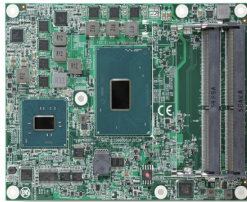




# EmETXe-i90M0

7<sup>th</sup> Generation Intel® Core™ i7-7820EQ/i5-7442EQ Processor  
COM Express® Basic Type 6 CPU Module

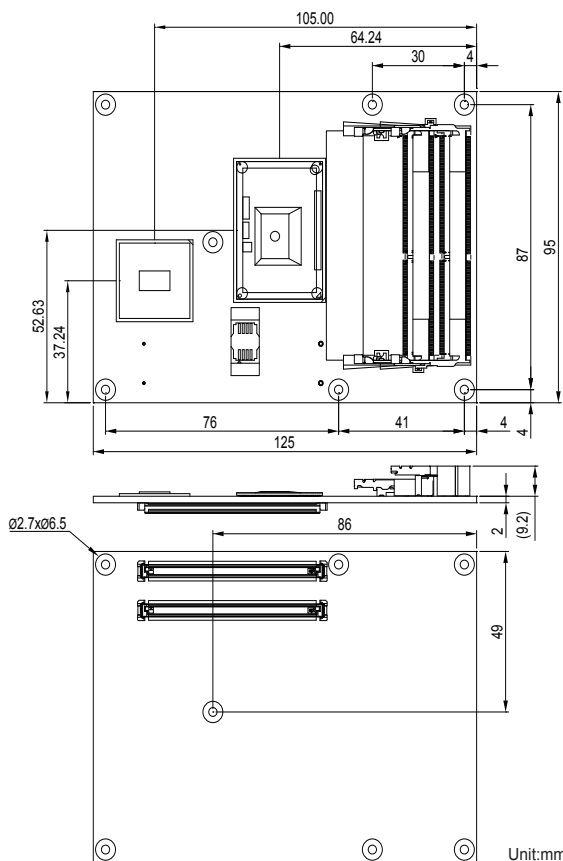


## Features

- Soldered onboard 7<sup>th</sup> Generation Intel® Core™ i7-7820EQ/i5-7442EQ
- Intel WGI219LM PCIe GbE PHY w/ iAMT
- Dual Channels 24-bit LVDS
- Support 3 independent displays
- 8.5V~20V Wide Range Voltage Input
- **Wide Range Operating Temp.: -40 ~ 85°C**

| System            |                                                                                                      |
|-------------------|------------------------------------------------------------------------------------------------------|
| CPU               | Soldered onboard 7 <sup>th</sup> Generation Intel® Core™ i7-7820EQ 3.7GHz/i5-7442EQ 2.9GHz processor |
| Chipset           | Soldered onboard Intel QM175 PCH                                                                     |
| Memory            | 2 x DDR4 SO-DIMM sockets                                                                             |
| BIOS              | AMI UEFI BIOS                                                                                        |
| Watchdog Timer    | 1~255 levels reset                                                                                   |
| I/O               |                                                                                                      |
| USB Port          | 12 x USB ports:<br>- 8 x USB 2.0 ports<br>- 4 x USB SuperSpeed ports                                 |
| Serial Port       | 2 x UART ports (RX/TX only)                                                                          |
| Expansion Bus     | 8 x PCIe1 lanes, 1 x PCIe16 lane, I2C Interface, GPIO                                                |
| DIO               | 8-bit Digital Input/Output                                                                           |
| Storage           | 4 x Serial ATA ports with 600MB/s HDD transfer rate                                                  |
| Ethernet Chipset  | 1 x Intel® i219LM PCIe GbE PHY                                                                       |
| Audio             | HD audio link                                                                                        |
| TPM               | Supports TPM (OEM Request)                                                                           |
| Display           |                                                                                                      |
| Graphic Chipset   | Integrated Intel® HD Graphics 630                                                                    |
| Graphic Interface | LCD: Dual Channels 24-bit LVDS<br>3 x DDI ports                                                      |
| OS support        |                                                                                                      |
| Windows 10 64-bit |                                                                                                      |
| Linux: Ubuntu     |                                                                                                      |

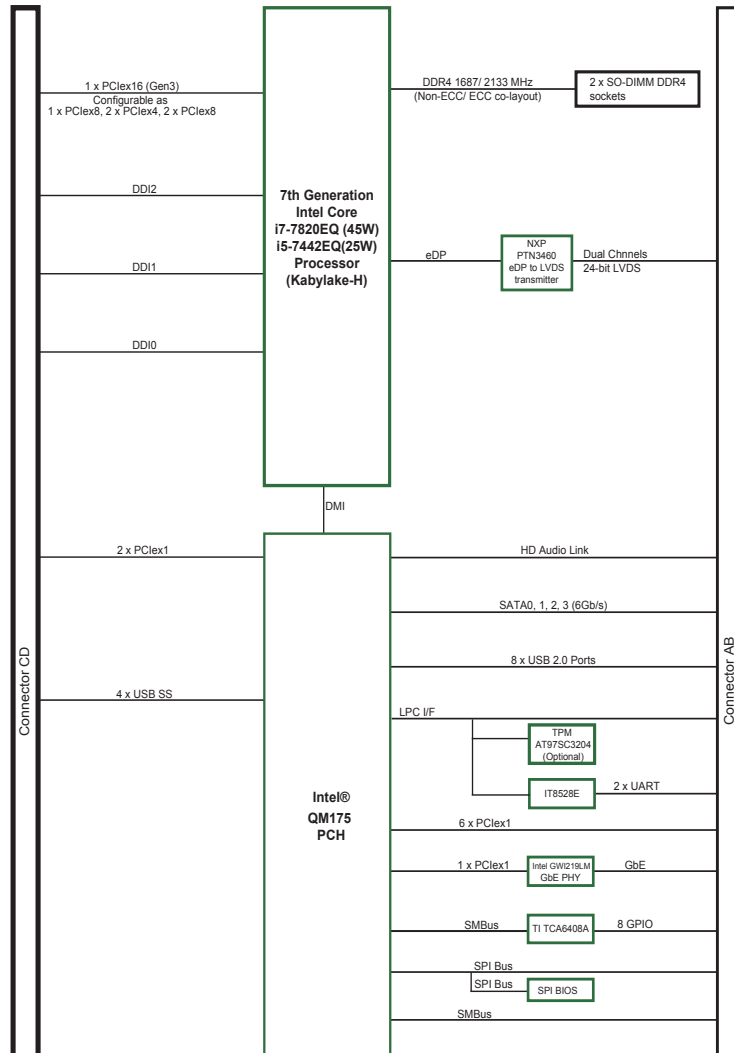
| Mechanical & Environmental |                                                 |
|----------------------------|-------------------------------------------------|
| Power Requirement          | 8.5V~20V +/- 5% wide range voltage input, +5VSB |
| Power Consumption          | 4.12A@12V( i7-7820EQ Typical)                   |
| Operating Temp.            | -40 ~ 85°C (-40 ~ 185°F)                        |
| Operating Humidity         | 10 ~ 95% @ 85°C (non-condensing)                |
| Dimensions (L x W)         | 125 x 95 mm (4.9" x 3.7")                       |
| Dimensions                 |                                                 |



All specifications are subject to change without notice.



## Block Diagram



## Ordering Information

|                        |                                                                                           |
|------------------------|-------------------------------------------------------------------------------------------|
| EmETXe-i90M0-WT-7820EQ | 7 <sup>th</sup> Generation Intel® Core™ i7-7820EQ WT COM Express® Basic Type 6 CPU Module |
| EmETXe-i90M0-WT-7442EQ | 7 <sup>th</sup> Generation Intel® Core™ i5-7442EQ WT COM Express® Basic Type 6 CPU Module |

## Optional Accessories

|                |                                                                                          |
|----------------|------------------------------------------------------------------------------------------|
| HS-90M0-C1     | Heat sink with Fan, with PAD (125x95x35mm)                                               |
| HS-90M0-F2-T   | Heat Spreader, with Threader, with PAD(95*95*11mm), only for i5-7442EQ Series            |
| HS-90M0-F2-NT  | Heat Spreader, through hole, with PAD(95*95*11mm), only for i5-7442EQ Series             |
| PBE-1705-F1    | COM Express® Type 6 evaluation carrier board with SIO F71869ED module in ATX form factor |
| CBK-03-1705-00 | Cable kit<br>1 x SATA cable<br>2 x COM Flat cables                                       |

## 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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