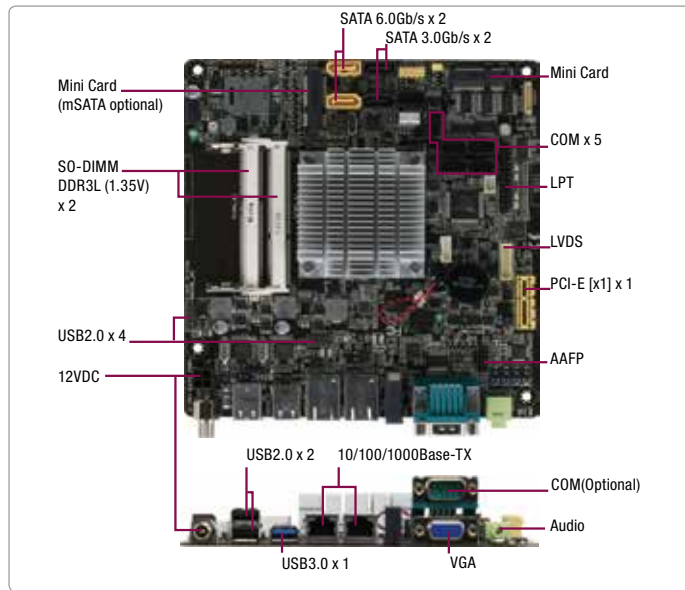


# EMB-BT1

Thin Mini-ITX Embedded Motherboard with Intel® Atom™ E3845/E3825 Processor, 2 SATA3, 2 SATA2, 8 USB



## Features

- Intel® Atom™ E3845/E3825 Processor
- Dual Displays: VGA x 1, HDMI x 1, LVDS x 1
- Realtek 8111G, Gigabit Ethernet x 2
- SATA 6.0Gb/s x 2, SATA 3.0Gb/s x 2
- USB 3.0 x 1, USB 2.0 x 7
- Full-size Mini Card with Optional mSATA x 1, Half-size Mini Card x 1, PCI-E[x1] x 1
- 12V DC Power



## Specifications

System	
Form Factor	Mini-ITX
Processor	Intel® Atom™ E3845 Processor (4C @ 1.91GHz CPU, 542/792MHz GFX, ~10W TDP) Intel® Atom™ E3825 Processor (2C @ 1.33GHz CPU, 533MHz GFX, 6W TDP)
Memory	DDR3L 1333 MHz SODIMM x 2 (flat) up to 8GB (for E3845), DDR3L 1066MHz SODIMM x 1 (flat) up to 4GB (for E3825), non-ECC, un-buffered memory, Dual-channel memory architecture flat type
Chipset	—
I/O Chipset	Fintech 81866D
Ethernet	Realtek 8111G, Gigabit Ethernet x 2
Audio	Realtek® ALC887
BIOS	64Mb Flash ROM, AMI BIOS
Wake On LAN / PXE	Yes (WOL/PXE)
Watchdog Timer	1~255 steps programmable
TPM	Infineon SLB9635 TT 1.2
H/W Monitor	Temperature Monitor on CPU/System, Voltage Monitor on Vcore/5V/3.3V/12V, Fan Monitor on CPU/Chassis
Expansion Slots	Full-size Mini Card (PCI-E + USB) + SIM Card (mSATA optional) x 1, Half-size Mini Card (PCI-E + USB) x 1, PCI-E[x1] x 1
Battery	Lithium battery
Power Requirement	12VDC
Power Consumption	—
Board Size	6.7" x 6.7" (170mm x 170mm)
Gross Weight	1.1 lb (0.5 Kg)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Operating Humidity	0% ~ 90% RH, non-condensing
Smart Fan Control	Chassis Fan (fanless)
Power State	S3, S4, S5
Power Requirement	12VDC
Power Compliance	Compliant with EuP / ErP
Certificate	CE & FCC
Mechanical	
Graphics Engine	Intel® Graphics Media Accelerator
Display	LVDS x 1, VGA x 1, HDMI x 1
VGA	Up to 1920 x 1200 @60 Hz
DVI	—
HDMI	Up to 1920 x 1200 @60 Hz
LVDS	Up to 1920 x 1080 @60Hz, Daul-Channel 18/24-bit (via CH7511)
eDP	—
DP	—
Backlight Control	Voltage / PWM

I/O	
Storage	SATA 6.0 Gb/s x 2, SATA 3.0 Gb/s x 2, SATA power connector x 1
USB	USB 2.0 x 9 (2 ports on rear panel, 5 ports on mid-board, 2 ports on Mini Card interface), USB 3.0 x 1 (1 port on rear panel)
Audio I/O	Mic-in, Line-out
LAN I/O	RJ-45 x 2
Serial Port	RS-232 x 4, RS-232/422/485 x 1 support optional 5V/12V/RI (COM1)
Parallel Port	SPP/EPP Mode
PS/2 Port	PS/2 x 1 for keyboard / Mouse
DIO	8-bit Programmable Digital I/O interface (4-in /4-out)
FAN	Chassis Fan connector x 1 (4-pin)

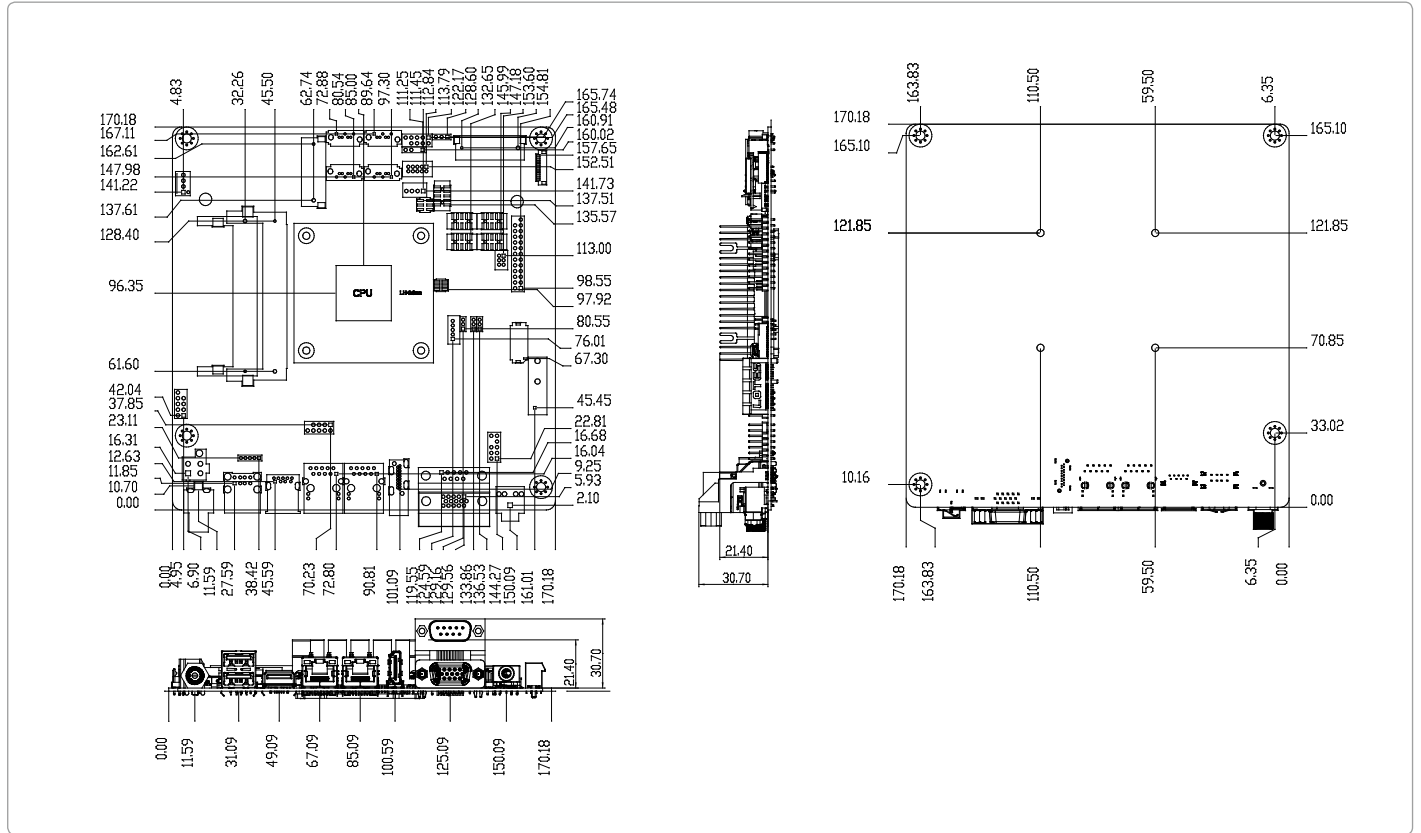
## Packing List

- SATA Cable
- SATA Power Cable
- I/O Shield
- Product CD
- EMB-BT1

# EMB-BT1

## Dimension

Unit: mm



## Order Information

Part Number	CPU	RAM	Fan/ Fanless	Display	Storage	LVDS	LAN	USB	RS-232	RS-232/422/485	Expansion Slot	Power	TPM	Temp.
EMB-BT1-A10-3845	E3845	DDR3L-1333 MHz	Fanless	VGA, LVDS, HDMI	SATA2 x 2, SATA3 x 2	18/24b, 2CH	GbE x 2	USB3.0 x 1, USB2.0 x 8	5	1	PCI-E x1, Full size mini card x 1 (PCI-E [x1] & USB), half size mini card x 1 (PCI-E [x1] & USB)	12VDC	Onboard	0~60°C
EMB-BT1-A10-3825	E3825	DDR3L-1066 MHz	Fanless	VGA, LVDS, HDMI	SATA2 x 2, SATA3 x 2	18/24b, 2CH	GbE x 2	USB3.0 x 1, USB2.0 x 4	5	1	PCI-E x1, Full size mini card x 1 (PCI-E [x1] & USB), half size mini card x 1 (PCI-E [x1] & USB)	12VDC	Onboard	0~60°C
EMB-BT1-A10-3845-MS	E3845	DDR3L-1333 MHz	Fanless	VGA, LVDS, HDMI	SATA2 x 1, SATA3 x 2, Full size mini card x 1 (mSATA)	18/24b, 2CH	GbE x 2	USB3.0 x 1, USB2.0 x 8	5	1	PCI-E x1, Half size mini card x 1 (PCI-E [x1] & USB)	12VDC	Onboard	0~60°C
EMB-BT1-A10-3825-MS	E3825	DDR3L-1066 MHz	Fanless	VGA, LVDS, HDMI	SATA2 x 1, SATA3 x 2, Full size mini card x 1 (mSATA)	18/24b, 2CH	GbE x 2	USB3.0 x 1, USB2.0 x 4	5	1	PCI-E x1, Half size mini card x 1 (PCI-E [x1] & USB)	12VDC	Onboard	0~60°C

## Optional Accessories

- **1709100330**  
USB 2.0 Cable (9P, 330MM, p=2.54mm)
- **170910020A**  
USB 2.0 Cable (5P, 220MM, p=2.00mm)
- **1701260305**  
LPT Cable (25P, 270MM)
- **1757306007**  
Lockable Adapter 60W
- **1757908403**  
Lockable Adapter 84W
- **1701100206**  
COM Port Cable