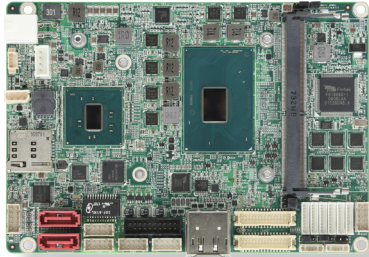


# EmCORE-i89M2

## 6<sup>th</sup> Generation Intel® Core™ Processor 3.5" Compact Board



### Features

- Soldered onboard 6<sup>th</sup> Generation Intel® Core™ i5-6442EQ/ i7-6822EQ
- Dual Gigabit Ethernet ports
- HDMI, DisplayPort and LVDS
- Integrated micro SIM Socket for mobile telecommunication

### System

CPU	Soldered onboard 6 <sup>th</sup> Generation Intel® Quad Core™ Processor i5-6442EQ 2.8GHz/ i7-6822EQ 3.4GHz
Chipset	Intel® PCH QM170
Memory	1 x DDR4 SO-DIMM socket, supporting 2133/1866MHz SDRAM up to 16GB
BIOS	AMI UEFI BIOS
Watchdog Timer	1~255 levels reset

### I/O

Super I/O	Fintek F81866
USB Port	2 x USB 3.0/2.0 ports 4 x USB 2.0 ports
Serial Port	6 x COM ports - 4 x RS-232 - 2 x RS-232/422/485 selectable
Expansion	1 x Mini-Card Socket 1 x SIM socket
Storage	2 x Serial ATA ports with 600MB/s HDD transfer rate 1 x NGFF M.2 M-key socket for SSD
Ethernet Chipset	1 x Intel® i219LM PCIe PHY controller 1 x Intel® i210IT PCIe GbE controller
Digital I/O	8-bit Programmable
Audio	Realtek® ALC662 5.1 Channel HD Audio CODEC, Mic-in/ Line-in/ Line-out

### Display

Graphic Chipset	Integrated Intel® HD Graphics 5x0 2 x Dual Channel 24-bit LVDS (1 x LVDS is optional)
Graphic Interface	1 x HDMI (Vertical type, optional) 1 x DisplayPort (Vertical type)

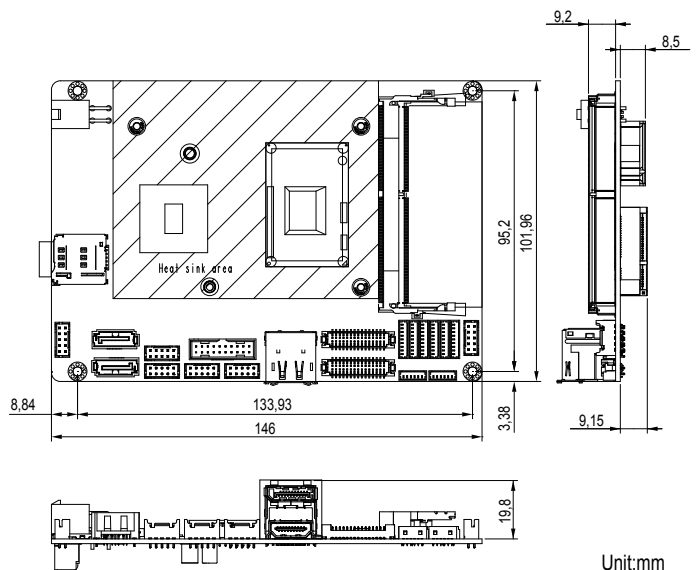
### OS Support

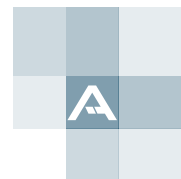
Windows 10 64-bit  
Linux Ubuntu

### Mechanical & Environmental

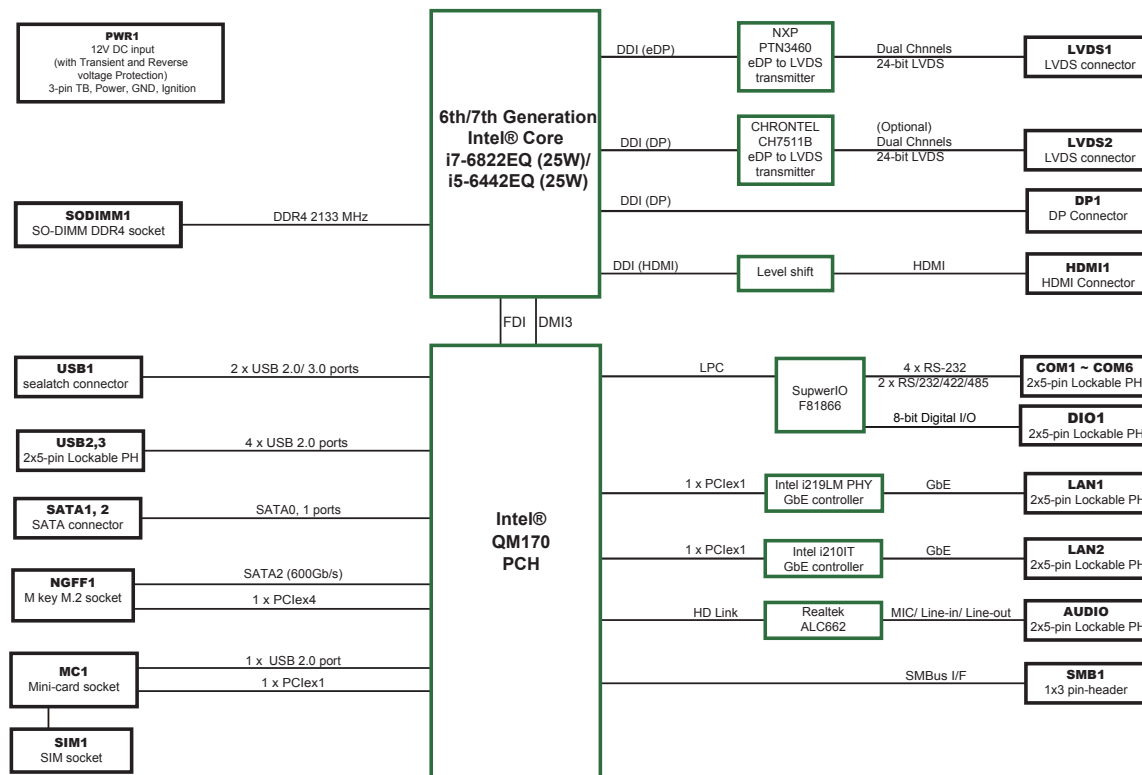
Power Requirement	+12V DC-In
Power Consumption	1.77A @+12V with i5-6442EQ (Typical) 1.82A @+12V with i7-6822EQ (Typical)
Operating Temp.	-40 ~ 85°C (-40 ~ 185°F)
Operating Humidity	10 ~ 95% @ 85°C (non-condensing)
Dimensions (L x W)	146 x 102 mm (5.7" x 4.0")

### Dimensions





## Block Diagram



### Ordering Information

EmCORE-i89M2-6442EQ	6 <sup>th</sup> Generation Intel® Core™ i5-6442EQ / QM170 3.5" compact board
EmCORE-i89M2-6822EQ	6 <sup>th</sup> Generation Intel® Core™ i7-6822EQ / QM170 3.5" compact board

### Optional Accessories

CBK-15-89M2-00	Cable kit 1 x Audio cable 2 x SATA cables 1 x SATA power cable 2 x USB 2.0 cables 1 x USB 3.0 cable 2 x LAN cables 6 x COM cables
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