PCIE-Q170

Full-size PICMG 1.3 CPU Card supports LGA1151 Intel® Core™ i7/i5/i3/Pentium®/Celeron® CPU per Intel® Q170, DDR4, VGA/IDP, Dual Intel® PCIe GbE, USB 3.0, SATA 6Gb/s, PCIe Mini, mSATA, HD Audio, Intel® AMT, iRIS-2400 and RoHS

Specifications

- CPU:
  - LGA 1151 socket supports Intel® 6th/7th generation Core™ i7/i5/i3, Pentium® or Celeron® processor
  - Chipset: Intel® Q170
- Memory:
  - Four 288-pin 1866/2133 MHz dual-channel unbuffered DDR4 DIMMs support up to 64GB
- BIOS:
  - UEFI BIOS
- Graphic Engine:
  - Intel® HD Graphics Gen 9 supports DX11/12, OpenGL 4.3/4.4
  - Decode/Encode for HEVC, VP8, VP9, VDENC
- Display Output:
  - Dual independent display: 1 x VGA (up to 1920x1200@60 Hz)
  - 1 x IDP interface for HDMI, LVDS, VGA, DVI and DisplayPort (up to 3840x2160@60 Hz)
- Ethernet:
  - LAN1: Intel® i219LM Clarkville-V with Intel® AMT 11.0 supported
  - LAN2: Intel® i210 PCIe controller
- External I/O Interface:
  - 2 x USB 3.0
  - Internal I/O Interface:
    - 1 x KB/MS (1x5 pin)
    - 1 x LPT (2x13 pin)
    - 1 x mSATA (SATA & USB signal)
    - 1 x USB 2.0 (180° Type-A)
    - 1 x USB 2.0 (2x4 pin, P=2.54)
    - 1 x RS-232 (2x9pin, P=2.54)
- Front Panel:
  - 1 x Front Panel (1x10 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-892HD kit
- TPM:
  - 1 x TPM (2x10 pin)
- SMBus:
  - 1 x SMBus (1x4 pin)
- I/O:
  - 1 x I/O (1x4 pin)
- iRIS Remote Management Module:
  - 1 x iRIS-2400 slot (optional)
- Expansion:
  - 16-lane PCIe link from CPU via golden finger:
    - Supports one PCIe x16, or two PCIe x8, or one PCIe x8 + two PCIe x4 on the backplane (configured via BIOS)
  - 4-lane PCIe link from PCH via golden finger:
    - Supports four PCIe x1 slots or one PCIe x4 slot on the backplane (configured via BIOS switch)
  - 1 x Full/Half-size PCIe Mini card slot
  - Four 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 (1x3 pin)
- Power Supply:
  - 5V/12V, AT/ATX support
  - Power Consumption:
    - 5V@1.3A, 12V@6.85A, 3.3V@1.13A, 5VSB@0.15A
    - (Intel® Core™ i7-6700K 4.0GHz CPU with 64GB (16GB x 4) 2133 MHz DDR4 memory)
  - Operating Temperature:
    - -20°C ~ 60°C
  - Operating Humidity:
    - 5% ~ 95%, non-condensing
  - Dimensions: 338 x 126 mm
  - Weight: 1000g / NW: 420g
  - CE/FCC compliant

Features

- PICMG 1.3 full-size CPU Card
  - LGA 1151 6th/7th generation Core™ i7/i5/i3, Pentium® or Celeron® processor supported
  - Four 288-pin 1866/2133MHz dual-channel DDR4 DIMMs support up to 64GB
  - Supports dual independent display by VGA & internal DP pin header
  - Supports PCIe Mini device & mSATA via PCIe Mini pin header
  - Intel® PCIe GbE with Intel® AMT 11.0 supported
  - Supports RAID 0, 1, 5, 10 function via SATA 6Gb/s
  - TPM 1.2 & 2.0 hardware security function supported by TPM module

Packing List

- 1 x PCIE-Q170 single board computer
- 1 x Mini jumper pack
- 1 x SATA cable
- 1 x QIG

Ordering Information

- Part No. Description
  - PCIE-Q170-R10
    - Full-size PICMG 1.3 CPU Card supports LGA1151 Intel® Core™ i7/i5/i3/Pentium®/Celeron® CPU per Intel® Q170, DDR4, VGA/IDP, Dual Intel® PCIe GbE, USB 3.0, SATA 6Gb/s, PCIe Mini, mSATA, HD Audio, Intel® AMT, iRIS-2400 and RoHS
  - PCIE-Q170-i2-R10
    - Full-size PICMG 1.3 CPU Card supports LGA1151 Intel® Core™ i7/i5/i3/Pentium®/Celeron® CPU per Intel® Q170, DDR4, VGA/IDP, Dual Intel® PCIe GbE, USB 3.0, SATA 6Gb/s, PCIe Mini, mSATA, HD Audio, Intel® AMT, iRIS-2400 and RoHS

Part No. Description

- 19800-00049-RS
  - LPT flat cable, 240mm, P=2.54
- 19800-00075-RS
  - PS/2 KB/MCS cable with bracket, 220mm, P=2.0
- 32102-000100-200-RS
  - SATA power cable, MOLEX 5264-4P to SATA15P
- AC-KIT-892HD-R10
  - 7.1 channel HD Audio kit with Realtek ALC892 support dual audio streams
- CF-1150SA-R10
  - Special cooler kit for LGA1150, 1U chassis compatible, 54W
- CF-1150SB-R11
  - Special cooler kit for LGA1150, high-performance compatible, 95W
- CF-1150SC-R20
  - Special cooler kit for LGA1150, 1U chassis compatible, 65W
- CF-1150SD-R11
  - Special cooler kit for LGA1150, high-performance compatible, 95W
- CF-1150SF-R10
  - Special cooler kit for LGA1150, 1U chassis compatible, 54W
- DP-DP-R10
  - DisplayPort to DisplayPort converter board (for IEI DP connector)
- DP-DVI-R10
  - DisplayPort to DVI-D converter board (for IEI DP connector)
- DP-HDMI-R10
  - DisplayPort to HDMI converter board (for IEI DP connector)
- DP-LVDS-R10
  - DisplayPort to LVDS converter board (for IEI DP connector)
- DP-VGA-R10
  - DisplayPort to VGA converter board (for IEI DP connector)
- SAIDE-KT01-R10
  - SATA to IDE/CF Converter board

**By order production, MOQ: 100**