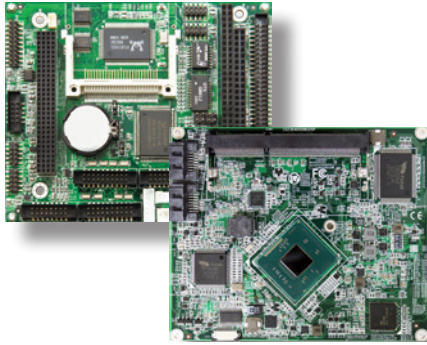


Em104P-i2313



Wide-Range Temperature Intel® Atom™ E3800 PC/104-Plus SBC



Features

- **Fanless Design**
- Soldered onboard Intel® Atom™ E3800 Family
- Dual Channel 24-bit LVDS, Analog RGB and DDI Port
- Integrated Gigabit Ethernet
- **Wide-Range Operating Temp.: -40 ~ 85°C**

System

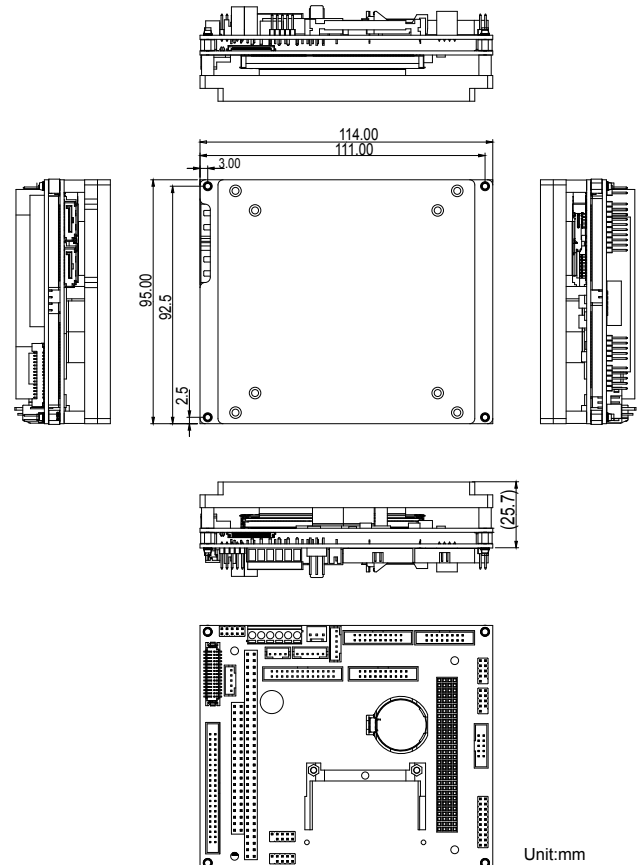
Processor	Soldered onboard Intel® Atom™ Processor E3800 family E3825 1.33GHz or E3845 1.91GHz
Memory	1 x DDR3L SO-DIMM socket, supporting up to 8GB 1333MT/s SDRAM
BIOS	Insyde BIOS
Watchdog Timer	1~255 levels reset
I/O	
Super IO chipset	Fintek F71869ED Winbond W83977
Serial Port	3 x RS-232 1 x RS-232/422/485 selectable
Parallel Port	SPP/EPP/ECP mode selectable
Keyboard & Mouse	6-pin wafer connector for PS/2 keyboard/ mouse via Y-cable
USB 2.0	4 x USB 2.0 ports
Expansion	PC-104-Plus
Storage	1 x Ultra ATA, supporting 1 IDE device and 1 CF socket 2 x Serial ATA ports with 300MB/s HDD transfer rate 1 x CF II socket
Ethernet Chipset	1 x Realtek RTL8105E PCIe 10/100Base-T Ethernet controller 1 x Realtek RTL8110SCL PCI GbE controller
Digital I/O	16-bit DIO, 8 in/8 out
Audio	Realtek ALC662 5.1 Channel HD Audio CODEC, Mic-in/ Line-in/ Line-out
Display	
Graphic Chipset	Integrated Intel® Gen 7 Graphics
Graphic Interface	Analog RGB/DVI: Analog RGB supporting up to 2048 x 1536 LCD: Dual Channel 24-bit LVDS supported via eDP to LVDS NXP PTN3460
OS Support	
Windows 7 32-bit/64-bit without ISA support*	
Windows 8.1 32-bit/64-bit without ISA support*	
Linux: Ubuntu	

*Note: OEM Request for ISA support

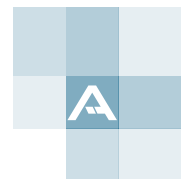
Mechanical & Environmental

Power Requirement	DC 12V, 5V
Power Consumption	2.69A@5V, 0.69A@12V with E3845 (Typical) 2.55A@5V, 0.70A@12V with E3825 (Typical)
Operating Temp.	-40 ~ 85°C (-40 ~ 185°F)
Operating Humidity	10 ~ 95% @ 85°C (non-condensing)
Dimension (L x W)	114 x 95 mm (4.5" x 3.7")

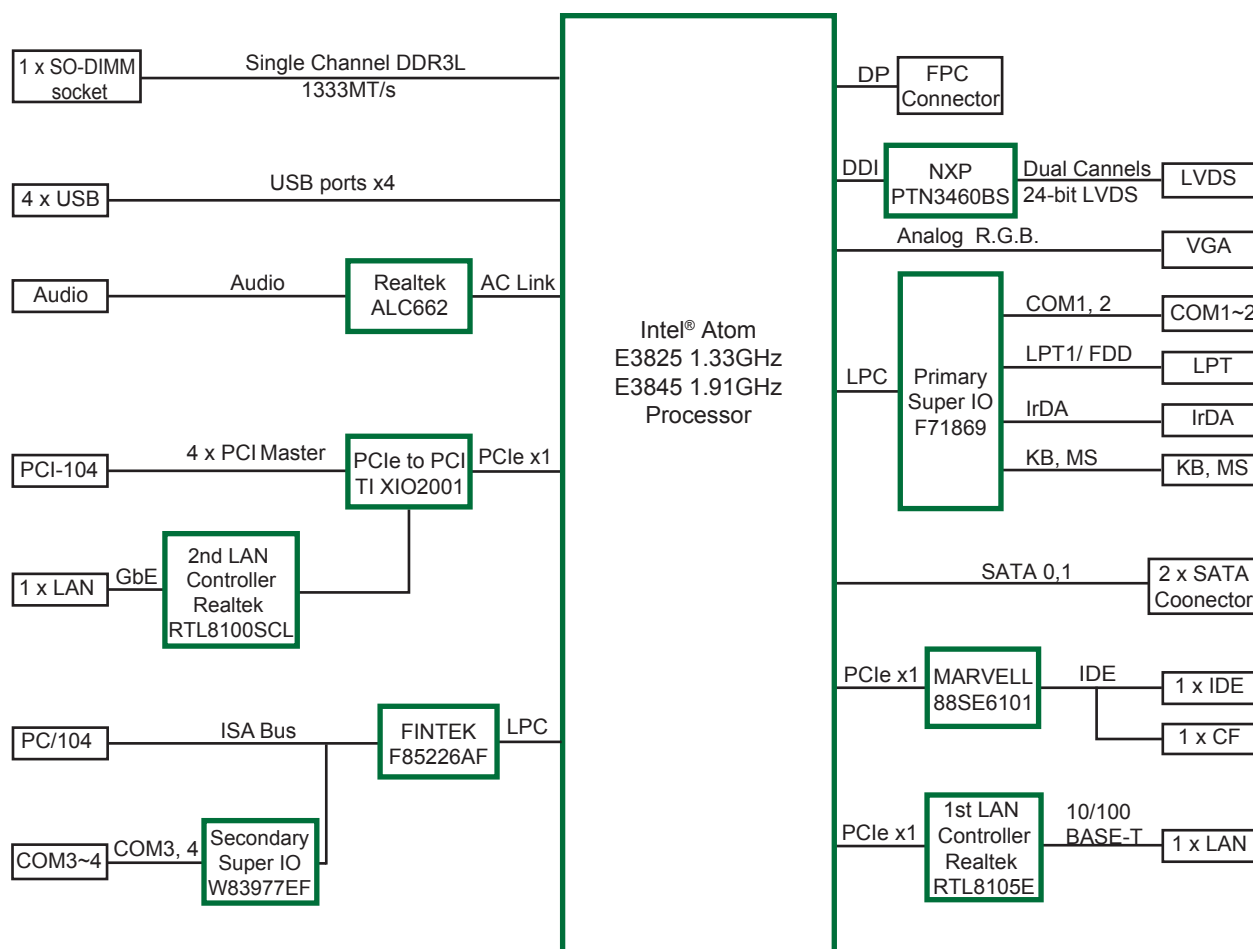
Dimensions



Unit:mm



Block Diagram



Ordering Information

Em104P-i2313-E3825 (BTO)	Intel® Atom™ Processor E3825 WT ETX CPU module + PBE-1100-RG R3.3 carrier board
Em104P-i2313-E3845 (BTO)	Intel® Atom™ Processor E3845 WT ETX CPU module + PBE-1100-RG R3.3 carrier board

Optional Accessories

HS-2304-F1	Heat spreader 114x95x18mm
CBK-16-1100-02	Cable kit 1 x Audio cable 2 x USB cables 2 x Serial port cables 1 x LPT-to-FDD cable 1 x IDE cable 1 x LPT cable 2 x Ethernet cables 1 x VGA cable 1 x KB/MS cable 2 x SATA cables 1 x Power cable (4 wires) 1 x Power cable (2 wires)