

# EmETX-i2900

# ETX

## Intel® Atom™ N450/D510 ETX CPU Module



### Features

- **Fanless Design**
- ETX 3.0 w/ SATA Connectors
- Soldered Onboard Intel® Atom™ N450/D510 Processor
- Single Channel 18-bit LVDS, and Analog RGB
- **Extended Operating Temp.: -20 ~ 70°C**

### System

<b>CPU</b>	Soldered onboard Intel® Atom™ N450 1.6GHz / D510 1.66GHz processor
<b>Memory</b>	1 x 200-pin DDR2 SO-DIMM socket, supporting 667MHz SDRAM up to 2GB
<b>Chipset</b>	Intel® ICH8M
<b>BIOS</b>	AMI PnP Flash BIOS
<b>Watchdog Timer</b>	1~255 levels reset

### I/O

<b>I/O Chip</b>	Winbond W83627HG
<b>Serial Port</b>	2 x COM ports
<b>Parallel Port</b>	SPP/EPP/ECP mode selectable
<b>USB Port</b>	4 x USB 2.0 ports
<b>KB/MS</b>	PS/2 interface for keyboard and mouse
<b>Expansion Bus</b>	PCI (4 x PCI masters) and ISA bus LPC (Low Pin Count) connector
<b>Storage</b>	1 x Ultra ATA port, supporting 2 IDE devices 2 x Serial ATA ports with 300MB/s HDD transfer rate
<b>Ethernet Chipset</b>	1 x Realtek 8103EL PCIe 10/100Base-T Ethernet controller
<b>Audio Interface</b>	Realtek ALC888 7.1 Channel HD Audio Codec, Mic-in/Line-in/Line-out

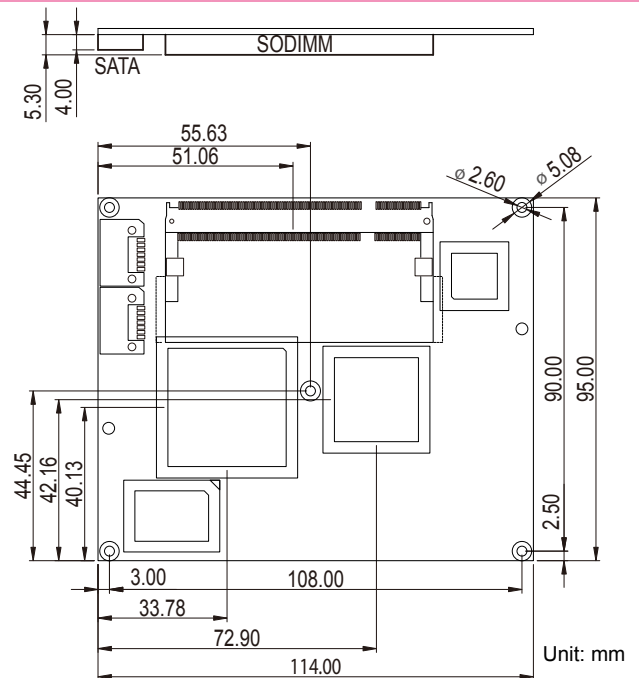
### Display

<b>Graphics Chipset</b>	Integrated Intel® Graphics Media Accelerator 3150
<b>Graphics Interface</b>	Analog RGB supports resolution up to: - 1400 x 1050 @60Hz (N450) - 2048 x 1536 @60Hz (D510) Single channel 18-bit LVDS supports resolution up to: - 1280 x 800 or 1366 x 768 (N450) - 1366 x 768 (D510)

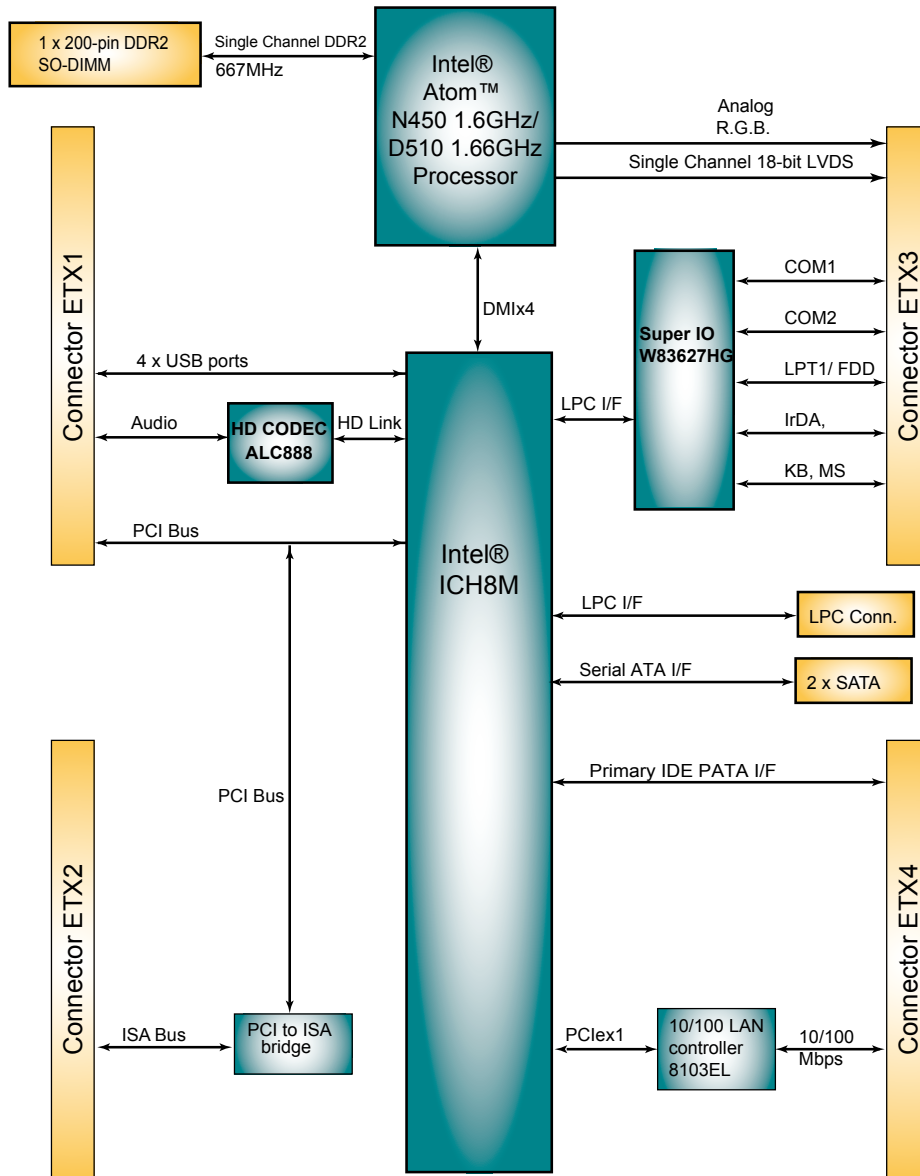
### Mechanical & Environmental

<b>Power Requirement</b>	+5V, 5VSB
<b>Power Consumption</b>	2.21A@+5V with N450 CPU (Typical) 3.18A@+5V with D510 CPU (Typical)
<b>Operating Temp.</b>	-20 ~ 70°C (-4 ~ 158°F)
<b>Operating Humidity</b>	10 ~ 95% @ 70°C (non-condensing)
<b>Dimension (L x W)</b>	114 x 95 mm (4.5" x 3.7")

### Dimensions



## Block Diagram



## Ordering Information

<b>EmETX-i2900-N4</b>	Intel® Atom™ N450 1.6GHz ETX CPU module
<b>EmETX-i2900-D5</b>	Intel® Atom™ D510 1.66GHz ETX CPU module

## Optional Accessories

<b>HS-0742-F3</b>	Heat spreader (114x95x8 mm)
<b>HS-0000-W4</b>	Universal evaluation heatsink kit w/ thermal pad (dimension: 125x95x22mm, only used on a flat type heatspreader)

**PBE-1000 R2.1** ETX® evaluation board in ATX form factor

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<b>CBK-05-1000-00</b>	Cable kit for PBE-1000 R2.1
	• 1 x FDD cable
	• 3 x COM port cables
	• 1 x TV-out cable
	• 1 x USB cable
	• 2 x IDE cables