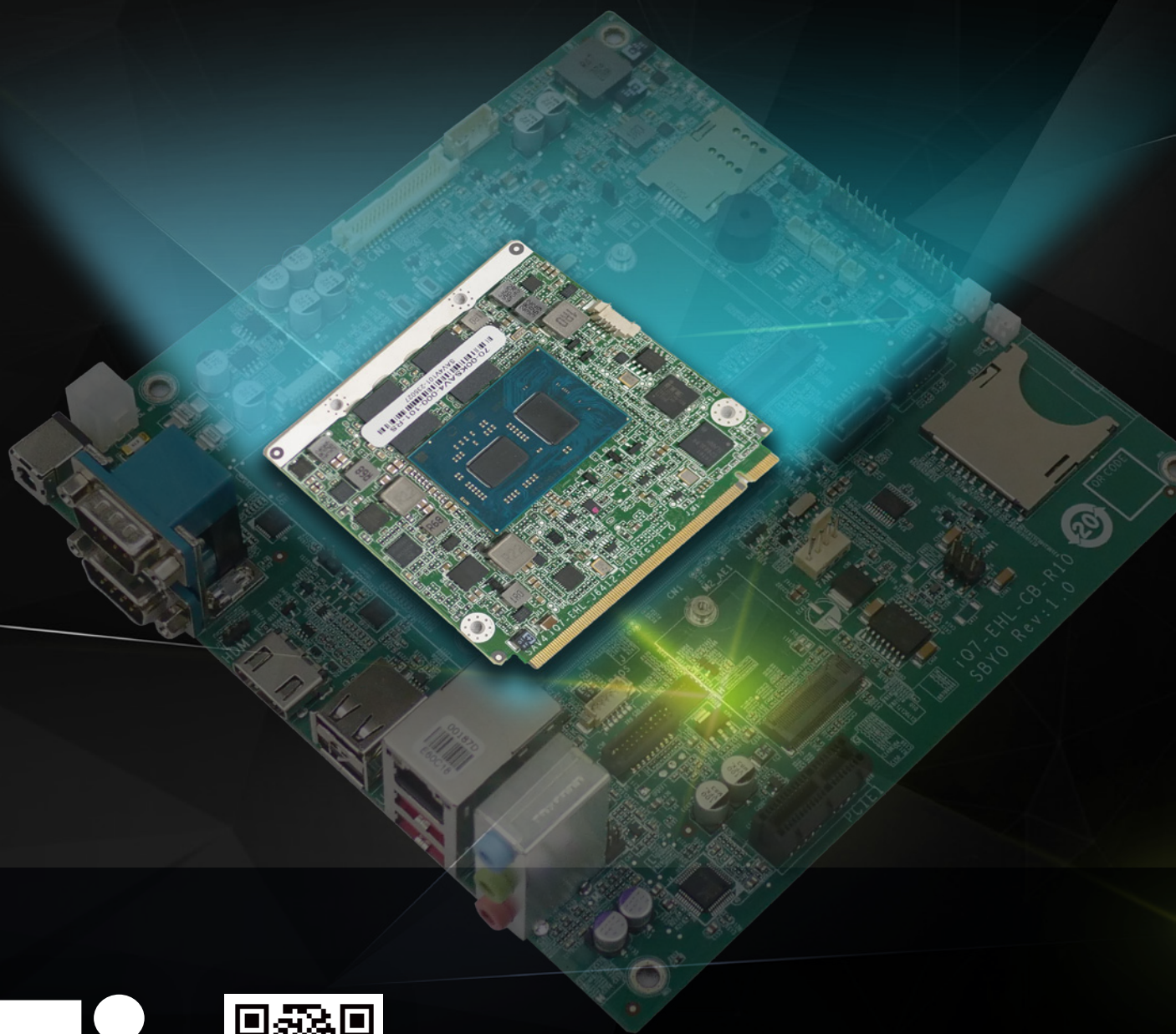


# IQ7-EHL

## Qseven<sup>®</sup> Rev. 2.1 module

---

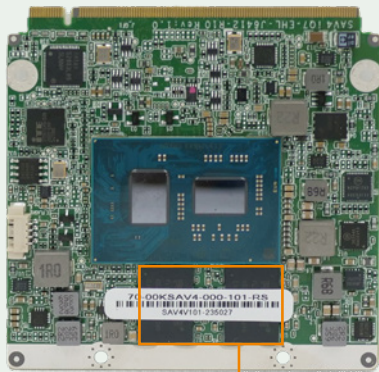
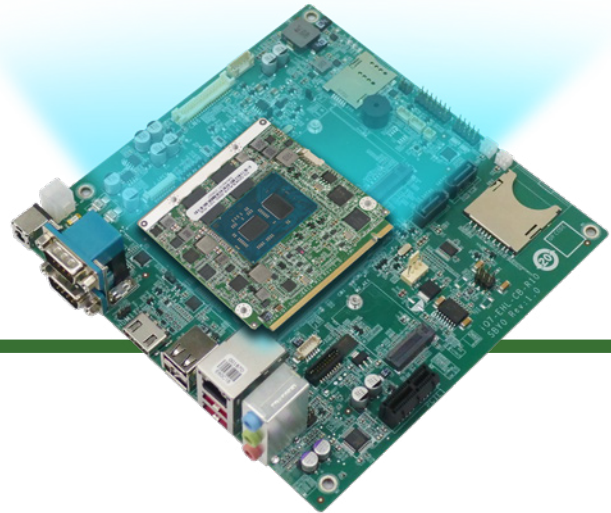
- Support Intel<sup>®</sup> Celeron<sup>®</sup> J6412 on-board SoC
- With 8GB 3200 LPDDR4x memory on board default (up to 16 GB)
- With optional on board eMMC as storage (up to 64 GB)



[www.ieiworld.com](http://www.ieiworld.com)

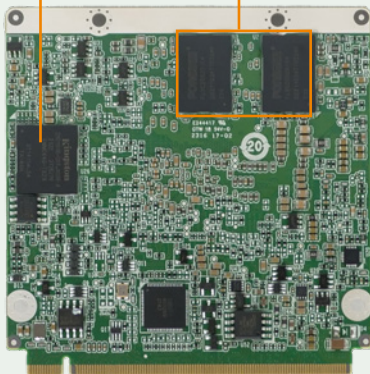
# iQ7-EHL

Qseven® Rev. 2.1 module supports Intel® Celeron® Processor J6412 (10W), with 8GB LPDDR4x memory on board default, Support DP, LVDS, 2.5GbE, SATA 6Gb/s, USB 3.1, Audio and RoHS



on board eMMC (optional)

LPDDR4x 3200 8GB (system max.16G)



## 10W Low-power Intel® Elkhart Lake Celeron® J6412 CPU

10nm Intel® Celeron® J6412 on-board SoC, 4 cores and 4 threads, base frequency 2.00GHz, turbo frequency up to 2.60GHz, 1.5MB cache



## Support Intel® I225-V/I226-V 2.5GbE Controller

With PCIe 2.5 GbE Intel I225-V/I226-V signal to baseboard, achieving up to 2.5GbE network transmission rate.



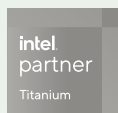
## On Board Memory And Storage

With 8GB LPDDR4x memory on board default, and optional on board eMMC as storage

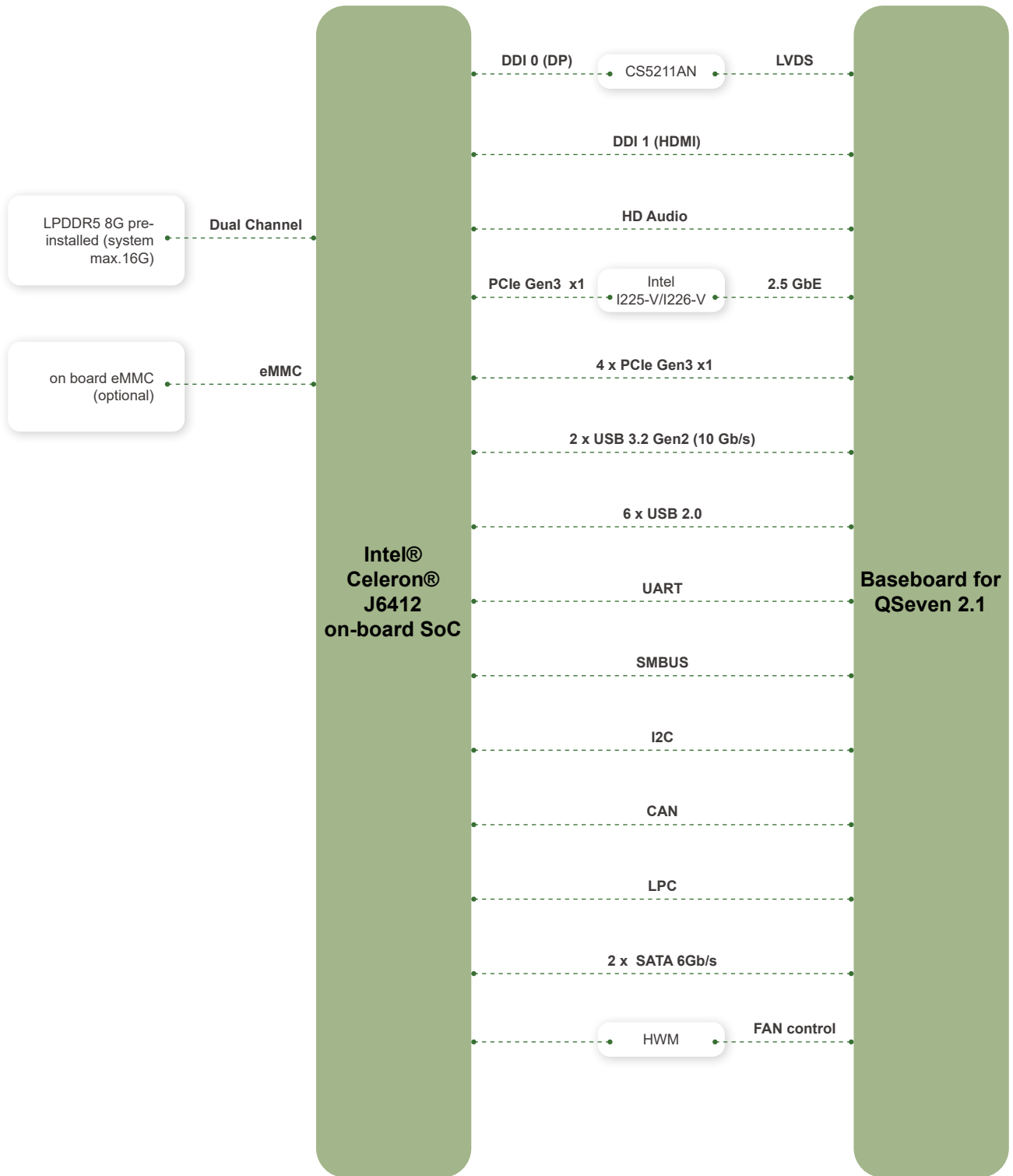


## Can be used flexibly with different baseboard

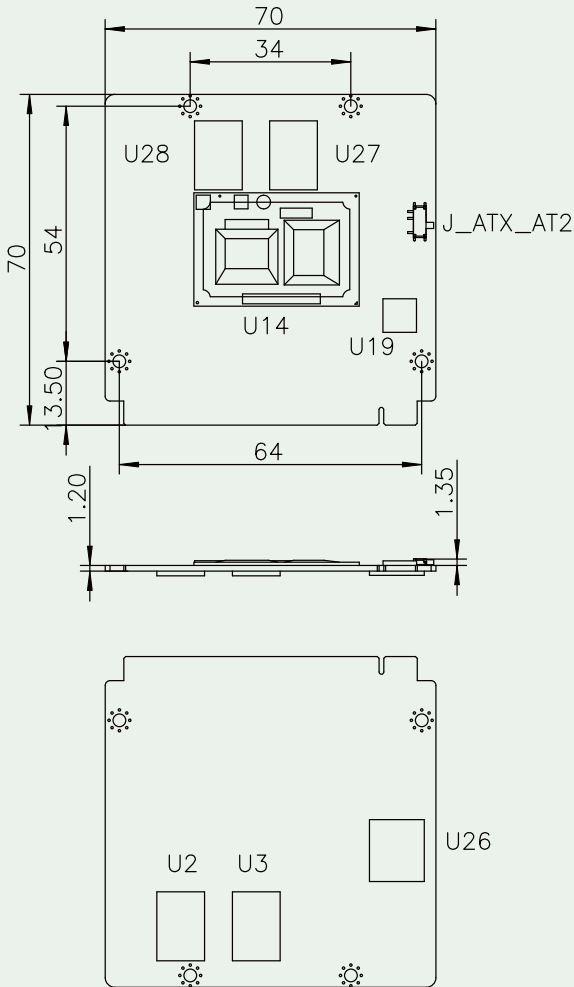
iQ7-EHL can use the backplane produced by IEI (compatible with the previous generation), or the backplane developed by the customer. In addition, enterprises can adapt to new processor and chipset technologies only by replacing modules.



# Block Diagram



### Dimensions



### Specifications

Model	iQ7-EHL-J6412
Specification	Qseven 2.1
CPU	Intel® Celeron® J6412 on-board SoC (up to 2.6GHz, quad-core, 1.5M Cache, TDP=10W)
Memory	On board LPDDR4x 3200 8GB (system max.16G)
BIOS	UEFI BIOS
Watchdog Timer	Software Programmable support 1~255 sec system reset
Graphics Engine	Intel® UHD Graphics
Display Interfaces	Double independent display signal to baseboard 1 x HDMI 1.4a: up to 4096 x 2160@30Hz 1 x LVDS: 1920 x 1200 @ 60Hz or eDP: 4096 x 2160 @ 60Hz
Ethernet	1 x 2.5 GbE Intel I225-V/I226-V signal to baseboard
I/O Interface	2 x USB 3.2 Gen2(10 Gb/s) signal to baseboard 6 x USB 2.0 signal to baseboard 1 x UART signal to baseboard
Storage	2 x SATA 6Gb/s signal to baseboard on board eMMC (optional)
Expansion	4 x PCIe Gen3 x1 signal to baseboard
Audio	1 x HDA signal to baseboard
CAN	1 x CAN Bus signal to baseboard
SDIO	1 x SDIO signal to baseboard
LPC	1 x LPC signal to baseboard
I2C	1 x I2C signal to baseboard
SMBUS	1 x SMBUS signal to baseboard
Front Panel	Front Panel signal to baseboard (Power LED, HDD LED, Speaker, Power Button, Reset Button)
FAN connector	1x FAN control signal to baseboard
TPM	Intel PTT
Power Supply	5V DC
Temperature	0°C ~ 60°C
Humidity	5% ~95 non-condensing
Dimensions	70*70mm
Certification	CE/FCC compliant

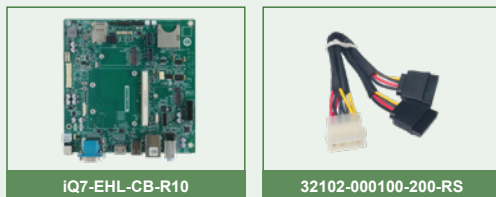
### Packing List

1 x iQ7-EHL Single Board Computer	1 x Heatsink
1 x QIG	

### Ordering Informaiton

iQ7-EHL-J6412C-R10	Qseven® Rev. 2.1 module supports Intel® Celeron® Processor J6412 (10W), with 8GB LPDDR4x memory on board default, Support HDMI, LVDS, 2.5GbE, SATA 6Gb/s, USB 3.1, Audio and RoHS
--------------------	---

### Optional Accessories

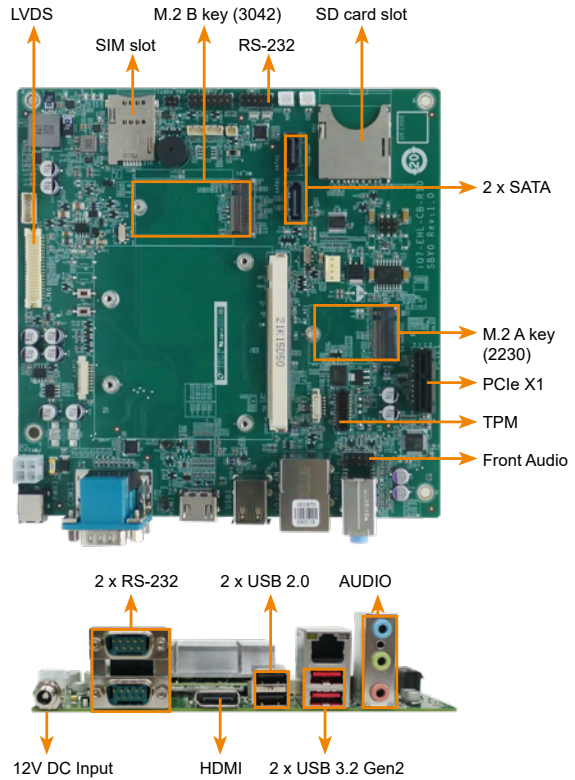
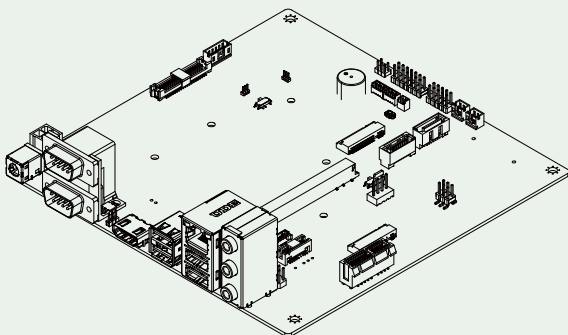
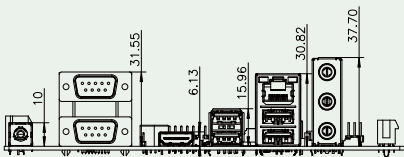
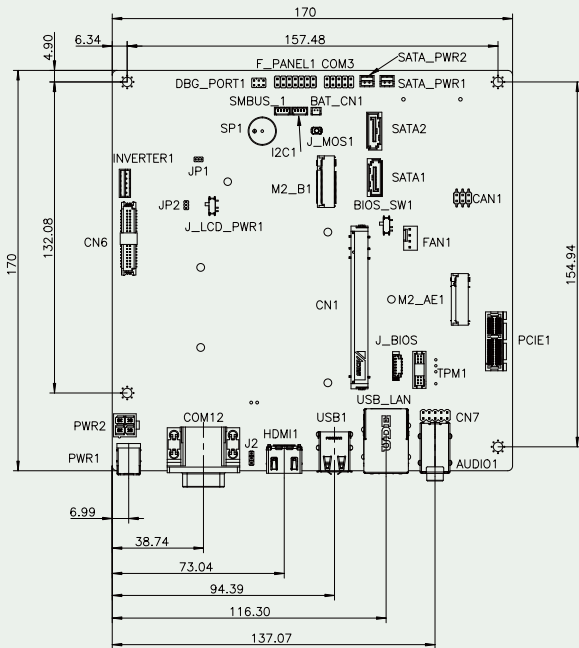


### Optional Accessories

iQ7-EHL-CB-R10	Base Board for Qseven® Rev. 2.1 module
32102-000100-200-RS	SATA power cable, MOLEX 5264-4P to SATA15P

# iQ7-EHL-CB

## Dimensions



## Specifications

Model	iQ7-EHL-CB
SIZE	Baseboard for QSeven Rev.2.1 module
Display Interfaces	1 X HDMI 1.4a 1 x18/24-bit Dual Channel LVDS
LAN	1 x RJ45 (2.5GbE)
External I/O Interface	2 x USB 3.2 Gen2 (10 Gb/s) 2 x USB 2.0 2 x RS-232
Internal I/O Interface	2 x SATA 1 x RS-232 pin header (2*5, P= 2.54) 1 x SD card socket 1 x SIM slot
Expansion	1 x PCIe x1 1 x M.2 A key 2230 for Wi-Fi & BT (PCIe Gen3 x1 / USB 2.0 signal) 1 x M.2 B key 3042 B key w/ SIM holder (PCIe Gen3 x2 / USB 2.0 signal)
Audio	Realtek ALC888S HD codec (Line-in, Line-out, Mic)
Front Panel	1 x Front_Panel (2*7 pin)(Power LED, HDD LED, Speaker(Buzzer), Power Button, Reset Button)
I2C	1 x 4-pin wafer
SMBus	1 x 4-pin wafer
Power Supply	12V DC Input
FAN connector	1 x System fan connector (1x4 pin)
Temperature	0°C ~ 60°C
Humidity	5% ~95 non-condensing
Dimensions	170mm x 170mm
Certification	CE/FCC compliant