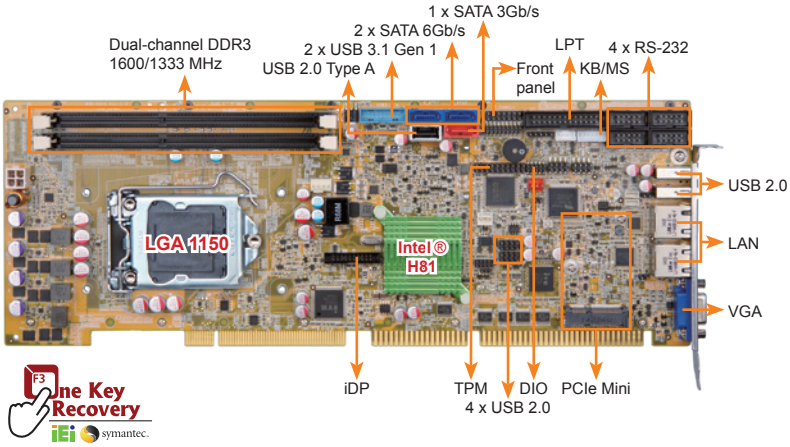
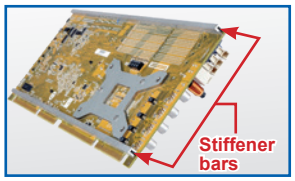
WSB-H810

Full-size PICMG 1.0 CPU Card supports LGA 1150 Intel® Core™ i7/i5/i3, Pentium® and Celeron® CPU with Intel® H81, DDR3, VGA, iDP, Dual Intel® GbE, PCIe Mini, USB 3.1 Gen 1 (5Gb/s), SATA 6Gb/s, mSATA, RS-232, HD Audio and RoHS

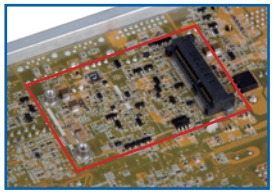




Enhanced stability

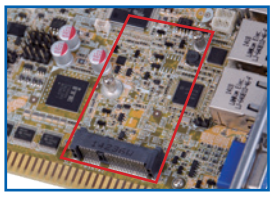
Strengthen the mechanism
Prevent PCB bending

PCIe Mini & mSATA connector



Support PCIe Mini & mSATA

◀ mSATA



Top-side PCIe Mini connector supports PCIe signal for half-size or full-size PCIe device. Solder-side PCIe Mini connector supports SATA 3Gb/s signal for full-size mSATA.

◀ PCIe Mini

Specifications

- CPU
  4th generation LGA 1150 Intel® Core™ i7/i5/i3, Pentium® or Celeron® processor supported
- Chipset
  Intel® H81
- Memory
  Twp 240-pin 1600/1333 MHz dual-channel DDR3 & DDR3L SDRAM unbuffered DIMMs support up to 16 GB
- BIOS
  UEFI
- Graphics Engine
  Intel® HD Graphics Gen 7.5 supports DX11.1 and OpenCL 1.2, OpenGL 3.2
  Full MPEG2, VC1, AVC Decode
- Display Output
  Dual independent display
  1 x VGA (up to 1920x1200@60 Hz)
  1 x iDP interface for HDMI, LVDS, VGA, DVI, DP (up to 3840x2160@60 Hz)
- Ethernet
  LAN1: Intel® I217-LM Ethernet controller
  LAN2: Intel® I211-AT Ethernet controller
- Audio
  Supports 7.1-channel HD Audio by IEI AC-KIT-892HD-R10 kit
- External I/O Interface
  2 x USB 2.0
- Internal I/O Interface
  1 x KB/MS (1x6 pin) — 2 x SATA 6Gb/s
  1 x LPT (2x13 pin) — 2 x USB 3.1 Gen 1 (5Gb/s) (2x10 pin)
  1 x RS-422/485 (1x4 pin, P=2.0) — 4 x RS-232 (2x5 pin, P=2.54)
  1 x USB 2.0 (180° Type-A) — 4 x USB 2.0 (2x4 pin, P=2.54)
  1 x SATA 3Gb/s (AHCI supported, no RAID)
- Front Panel
  1 x Front panel (2x7 pin, power LED, HDD LED, speaker, power button, reset button)
- LAN LED
  2 x LAN LED (1x2 pin)
- Digital I/O
  8-bit digital I/O (2x5 pin)
- 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)
- Expansion
  1 x Full-size PCIe Mini card slot (support mSATA)
  PCI and ISA signal via golden finger
- Watchdog Timer
  Software programmable supports 1~255 sec. system reset
- 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@3.4A, 12V@0.36A, Vcore_12V@7.48A, 3.3V@1.42A, 5VSB@0.13A
  (Intel® Core™ i7-4770K 3.90 GHz CPU with 8 GB (two 4 GB) 1333 MHz DDR3 memory)
- Operating Temperature: -20°C ~ 60°C
- Storage Temperature: -30°C ~ 70°C
- Operating Humidity: 5% ~ 95%, non-condensing
- Dimensions: 338 mm x 122 mm
- Weight: GW: 1000g / NW: 260g
- CE/FCC compliant

Features

- Full-size PICMG 1.0 with LGA 1150 Intel® CPU
- Two 1600/1333 MHz DDR3 SDRAM DIMM slots support up to 16 GB of memory
- Dual Intel® Gigabit Ethernet LAN controller
- SATA 6Gb/s and USB 3.1 Gen 1 (5Gb/s) supported
- IEI One Key Recovery solution for rapid OS backup and recovery
- TPM v1.2 hardware security function supported by TPM module
- Stiffener bars
- IEI jumper-less function

Packing List

1 x WSB-H810 single board computer	
2 x SATA cable	1 x QIG

Ordering Information

Part No.	Description
WSB-H810-R10	Full-size PICMG 1.0 CPU card supports LGA 1150 Intel® Core™ i7/i5/i3, Pentium® and Celeron® CPU with Intel® H81, DDR3, VGA, iDP, dual Intel® GbE, PCIe Mini, USB 3.1 Gen 1 (5Gb/s), SATA 6Gb/s, mSATA, RS-232, 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
19800-003100-100-RS	Dual port USB 2.0 cable with bracket, 300mm, P=2.54
19800-010500-200-RS	USB 3.1 Gen 1 (5Gb/s) cable with bracket, 450mm
32102-000100-200-RS	SATA power cable, MOLEX 5264-4P to SATA15P
32200-074800-RS	RS-422/485 cable, 200mm, P=2.0
32205-000702-100-RS	RS-232 cable, 230mm, P=2.54
AC-KIT-892HD-R10	7.1-channel HD Audio kit with Realtek ALC892 supports dual audio streams
CF-1150SB-R11	Special cooler kit for LGA 1150, high-performance compatible, 65W
CF-1150SC-R20	Special cooler kit for LGA 1150, 1U chassis compatible, 65W
CF-1150SE-R11	Special cooler kit for LGA 1150, high-performance compatible, 95W
CF-1150SF-R10	Special cooler kit for LGA 1150, 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)
TPM-IN01-R20	20-pin Infineon TPM module, software management tool, firmware v3.17