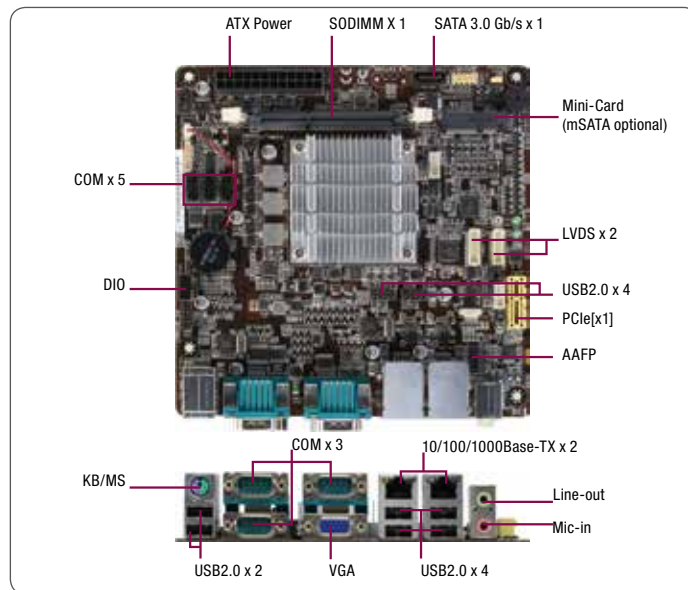


# EMB-BT2

Thin Mini-ITX Embedded Motherboard with Intel® Atom™ J1900 Processor, SATA2 x 1, USB2.0 x 10, Dual LVDS



## Features

- Intel® Atom™ J1900 Processor
- Realtek 8111G, Gigabit Ethernet x 2
- Dual Displays: VGA + LVDS, Dual LVDS
- SATA 3.0Gb/s x 1
- USB 2.0 x 10
- Full-size Mini-Card with mSATA x 1, PCI-E[x1] x 1
- ATX Power



## Specifications

System	
Form Factor	Mini-ITX
Processor	J1900 Bay Trail-D (4C @ 2 GHz CPU, 688/854 (Turbo) GFX, ~10W TDP)
Chipset	—
System Memory	SODIMM x 1, max. 8 GB, 204-pin DDR3L 1333 MHz, non-ECC, un-buffered memory
Graphics	Intel® HD Graphics
I/O Chipset	Fintek 81866D
Ethernet	Realtek PCIe GB LAN 8111G x 2
Audio	Realtek® ALC887 (colay ALC892/886)
TPM	Infineon SLB9635 TT 1.2 (optional)
Expansion Interface	Full-size Mini-Card(mSATA default, PCIe optional) x 1, PCI-E[x1] x 1
BIOS	64Mbit Flash ROM, AMI BIOS
H/W Monitor	Temperature Monitor on CPU/System, Voltage Monitor on Vcore/5V/3.3V/12V, Fan Monitor on CPU/Chassis
Watchdog Timer	1~255 step by software program
Smart Fan Control	Chassis Fan (fanless)
Wake On LAN/PXE	Yes (WOL / PXE)
Power State	S3, S4, S5
Power	
Battery	Lithium battery
Power Requirement	24-pin ATX main power connector x 1
Power Consumption	—
Power Compliance	Compliant with EuP / ErP
Mechanical	
Form Factor	Mini-ITX 6.7" x 6.7"(170mm x 170mm)
Gross Weight	1.1 lb (0.5 kg)
Environmental	
Operating temperature	32°F ~140°F (0°C ~ 60°C)
Storage temperature	—
Operating Humidity	0% ~ 90% RH, non-condensing
Certificate	CE & FCC
MTBF	100,000
Display	
Chipset	Intel® HD Graphics
Multi Display	VGA+LVDS, Dual LVDS
VGA	Up to 1920 x 1200 @60 Hz
DVI	—
HDMI	—
LVDS	Up to 1920 x 1080 @60Hz, Dual Channel 18/24 (via CH7511)

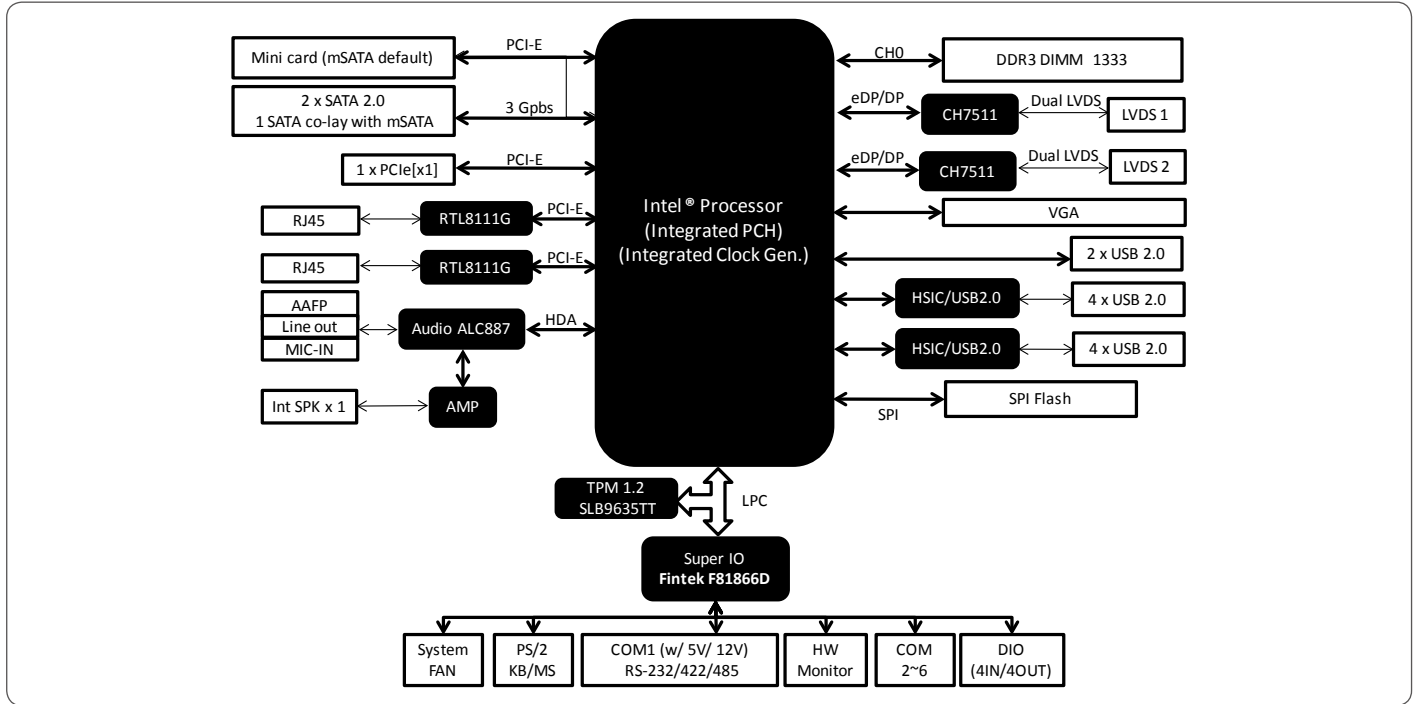
I/O	
Storage	SATA 3 Gb/s(One SATA colay with mSATA) x 2
USB	USB 2.0 x 10 (4 ports in mid-board, 6 ports on rear I/O)
Display I/O	LVDS x 2, VGA x 1
Audio I/O	Mic-in, Line-out
LAN I/O	RJ-45 x 2
Serial Port	RS-232 x 5, RS-232/422/485 x 1 supports optional 5V/12V/RI (COM1)
Parallel Port	—
PS/2 Port	PS/2 for keyboard / Mouse x 1
DIO	8-bit Programmable Digital I/O interface (4-in/4-out)
FAN	Chassis Fan connector x 1 (4-pin)
Operating System	
MS Windows	Windows 7 32/64 bit, Windows 8.1
Linux	Linux Fedora

## Packing List

- SATA 3G Cable
- Product CD
- I/O Shield
- EMB-BT2
- Heatsink

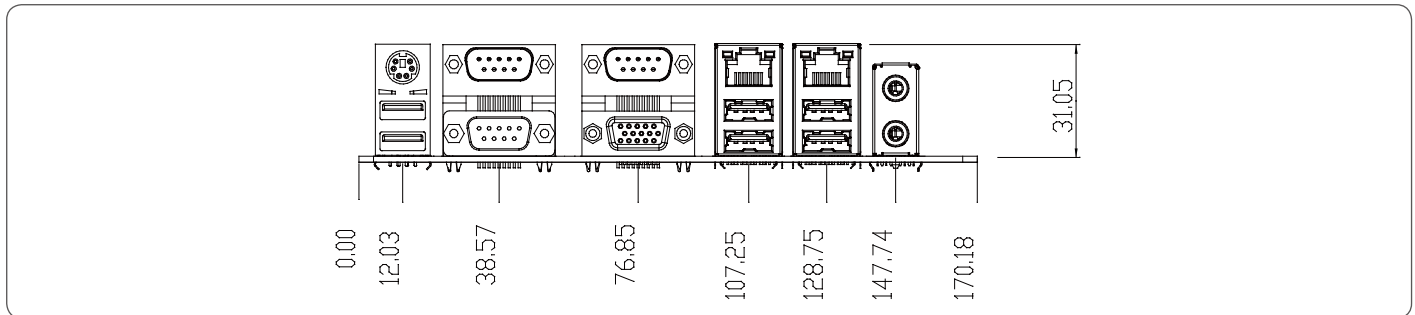
# EMB-BT2

## Block Diagram



## 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-BT2-A10-1900-MS	J1900	SODIMM x 1	Fanless	VGA, LVDS x 2	SATA2 x 1, Full-Size Mini-Card x 1 (mSATA)	18/24b 2CH x 2	GbE x 2	USB2.0 x 10	5	1	Full-size Mini-Card (mSATA default, PCI-E[x1] optional) x 1, PCIe [x1] x 1	ATX	Onboard	0°C ~ 60°C

## Optional Accessories

Part Number	Description
1709100330	USB 2.0 cable (9P, 330MM, p=2.54mm, w/bracket)
1701100206	COM Port Cable
170910020K	USB 2.0 cable (9P, 200MM, p=2.54mm, w/o bracket)