



# EmCORE-iX700

## Intel® Atom™ Processor x7000 Amston Lake and Alder Lake N series 3.5" Compact Board



### Features

- Support Intel® Atom™ Processor x7000 family and Processor N-Series
- Support one DDR5 SO-DIMM socket
- Integrated 2.5 Gigabit Ethernet ports
- LVDS, Analog RGB Port, HDMI and DP ports (Support Triple Independent Displays)
- Two USB 3.2 (Gen 2) and Four USB 2.0 ports
- One M.2 M-key and One SATA 3.0
- One M.2 E-key and One M.2 B-key
- Extended Operating Temp.: -40 ~ 85°C (WT series)
- Commercial Operating Temp.: -20 ~ 50°C

### System

Processor	Soldered onboard Intel® Atom™ Processor x7000 for extended temperature or Intel® processor N Series for commercial temperature
Memory	1 x DDR5 SO-DIMM socket, supporting up to 16GB 4800 MT/s SDRAM
BIOS	AMI BIOS
Watchdog Timer	1~255 levels reset

### I/O

Super IO Chipset	Fintek F81804ED
Serial Port	2 x RS-232/422/485 selectable
USB	2 x USB 3.2 (Gen 2) ports 4 x USB 2.0 ports
Expansion	1 x M.2 E-key 2030 (PCIe x1 / USB 2.0) 1 x M.2 B-key 3042/3052 (PCIe x1 / USB 3.2)
Storage	1 x SATA 3.0 port 1 x M.2 M-key 2280 (PCIe x1 / SATA 3.0)
Ethernet Chipset	2 x Intel i226 PCIe 2.5 GbE controllers
Digital I/O	8-bit Programmable
Audio Interface	Realtek® HD Audio CODEC, Mic-in/ Line-out

### Display

Graphic Chipset	Integrated Intel® Gen 12 UHD Graphics
Graphic Interface	Analog RGB with resolution up to 2048x1536
	HDMI 2.0b with resolution up to 4096x2160
	Display port 1.4 with resolution up to 4096x2160 LVDS: Dual Channels 24-bit LVDS, with resolution up to 1920x1200

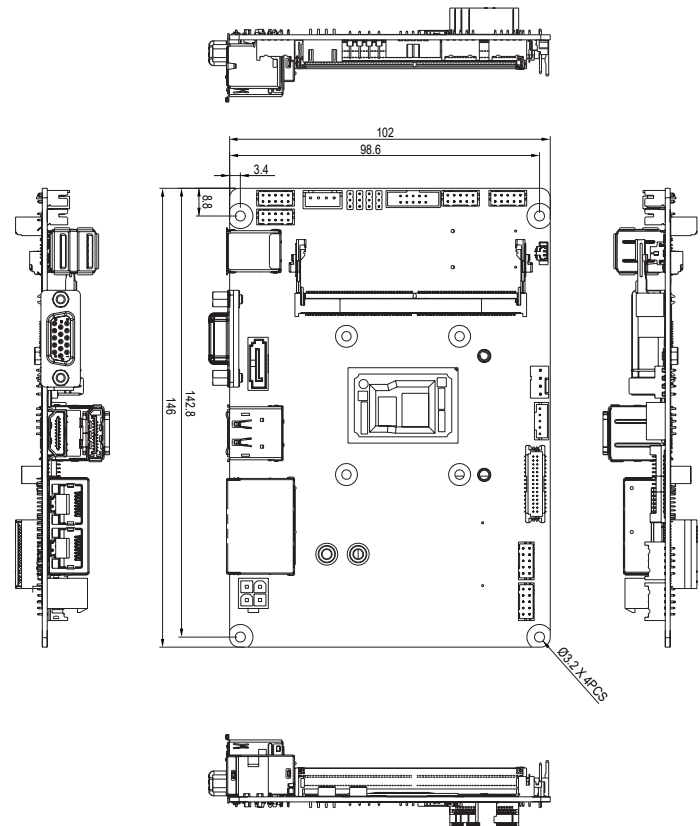
### OS Support

Windows 11/10 IoT  
Linux: Ubuntu

### Mechanical & Environmental

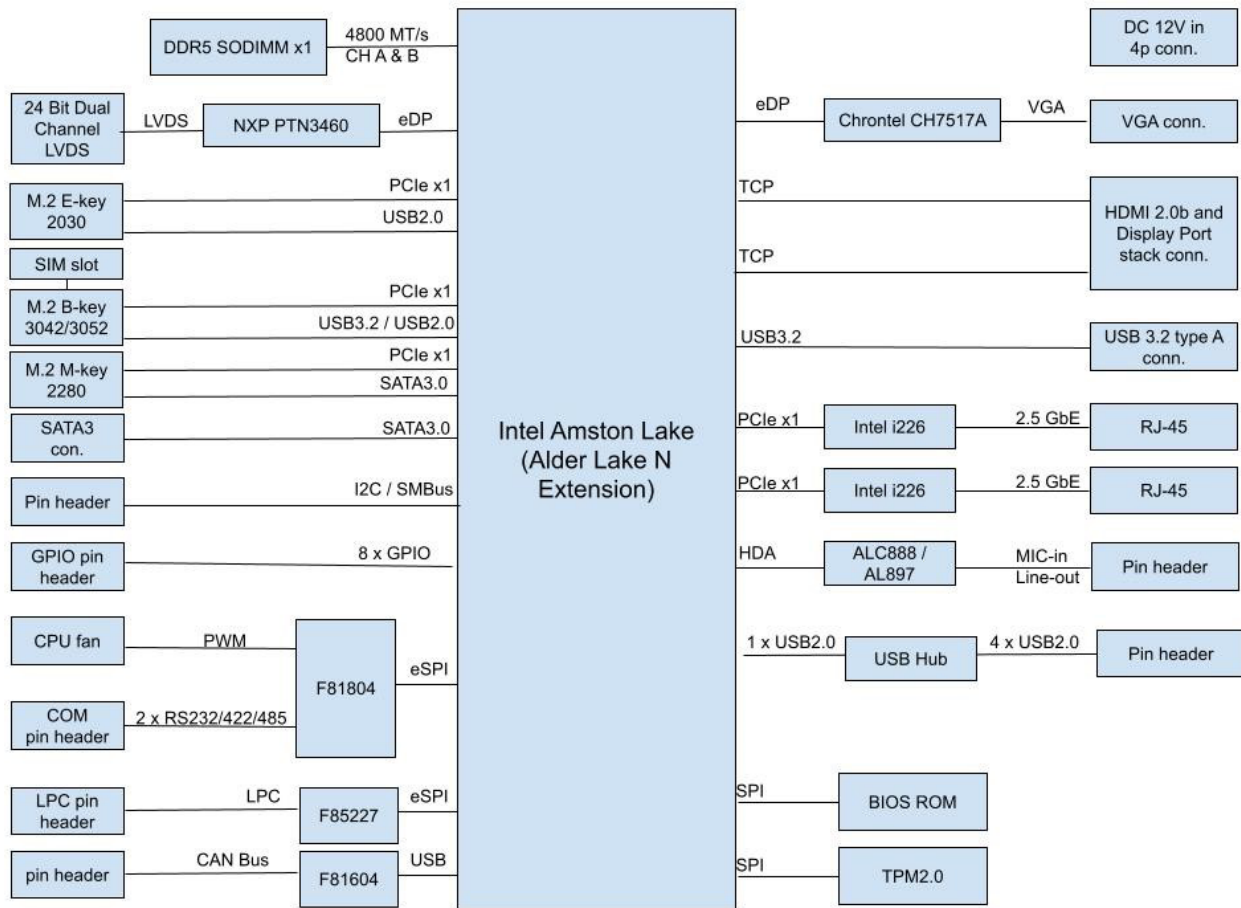
Power Input	DC 12V
Operating Temp.	-40 ~ 85°C (-40 ~ 185°F, WT-series) -20 ~ 50°C (-4 ~ 122°F)
Operating Humidity	10 ~ 95% @ 85°C (non-condensing, WT-series) 10 ~ 95% @ 50°C (non-condensing)
Dimension (L x W)	146 x 102 mm (5.7" x 4.0")

### Dimension



Unit: mm

## Block Diagram



### Ordering Information

EmCORE-iX700-WT-x7433RE	Intel® Atom™ Processor x7433RE 3.5" compact board
EmCORE-iX700-WT-x7211RE	Intel® Atom™ Processor x7211RE 3.5" compact board
EmCORE-iX700-N200 (OEM request)	Intel® Processor N200 3.5" compact board
EmCORE-iX700-N305 (OEM request)	Intel® Processor i3-N305 3.5" compact board

### Optional Accessories

CBK-07-X700-00	Cable kit
	1 x AUDIO cable
	2 x COM port latching cables
	1 x SATA cable
	1 x SATA power cable
	2 x USB cable