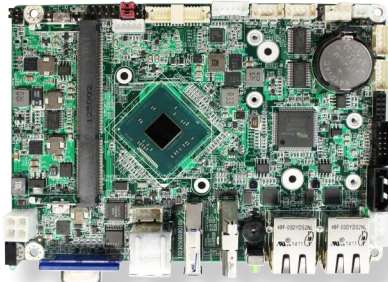


EmCORE-i2305

Intel® Atom™ Processor E3800 Family 3.5" Compact Board



Features

- Support Intel® Atom™ Processor E3800 family
- Integrated Gigabit Ethernet
- LVDS, Analog RGB Port, HDMI port
- Support Dual Independent Displays
- Soldered Onboard 16GB eMMC (optional)
- **Extended Operating Temp.: -20 ~ 70°C**
- **Wide Range Operating Temp.: -40 ~ 85°C (WT series)**

System

CPU	Soldered onboard Intel® Atom™ Processor E3825 dual-core 1.33GHz or E3845 quad-core 1.91GHz
Memory	1 x DDR3L SO-DIMM socket, supporting SDRAM up to 8GB
BIOS	Insyde BIOS
Watchdog Timer	1~255 levels reset

I/O

Serial Port	2 x COM ports: COM1: RS-232, COM2: RS-232/485 selectable
USB Port	4 x USB 2.0 ports 1 x USB 3.0 port
Digital I/O	8-bit programmable Digital Input/Output 1 x Mini-card socket
Expansion Bus	1 x Micro-SDXC socket 2 x I2C ports(optional) 1 x Serial ATA port with 300MB/s HDD transfer rate
Storage	1 x mSATA socket Soldered onboard 16GB eMMC(optional)
Ethernet Chipset	2 x Realtek® RTL8111 PCIe GbE controllers
Audio	Realtek ALC662 HD Audio CODEC, MIC-in/ Line-out/Line-in

Display

Graphic Chipset	Integrated Intel® HD Graphics
Graphic Interface	HDMI: Vertical HDMI connector LCD: Dual Channel 24-bit LVDS Analog RGB that supports resolution up to 2048 x 1536

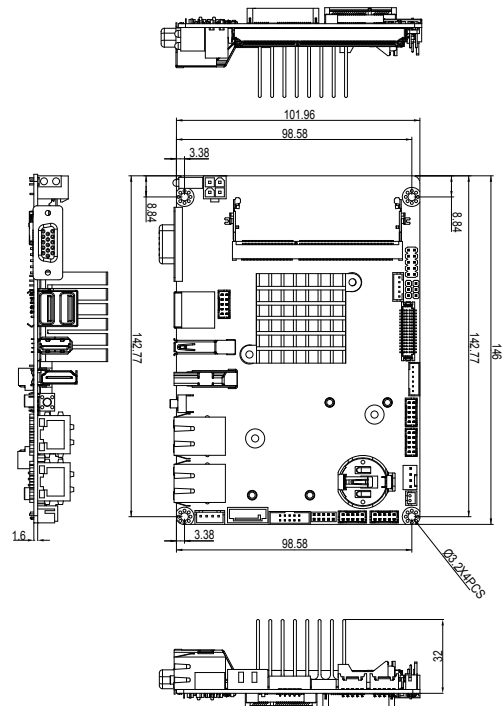
OS Support

Windows 7 32-bit/64-bit
Windows 8.1 32-bit/64-bit
Linux: Ubuntu

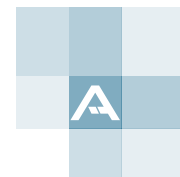
Mechanical & Environmental

Power Requirement	+12V DC
Power Consumption	0.56A@+12V (typical) (E3825) 0.65A@+12V (typical) (E3845)
Operating Temp.	-20 ~ 70°C (-4 ~ 158°F) -40 ~ 85°C (-40 ~ 185°F, WT series)
Operating Humidity	10%~95% @ 70°C (non-condensing) 10%~95% @ 85°C (non-condensing, WT series)
Dimensions (L x W)	146 x 102 mm (5.7" x 4.0")

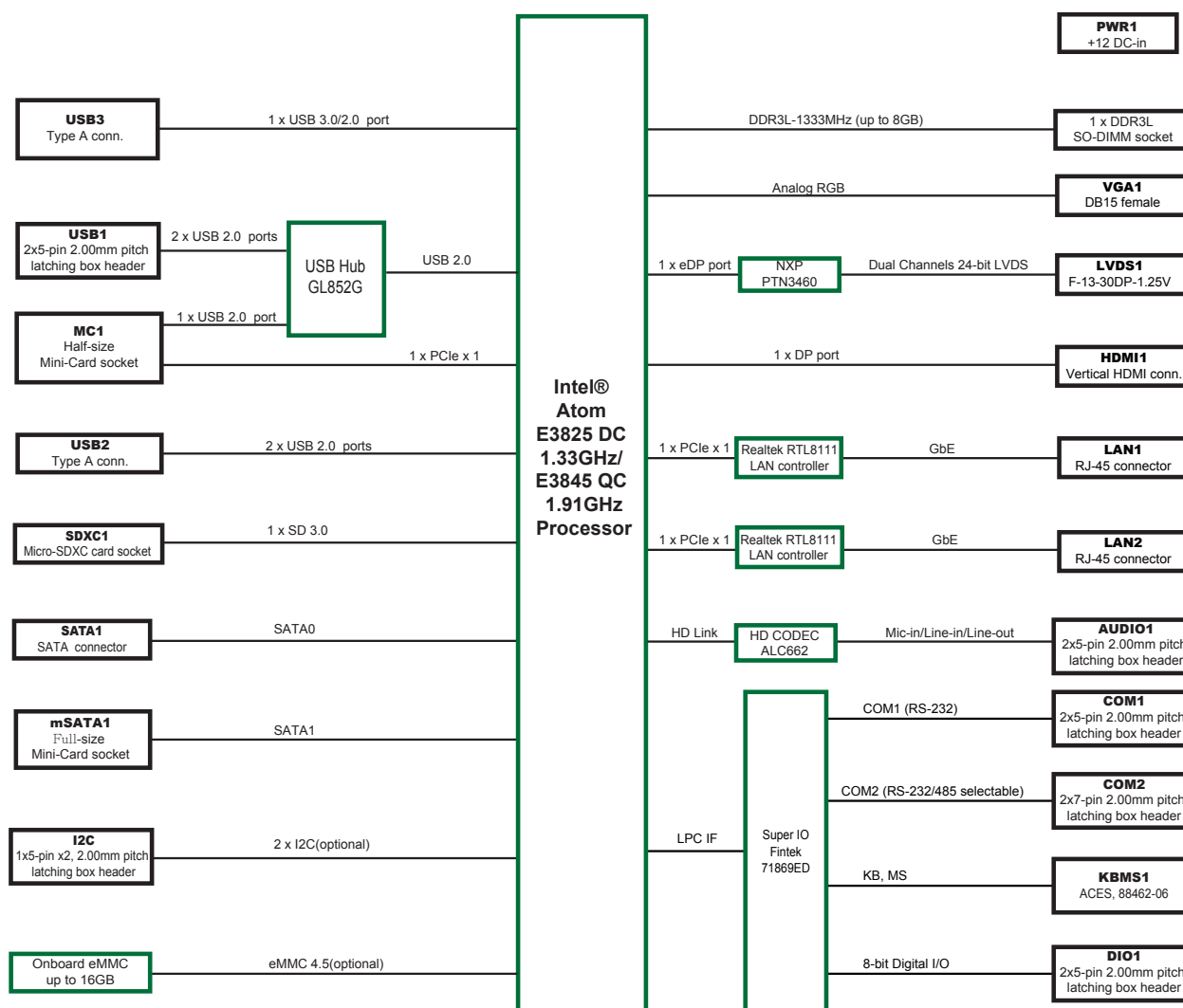
Dimensions



Unit: mm



Block Diagram



Ordering Information

EmCORE-i2305-E3825	Intel® Atom™ Processor E3825 3.5" Compact Board
EmCORE-i2305-WT-E3825	Wide range temperature Intel® Atom™ Processor E3825 3.5" Compact Board
EmCORE-i2305-E3845	Intel® Atom™ Processor E3845 3.5" Compact Board
EmCORE-i2305-WT-E3845	Wide range temperature Intel® Atom™ Processor E3845 3.5" Compact Board

Optional Accessories

FCDB-1293	4 x COM ports, 8-bit digital I/O daughterboard
	Cable kit
	1 x AUDIO cable
	2 x COM port latching cables
CBK-07-2305-00	1 x Keyboard & mouse latching y-cable
	1 x SATA cable
	1 x SATA power cable
	1 x USB cable