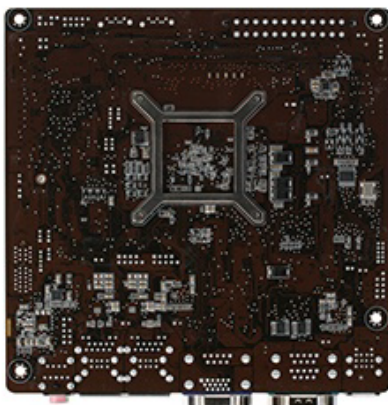
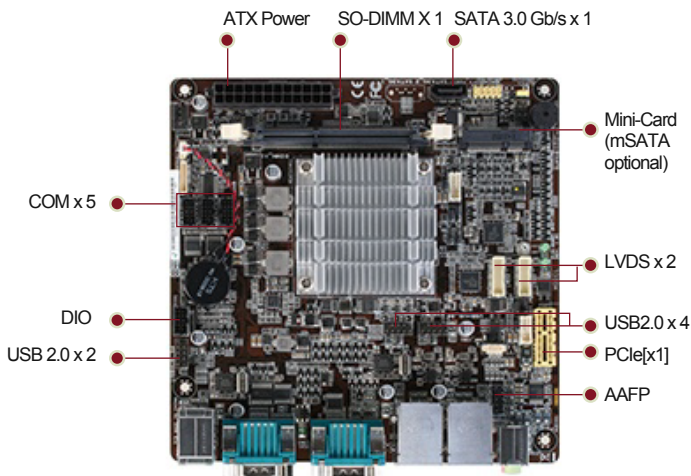
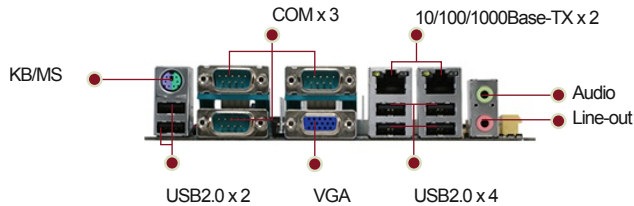


Onyx Single Board Computer Unit

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 12
- Full-size Mini Card with mSATA x 1, PCI-E[x1] x 1
- ATX Power

Specifications

Main Specifications

Processor	Processor J1900 Bay Trail-D (4C @ 2 GHz CPU, 688/854 (Turbo) GFX, ~10W TDP)
Form Factor	Mini-ITX
System Memory	SODIMM x 1, max. 8GB, 204-pin DDR3L 1333 MHz, non-ECC, un-buffered
Chipset	I/O Fintek 81866D
H/W Status Monitoring	Temperature Monitor on CPU/System, Voltage Monitor on Vcore/5V/3.3V/12V, Fan Monitor on CPU/Chassis
Expansion Interface	Full-size Mini-Card(mSATA default, PCIe optional) x 1,PCI-E[x1] x 1
Operating System	Windows 7 32/64 bit, Windows 8.1, Linux Fedora
BIOS	64Mbit Flash ROM, AMI BIOS
Wake on LAN	Yes (WOL / PXE)
Watchdog Timer	1~255 step by software program
TPM	Infineon SLB9635 TT 1.2 (optional)
Power State	S3, S4, S5

I/O

USB	USB 2.0 x 10 (4 ports in mid-board, 6 ports on rear I/O)
Serial Port	RS-232 x 5, RS-232/422/485 x 1 optional 5V/12V/RI (COM1)
Ethernet	Realtek PCIe GB LAN 8111G x 2, RJ-45 x 2
Storage	SATA 3 Gb/s(one SATA colay with mSATA) x 2
Audio	Realtek® ALC887 (colay ALC892/886), Mic-in, Line-out
Display Chipset	Intel® HD Graphics
Display I/O	LVDS x 2, VGA x 1
Multi Display	VGA+LVDS, Dual LVDS
VGA	Up to 1920 x 1200 @60 Hz
LVDS	Up to 1920 x 1080 @60Hz, Dual Channel 18/24 (via CH7511)
DIO	8-bit Programmable Digital I/O interface (4-in/4-out)
PS/2 Port	PS/2 for keyboard / Mouse x 1
Fan	Chassis Fan connector x 1 (4-pin)

Mechanical and Environmental

Battery	Lithium battery
Power Requirement	24-pin ATX main power connector x 1
Power Compliance	Compliant with EuP / ErP
Operating Humidity	0% ~ 90% RH, non-condensing
Operating Temperature	32°F ~140°F (0°C ~ 60°C)
Storage Temperature	-40 °F ~ 185 °F (-40 °C ~ 85 °C) by E3815
Gross weight	1.1 lb (0.5 kg)
Dimensions(W x D x H)	6.7" x 6.7"(170mm x 170mm)
MTBF (Hours)	100,000

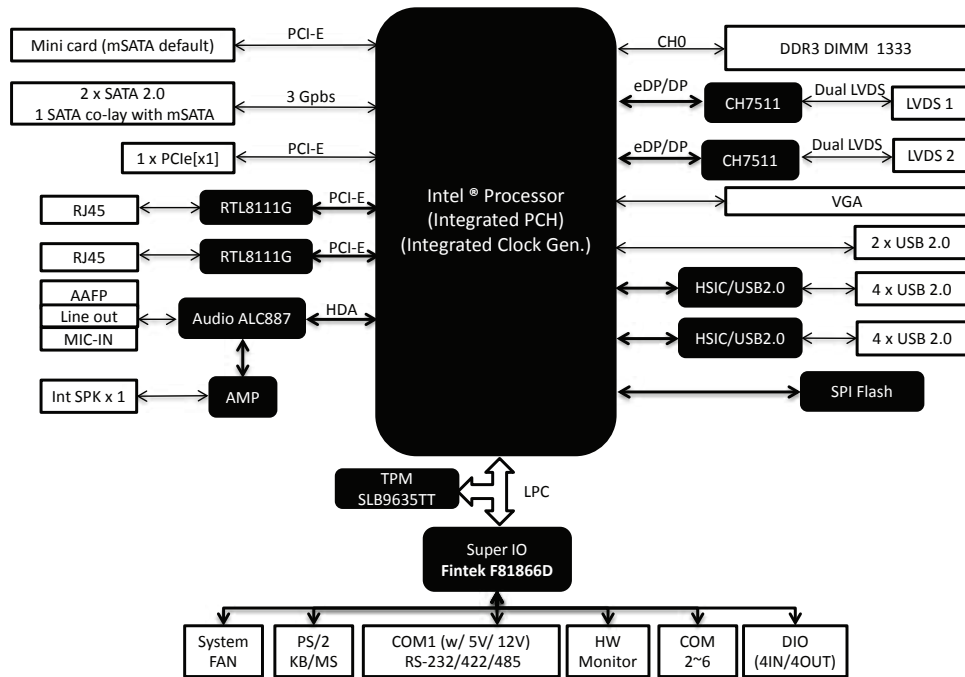


usa.onyx-healthcare.com

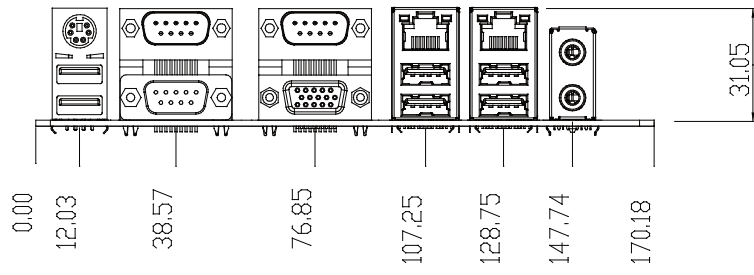
EMB-BT2

Thin Mini-ITX Embedded Motherboard with Intel® Atom™ J1900 Processor, SATA2 x 1, USB2.0 x 12, Dual LVDS

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-BT2-A10	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 12	5	1	Full-size mini card (mSATA default), PCI-E[x1] optional) x 1, PCIe [x1] x 1	ATX	Onboard	0°C ~ 60°C

