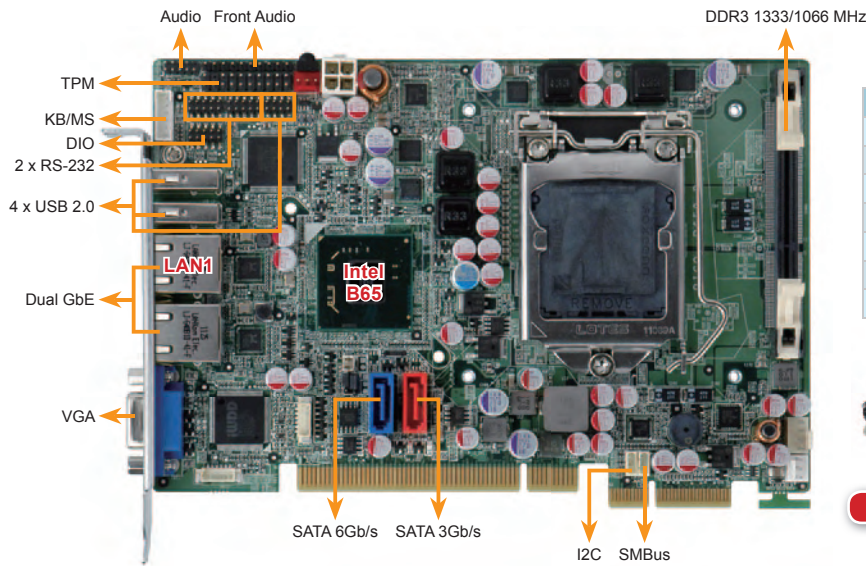


## PICOe-B650

Half-size PCIe CPU Card Supports LGA1155 Intel® Core™ i7/i5/i3/Pentium®/ Celeron® CPU with Intel® B65, DDR3, VGA, Dual Realtek PCIe GbE, USB 2.0, SATA 6Gb/s, HD Audio and RoHS

### New



### 2nd Gen Intel® CPU Support List (TDP=35W)

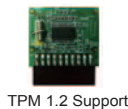
CPU No.	Clock speed	Core	Smart cache	TDP
i5-2390T	2.7GHz	2	3M	35W
i3-2120T	2.6GHz	2	3M	35W
i3-2100T	2.5GHz	2	3M	35W
G630T	2.3GHz	2	3M	35W
G620T	2.2GHz	2	3M	35W
G530T	2.0GHz	2	2M	35W
G440	1.6GHz	1	1M	35W



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

## Specifications

- ◆ CPU  
LGA1155 socket supports Intel® Core™ i7/i5/i3/Pentium®/Celeron® processor
- ◆ System Chipset  
Intel® B65
- ◆ Memory  
One 204-pin 1333/1066MHz DDR3 SO-DIMM supported. (system max. 8GB)
- ◆ BIOS  
UEFI
- ◆ Graphics Engine  
Intel® HD Graphics Gen 6 support for DX10.1 and OpenGL 3.0  
Full MPEG2, VC1, AVC Decode
- ◆ Display Output  
VGA integrated in Intel® B65
- ◆ Ethernet  
Dual Realtek RTL8111E PCIe GbE controllers, LAN1 with ASF2.0 support
- ◆ Super I/O  
Fintek F81866
- ◆ Embedded Controller  
ITE IT8519E
- ◆ I/O Interface  
2 x RS-232  
1 x SATA 3Gb/s  
1 x 6-pin wafer for KB & MS
- ◆ Audio  
Support 7.1 channel HD Audio by IEI AC-KIT-888HD kit
- ◆ Front Panel  
1 x Front panel connector (power LED, HDD LED, speaker, power button, reset button)
- ◆ TPM  
1 x 20-pin header
- ◆ SMBus  
1 x 4-pin wafer
- ◆ I2C  
1 x 4-pin wafer
- ◆ Expansion  
PCIe signal and PCI signal via golden finger
- ◆ 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  
1 x 3-pin system fan connector
- ◆ Power Supply  
5V/12V, AT/ATX support
- ◆ Power Consumption  
TBD
- ◆ Operating Temperature  
-10°C ~ 60°C
- ◆ Operating Humidity  
5% ~95%, non-condensing
- ◆ Dimensions  
185 mm x 122 mm
- ◆ Weight  
GW: 1000g / NW: 260g



## Features

1. Half-size PCIe CPU card with LGA1155 Intel® Core™ i7/i5/i3/Pentium®/Celeron® processor supported
2. One 1333/1066 MHz DDR3 SDRAM SO-DIMM supports up to 8GB
3. On board Embedded controller supports infrared and PECI 2.0 technologies
4. One SATA 6Gb/s and dual Realtek PCIe GbE
5. TPM V1.2 hardware security provided by the TPM module
6. IEI One Key Recovery solution allows you to create raidd OS backup and recovery

## Packing List

1 x PICOe-B650 Single Board Computer	
1 x Dual RS-232 Cable w/ Bracket (P/N: 19800-000112-RS)	
2 x SATA Cable (P/N: 32000-0628000-RS)	
1 x USB Cable (P/N: CB-USB02A-RS)	1 x Mini Jumper Pack
1 x Utility CD	1 x QIG (Quick Installation Guide)

## Ordering Information

Part No.	Description
PICOe-B650-R10	Half-size PCIe CPU Card Supports LGA1155 32nm Intel® Core™ i7/i5/i3/Pentium®/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
SAIDE-KIT01-R10	SATA to IDE/CF converter board
32102-000100-200-RS	SATA power cable
AC-KIT-888HD-R10	7.1 channel HD Audio kit with Realtek ALC888 supports dual audio streams
TPM-IN01-R11	20-pin Infineon TPM module, software management tool, firmware V3.17
CPU-DT-i5-2500T	Intel® Core™ i5-2500T processor, LGA1155, Quad core 2.3GHz, 6M Cache, 45W, compatible with CF-1156C-RS CPU cooler
CPU-DT-i5-2390T	Intel® Core™ i5-2390T processor, LGA1155, Dual core 2.7GHz, 3M Cache, 35W, AMT, compatible with CF-1156C-RS CPU cooler
CPU-DT-i3-2100T	Intel® Core™ i3-2100T processor, LGA1155, Dual core 2.5GHz, 3M Cache, 35W, compatible with CF-1156C-RS CPU cooler
CPU-DT-P-G620T	Intel® Pentium G620T processor, LGA1155, Dual core 2.2GHz, 3M Cache, 35W, compatible with CF-1156C-RS CPU cooler
CPU-DT-C-G440	Intel® Celeron G440 processor, LGA1155, Single core 1.6GHz, 1M Cache, 35W, compatible with CF-1156C-RS CPU cooler
CF-1156A-RS	High-performance LGA1155/LGA1156 cooler kit, 1U chassis compatible, 73W
CF-1156B-RS	High-performance LGA1155/LGA1156 cooler kit, 95W
CF-1156C-RS	LGA1155/LGA1156 cooler kit, 1U chassis compatible, 45W
CF-1156D-RS	LGA1155/LGA1156 cooler kit, 1U chassis compatible, 65W