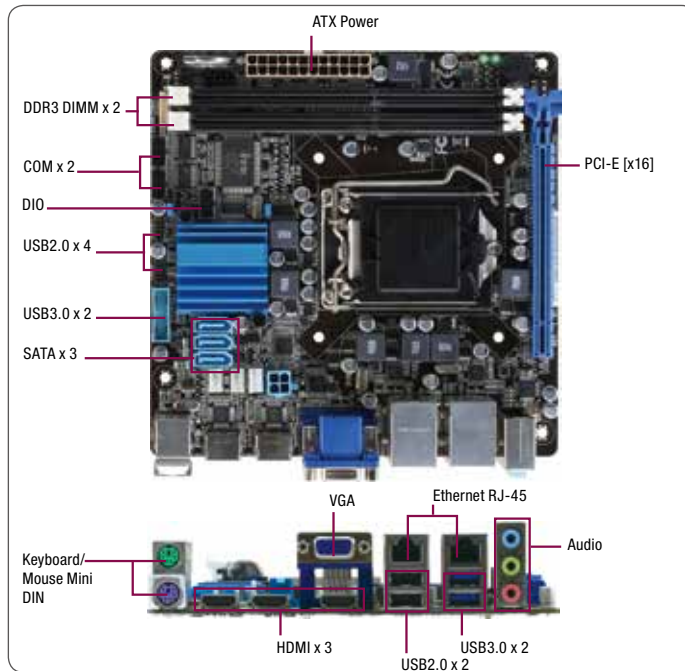


EMB-B75A

Mini-ITX Embedded Motherboard with Intel® 2nd/3rd Generation Core™ i7/i5/i3 Processor



Features

- Intel® 2nd/3rd Generation Core™ i7/i5/i3 Processor
- Intel® B75 Express Chipset
- DDR3 1600/1333 MHz DIMM x 2, Up to 16 GB
- Dual/Three Independent Display: VGA, HDMI x 3
- Gigabit Ethernet x 2
- Onboard TPM Infineon SLB9635 TT 1.2
- USB3.0 and SATA 6.0 Gb/s



Specifications

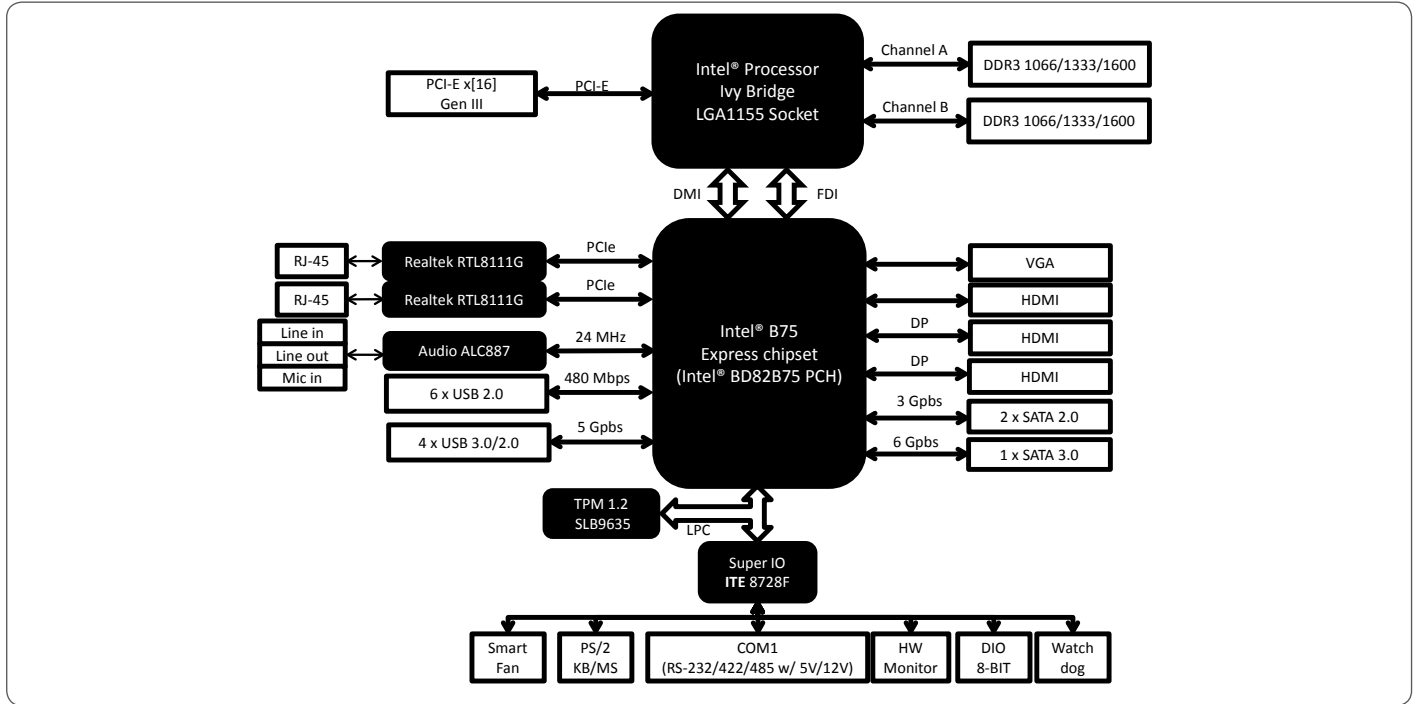
System	
Form Factor	Mini-ITX
Processor	Intel® Socket 1155 for 2nd/3rd Generation Core™ i7/i5/i3/Pentium®/Celeron® Processors up to 95W
System Memory	240-pin DDR3 1600/1333 MHz DIMM x 2, up to 16 GB (8 GB per DIMM)
Chipset	Intel® B75 chipset
I/O Chipset	ITE 8728F
Ethernet	Realtek® RTL8111F, Gigabit Ethernet, RJ-45 x 2
BIOS	AMI BIOS, 64 M bit ROM x 2
Wake On LAN	Yes
Watchdog Timer	255 level and can be set by software
TPM	Infineon SLB9635 TT1.2
H/W Status Monitoring	Temperature Monitor on CPU/Chassis Voltage Monitor on Vcore 5V/3.3V/12V Fan Monitor on CPU/Chassis
Expansion Interface	PCI-E[x16] slot x 1
Battery	Lithium battery
Power Requirement	24-pin ATX connector x 1, 4-pin ATX Power connector x 1
Power Consumption	Intel® Core™ i7-3770K Processor, DDR3 1600/8 GB DIMM x 2, ATX 56.89W
Board Size	6.7" x 6.7"(170mm x 170mm)
Gross Weight	1.1 lb (0.5 kg)
Operation Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~ 185°F (-40°C ~ 85°C)
Operation Humidity	0% ~ 90%RH, non-condensing
MTBF (Hours)	116,000
Display	
Graphic	Intel® HD Graphics
Graphic Engine	Intel® HD Graphics 2500, Intel® HD Graphics 4000 with i7 CPU
Resolution	Up to 1920 x 1200 @60 Hz for VGA Up to 1920 x 1080 @60 Hz for HDMI
Output Interface	VGA x 1, HDMI x 3
I/O	
Storage	SATA 6.0 Gb/s x 1, SATA 3.0 Gb/s x 2
Serial Port	RS-232/422/485 x 1 supports +5/+12V, RS-232 x 1
USB	USB 3.0 (On rear I/O) x 2, USB 3.0 (Box header 2.00mm) x 2 USB 2.0 (On rear I/O) x 2, USB 2.0 (Pin header 2.00mm) x 4
Digital I/O	8-bit programmable
PS/2 Port	PS/2 x 2 (Keyboard & Mouse)
Audio	Line-in, Mic-in, Line-out

Packing List

- SATA Cable x 2
- Metal I/O Bracket
- Product CD
- EMB-B75A

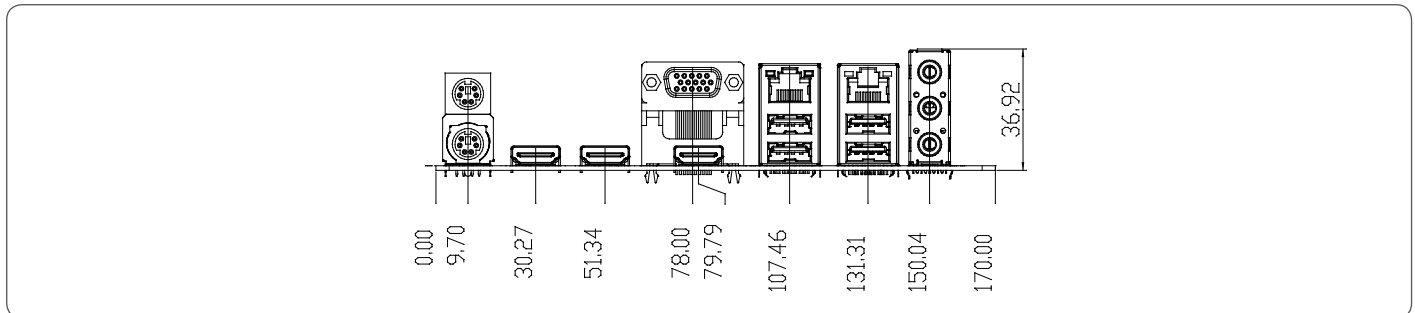
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Block Diagram



Dimension

Unit: mm



Ordering Information

Part number	CPU	RAM	Fan/Fanless	Display	Storage	LVDS	LAN	USB	RS-232	RS-232/422/485	Expansion Slot	Power	TPM	Temp.
EMB-B75A-B10	Socket	DIMM	CPU Fan x 1 System Fan x 1	VGA/HDMI x 3	SATA3 x 1 SATA2 x 2	—	GbE x 2	USB3.0 x 4 USB2.0 x 6	1	1	PCI-E[x16] x 1	ATX	Onboard	0°C ~ 60°C

Optional Accessories

- **1759200172**
2U CPU Cooler (2-Ball, Screw with Retention Plate)
- **175921156B**
2U CPU Cooler (2-Ball, Push-pin Type)
- **1700190450**
USB 3.0 Cable (19P, 450MM, p=2.00mm, w/ bracket)
- **1709070800**
SATA Cable
- **1701100206**
COM Cable (200MM, p=2.00mm)
- **1709100201**
USB 2.0 Cable (10P, 200MM, p=2.00mm, w/ bracket)