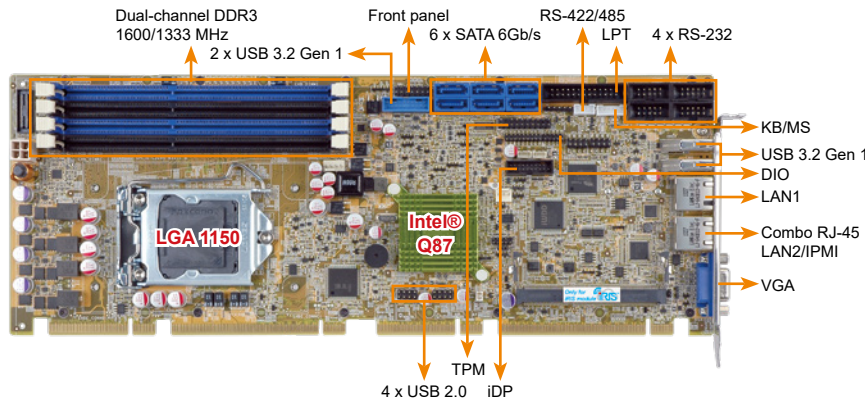


# PCIE-Q870-i2

Full-size PICMG 1.3 CPU Card supports LGA 1150 Intel® Core™ i7/i5/i3, Pentium® and Celeron® CPU per Intel® Q87, DDR3, VGA, iDP, Dual PCIe GbE, mSATA, PCIe Mini and RoHS



## Specifications

- ◆ CPU  
LGA 1150 Intel® 4th generation Core™ i7/i5/i3, Pentium® or Celeron® processor supported
- ◆ Chipset  
Intel® Q87
- ◆ Memory  
Four 240-pin 1600/1333 MHz dual-channel unbuffered DDR3 & DDR3L SDRAM DIMMs support up to 32 GB
- ◆ BIOS  
UEFI BIOS
- ◆ Graphics Engine  
Intel® HD Graphics Gen 7.5 supports DX11.1, OpenCL 1.2 and OpenGL 3.2 Full MPEG2, VC1, AVC Decode
- ◆ Display Output  
1 x VGA (up to 1920x1200@60 Hz)  
1 x iDP interface for HDMI, LVDS, VGA, DVI, DP (up to 3840x2160@60 Hz)
- ◆ Ethernet  
LAN1: Intel® I217LM with Intel® AMT 9.0 support  
LAN2: Intel® I210-AT PCIe controller with NCSI support
- ◆ External I/O Interface  
2 x USB 3.2 Gen 1 (5Gb/s)
- ◆ Internal I/O Interface  
1 x KB/MS (1x6 pin) 2 x USB 3.2 Gen 1 (5Gb/s) (2x10 pin)  
1 x LPT (2x13 pin) 4 x RS-232 (2x5pin, P=2.54)  
1 x mSATA 4 x USB 2.0 (2x4 pin, P=2.54)  
1 x RS-422/485 (1x4 pin, P=2.0) 4 x USB 2.0 (Golden finger)  
6 x SATA 6Gb/s (RAID 0/1/5/10 supported)
- ◆ Front Panel  
1 x Front panel (2x7 pin, power LED, HDD LED, speaker, power button, reset button)
- ◆ LAN LED  
2 x LAN LED (1x2 pin)
- ◆ Audio  
Support 7.1 channel HD Audio by IEI AC-KIT-888S-R10 kit
- ◆ TPM  
1 x TPM (2x10 pin)
- ◆ SMBus  
1 x SMBus (1x4 pin)
- ◆ I<sup>2</sup>C  
1 x I<sup>2</sup>C (1x4 pin)
- ◆ Infrared Interface  
1 x Infrared Interface (1x5 pin)
- ◆ Expansion  
PCIe signal and PCI signal via golden finger  
1 x Full-size PCIe Mini card slot (supports mSATA)
- ◆ 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 (1x3 pin)
- ◆ Power Supply: 5V/12V, AT/ATX support
- ◆ Power Consumption  
5V@3.55A, 12V@0.37A, Vcore\_12V@7.61A, 3.3V@1.55A, 5VSB@0.13A (Intel® Core™ i7-4770K 3.90 GHz CPU with 16 GB (4x4 GB) 1333 MHz DDR3 memory)
- ◆ Operating Temperature: -20°C ~ 60°C
- ◆ Storage Temperature: -30°C ~ 70°C
- ◆ Operating Humidity: 5% ~ 95%, non-condensing
- ◆ Dimensions: 338 mm x 126 mm
- ◆ Weight: GW: 1200g / NW: 420g
- ◆ CE/FCC compliant

## Features

- PICMG 1.3 full-size graphics grade solution
- LGA 1150 Intel® 4th generation Core™ i7/i5/i3, Pentium® or Celeron® processor supported
- Four 240-pin 1600/1333 MHz dual-channel DDR3 DIMMs support up to 32 GB memory
- Supports dual independent display by VGA & iDP interfaces
- Supports PCIe Mini devices and mSATA via PCIe Mini socket
- Supports RAID function via SATA 6Gb/s

## Packing List

- 1 x PCIE-Q870-i2 single board computer
- 1 x Dual RS-232 cable
- 1 x USB 2.0 cable
- 2 x SATA cable
- 1 x QIG

## Ordering Information

Part No.	Description
PCIE-Q870-i2-R10	Full-size PICMG 1.3 CPU Card supports LGA 1150 Intel® Core™ i7/i5/i3, Pentium® and Celeron® CPU per Intel® Q87, DDR3, VGA, iDP, Dual PCIe GbE, mSATA, PCIe Mini and RoHS
19800-000049-RS	LPT flat cable, 240mm, P=2.54
19800-000075-RS	PS/2 KB/MS cable with bracket, 220mm, P=2.0
19800-010500-200-RS	USB 3.2 Gen 1 (5Gb/s) cable with bracket, 450mm
32102-000100-200-RS	SATA power cable, MOLEX 5264-4P to SATA15P
32205-003800-300-RS	RS-422/485 cable, 200mm, P=2.0
AC-KIT-888S-R10	7.1-channel HD Audio kit with Realtek ALC892 supports dual audio streams
CF-1150SB-R11	Special cooler kit for LGA 1150, high-performance compatible, 65W
CF-1150SC-R20	Special cooler kit for LGA 115X, 1U chassis compatible, 65W, copper
CF-1150SE-R11	Special cooler kit for LGA 115X, high-performance compatible, 95W, copper
DP-DP-R10	DisplayPort to DisplayPort converter board (for IEI iDP connector)
DP-DVI-R10	DisplayPort to DVI-D converter board (for IEI iDP connector)
DP-HDMI-R10	DisplayPort to HDMI converter board (for IEI iDP connector)
DP-LVDS-R10	DisplayPort to LVDS converter board (for IEI iDP connector)
DP-VGA-R10	DisplayPort to VGA converter board (for IEI iDP connector)
TPM-IN01-R20	20-pin Infineon TPM module, software management tool, firmware v3.17