# Single Board Computer

***Full-size***

***w w w . i ei w or l d .c om***



**PCIE-Q670-R20**

***Full-size PICMG 1.3 CPU Card supports LGA 1155 Intel® Core™ i7/i5/i3, Pentium® or Celeron® CPU with Intel® Q67, DDR3, VGA, DVI-D, Dual Intel® PCIe GbE, SATA 6Gb/s, PCIe Mini, HD Audio and RoHS***

**PCIE-H610**

***Full-size PICMG 1.3 CPU Card supports 32nm LGA 1155 Intel® Core™ i7/i5/i3, Pentium® or Celeron® CPU with Intel® H61, DDR3, VGA, USB 2.0, SATA 3Gb/s, Dual Realtek PCIe GbE, HD Audio and RoHS***

Dual-channel DDR3

I²C

Front panel 2 x RS-232

Dual-channel DDR3

4 x SATA 3Gb/s

2 x RS-232

1333/1066 MHz

2 x SATA 6Gb/s

SMBus TPM

**Intel** ®

KB/MS

RS-422/485

2 x RS-232

LPTDIO IR

USB 2.0 LAN1

1333/1066 MHz

SMBus I²C

Front panel

TPM

**Intel®**

RS-422/485 KB/MS

FDD

LPT

DIO

USB 2.0 IR

### CF-115XC-R10

1U chassis compatible

**Q67**

4 x SATA 3Gb/s

DVI-D PCIe Mini

LAN2 VGA

TPM 1.2 Support

**H61**

4 x USB 2.0

DVI-D Audio

LAN

VGA

### IO-KIT-001-R20

DVI cable included in DVI model

# *Features*

6 x USB 2.0(optional)

**IO-KIT-001-R20**

DVI cable included in DVI model

* PICMG 1.3 full-size graphics grade solution
* LGA 1155 Intel® Core™ i7/i5/i3, Pentium® or Celeron® processors supported
* Up to 16 GB 1333 MHz dual-channel DDR3 SDRAM

## DDR3 1333

1.35V DDR3

SATA 3Gb/s

* Supports dual independent display by VGA and DVI-D (DVI model)
* Supports RAID function via SATA 6Gb/s and SATA 3Gb/s
* TPM v1.2 hardware security provided by the TPM module

# *Features*

* + Full-size PICMG 1.3 graphics grade solution

TPM 1.2 Support

* IEI One Key Recovery solution allows you to create rapid OS backup and recovery

# *Specifications*

* LGA 1155 Intel® Core™ i7/i5/i3, Pentium® or Celeron® processor supported
* Dual-channel 1333/1066 MHz DDR3/DDR3L SDRAM supported up to 16 GB
* Intel® HD graphics technology integrates high-performance graphics and media processing

CPU: LGA 1155 socket supports Intel® Core™ i7/ i5/i3, Pentium® or Celeron® processor

Chipset: Intel® Q67

Memory: Two 240-pin 1333/1066 MHz dual- channel unbuffered DDR3 & DDR3L SDRAM

Front Panel: 1 x Front panel connector (2x7 pin, power LED, HDD LED, speaker, power button, reset button)

Audio: Supports 7.1-channel HD Audio by IEI AC-KIT-892HD-R10 kit

* TPM v1.2 hardware security function supported by TPM module
* IEI One Key Recovery solution allows you to create rapid OS backup and recovery

# *Specifications*

DIMMs support up to 16 GB BIOS: UEFI BIOS

Graphics Engine: Intel® HD Graphics Gen 6 supports DX10.1 and OpenGL 3.0

Full MPEG2, VC1, AVC Decode Display Output

1 x VGA (up to 2048x1536@75Hz)

1 x DVI-D (via header to IO-KIT-001-R20 DVI-D/ USB module) (optional)

Ethernet

LAN1: Intel® 82583V PCIe controller

LAN2: Intel® 82579 PHY with Intel® AMT 7.0 support

External I/O Interface: 2 x USB 2.0 Internal I/O Interface

1. x KB/MS (1x6 pin) 1 x LPT (2x13 pin) 1 x RS-422/485 (1x4 pin, P=2.0)
2. x SATA 6Gb/s (RAID 0/1/5/10 supported) 4 x RS-232 (2x5pin, P=2.54)

4 x SATA 3Gb/s (RAID 0/1/5/10 supported) 4 x USB 2.0 (Golden finger)

6 x USB 2.0 (2x4 pin, P=2.54)

# *Packing List*

|  |  |
| --- | --- |
| 1 x PCIE-Q670 single board computer | 4 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 |
| PCIE-Q670-R20 | Full-size PICMG 1.3 CPU card supports LGA 1155 32nm Intel® Core™ i7/i5/i3, Pentium® or Celeron® CPU with Intel® Q67, DDR3, VGA, dual Intel® PCIe GbE, SATA 6Gb/s, PCIe Mini, HD Audio and RoHS |
| PCIE-Q670-DVI-R20 | Full-size PICMG 1.3 CPU card supports LGA 1155 32nm Intel® Core™ i7/i5/i3, Pentium® or Celeron® CPU with Intel® Q67, DDR3, DVI-D, dual Intel® PCIe GbE, SATA 6Gb/s, PCIe Mini, HD Audio 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 |
| 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-892HD-R10 | 7.1-channel HD Audio kit with Realtek ALC892 supports dual audio streams |
| CF-115XA-R10 | High-performance LGA 1155/LGA 1156 cooler kit, 1U chassis compatible, 73W |
| CF-115XC-R10 | LGA 1155/LGA 1156 cooler kit, 1U chassis compatible, 45W |
| CF-115XD-R10 | LGA 1155/LGA 1156 cooler kit, 1U chassis compatible, 65W |
| CF-115XE-R10 | High-performance LGA 1155/LGA 1156 cooler kit, 95W |
| CPU-DT-C-G440 | Intel® Celeron® G440 processor, LGA 1155, single core 1.6GHz, 1M cache, 35W, compatible with CF-115XC-R10 CPU cooler |
| CPU-DT-i3-2120T | Intel® Core™ i3-2120T processor, LGA 1155, dual core 2.6GHz, 3M cache, 35W, compatible with CF-115XC-R10 CPU cooler |
| CPU-DT-i5-2390T | Intel® Core™ i5-2390T processor, LGA 1155, dual core 2.7GHz, 3M cache, 35W, AMT, compatible with CF-115XC-R10 CPU cooler |
| CPU-DT-i5-2500T | Intel® Core™ i5-2500T processor, LGA 1155, quad core 2.3GHz, 6M cache, 45W, compatible with CF-115XC-R10 CPU cooler |
| CPU-DT-P-G630T | Intel® Pentium® G630T processor, LGA 1155, dual core 2.3GHz, 3M cache, 35W, compatible with CF-115XC-R10 CPU cooler |
| SAIDE-KIT01-R10 | SATA to IDE/CF converter board |

TPM: 1 x TPM (2x10 pin)

SMBus: 1 x SMBus (1x4 pin)

Infrared Interface: 1 x Infrared Interface (1x5 pin) Expansion

PCIe signal and PCI signal via golden finger 1 x Full/Half-size PCIe Mini card slot Watchdog Timer: Software programmable supports 1~255 sec. system reset

Digital I/O: 8-bit digital I/O (2x5 pin) Fan Connector: 1 x Smart fan (1x4 pin)

Power Supply: AT/ATX power supply supported Power Consumption

5V@3.45A, 12V@0.32A, Vcore\_12V@5.24A,

3.3V@1.69A, 5VSB@0.17A (3.4GHz Intel®

Core™ i7-2600K with two 2 GB 1333 MHz DDR3 memory)

Operating Temperature: -10°C ~ 60°C Storage Temperature: -20°C ~ 70°C

Operating Humidity: 5% ~ 95%, non-condensing

Dimensions: 338 mm x 126 mm Weight: GW: 1200g / NW: 420g CE/FCC compliant

CPU: LGA 1155 socket supports Intel® Core™ i7/i5/

i3, Pentium® or Celeron® processor Chipset: Intel® H61

Memory: Two 240-pin 1333/1066 MHz dual-channel unbuffered DDR3 & DDR3L SDRAM DIMMs support up to 16 GB

BIOS: UEFI BIOS

Graphics Engine

Intel® HD Graphics Gen 6 supports DX10.1 and OpenGL 3.0

Full MPEG2, VC1, AVC Decode Display Output

1 x VGA (up to 2048x1536@75Hz)

1 x DVI-D (up to 1920x1200@60Hz)

(via header to IO-KIT-001-R20 DVI-D/USB module) (optional)

Ethernet

LAN1: Realtek RTL8111E PCIe GbE controller with ASF 2.0 support

LAN2: Realtek RTL8111E PCIe GbE controller TPM: 1 x TPM (2x10 pin)

SMBus: 1 x SMBus (1x4 pin) I²C: 1 x I²C (1x4 pin)

Infrared Interface: 1 x Infrared Interface (1x5 pin) Digital I/O: 8-bit digital I/O (2x5 pin)

External I/O Interface: 2 x USB 2.0

Audio: Supports by IEI AC-KIT-892HD-R10 audio kit

# *Packing List*

|  |  |
| --- | --- |
| 1 x PCIE-H610 single board computer | 4 x SATA cable |
| 1 x Dual RS-232 cable | 1 x Mini jumper pack |
| 1 x USB cable | 1 x QIG |

***Ordering Information***

Internal I/O Interface

1 x FDD (2x17 pin) 1 x KB/MS (1x6 pin) 1 x LPT (2x13 pin) 4 x SATA 3Gb/s

1 x RS-422/485 (1x4 pin, P=2.0)

2 x RS-232 (2x5pin, P=2.54)

4 x USB 2.0 (2x4 pin, P=2.54)

4 x USB 2.0 (Golden finger) Front Panel

1 x Front panel (2x7 pin, power LED, HDD LED, speaker, power button, reset button) Expansion: PCIe signal and PCI signal via golden finger

Watchdog Timer: Software programmable supports 1~255 sec. system reset

Fan Connector: 1 x Smart fan (1x4 pin) Power Supply: 5V/12V, AT/ATX support Power Consumption

5V@4.41A, 12V@0.21A, Vcore\_12V@7.72A,

3.3V@1.71A, 5VSB@0.16A

(3.4GHz Intel® Core™ i7-2600K with two 2 GB 1333 MHz DDR3 memory)

Operating Temperature: -10°C ~ 60°C Storage Temperature: -20°C ~ 70°C Operating Humidity: 5% ~ 95%, non- condensing

Dimensions: 338 mm x 126 mm Weight: GW: 1200g / NW: 420g CE/FCC compliant

PCIE-Q670-2019-V11

|  |  |
| --- | --- |
| Part No. | Description |
| PCIE-H610-R10 | Full-size PICMG 1.3 CPU card supports 32nm LGA 1155 Intel® Core™ i7/i5/i3 CPU with Intel® H61, DDR3, VGA, dual Realtek PCIe GbE, USB 2.0, SATA 3Gb/s, HD Audio and RoHS |
| PCIE-H610-DVI-R10 | Full-size PICMG 1.3 CPU card supports 32nm LGA 1155 Intel® Core™ i7/i5/i3 CPU with Intel® H61, DDR3, VGA, DVI-D, dual Realtek PCIe GbE, USB 2.0, SATA 3Gb/s, HD Audio 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 |
| 32102-000100-200-RS | SATA power cable, MOLEX 5264-4P to SATA15P |
| 32200-000017-RS | FDD Cable, 520mm, 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-115XA-R10 | High performance LGA 1155/LGA 1156 cooler kit, 1U chassis compatible,73W |
| CF-115XC-R10 | LGA 1155/LGA 1156 cooler kit, 1U chassis compatible, 45W |
| CF-115XD-R10 | LGA 1155/LGA 1156 cooler kit, 1U chassis compatible, 65W |
| CF-115XE-R10 | High performance LGA 1155/LGA 1156 cooler kit, 95W |
| CPU-DT-C-G440 | Intel® Celeron® G440 processor, LGA 1155, single core 1.6GHz, 1Mcache, 35W, compatible with CF-115XC-R10 CPU cooler |
| CPU-DT-i3-2120T | Intel® Core™ i3-2120T processor, LGA 1155, dual core 2.6GHz, 3M cache,35W, compatible with CF-115XC-R10 CPU cooler |
| CPU-DT-i5-2390T | Intel® Core™ i5-2390T processor, LGA 1155, dual core 2.7GHz, 3M cache,35W, AMT, compatible with CF-115XC-R10 CPU cooler |
| CPU-DT-i5-2500T | Intel® Core™ i5-2500T processor, LGA 1155, quad core 2.3GHz, 6Mcache, 45W, compatible with CF-115XC-R10 CPU cooler |
| CPU-DT-P-G630T | Intel® Pentium® G630T processor, LGA 1155, dual core 2.3GHz, 3M cache, 35W, compatible with CF-115XC-R10 CPU cooler |
| SAIDE-KIT01-R10 | SATA to IDE/CF converter board |
| TPM-IN01-R20 | 20-pin Infineon TPM module, software management tool, firmware v3.17 |