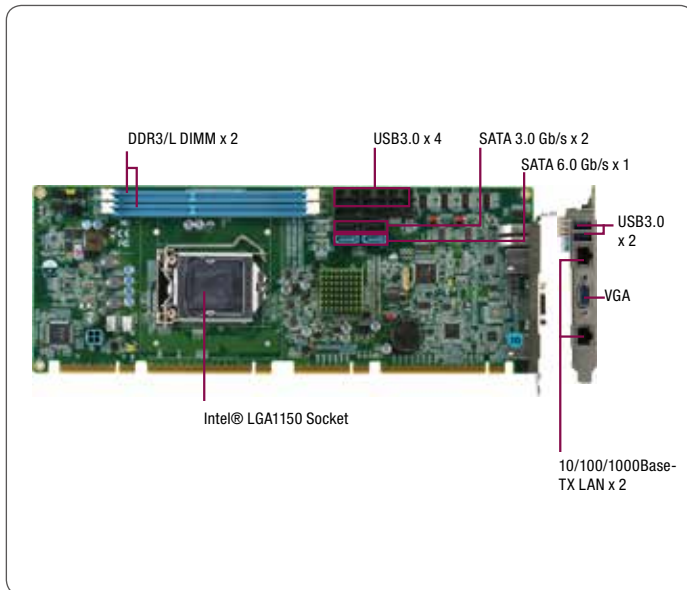


# FSB-H81H

Full-Size SBC with Intel® 4th Generation Core™ i7/i5/i3 LGA 1150 Processor



## Features

- Intel® 4th Generation Core™ i7/i5/i3 LGA 1150 Processor
- Intel® H81 Chipset
- Dual-Channel DDR3/L DIMM Socket x 2, Up to 16 GB
- Intel® H81 Integrated Intel® HD Graphics
- 10/100/1000Base-TX Ethernet x 2
- SATA 6.0 Gb/s x 2, SATA 3.0 Gb/s x 2
- COM x 6 (RS-232 x 4, RS-232/422/485 x 2)
- USB3.0 x 2 (On Bracket), USB 2.0 x 8
- PICMG 1.3
- ATX 2.1 Power Requirement

## Specifications

System	
Form Factor	PICMG 1.3 Full-Size SBC
Processor	Intel® 4th Generation Core™ i7/i5/i3 LGA 1150 Processor
System Memory	240-pin Dual-Channel DDR3/DDR3L 1333/1600 MHz DIMM socket x 2, up to 16 GB
Chipset	Intel® H81
Ethernet	Realtek 8111E x 2, 10/100/1000Base-TX, RJ-45 x 2 on bracket
BIOS	AMI Plug & Play SPI BIOS – 128 MB ROM
Wake On LAN	Yes
Watchdog Timer	1~255 steps by software programming
H/W Status Monitoring	System temperature, Voltage, and Cooling fan status monitoring
Expansion Interface	PICMG 1.3
Battery	Lithium battery
Power Requirement	ATX 2.1
Power Consumption	—
Board Size	13.3" x 5" (339mm x 126mm)
Gross Weight	1.2 lb (0.5 kg)
Operation Temperature	32 °F ~ 140 °F (0 °C ~ 60 °C)
Storage Temperature	-4 °F ~ 158 °F (-20 °C ~ 70 °C)
Operation Humidity	5% ~ 90% relative humidity, non-condensing
MTBF (Hours)	60,000
Display	
Chipset	Intel® H81 Integrated Intel® HD Graphics
Resolution	Up to 2048 x 1536 @ 75 Hz for CRT
Output Interface	VGA x 1 or DVI x 1 on bracket
I/O	
Storage	SATA 6.0 Gb/s x 2, SATA 3.0 Gb/s x 2
Serial Port	COM port x 6, COM 3~6: RS-232, with Box header optional, COM 1~2: RS-232/422/485, with Box header
PS/2 Port	4x2 pin header x 1
USB	USB 3.0 x 2 (Type A on bracket), USB2.0 x 6 (Internal 5 x 2-pin header x 8)
Parallel Port	LPT Port x 1
Audio	HDAC Daughter board (Optional), Mic-in/Line-in/Line-out/CD-in
Digital I/O	8-bit programmable (4-in / 4-out)



## Packing List

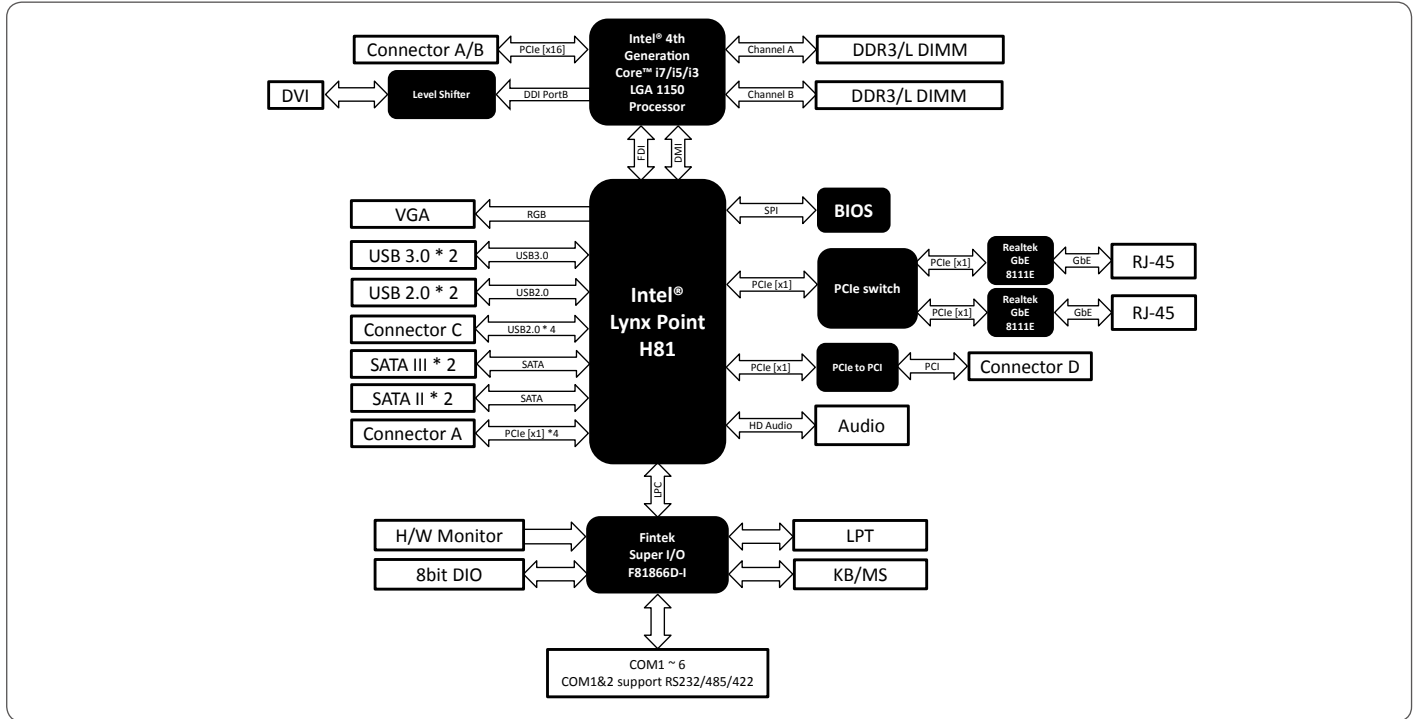
- COM Port & LPT Cable
- COM Port Cable
- SATA Cable x 4
- ATX Cable
- USB Cable
- COM Port Cable x 2
- Product DVD
- FSB-H81H

## Optional Accessories

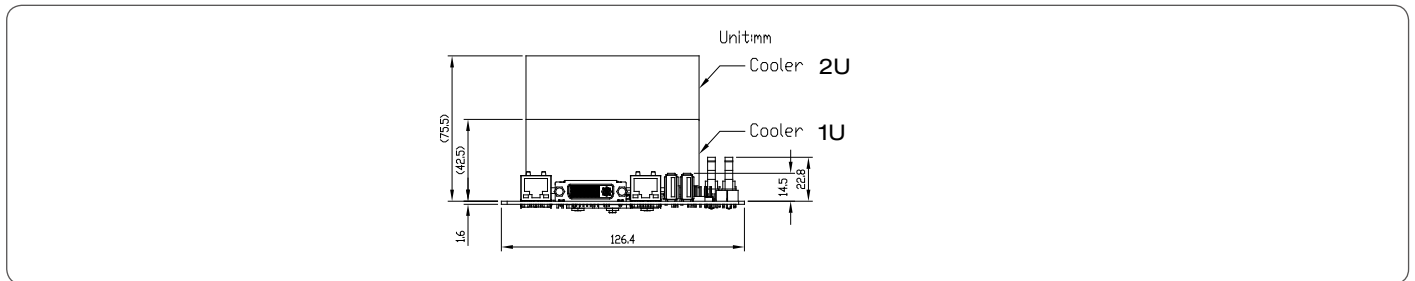
- 1175920000D  
LGA1155/1150 CPU Cooler, Aluminum (2U Height, 95Watt)
- 1759218000  
LGA1155/1150 CPU Cooler, Copper (1U Height, 95Watt)
- 1709080207  
KB/MS Cable

# FSB-H81H

## Block Diagram



## Dimension Unit: mm



## Passive Backplane Options

P/N	Description	Master Interface	Slots	Power Connector, ATX Extend Function
TF-BP-214SH-P3E2I6	Rackmount, PICMG 1.3, 14-Slot, Backplane, 3 PCI, 1 PCI-E[x4], 1 PCI-E[x4], 6 ISA, Single Segment, ATX	PICMG 1.3	3/2/6/2 (PCI/PCI-E/ISA/PICMG 1.3)	ATX
BP-214SH-P8E4-A11	Rackmount, PICMG 1.3, 14-Slot, Backplane, 8 PCI, 1 PCI-E[x4], 4 PCI-E[x4], Single Segment, ATX	PICMG 1.3	8/4/1 (PCI/PCI-E/PICMG 1.3)	ATX
TF-BP-208RH-P4E3	Rackmount, PICMG 1.3, 8-Slot, Backplane, 4 PCI, 2 PCI-E[x1], 1 PCI-E[x16], Single Segment, ATX	PICMG 1.3	4/2/1 (PCI/PCI-E/PICMG 1.3)	ATX
BP-208SH-P3E4	Wallmount, PICMG 1.3, 8-Slot, Backplane, 3 PCI, 4 PCI-E, Single Segment, ATX	PICMG 1.3	3/4/1 (PCI/PCI-E/PICMG 1.3)	ATX
TF-BP-206VH-P4	Rackmount, PICMG 1.3, 6-slot Backplane, 4 PCI, Single Segment, ATX	PICMG 1.3	4/1 (PCI/ PICMG 1.3)	ATX
TF-BP-206VH-E4	Rackmount, PICMG 1.3, 6-slot Backplane, 4 PCI-E, Single Segment, ATX	PICMG 1.3	4/1 (PCI-E/ PICMG 1.3)	ATX
TF-BP-206SH-P3	Wallmount, PICMG 1.3, 6-Slot, Backplane, 3 PCI, 2 PCI-E, Single Segment, ATX	PICMG 1.3	3/2/1 (PCI/PCI-E/PICMG 1.3)	ATX
BP-206VH-P2E2	Rackmount, PICMG 1.3, 6-Slot, Backplane, 2 PCI, 2 PCI-E, Single Segment, ATX	PICMG 1.3	2/2/1 (PCI/PCI-E/PICMG 1.3)	ATX

## Ordering Information

Part Number	CPU	RAM	Fan/Fanless	Display	Storage	LVDS	LAN	USB	RS-232	RS-232/422/485	Expansion Slot	Power	Temp.
FSB-H81H-A10-V	Socket	DIMM	Fan	VGA	SATA 6.0 Gb/s x 2 + SATA 3.0 Gb/s x 2 (Backplane x 2)	—	GbE x 2	USB3.0 x 2 USB2.0 x 6	4	2	PICMG 1.3	ATX	0°C ~ 60°C
FSB-H81H-A10-D	Socket	DIMM	Fan	DVI	SATA 6.0 Gb/s x 2 + SATA 3.0 Gb/s x 2 (Backplane x 2)	—	GbE x 2	USB3.0 x 2 USB2.0 x 6	4	2	PICMG 1.3	ATX	0°C ~ 60°C