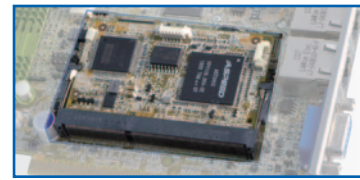
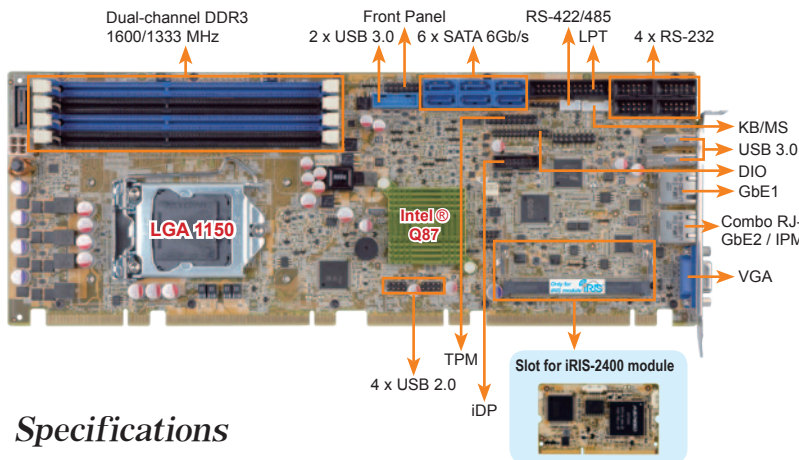


# PCIE-Q870-i2

Full-size PICMG 1.3 CPU card supports LGA1150 Intel® Core™ i7/i5/i3, Pentium® and Celeron® CPU per Intel® Q87, DDR3, VGA, iDP, Dual Intel® PCIe GbE, SATA 6Gb/s, mSATA, PCIe Mini, RS-232, Audio, iRIS-2400 and RoHS



**New**

## iRIS-2400 Key Features

- IPMI 2.0 Based Management
- Cross OS Platform Support
- Hardware Health Monitor
- Event Log
- KVM over IP
- Notifications
- Virture Media Support
- Remote Power Control
- User Management
- Serial over LAN



**Enhance component protection**  
Prevent the damage of bottom size components

## Specifications

- ◆ CPU  
LGA1150 Intel® 4th generation Core™ i7/i5/i3, Pentium® or Celeron® processor supported
- ◆ System Chipset  
Intel® Q87
- ◆ Memory  
Four 240-pin 1600/1333MHz dual-channel DDR3 & DDR3L SDRAM unbuffered DIMMs support up to 32GB
- ◆ BIOS  
UEFI BIOS
- ◆ Graphics Engine  
Intel® HD Graphics Gen 7.5 supports DX11.1 and OpenCL 1.2, OpenGL 3.2 Full MPEG2, VC1, AVC Decode
- ◆ Display Output  
VGA (up to 1920x1200 @ 60 Hz)  
iDP interface for HDMI, LVDS, VGA, DVI, DP (up to 3840x2160 @60 Hz)
- ◆ Ethernet  
GbE1: Intel® I217LM with Intel® AMT 9.0 support  
GbE2: Intel® I210-AT PCIe controller with NCSI support
- ◆ Super I/O  
Fintek F81866
- ◆ I/O Interface  
4 x RS-232  
1 x RS-422/485  
1 x LPT  
1 x 6-pin wafer for KB/MS  
1 x mSATA (colay SATA port 6) (support SATA 6Gb/s signal only)  
6 x SATA 6Gb/s (RAID 0, 1, 5, 10 supported)  
8 x USB 2.0 (4 by pin header, 4 by backplane pin header)  
4 x USB 3.0 (2 by rear IO, 2 by pin header)
- ◆ Front Panel  
1 x Front panel (Power LED, HDD LED, Speaker, Power Button, Reset Button)
- ◆ LAN LED  
2 x 2-pin headers for LAN1 Link LED, LAN2 Link LED
- ◆ Audio  
Supported by IEI AC-KIT-892HD Audio Kit
- ◆ TPM  
1 x 20-pin (2x10) header
- ◆ SMBus  
1 x 4-pin wafer
- ◆ I2C  
1 x 4-pin wafer
- ◆ Infrared Interface  
1 x 5-pin header
- ◆ iRIS Remote Management Module  
1 x iRIS-2400 slot
- ◆ Expansion  
PCIe signal and PCI signal via golden finger  
PCI signal by ITE 8892 (PCIe to PCI bridge)  
1 x Full-size PCIe Mini card slot (colay mSATA)
- ◆ Watchdog Timer  
Software programmable, support 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 (CPU fan)  
1 x 4-pin smart fan connector (system fan)
- ◆ 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 16GB (4x4GB) 1333MHz DDR3 memory)
- ◆ Operating Temperature  
-20°C ~ 60°C
- ◆ Operating Humidity  
5% ~ 95%, non-condensing
- ◆ Dimensions  
338 mm x 126 mm
- ◆ Weight  
GW 1200g / NW: 420g



## Features

1. PICMG 1.3 full-size graphic grade solution
2. LGA1150 Intel® 4th generation Core™ i7/i5/i3, Pentium® or Celeron® processor supported
3. Four 240-pin 1600/1333MHz dual-channel DDR3 DIMMs support up to 32GB memory
4. Supports dual independent display by VGA & iDP interface
5. Supports PCIe Mini devices and mSATA via PCIe Mini socket
6. Intel® PCIe GbE with Intel® AMT 9.0 support
7. Supports RAID function via SATA 6Gb/s
8. TPM V1.2 hardware security function supported by TPM module
9. Stiffener bars
10. IEI jumper-less function
11. Support IPMI 2.0 via iRIS-2400 module

## Packing List

1 x PCIE-Q870-i2 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 Utility CD
1 x USB 2.0 cable (P/N: 19800-003100-100-RS)	1 x QIG (Quick Installation Guide)

## Ordering Information

Part No.	Description
PCIE-Q870-i2-R10	Full-size PICMG 1.3 CPU card supports LGA1150 Intel® Core™ i7/i5/i3, Pentium® and Celeron® CPU per Intel® Q87, DDR3, VGA, iDP, Dual Intel® PCIe GbE, SATA 6Gb/s, mSATA, RS-232, PCIe Mini, Audio, iRIS-2400 and RoHS
iRIS-2400-R10	IPMI 2.0 adapter card with AST2400 BMC chip for DDR3 SO-DIMM socket interface
32200-074800-RS	RS-422/485 cable, 200mm
19800-010500-100-RS	USB 3.0 cable 457mm with bracket
19800-000075-RS	KB/MS cable with bracket
32102-000100-200-RS	SATA power cable, MOLEX 5264-4P to SATA15P
32200-015100-RS	LPT cable
CF-1150SB-R10	Special cooler kit for LGA1150, high-performance compatible, 65W
CF-1150SC-R10	Special cooler kit for LGA1150, 1U chassis compatible, 65W
CF-1150SE-R10	Special cooler kit for LGA1150, high-performance compatible, 95W
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)
DP-DP-R10	DisplayPort to DisplayPort converter board (for IEI iDP connector)
AC-KIT-892HD-R10	7.1 channel HD Audio kit with Realtek ALC892 support dual audio streams
TPM-IN01-R11	20-pin Infineon TPM module, software management tool, firmware V3.17