

## Features

- 6th/7th Generation Intel® Core™ i-H series Processor
- DDR4 SODIMM x 2, 2133MHz, up to 32G
- LVDSx 2, HDMI x 2
- USB 3.2 Gen 1 x 2 (Rear I/O), USB 2.0 x 5 (Internal)
- LAN x 2 (RJ45 x 1, internal x 1)
- M.2 2280 Slot x 1 (B Key: SATA/USB 3.2 Gen 1/USB2.0)
- M.2 2230 Slot x 1 (E Key: PCIe/USB2.0)
- Mini-PCle Slot x 1 (PCIe/USB2.0), Micro-SIM slot x 1
- Audio Codec with Amp, SATA x 2, COM x 4
- +9V~36V AT/ATX
- Support dual battery



## Specifications

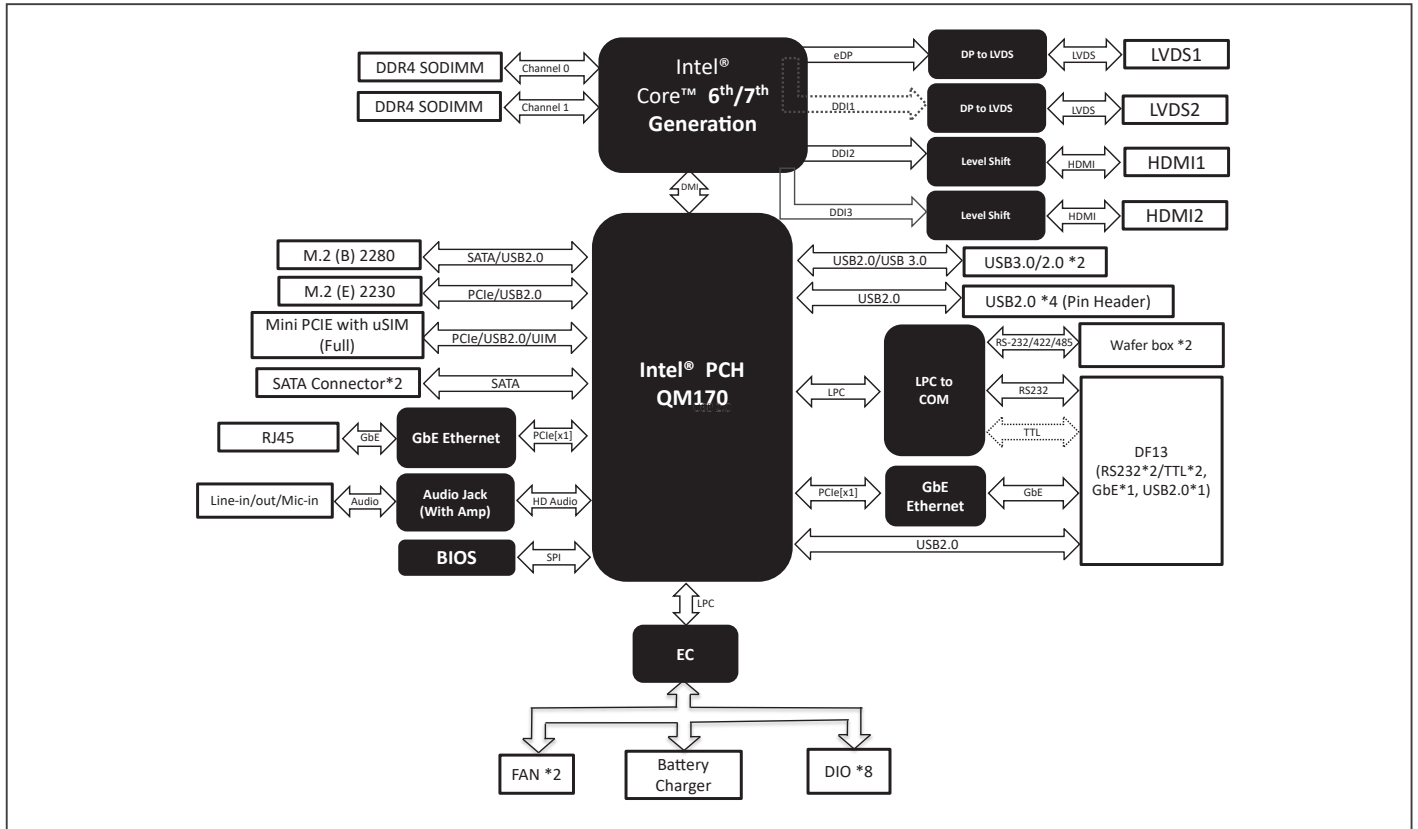
| System                      |  |
|-----------------------------|--|
| Form Factor                 | 4" EPIC Board  |
| CPU                         | 6th/7th Generation Intel® Core™ i-H series Processor                       |
| CPU Frequency               | i7-6822EQ (4C, 2GHz, up to 2.8GHz)<br>i7-7820EQ (4C, 3.0GHz, up to 3.7GHz) |
| Chipset                     | Intel® QM170 (TDP: 2.6W)   |
| Memory Type                 | SODIMM DDR4 memory slot x 2  |
| Max. Memory Capacity        | Up to 32GB   |
| BIOS                        | UEFI/Legacy  |
| Wake on LAN                 | Yes  |
| Watchdog Timer              | 255 Levels   |
| Power Requirement           | +9V ~ 36V  |
| Power Supply Type           | AT/ATX   |
| Power Consumption (Typical) | CPU 45W TDP  |
| Dimension (L x W)           | 4.53" x 6.5" (115 x 165 mm)  |
| Operating Temperature       | -4°F ~ 140°F (-20°C ~ 60°C)  |
| Storage Temperature         | -40°F ~ 176°F (-40°C ~ 80°C)   |
| Operating Humidity          | 0% ~ 90% relative humidity, non-condensing                                 |
| MTBF (Hours)                | TBD  |
| Certification               | CE/FCC Class A   |
| Display                     |  |
| VGA/LCD Controller          | Intel® HD Graphics 530<br>Intel® HD Graphics 630                           |
| Video Output                | LVDS x 2<br>HDMI 1.4 x 2   |
| Backlight Inverter Supply   | 18/24bit (2CH)   |
| I/O                         |  |
| Ethernet                    | Intel GbE i211   |
| Audio                       | ALC269 (With 2W Amp)   |
| USB Port                    | USB 3.2 Gen 1/2.0 x 2 (Rear I/O)<br>USB 2.0 x 5 (Internal header)          |

|                |   |
|----------------|---|
| Serial Port    | RS-232/422/485 x 2 (Internal header)<br>RS-232 x 2 (Internal header)  |
| Parallel Port  | —   |
| HDD Interface  | SATA x 2  |
| SSD            | —   |
| Expansion Slot | M.2 2280 Slot (B Key) x 1<br>M.2 2230 Slot (E Key) x 1<br>Mini-PCle Slot (PCIe/USB2.0) x 1<br>Micro-SIM slot<br>LPC Bus<br>SMBus (default) / I2C (option) |
| DIO            | 8-bit   |
| TPM            | —   |
| Touch          | —   |
| SIM            | Micro SIM   |

## Optional Accessories

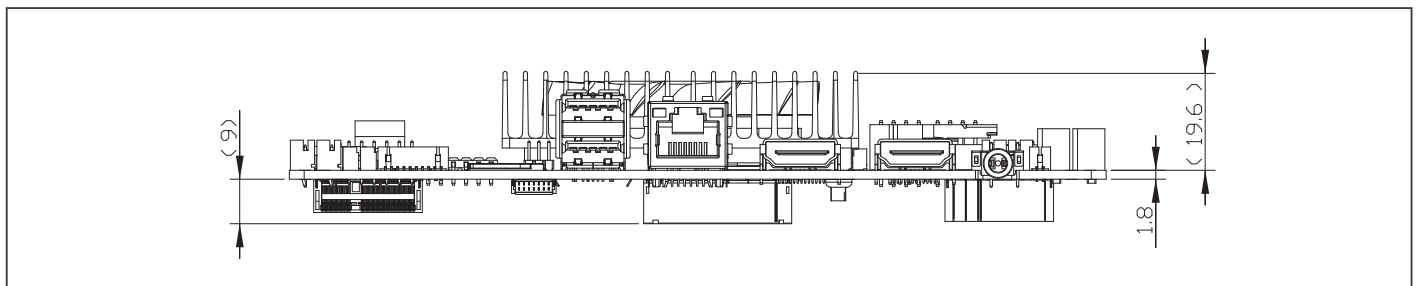
| Part Number     | Description   | QTY |
|-----------------|---|-----|
| EPIC-SKH7-FAN01 | CPU COOLER.AL+CU.12V.3600rpm.Smart FAN.90*72*20mm.for EPIC-SKH7 | 1   |

### Block Diagram



### Dimension

Unit: mm



### Ordering Information

| Part Number        | CPU       | Thermal | Display | LVDS           | Storage   | LAN     | USB                           | RS-232 | RS-232/422/485 | Expansion Slot   | Power       | Operating Temp | Others                                   |
|--------------------|-----------|---------|---------|----------------|-----------|---------|-------------------------------|--------|----------------|--|-------------|----------------|--|
| EPIC-SKH7-A10-0001 | i7-7820EQ | Fan     | 2HDMI   | 18/24bits, 2CH | SATA3 x 2 | GbE x 2 | USB3.2 Gen1 x 2<br>USB2.0 x 5 | 2      | 2              | M.2 2280 Slot (B Key) x 1<br>M.2 2230 Slot (E Key) x 1<br>Mini-PCle Slot (PCIe/USB2.0) x 1 | DC<br>9-36V | 0-60°C         | DIO 8 bit, LPC Bus, Micro SIM, SMBUS/I2C |