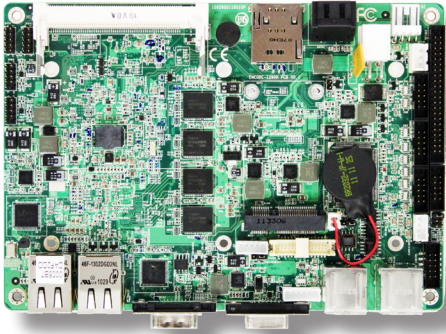


EmCORE-i290H

Intel® Atom™ Processor N455/D525 EPIC Compact Board



Features

- Soldered onboard Intel® Atom™ Processor N455/D525
- Dual Gigabit Ethernet Ports
- Analog RGB and Single Channel 18-bit LVDS Display
- Dual Independent Displays supported
- Integrated SIM Socket for Mobile Telecommunication
- **Extended Range Operating Temp.: -20 ~ 70°C**

System

CPU	Soldered onboard Intel® Atom™ Processor N455 1.66GHz or D525 dual-core 1.8GHz
Memory	Soldered onboard 2GB DDR3 SDRAM
Chipset	Intel® ICH8M
BIOS	AMI PnP Flash BIOS
Watchdog Timer	1~255 levels reset

I/O

I/O Chip	Winbond 83627UHG
Serial Port	5 x COM ports (4 x RS-232, 1 x RS-232/422/485 selectable)
USB Port	8 x USB 2.0 ports
KB/MS	1 x 6-pin wafer connector for keyboard and mouse (PS/2 interface via cable)
Digital I/O	8-bit programmable digital input/output
Expansion Bus	1 x Mini PCI socket
	1 x Mini-card socket
	1 x SIM socket
Storage	1 x Ultra ATA, supporting 2 IDE devices
	2 x SATA ports at 300MB/s HDD transfer rate Soldered onboard 2GB NANDrive (optional)
Ethernet Chipset	2 x Realtek RTL8111 PCIe GbE controllers
Audio	Realtek ALC886 7.1 Channel HD Audio Codec, Mic-in/Line-out

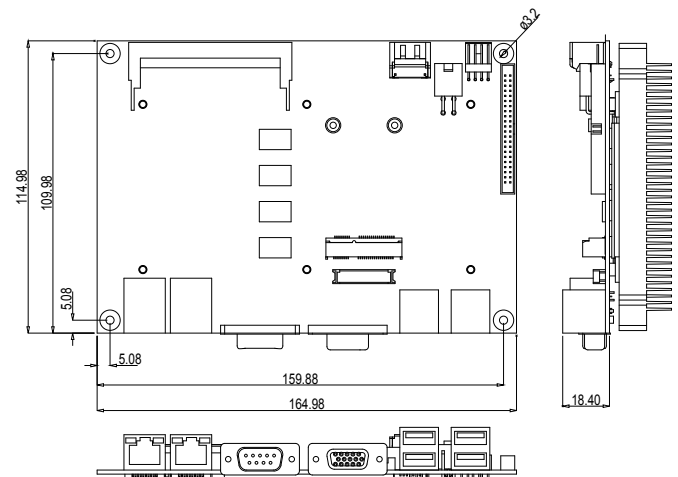
Display

Graphic Chipset	Integrated Intel® Graphics Media Accelerator 3150
Graphic Interface	Analog RGB that supports resolution up to: - 1400 x 1050 @60Hz (N455) - 2048 x 1536 @60Hz (D525)
	Single channel 18-bit LVDS that supports resolution up to: - 1280 x 800 or 1366 x 768 (N455) - 1366 x 768 (D525)
	Dual independent displays supported

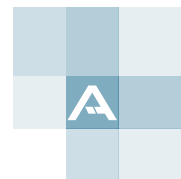
Mechanical & Environmental

Power Connector	4-pin Aux. ATX power connector
Power Consumption	1.52A@+12V with D525 CPU (Typical)
	1.29A@+12V with N455 CPU (Typical)
Operating Temp.	-20 ~ 70°C (-4 ~ 158°F)
Operating Humidity	10 ~ 95% @ 70°C (non-condensing)
Dimensions (L x W)	165 x 115 mm (6.5" x 4.5")

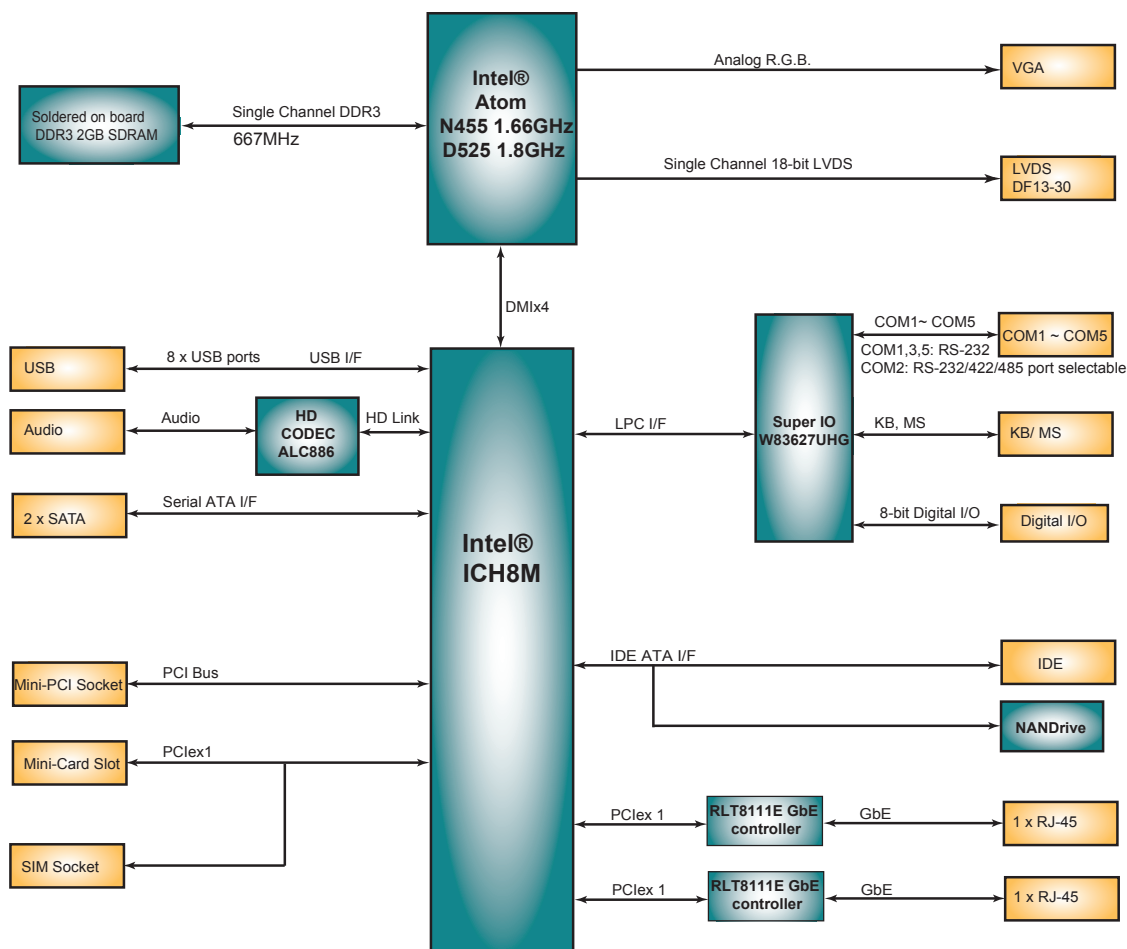
Dimensions



Unit: mm



Block Diagram



Ordering Information

EmCORE-i290H-N4	Intel® Atom™ Processor N455 EPIC Compact Board
EmCORE-i290H-D5	Intel® Atom™ Processor D525 EPIC Compact Board
EmCORE-i290HD-N4 (BTO)	Intel® Atom™ Processor N455 with 2GB NANDrive EPIC Compact Board
EmCORE-i290HD-D5 (BTO)	Intel® Atom™ Processor D525 with 2GB NANDrive EPIC Compact Board

Optional Accessories

CBK-11-2902-00	Cable kit 1 x IDE cable 1 x Audio cable 2 x SATA cables 2 x USB cables 4 x COM-port cables 1 x KB/MS cable
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