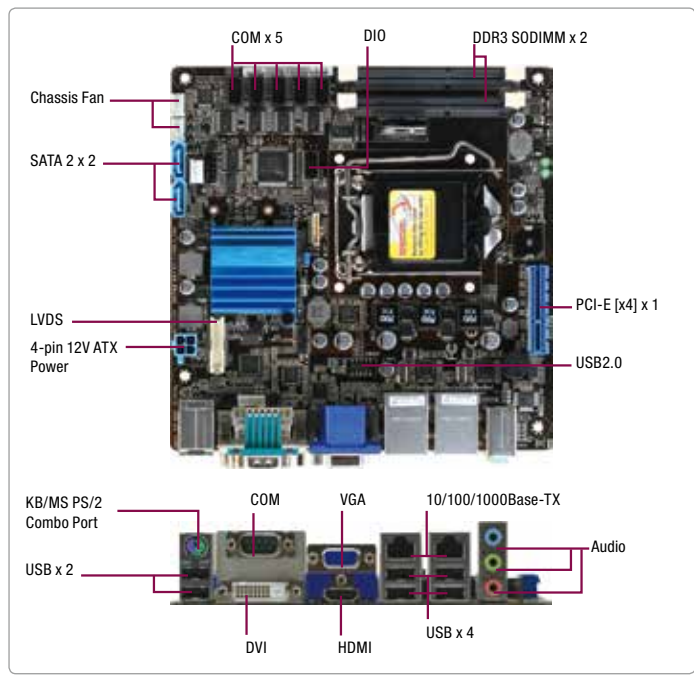


EMB-H61A

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



Features

- Intel® Socket 1155 for 2nd/3rd Generation Core™ i7/i5/i3 Processor Up to 65W
- Dual-Channel DDR3 1333/1066MHz SODIMM x 2, Up to 16GB
- Gigabit Ethernet x 2
- Intel® Integrated Graphics Engine Supports Dual Display By VGA, DVI, HDMI, LVDS
- HD 5.1CH Audio
- SATA 3.0Gb/s x 2, CF-SATA x 1 (Optional)
- USB2.0 x 8 , COM x 6
- PCI-Express[x4] x 1, Mini Card x 1 (mSATA Optional), TPM Module



Specifications

System	
Form Factor	Mini-ITX
Processor	Intel® 2nd/3rd Generation Core™ i7/ i5/ i3/ Pentium®/ Celeron® Processors Supports Intel® 32 nm CPU up to 65W (65W CPU supported without Turbo Boost Mode) (Note: please use proprietary CPU cooler)
System Memory	204-pin Dual-Channel DDR3 1066/1333MHz SODIMM x 2, up to 16GB
Chipset	Intel® H61
I/O Chipset	Fintek F81866D-1
Ethernet	Realtek 8111E, Gigabit Ethernet, RJ-45 x 2
BIOS	AMI BIOS, SPI type, 64Mb ROM
Wake On LAN	Yes
Watchdog Timer	1~255 steps programmable
TPM	Infineon SLB9635
H/W Status Monitoring	Temperature Monitor on CPU/Chassis Voltage Monitor on Vcore 5V/3.3V/12V Fan Monitor on CPU/Chassis
Expansion Interface	PCIe[x4] x 1, Full size Mini PCI-Esocket with SIM Slot x 1 (mSATA optional)
Battery	Lithium battery
Power Requirement	12VDC with 4 PIN power connector
Power Consumption	Intel® Core™ i5-2390T, DDR3 1333 8GB 3.9A@12V
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% relative humidity, non-condensant
MTBF (Hours)	117,000
Display	
Graphic Engine	Intel® Graphics Media Accelerator
Resolution	Up to 2048 x 1536 @75Hz for VGA Up to 1920 x 1200 @60Hz for DVI Up to 1920 x 1200 @60Hz for HDMI Up to 1920 x 1200 @60Hz for LVDS
Output Interface	Dual Channel 18/24-bit LVDS HDMI, VGA, DVI-D, LVDS

I/O	
Storage	SATA 3.0Gb/s x 2, CF-SATA x 1 (SATA+IDE) optional
Serial Port	RS-232/422/485 x 1 supports 5V/12V/ RI on the 9th (on I/O), RS-232 x 5 (pin header)
USB	USB 2.0 x 8 (2 ports at mid-board, 6 ports at back panel)
Digital I/O	8-bit programmable (4-in / 4-out)
PS/2 Port	KB/MS PS/2 combo Port x 1 (integrated with Dock USB)
Audio	Line-in, Mic-in, Line-out

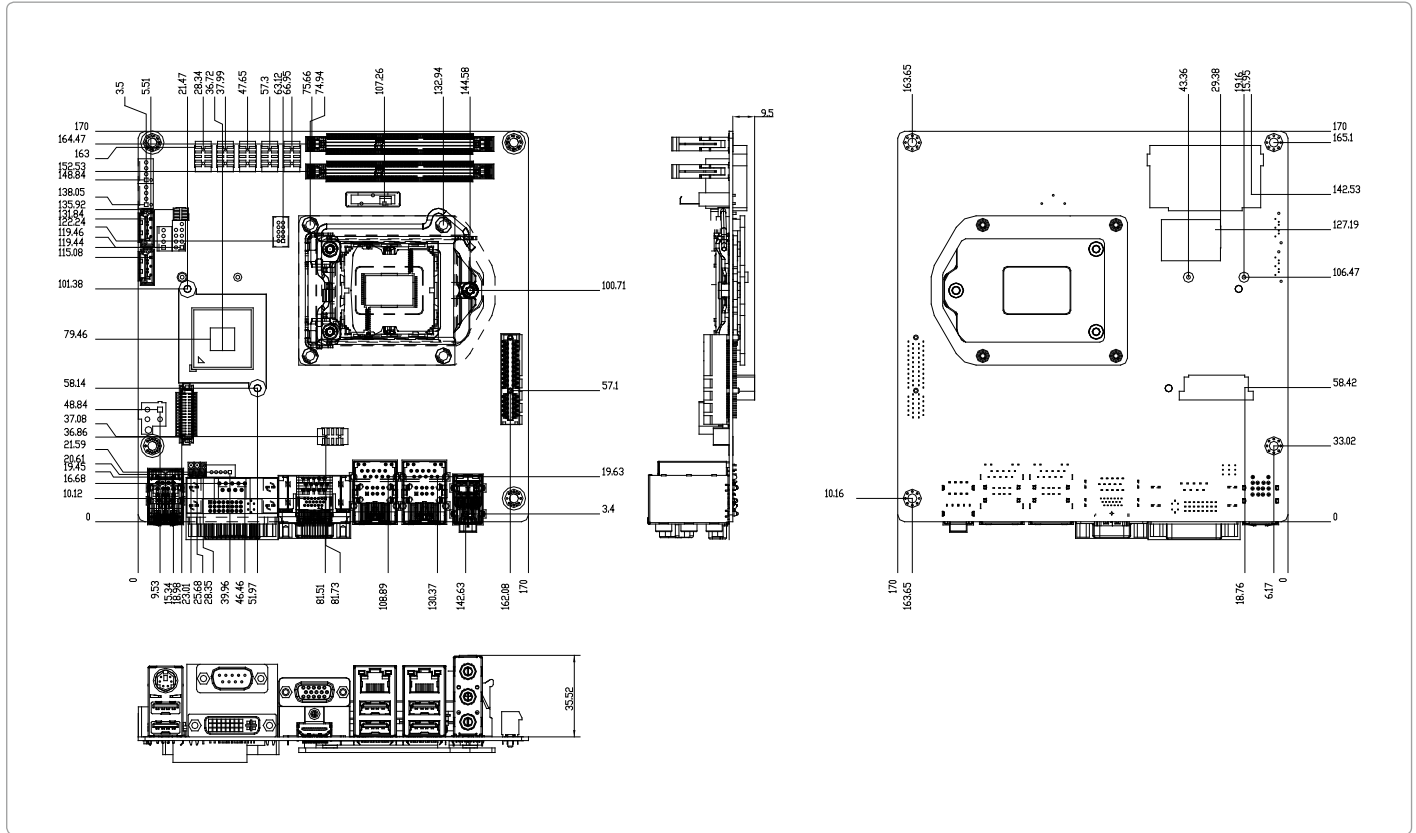
Packing List

- SATA Cable x 2
- SATA Power Cable
- I/O Shield
- Product CD
- EMB-H61A

EMB-H61A

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	Temp.
EMB-H61A-A10	Socket	SODIMM	Fan (Proprietary CPU Cooler)	VGA, DVI-D, LVDS, HDMI	SATA2 x 2, CF-SATA x 1	18/24b, 2CH	GbE x 2	8	5	1	PCI-E [x4] x 1	12V DC	0°C ~ 55°C
EMB-H61A-A10-NC	Socket	SODIMM	Fan (Proprietary CPU Cooler)	VGA, DVI-D, LVDS, HDMI	SATA2 x 2	18/24b, 2CH	GbE x 2	8	5	1	PCI-E [x4] x 1	12V DC	0°C ~ 55°C

Optional Accessories

- **17592H61A0**
Proprietary CPU Cooler for EMB-H61A
- **SATA Power Cable**
- **1701100206**
COM Cable (200MM, p=2.00mm)
- **1709100201**
USB 2.0 Cable (10P, 220MM, p=2.00mm)
- **1709070800**
SATA Cable