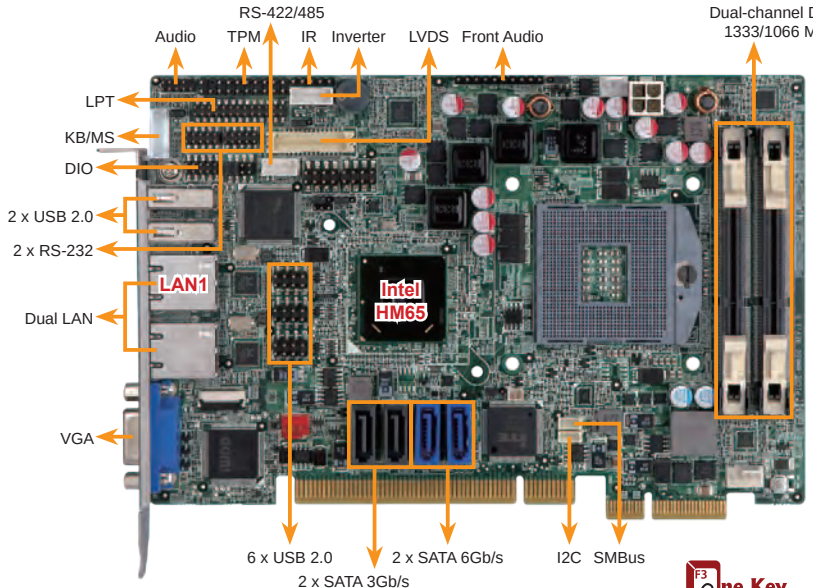
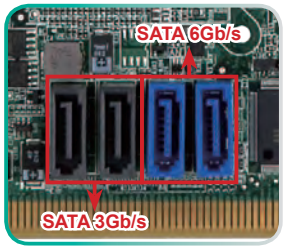
PICOe-HM650

Half-size PCIe CPU Card Supports Socket 989B 32nm Intel® Mobile Core™ i7/i5/i3/Celeron® CPU with Intel® HM65, DDR3, VGA/LVDS, Dual PCIe GbE, SATA 6Gb/s, HD Audio and RoHS



The 2nd generation Intel® processors provide advanced technology and intelligent performance.

SATA 6Gb/s and SATA 3Gb/s



The latest SATA 6Gb/s interfaces have double the speed of SATA 3Gb/s.

TPM 1.2 Support

CPU cooler
P/N: CF-989A-RS-R12

Specifications

- CPU
  Socket G2 supports Intel® Core™ i7/i5/i3/Celeron® processor
- System Chipset
  Intel® HM65
- Memory
  Two 204-pin 1333/1066 MHz dual-channel DDR3 SO-DIMMs supported (system max. 16GB)
- BIOS
  UEFI
- Graphics Engine
  Intel® HD Graphics Gen 6 supports DX10.1 and OpenGL 3.0
  Full MPEG2, VC1, AVC Decode
- Display Output
  Dual display supported
  1 x VGA (up to 2048 x 1536 @75Hz)
  1 x 18/24-bit dual-channel LVDS (up to 1920 x 1200 @60Hz)
- Ethernet
  LAN1: Realtek RTL8111E GbE controller with ASF 2.0 support
  LAN2: Realtek RTL8111E GbE controller
- Super I/O
  Fintek F81866
- Embedded Controller
  ITE IT8519E
- I/O Interface
  1 x RS-422/485 — 2 x RS-232
  2 x SATA 3Gb/s — 2 x SATA 6Gb/s
  1 x LPT — 1 x 6-pin wafer for KB & MS
  8 x USB 2.0 (2 on rear, 6 by pin header)
- Audio
  Supports 7.1 channel HD audio by IEI AC-KIT-892HD-R10 kit
- Front Panel
  1 x Front panel connector (power LED, HDD LED, speaker, power button, reset button)
- TPM
  1 x 20-pin header
- SMBus
  1 x 4-pin wafer
- I2C
  1 x 4-pin wafer
- PCIe to PCI Bridge IC
  ITE IT8892E
- Expansions
  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 (4-bit input, 4-bit output)
- Fan Connector
  1 x 4-pin smart fan connector
  1 x 3-pin system fan connector
- Power Supply
  5V/12V, AT/ATX support
- Power Consumption
  5V@3.99A, 12V@0.43A, Vcore_12V@3.80A, 5VSB@0.06A
  (2.70GHz Intel® Core™ i7-2620M with two 2GB 1333MHz DDR3 memory)
- Operating Temperature
  -10°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

Features

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

Packing List

1 x PICOe-HM650 single board computer
1 x Dual RS-232 cable (P/N: 19800-000051-RS)
2 x SATA cable (P/N: 32000-062800-RS)
1 x USB cable (P/N: 19800-003100-300-RS)
1 x One Key Recovery CD
1 x Mini jumper pack
1 x Utility CD
1 x QIG (Quick Installation Guide)

Ordering Information

Part No.	Description
PICOe-HM650-R10	Half-size PCIe CPU card supports 32nm Socket 989B Intel® mobile Core™ i7/i5/i3/Celeron® CPU with Intel® HM65, DDR3, VGA/LVDS, dual PCIe GbE, SATA 6Gb/s, HD Audio and RoHS
32205-003800-300-RS	RS-422/485 cable, 200mm
19800-000075-RS	KB/MS cable with bracket
SAIDE-KIT01-R10	SATA to IDE/CF converter board
32102-000100-200-RS	SATA power cable
32200-015100-RS	LPT cable
AC-KIT-892HD-R10	7.1 channel HD audio kit with Realtek ALC892 supports dual audio streams
TPM-IN01-R11	20-pin Infineon TPM module, software management tool, firmware V3.17
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