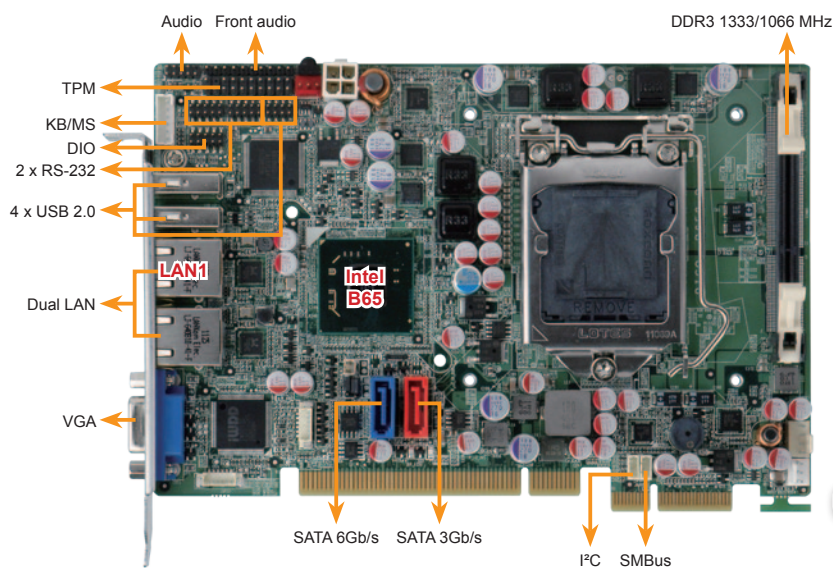


# PIC0e-B650

Half-size PCIe CPU Card supports LGA 1155 32nm Intel® Core™ i7/i5/i3, Pentium® or Celeron® CPU with Intel® B65, DDR3, VGA, Dual Realtek PCIe GbE, USB 2.0, SATA 6Gb/s, HD Audio and RoHS



## 2nd Gen Intel® Core™ Processors (TDP=35W) Recommended List

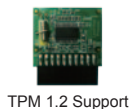
CPU No.	Clock speed	Core	Smart cache	TDP
i5-2390T	2.7GHz	2	3M	35W
i3-2120T	2.6GHz	2	3M	35W
G630T	2.3GHz	2	3M	35W
G530T	2.0GHz	2	2M	35W
G440	1.6GHz	1	1M	35W



The 2nd generation Intel® processors provide advanced technology and intelligent performance.

## Specifications

- ◆ CPU  
LGA 1155 socket supports Intel® Core™ i7/i5/i3, Pentium® or Celeron® processor
- ◆ System Chipset  
Intel® B65
- ◆ Memory  
One 204-pin 1333/1066 MHz DDR3 & DDR3L (1.35V) SO-DIMM supported (system max. 8 GB)
- ◆ BIOS  
UEFI
- ◆ Graphics Engine  
Intel® HD Graphics Gen 6 supports DX10.1 and OpenGL 3.0  
Full MPEG2, VC1, AVC decoding
- ◆ Display Output  
1 x VGA (up to 2048x1536@75Hz)
- ◆ Ethernet  
LAN1: Realtek RTL8111E PCIe GbE controller with ASF 2.0 support  
LAN2: Realtek RTL8111E PCIe GbE controller
- ◆ Super I/O  
Fintek F81866
- ◆ Embedded Controller  
ITE IT8519E
- ◆ I/O Interface
  - 1 x 6-pin wafer for KB & MS
  - 1 x SATA 3Gb/s
  - 2 x RS-232
  - 1 x SATA 6Gb/s
  - 4 x USB 2.0 (2 on rear, 2 by pin header)
- ◆ Audio  
Supports 7.1-channel HD Audio by IEI AC-KIT-892HD-R10 kit
- ◆ Front Panel  
1 x Front panel connector (power LED, HDD LED, speaker, power button, reset button)
- ◆ TPM  
1 x TPM connector (2x10 pin)
- ◆ SMBus  
1 x 4-pin wafer
- ◆ I²C  
1 x 4-pin wafer
- ◆ Expansions  
PCIe signal and PCI signal via golden finger
- ◆ Watchdog Timer  
Software programmable supports 1~255 sec. system reset
- ◆ Digital I/O  
8-bit digital I/O
- ◆ Fan Connector  
1 x 4-pin smart fan connector  
1 x 3-pin system fan connector
- ◆ Power Supply  
5V/12V, AT/ATX support
- ◆ Power Consumption  
5V@3.17A, 12V@0.46A, Vcore\_12V@7.26A, 5VSB@0.18A  
(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  
185 mm x 122 mm
- ◆ Weight  
GW: 1000g/NW: 260g



TPM 1.2 Support



## Features

- Half-size PCIe CPU card with LGA 1155 Intel® Core™ i7/i5/i3, Pentium® or Celeron® processor supported
- One 1333/1066 MHz DDR3/DDR3L (1.35V) SDRAM SO-DIMM supports up to 8 GB
- On-board embedded controller supports infrared and PECI 2.0 technologies
- One SATA 6Gb/s and dual Realtek PCIe GbE
- TPM V1.2 hardware security provided by the TPM module
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery

## Packing List

1 x PIC0e-B650 single board computer	
1 x Dual RS-232 cable with bracket (P/N: 19800-000112-RS)	
1 x USB cable (P/N: CB-USB02A-RS)	1 x Mini jumper pack
2 x SATA cable (P/N: 32000-062800-RS)	1 x QIG (Quick Installation Guide)
1 x One Key Recovery CD	1 x Utility CD

## Ordering Information

Part No.	Description
PIC0e-B650-R10	Half-size PCIe CPU card supports 32nm LGA 1155 Intel® Core™ i7/i5/i3, Pentium® or Celeron® CPU with Intel® B65, DDR3, VGA, dual Realtek PCIe GbE, USB 2.0, SATA 6Gb/s, HD Audio and RoHS
19800-000075-RS	PS/2 KB/MS Y-cable with bracket, 220mm
32102-000100-200-RS	SATA power cable
AC-KIT-892HD-R10	7.1-channel HD Audio kit with Realtek ALC892 supports dual audio streams
CF-1156A-RS-R11	High-performance LGA 1155/LGA 1156 cooler kit, 1U chassis compatible, 73W
CF-1156C-RS	LGA 1155/LGA 1156 cooler kit, 1U chassis compatible, 45W
CF-1156D-RS	LGA 1155/LGA 1156 cooler kit, 1U chassis compatible, 65W
CPU-C-G440	Intel® Celeron® G440 processor, LGA -1155, single core 1.6GHz, 1M cache, 35W, compatible with CF-1156C-RS CPU cooler
CPU-DT-i3-2120T	Intel® Core™ i3-2120T processor, LGA 1155, dual core 2.6GHz, 3M cache, 35W, compatible with CF-1156C-RS CPU cooler
CPU-DT-i5-2390T	Intel® Core™ i5-2390T processor, LGA -1155, dual core 2.7GHz, 3M cache, 35W, AMT, compatible with CF-1156C-RS CPU cooler
CPU-DT-i5-2500T	Intel® Core™ i5-2500T processor, LGA -1155, quad core 2.3GHz, 6M cache, 45W, compatible with CF-1156C-RS CPU cooler
CPU-DT-P-G630T	Intel® Pentium® G630T processor, LGA 1155, dual core 2.3GHz, 3M cache, 35W, compatible with CF-1156C-RS CPU cooler
SAIDE-KIT01-R10	SATA to IDE/CF converter board
TPM-IN01-R11	20-pin Infineon TPM module, software management tool, firmware v3.17