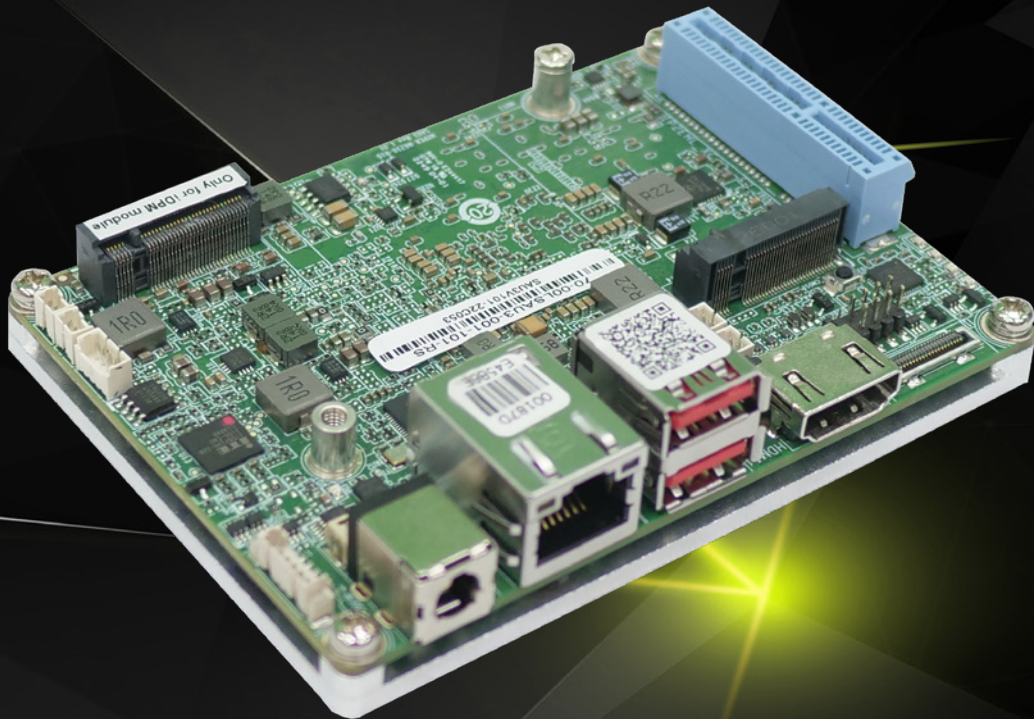


HYPER-EHL

Pico-ITX SBC supports Intel® Celeron J6412/N6210 on-board SoC

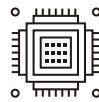
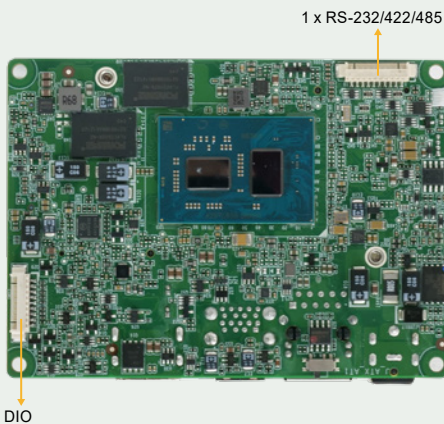
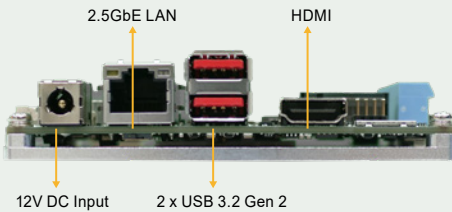
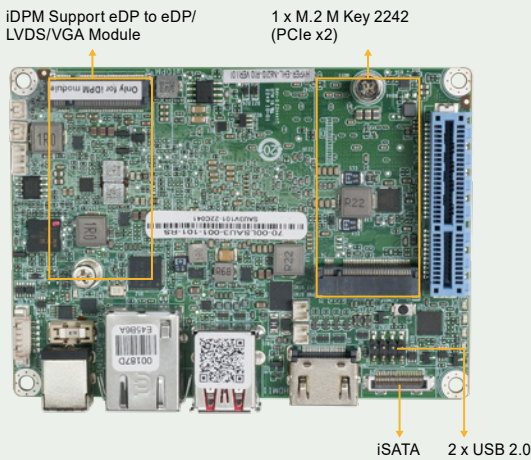
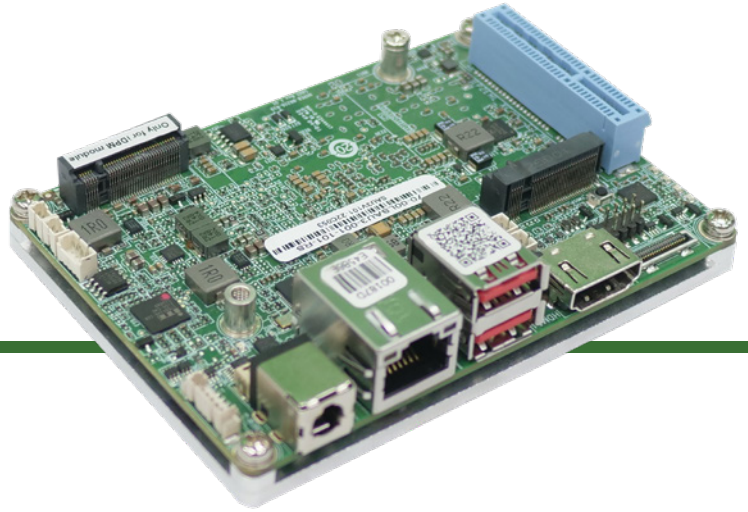
- On-board LPDDR4x 4GB (up to 8 GB option)
- HDMI and iDPM support dual independent displays
- Support Intel® I225-V/I226-V 2.5GbE port
- One PCIe Gen3 x4 slot and one M.2 M key expansions
- Two USB 3.2 Gen2, two USB 2.0, one RS-232/422/485



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HYPER-EHL

Pico-ITX SBC supports Intel® Celeron® J6412/N6210 on-board SoC, with 4GB LPDDR4x memory on board, HDMI, iDPM, M.2 M key, USB 3.2, iSATA 6Gb/s, COM, PCIe x4 for riser card and RoHS



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



Supporting Intel® I225-V/I226-V 2.5GbE Controller

One RJ45 network interface is supported via Intel® I225-V/I226-V 2.5GbE controller, achieving up to 2.5GbE network transmission rate



PCIe x4 Slot Available for Riser Card

One PCIe x4 slot (PCIe Gen3 x4 signal) is reserved on the edge of the motherboard, which can be used to connect a PCIe expansion card or a riser card designed by IEI.

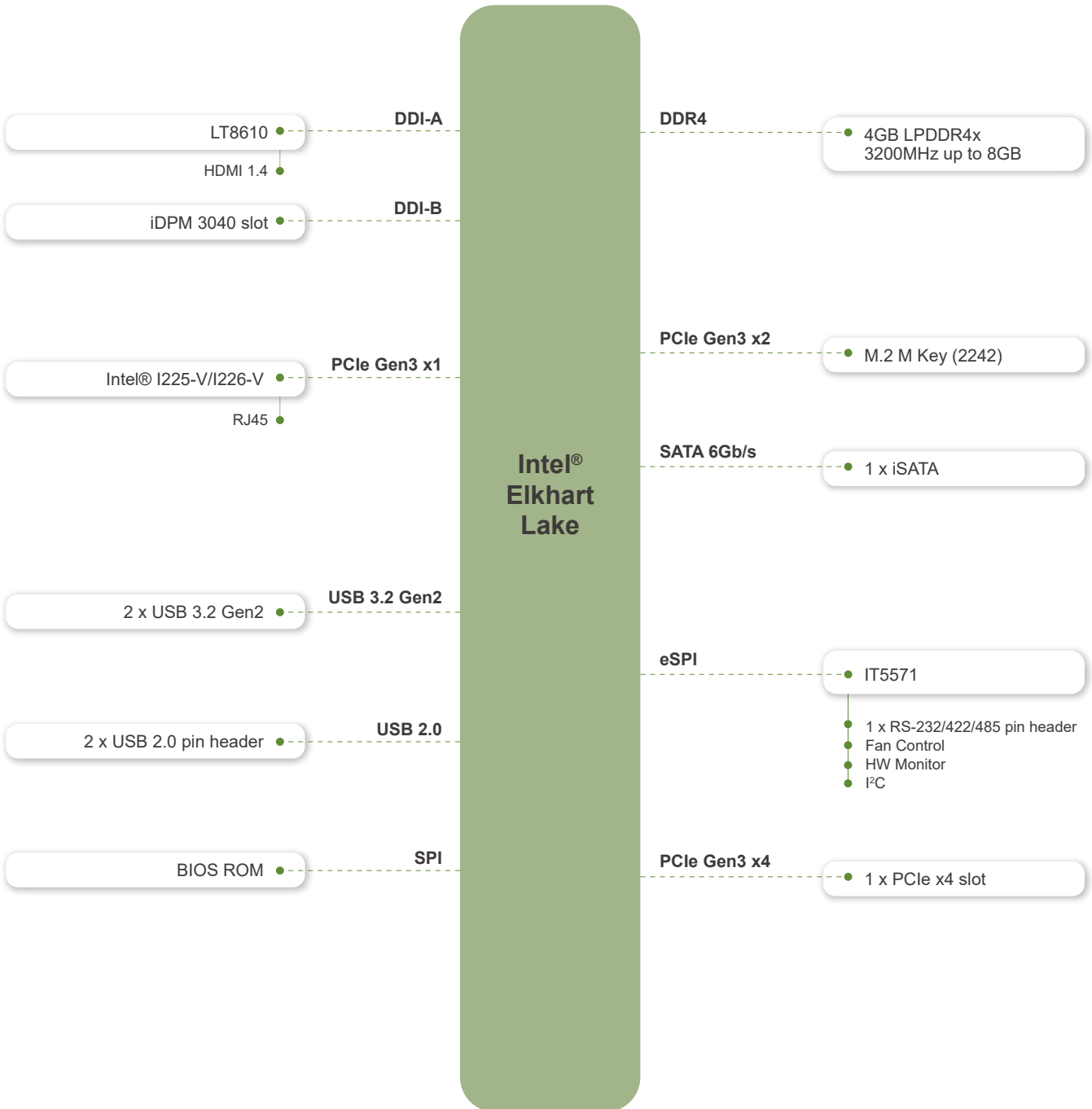


IEI-specific iDPM Interface

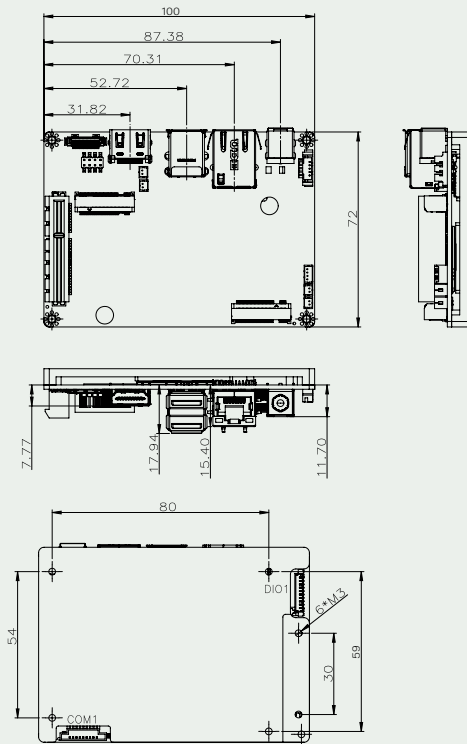
IEI uniquely designs a iDPM interface that can connect to display modules, enabling users to add LVDS/eDP/VGA display interface upon requirements.



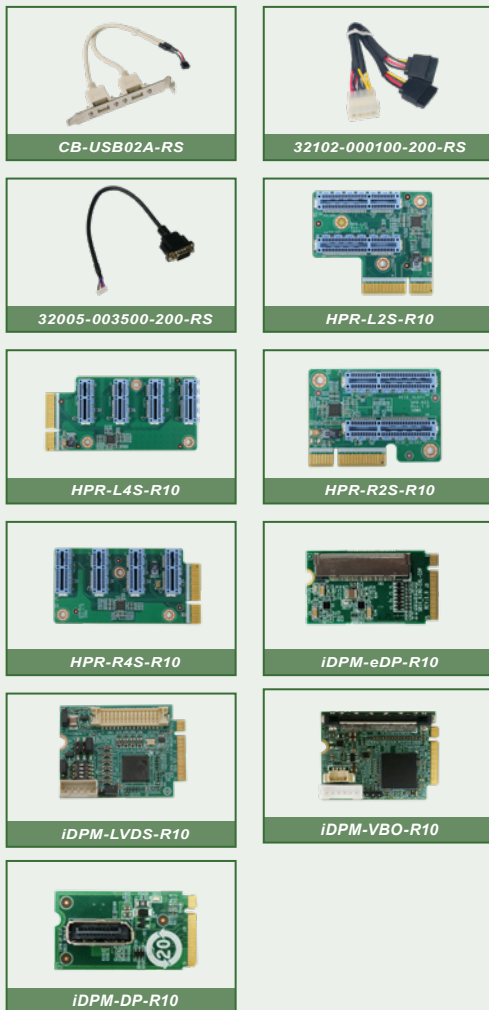
Block Diagram



Dimensions



Optional accessories



Specifications

Model	HYPER-EHL
SoC	Onboard Intel® Atom™ x6000 series / Pentium® / Celeron® processor (Elkhart Lake platform) Intel® Celeron® J6412 on-board SoC (up to 2.6GHz, quad-core, 1.5M Cache, TDP=10W) Intel® Celeron® N6210 on-board SoC (up to 2.6GHz, dual-core, 1.5M Cache, TDP=6.5W)
BIOS	AMI UEFI BIOS
Memory	LPDDR4x-3200 MHz 4GB, up to 8GB
Graphics Engine	Intel® UHD Graphics (Gen11)
Display Output	1 x HDMI 1.4 (up to 4096x2160 @ 30Hz) 1 x iDPM 3040 slot (only for IEI eDP/LVDS/VGA module)
Ethernet	LAN1: Intel® I225-V/I226-V 2.5GbE controller
External I/O Interface	2 x USB 3.2 Gen2 (10Gb/s)
Internal I/O Interface	2 x USB 2.0 (2x4 pin, P=2.0) 1 x iSATA 6Gb/s 1 x RS-232/422/485 (1x9 pin, P=1.25)
Front Panel	1 x front panel (power button 1x2 pin P=1.25mm, reset button 1x2 pin P=1.25mm)
Expansion	1 x M.2 M Key 2242 (PCIe Gen3 x2) 1 x PCIe x4 slot (PCIe Gen3 x4) (x4 or x2+x2 or x1+x1+x1+x1)
SMBus	1 x SMBus (1x4 pin)
Digital I/O	1 x 8-bit DIO (1x10 pin, P=1.25)
Power Supply	12V DC input Support AT/ATX mode
Watchdog Timer	Software Programmable support 1~255 sec. System reset
Operating Temperature	0°C ~ 60°C
Storage Temperature	-30°C ~ 70°C
Operating Humidity	5% ~95%, non-condensing
Power Consumption	12V@ 2.07A (Intel® Celeron® J6412 CPU with 4 GB 3200 MHz LPDDR4x memory, max. loading, EuP mode enabled)
Dimensions	100mm x 72mm
Weight	600g / NW: 250g
Certification	CE/FCC Compliant

Packing List

1 x HYPER-EHL SBC with heat spreader	1 x iSATA cable (PN: 32801-010500-100-HF)
1 x QIG	

Ordering Information

HYPER-EHL-J6412B-R10	Pico-ITX SBC with Intel® Celeron® J6412 2.0GHz quad-core on-board SoC, 4GB LPDDR4x memory on board default, HDMI, iDPM, M.2 M key, USB 3.2, iSATA 6Gb/s, COM, PCIe x4 for riser card and RoHS
HYPER-EHL-N6210B-R10	Pico-ITX SBC with Intel® Celeron® N6210 2.0GHz dual-core on-board SoC, 4GB LPDDR4x memory on board default, HDMI, iDPM, M.2 M key, USB 3.2, iSATA 6Gb/s, COM, PCIe x4 for riser card and RoHS

Optional Accessories

CB-USB02A-RS	Dual port USB cable with bracket, 300mm, P=2.00
32102-000100-200-RS	SATA power cable, MOLEX 5264-4P to SATA15P
32005-003500-200-RS	RS-232/422/485, 300mm, P=1.25
HPR-L2S-R10	PCIe x4 to two PCIe x2 riser card for HYPER on the left side
HPR-L4S-R10	PCIe x4 to four PCIe x1 left riser card for HYPER on the left side
HPR-R2S-R10	PCIe x4 to two PCIe x2 riser card for HYPER on the right side
HPR-R4S-R10	PCIe x4 to four PCIe x1 left riser card for HYPER on the right side
iDPM-eDP-R10	eDP to eDP DisplayPort converter board (for IEI iDPM connector)
iDPM-LVDS-R10	eDP to LVDS DisplayPort converter board (for IEI iDPM connector)
iDPM-VBO-R10	eDP to VBO DisplayPort converter board (for IEI iDPM connector)
iDPM-DP-R10	eDP to DP DisplayPort converter board (for IEI iDPM connector)