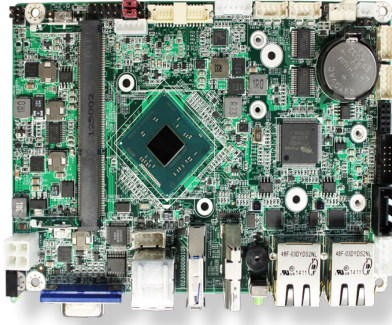




# EmCORE-i2305

Intel® Atom™ Processor E3800 Family & Celeron® Processor N-Series  
3.5" Compact Board



## Features

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

Mainboard & Chassis

### System

Processor	Soldered onboard Intel® Atom™ Processor E3800 family E3825 1.33GHz/ E3845 1.91GHz or Intel® Celeron® processor N2807 1.58GHz/ N2930 1.83GHz
Memory	1 x DDR3L SO-DIMM socket, supporting up to 8GB 1333/1600 MT/s SDRAM
BIOS	Insyde BIOS
Watchdog Timer	1~255 levels reset

### I/O

Super IO Chipset	Fintek F71869ED
Serial Port	1 x RS-232 1 x RS-232/485 selectable
Keyboard & Mouse	6-pin wafer connector for PS/2 keyboard/ mouse via Y-cable
USB 2.0	4 x USB 2.0 ports
USB 3.0/2.0	1 x USB 3.0/2.0 ports

Expansion	1 x Mini-card socket
	1 x micro-SDXC socket (E3800 family only, supports SDXC card SD 3.0 only)
	2 x I2C ports (OEM request, E3800 family Processor only)

Storage	1 x Serial ATA ports with 300MB/s HDD transfer rate
	1 x mSATA socket
	4GB/ 8GB/ 16GB eMMC 4.5 (OEM request, E3800 family Processor only)

Ethernet Chipset	2 x Intel i21x PCIe GbE controllers
Digital I/O	8-bit Programmable
Audio Interface	Realtek® HD Audio CODEC, Mic-in/ Line-in/ Line-out

### Display

Graphic Chipset	Integrated Intel® HD Graphics
Graphic Interface	Analog RGB with resolution up to 2048x1536, HDMI
	LVDS: Dual Channels 24-bit LVDS, with resolution up to 1920x1200

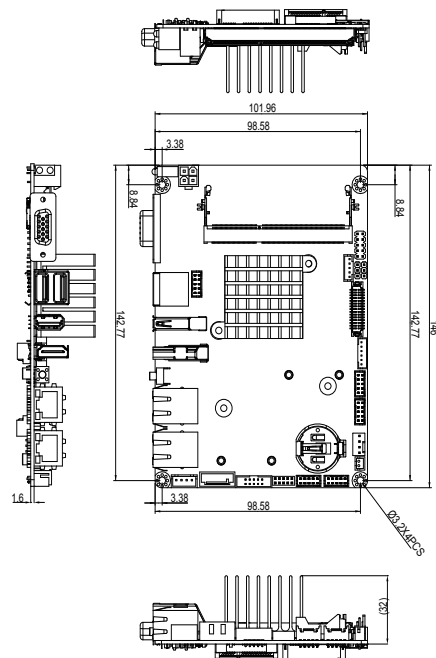
### OS Support

Windows 7 32/64-bit, Windows 8.1 32/64-bit
Windows 10 IoT
Linux: Ubuntu, Red Hat 7.3 or later

### Mechanical & Environmental

Power Input	DC 12V
Power Consumption	0.56A@+12V with E3825 (Typical) 0.65A@+12V with E3845 (Typical)
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)
Dimension (L x W)	146 x 102 mm (5.7" x 4.0")

### Dimensions

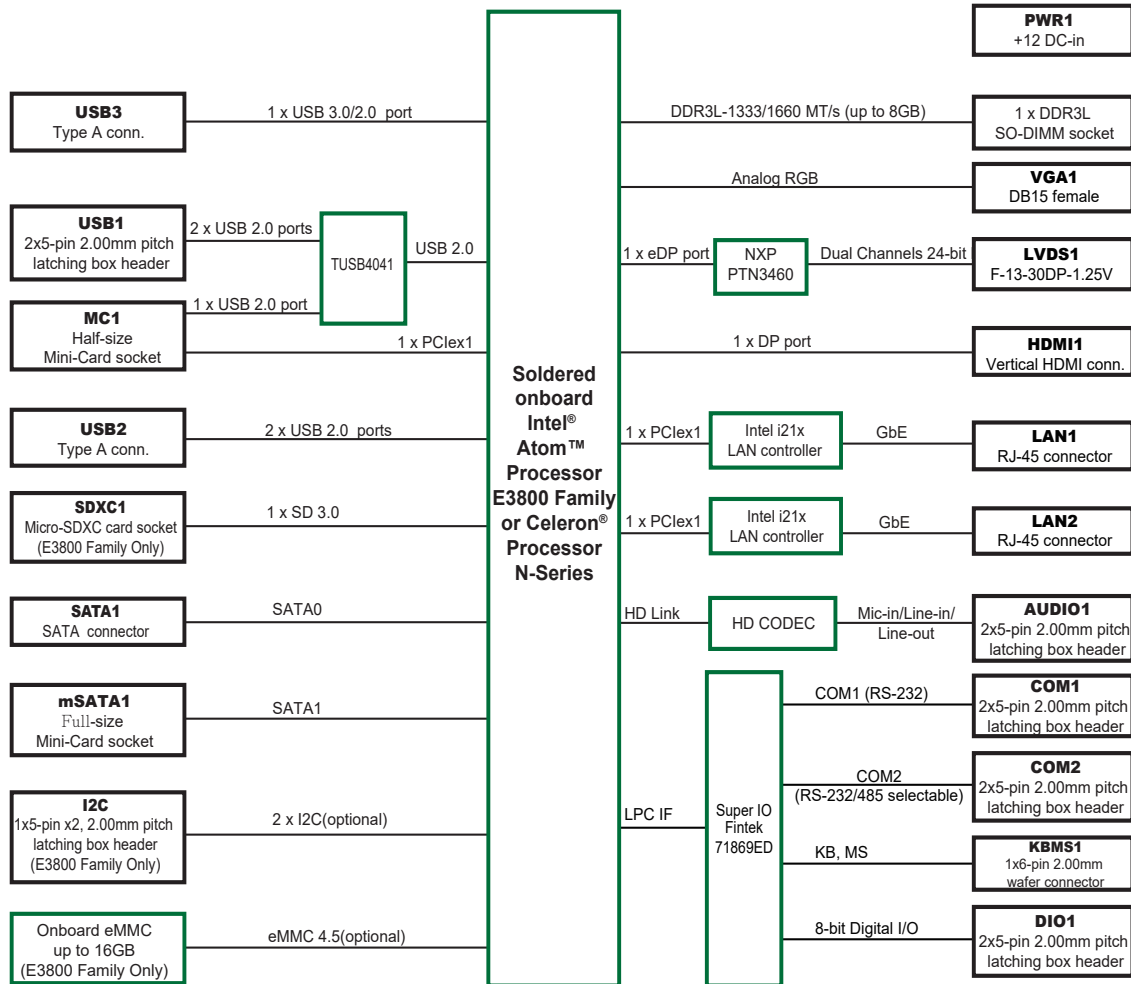


Unit: mm

All specifications are subject to change without notice.



**Block Diagram**



**Ordering Information**

EmCORE-i2305-E3825	Intel® Atom™ Processor E3825 3.5" compact board
EmCORE-i2305-E3845	Intel® Atom™ Processor E3845 3.5" compact board
EmCORE-i2305-N2807(OEM request)	Intel® Celeron® Processor N2807 3.5" compact board
EmCORE-i2305-N2930(OEM request)	Intel® Celeron® Processor N2930 3.5" compact board
EmCORE-i2305-WT-E3825(BTO)	Intel® Atom™ Processor E3825 WT 3.5" compact board
EmCORE-i2305-WT-E3845(BTO)	Intel® Atom™ Processor E3845 WT 3.5" compact board

**Optional Accessories**

CBK-07-2305-00	<p>Cable kit</p> <ul style="list-style-type: none"> <li>1 x AUDIO cable</li> <li>2 x COM port latching cables</li> <li>1 x Keyboard &amp; mouse latching y-cable</li> <li>1 x SATA cable</li> <li>1 x SATA power cable</li> <li>1 x USB cable</li> </ul>
----------------	--

All specifications are subject to change without notice.

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

### US

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +1 347 719 4508  
Support: +1 347 719 4508

1309 Coffeen Ave  
Ste 1200  
Sheridan  
WY 82801  
USA

### EMEA

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +44 (0)1785 879 050  
Support: +44 (0)1785 879 050

Unit A5 Douglas Park  
Stone Business Park  
Stone  
ST15 0YJ  
United Kingdom

VAT Number: 120 9546 28  
Business Registration Number: 07699660