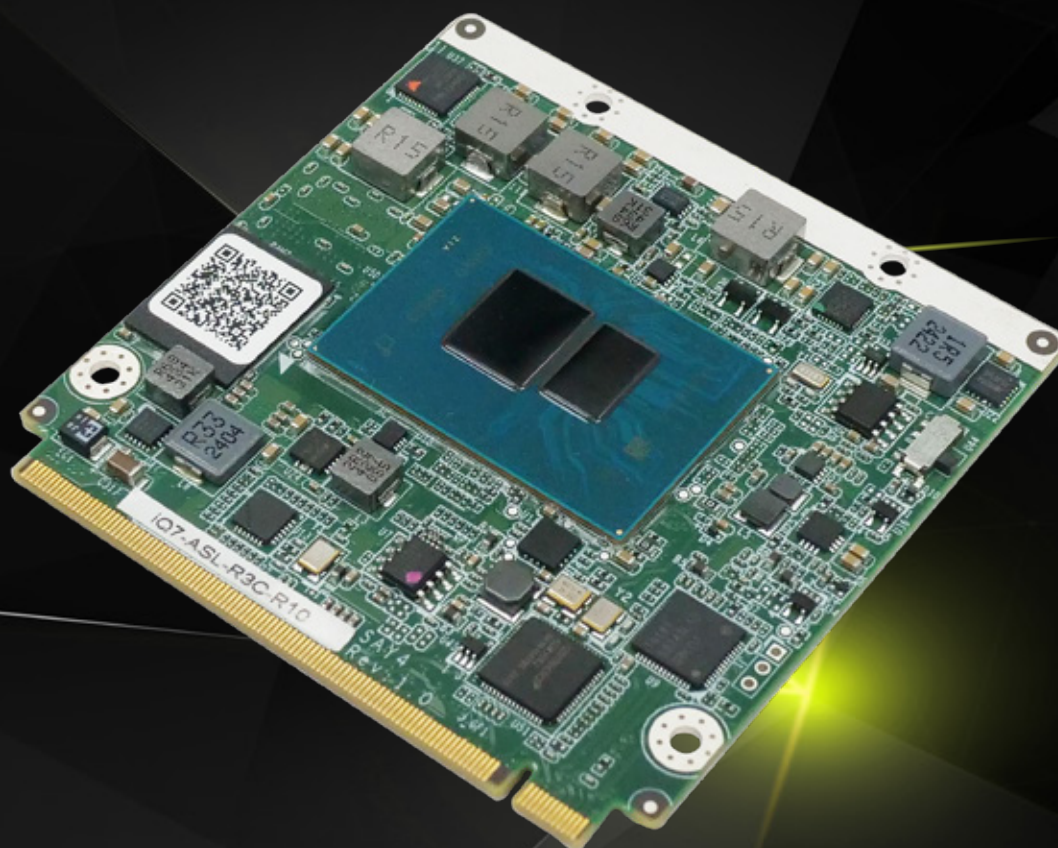


iQ7-ASL

Qseven[®] Rev. 2.1 module

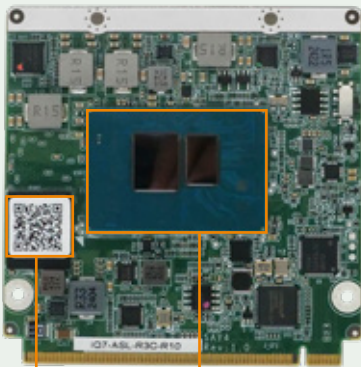
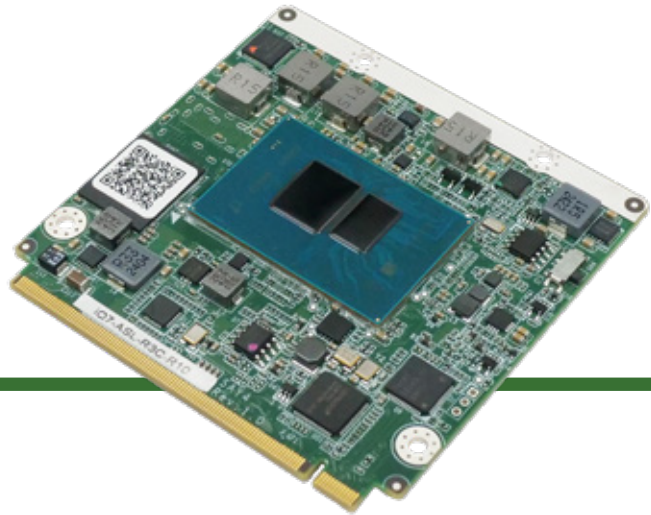
- Support Intel[®] Amston Lake & Alder Lake-N on-board SoC
- Qseven connector pinout according to Qseven Specification Revision 2.1
- With 8GB 5500 LPDDR5 memory on board default(up to 16 GB)
- With optional on board eMMC as storage (up to 256 GB)



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iQ7-ASL

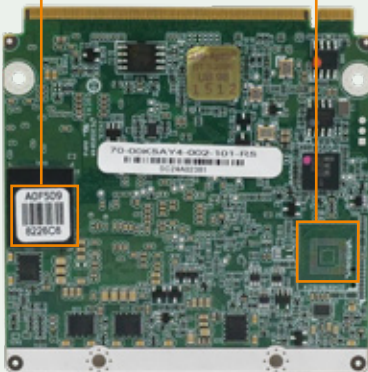
Qseven® Rev. 2.1 module with Intel® Amston Lake & Alder Lake-N on-board SoC, with 8GB LPDDR5 memory on board default, Support HDMI, LVDS, 2.5GbE, SATA 6Gb/s, USB 3.2, Audio and RoHS



Intel® Amston Lake & Alder Lake-N on-board SoC

LPDDR5-5500 8G pre-installed(system max.16G)

On board eMMC (option)



Low-power Intel® Amston Lake & Alder Lake-N Processor

8 Gracemont core configuration to Atom product line with scalability from 2 cores to 8 cores



Support Intel® I226V 2.5GbE Controller

With PCIe 2.5 GbE Intel i226V signal to baseboard, achieving up to 2.5GbE network transmission rate.



On Board Memory And Storage

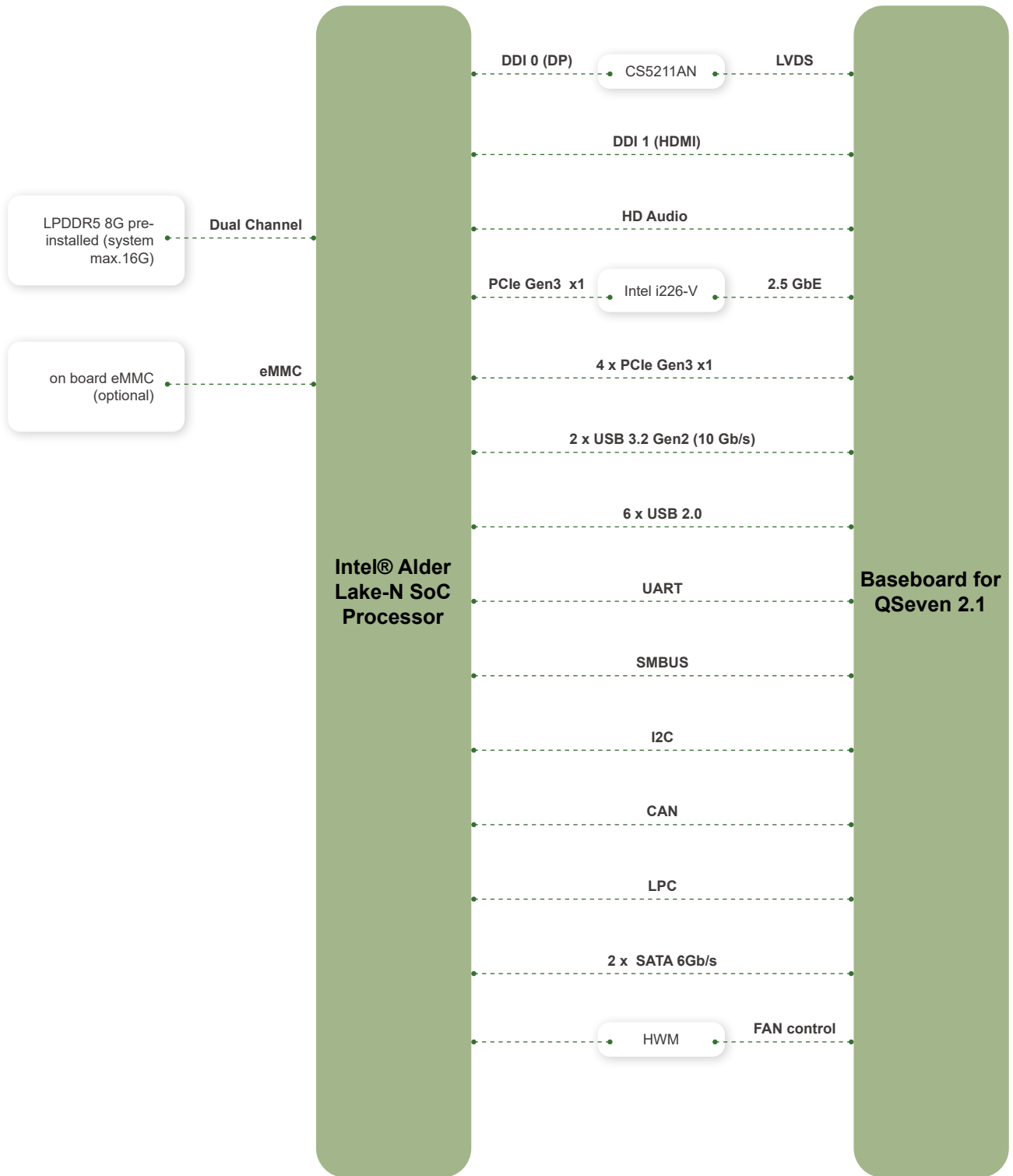
With 8GB LPDDR5 memory on board default, and optional on board eMMC as storage



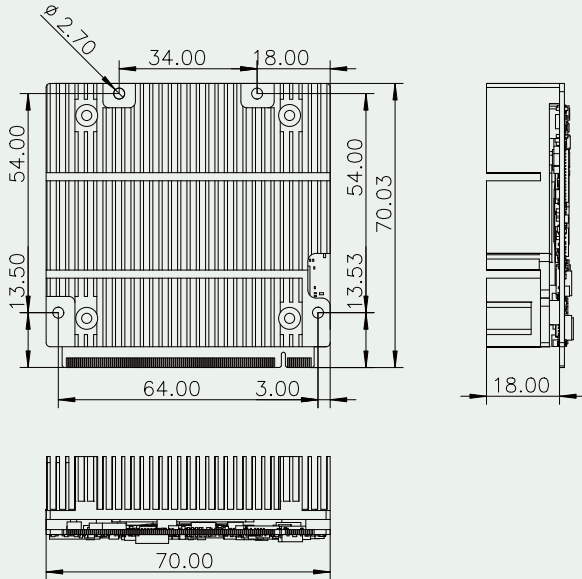
Can be used flexibly with different baseboard

iQ7-ASL 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-ASL
Size	Qseven 2.1 70*70mm
CPU	Intel® Amston Lake & Alder Lake-N on-board SoC Intel® Alder Lake-N N97 SoC Processor (up to 2.9GHz, quad-core, TDP=12W) Intel® Amston Lake 7433RE SoC Processor (up to 2.7GHz, quad-core, TDP=9W) Intel® Alder Lake-N x7211E SoC Processor (up to 2.9GHz, dual-core, TDP=6W)
Memory	On board LPDDR5-5500 8G pre-installed(system max. 16G)
BIOS	UEFI BIOS
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 PCIe 2.5 GbE with Intel 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
Watchdog timer	Software Programmable support 1~255 sec system reset
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	Operating Temperature: -10°C ~ 60°C Storage Temperature: -30°C ~ 70°C
Humidity	5% ~95 non-condensing
Dimensions	70*70mm

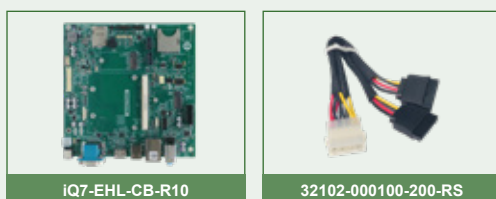
Packing List

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

Ordering Informaiton

iQ7-ASL-N2C-R10	Qseven® Rev. 2.1 module with Intel® N-series N97 SoC Processor (12W), with 8GB LPDDR5 memory on board default, Support HDMI, LVDS, 2.5GbE, SATA 6Gb/s, USB 3.2, Audio and RoHS
iQ7-ASL-R3C-R10	Qseven® Rev. 2.1 module with Intel® Atom x7433RE SoC Processor (9W), with 8GB LPDDR5 memory on board default, Support HDMI, LVDS, 2.5GbE, SATA 6Gb/s, USB 3.2, Audio and RoHS

Optional Accessories



Optional Accessories

iQ7-CB-R10	Base Board for Qseven® Rev. 2.1 module
32102-000100-200-RS	SATA power cable, MOLEX 5264-4P to SATA15P, 150mm