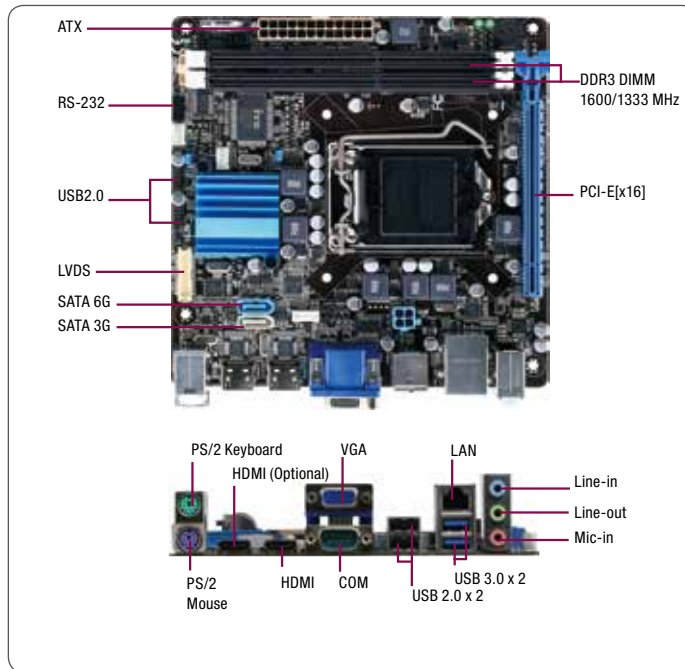


EMB-B75B

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



Features

- Intel® Socket 1155 for 2nd/3rd Generation Core™ i7/i5/i3 Processor
- Intel® B75 Express Chipset
- DDR3 1600/1333 MHz DIMM x 2, Up to 16 GB
- Dual Independent Display: VGA, LVDS, HDMI (Dual HDMI Optional)
- Realtek RTL8111F, Gigabit Ethernet x 1
- SATA 6.0 Gb/s x 1, USB3.0 x 2, PCI-E3.0/2.0 [x16] x 1



Specifications

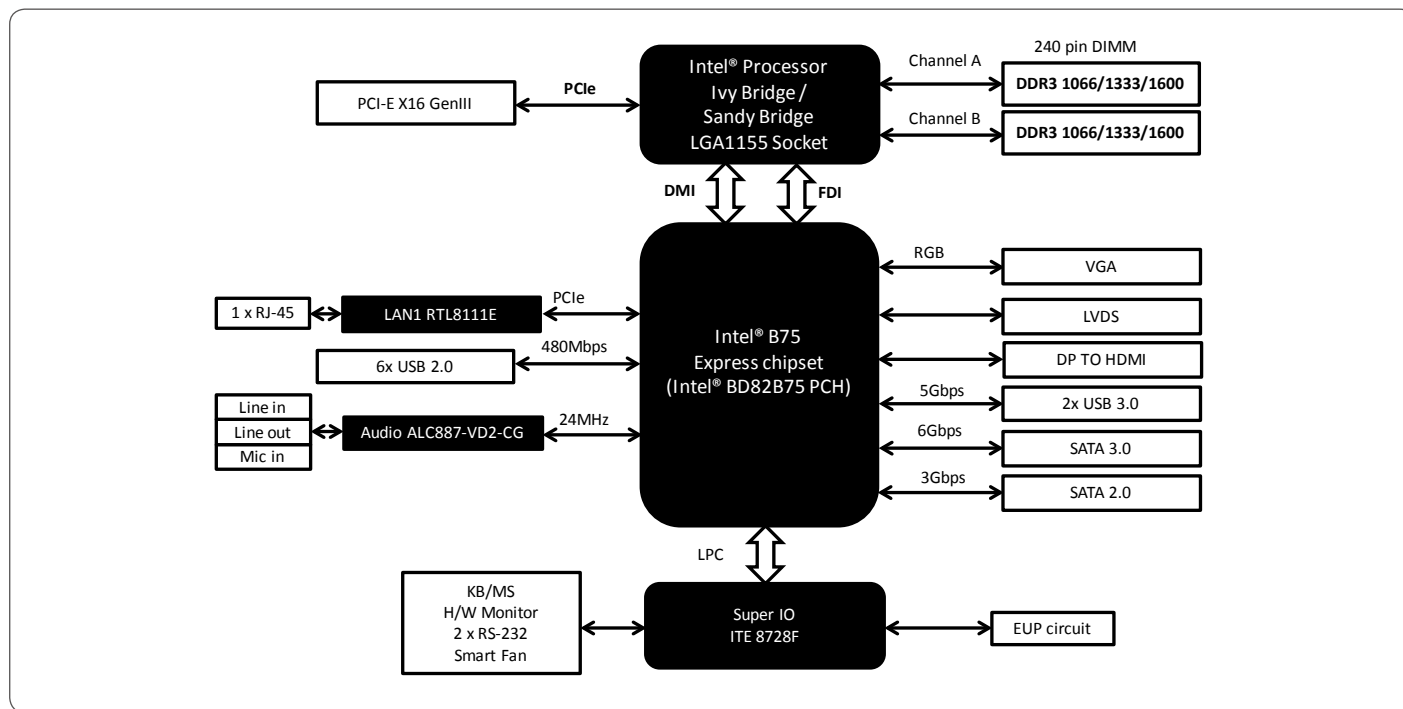
System	
Form Factor	Mini-ITX
Processor	LGA1155 socket for Intel® 2nd/3rd Generation Core™ i7/ i5/ i3/ Pentium®/ Celeron® Processors
System Memory	DIMM DDR3 1600/1333 MHz x 2, up to 16 GB, non-ECC, un-buffered memory
Chipset	Intel® B75 Express Chipset
I/O Chipset	ITE 8728F
Ethernet	Realtek 8111F, Gigabit Ethernet, RJ-45 x 1
BIOS	64Mbit Flash ROM x 2, AMI BIOS
Wake On LAN	Yes (WOL / PXE)
Watchdog Timer	1~255 steps by software program
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 3.0/2.0[x16] x 1
Battery	Lithium battery
Power Requirement	24-pin ATX connector x 1, 4-pin ATX 12V Power connector x 1
Power Consumption (Typical)	Intel® Core™ i7-3770K, DDR3 1600/8 GB, ATX, 5.2A@12V, 1.18A@5V, 1.1A@3.3V
Board Size	6.7" x 6.7" (170mm x 170mm)
Gross Weight	1.1 lb (0.5 kg)
Operation Temperature	32°F ~ 131°F (0°C ~ 55°C)
Storage Temperature	-40°F ~ 185°F (-40°C ~ 85°C)
Operation Humidity	0% ~ 90% R/H, non-condensing
MTBF (Hours)	125,948
Display	
Graphic Engine	Intel® HD Graphics
Resolution	Up to 1920 x 1200 @60 Hz for VGA Up to 1920 x 1080 @60 Hz for HDMI Up to 1920 x 1200 @60 Hz, Dual-Channel 18/24-bit for LVDS, support EDID LVDS auto detection
Output Interface	VGA, HDMI (Dual HDMI optional), LVDS
I/O	
Storage	SATA 6.0 Gb/s x 1, SATA 3.0 Gb/s x 1
Serial Port	RS-232 on back panel x 1, RS-232 on mid-board x 1
Universal Serial Bus	USB 3.0 x 2 (on back panel), USB 2.0 x 6 (4ports on mid-board, 2 ports on back panel)
Digital I/O	—
PS/2 Port	PS/2 Port (Keyboard & Mouse) x 2
Audio	Line-in, Mic-in, Line-out

Packing List

- I/O Shield
- SATA Power Cable
- SATA Cable x 2
- Product CD
- EMB-B75B

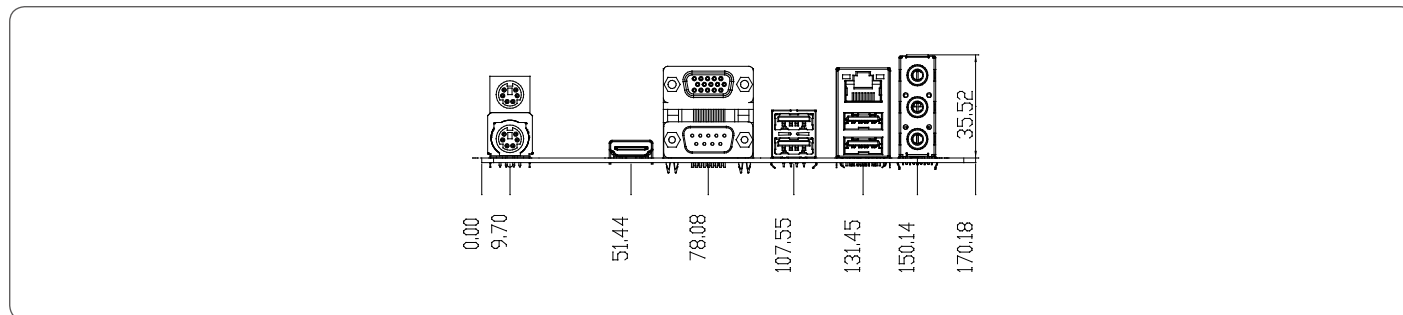
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Block Diagram



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-B75B-A10	Socket	DIMM x 2	FAN	VGA, HDMI	SATA3 x 1 SATA2 x 1	18/24b	GbE x 1	USB 3.0 x 2 USB 2.0 x 6	2	—	PCI-E[x16] x 1	ATX	—	0°C ~ 55°C

Optional Accessories

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