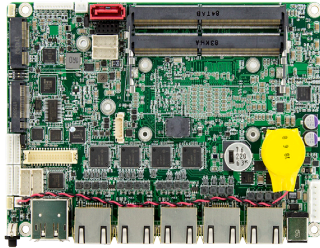




# EmCORE-i90U2



## 7<sup>th</sup> Generation Intel® Core™ i3/ i5/ i7 U-series Processor 3.5" Compact Board



### Features

- Soldered onboard 7<sup>th</sup> Generation Intel® Core™ U-series Processor
- Five Gigabit Ethernet ports (4 ports support PoE, 802.3af)
- HDMI, DisplayPort and LVDS
- Integrated micro SIM Socket for mobile telecommunication
- Support Intel® vPro & AMT (for Core i7 & i5 only)
- Wide Range Temperature: -40 ~85°C

Computer on Module

### System

CPU	Soldered onboard 7th Gen. Intel® Core™ Processor i7-7600U 2.8GHz/3.4GHz, i5-7300U 2.6GHz/2.8GHz, i3-7100U 2.4GHz
Memory	2 x DDR4 SO-DIMM sockets, supporting 2133/1866MHz SDRAM up to 32GB
BIOS	AMI UEFI BIOS
TPM	Support TPM 1.2 SLB9660 & 2.0 SLB9665 function onboard (OEM request)
Watchdog Timer	1~255 levels reset

### I/O

Super I/O	Fintek F81866
USB Port	4 x USB 3.0/2.0 ports 4 x USB 2.0 ports
Serial Port	4 x RS-232/422/485 selectable 1 x M.2 E-key (2230) socket for Wi-Fi module

### Expansion

	1 x NANO SIM socket 4 x PCIe x1 lanes or 1 x PCIe x4 with FFC connector (OEM request) 1 x Serial ATA port with 600MB/s HDD transfer rate
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### Storage

	1 x M.2 B-key (2242) socket for SATA SSD or LTE, depending on module
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### Ethernet Chipset

	1 x Intel® i219LM PCIe PHY controller 4 x Intel® i210IT PCIe GbE controllers supporting 802.3af PoE
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### Digital I/O

	8-bit Programmable
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### Audio

	Realtek® ALC269 5.1 Channel HD Audio CODEC, Mic-in/ Line-in/ Line-out
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### Display

Graphic Chipset	Integrated Intel® HD Graphics 620
	Dual Channel 24-bit LVDS
Graphic Interface	1 x DisplayPort 1.2 1 x HDMI 1.4 port

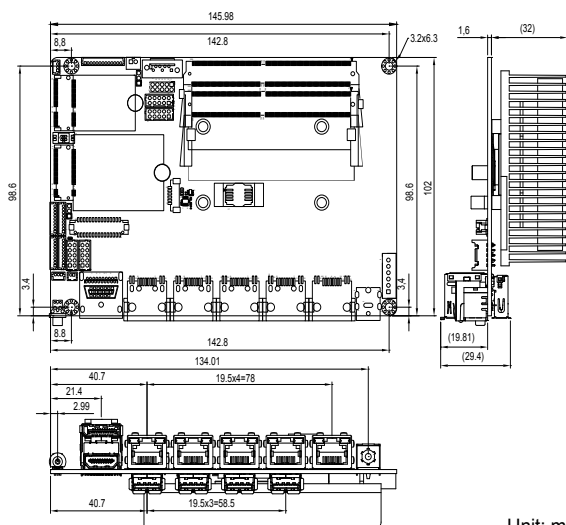
### OS Support

	Windows 10 64-bit Linux Ubuntu
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### Mechanical & Environmental

Power Requirement	9~15V or 15~36V DC-In (configurable via DIP switch)
Power Consumption	19V, 3.16A (i7-7600U, full loading w/ PoE) 19V, 3.15A (i5-7300U, full loading w/ PoE)
Operating Temp.	-40 ~ 85°C (-40 ~ 185°F)
Operating Humidity	10 ~ 95% @ 85°C (non-condensing)
Dimensions (L x W)	146 x 102 mm (5.7" x 4.0")

### Dimensions

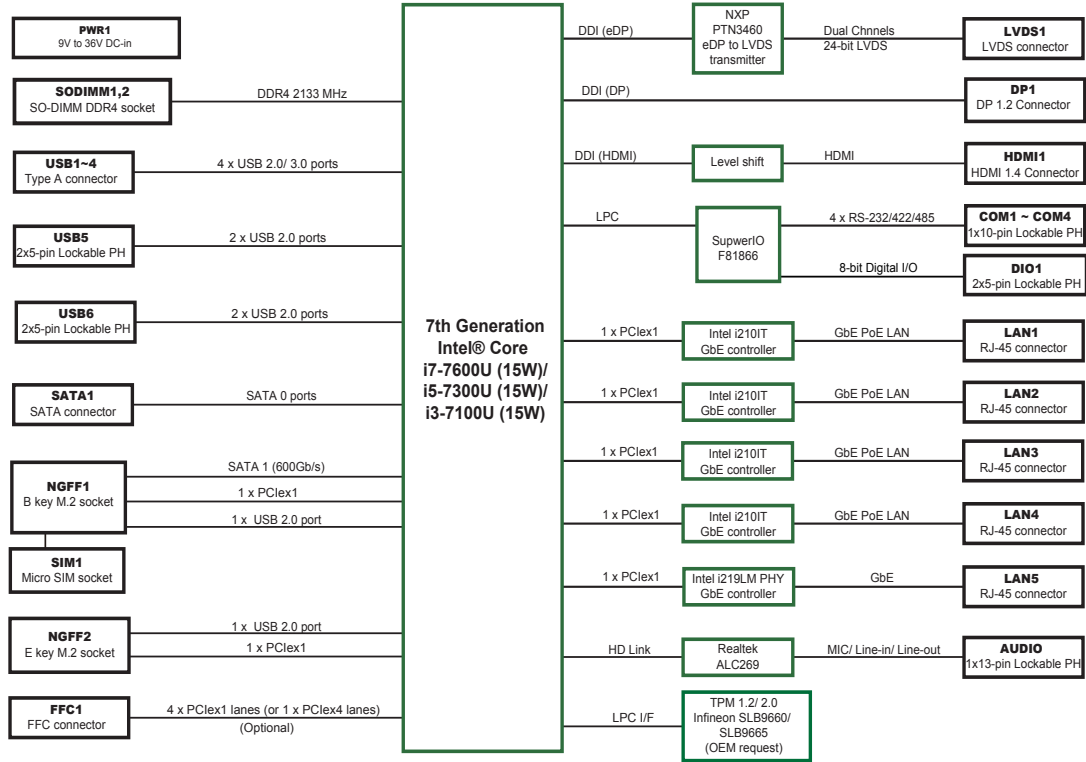


Unit: mm

All specifications are subject to change without notice.



**Block Diagram**



**Ordering Information**

EmCORE-i90U2-WT-7600U	7 <sup>th</sup> Generation Intel® Core™ i7-7600U 3.5" compact board
EmCORE-i90U2-WT-7300U	7 <sup>th</sup> Generation Intel® Core™ i5-7300U 3.5" compact board
EmCORE-i90U2-WT-7100U	7 <sup>th</sup> Generation Intel® Core™ i3-7100U 3.5" compact board

**Optional Accessories**

CBK-09-90U2-00	Cable kit 1 x Audio cable 1 x SATA cable 1 x SATA power cable 2 x USB 2.0 cables 4 x COM cables
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## 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.

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