12V, AT/ATX support
- ◆ Operating Temperature: -20°C ~ 60°C with free air, -20°C ~ 70°C with force air for D525 processor, -20°C ~ 65°C with free air, -20°C ~ 70°C with force air for D425 processor, -20°C ~ 70°C with free air, -20°C ~ 75°C with force air for N455 processor
- ◆ Storage Temperature: -30°C ~ 80°C
- ◆ Operating Humidity: 5% ~ 95%, non-condensing
- ◆ Dimensions: 185 mm x 122 mm
- ◆ Weight: GW: 1000g / NW: 260g
- ◆ CE/FCC compliant

Packing List

| | |
|--|----------------------|
| 1 x PIC0e-PV-D4251/N4551/D5251 single board computer | 3 x SATA cable |
| 1 x Dual RS-232 cable | 1 x Mini jumper pack |
| 1 x KB/MS Y cable | 1 x QIG |
| 1 x USB cable | |

Ordering Information

| Part No. | Description |
|----------------------------|---|
| PIC0e-PV-D5251-R11 | Half-size PCIe CPU card with Intel® Atom™ dual-core D525 1.80GHz/1MB L2, 1 GB memory on board, VGA, LVDS, dual PCIe GbE, USB 2.0, SATA 3Gb/s, audio and RoHS |
| PIC0e-PV-N4551-R11 | Half-size PCIe CPU card with Intel® Atom™ single-core N455 1.66GHz/512K L2, 1 GB memory on board, VGA, LVDS, dual PCIe GbE, USB 2.0, SATA 3Gb/s, audio and RoHS |
| PIC0e-PV-D4251-R11 | Half-size PCIe CPU card with Intel® Atom™ single-core D425 1.80GHz/512K L2, 1 GB memory on board, VGA, LVDS, dual PCIe GbE, USB 2.0, SATA 3Gb/s, audio and RoHS |
| 19800-000075-RS | PS/2 KB/MS cable with bracket, 220mm, P=2.0 |
| 19800-004300-100-RS | RS-232 & RS-422/485 cable with bracket, 14-pin to two DB-9, 250mm, P=2.0 |
| 19FFD124010HB2A7-000001-RS | CPU fan |
| 32102-000100-200-RS | SATA power cable, MOLEX 5264-4P to SATA15P |
| 32200-015100-RS | LPT flat cable, 280mm, P=2.0 |
| 34000-000510-RS | 30mm higher heatsink |
| AC-KIT-892HD-R10 | 7.1-channel HD Audio kit with Realtek ALC892 supports dual audio streams |