# Single Board Computer

***Full-size***

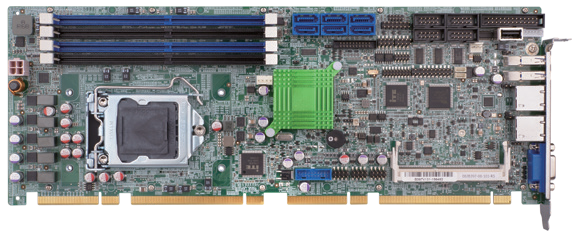
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**SPCIE-C236**

***Full-size PICMG 1.3 CPU Card supports LGA 1151 Intel® Xeon® E3, Core™ i3/Pentium®/ Celeron® CPU per Intel® C236, ECC & non-ECC DDR4, VGA/iDP, Dual Intel® PCIe GbE, mSATA, PCIe Mini, USB 3.1 Gen 1 (5Gb/s), SATA 6Gb/s, HD Audio, Intel® AMT, iRIS-2400 and RoHS***

2 x RS-232/422/485

Dual-Channel DDR4



iDP

DIO

2 x RS-232

**PCIe Mini & mSATA colay**

1866/2133 MHz

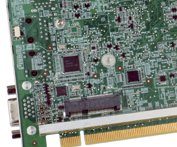
6 x SATA 6Gb/s

TPM

LPT

USB 2.0

KB/MS



◄ mSATA

**LGA 1151**

**Intel** ®

**C236**

6 x USB 2.0

iRIS-2400 slot (optional)

USB 3.1

Gen 1 LAN

VGA

▲ Half-size wireless LAN card

PCIe Mini interface provides SATA, PCIe x1 and USB signals to support full- size or half-size devices, such as mSATA, PCIe devices, and wireless LAN cards.

# *Specifications*

CPU

2 x USB 3.1 Gen 1

TPM 2.0 Support



DDR4

2133

***USB***

USB 3.1 SATA 6Gb/s Dual GbE

mSATA

iDP



AMT 11.0

Intel®

LGA 1151 socket supports Intel® Xeon® E3 v5/v6, 6th/7th generation Core™ i3, Pentium® or Celeron® processor



SPCIE-C236-2019-V10

Chipset Intel® C236 Memory

Four 288-pin 1866/2133 MHz dual-channel ECC & non-ECC unbuffered DDR4 DIMMs support up to 64GB

BIOS

UEFI BIOS

Graphics Engine

Intel® HD Graphics Gen 9 supports DX11/12, OpenCL 2.x and 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

1. x USB 3.1 Gen 1 (5Gb/s)

Internal I/O Interface

1 x KB/MS (1x6 pin) 2 x RS-232/422/485 (2x5 pin, P=2.54)

1 x LPT (2x13 pin) 2 x USB 3.1 Gen 1 (5Gb/s) (2x10 pin)

1 x mSATA (SATA & USB signal) 6 x SATA 6Gb/s (RAID 0/1/5/10 supported) 1 x USB 2.0 (180° Type-A) 6 x USB 2.0 (2x4 pin, P=2.54)

2 x RS-232 (2x5pin, 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) I²C

1 x I²C (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 (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@3.22A,](mailto:5V@3.22A) [12V@6.81A,](mailto:12V@6.81A) [3.3V@1.21A,](mailto:3.3V@1.21A) [5VSB@0.18A](mailto:5VSB@0.18A) (Intel® Xeon® E3-1275 v5 3.60 GHz

CPU with 64GB (16GBx4) 2133 MHz DDR4 memory) Operating Temperature

-20°C ~ 60°C

Operating Humidity

5% ~ 95%, non-condensing Dimensions

338 mm x 126 mm

Weight

GW: 1000g / NW: 420g

CE/FCC compliant

# *Features*

* PICMG 1.3 full-size CPU Card
* LGA 1151 Intel® Xeon® E3 v5/v6, 6th/7th generation Core™ i3, Pentium® or Celeron® processor supported
* Four 288-pin 1866/2133MHz DDR4 ECC & non-ECC unbuffered DIMM
* Supports dual independent display by VGA & internal DP pin header
* Supports PCIe Mini device & mSATA via PCIe Mini card slot
* 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 SPCIE-C236 single board computer | 1 x Mini jumper pack |
| 1 x SATA cable | 1 x QIG |

***Ordering Information***

|  |  |
| --- | --- |
| Part No. | Description |
| SPCIE-C236-R10 | Full-size PICMG 1.3 CPU Card supports LGA 1151 Intel® Xeon® E3, Core™ i3/Pentium®/Celeron® CPU per Intel® C236, ECC & non-ECC DDR4, Dual Intel® PCIe GbE, VGA/iDP, VGA/ iDP, USB 3.1 Gen 1 (5Gb/s), SATA 6Gb/s, PCIe Mini, HD Audio,  Intel® AMT, and RoHS |
| SPCIE-C236-i2-R10\*\* | Full-size PICMG 1.3 CPU Card supports LGA 1151 Intel® Xeon® E3, Core™ i3/Pentium®/Celeron® CPU per Intel® C236, ECC & non-ECC DDR4, Dual Intel® PCIe GbE, VGA/iDP, VGA/ iDP, USB 3.1 Gen 1 (5Gb/s), SATA 6Gb/s, PCIe Mini, HD Audio,  Intel® AMT, iRIS-2400 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 |
| 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, high-performance compatible,  95W |
| CF-1150SB-R11 | Special cooler kit for LGA1150, high-performance compatible,  65W |
| CF-1150SC-R20 | Special cooler kit for LGA1150, 1U chassis compatible, 65W |
| CF-1150SE-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 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) |
| SAIDE-KIT01-R10 | SATA to IDE/CF converter board |

\*\*By order production, MOQ: 100