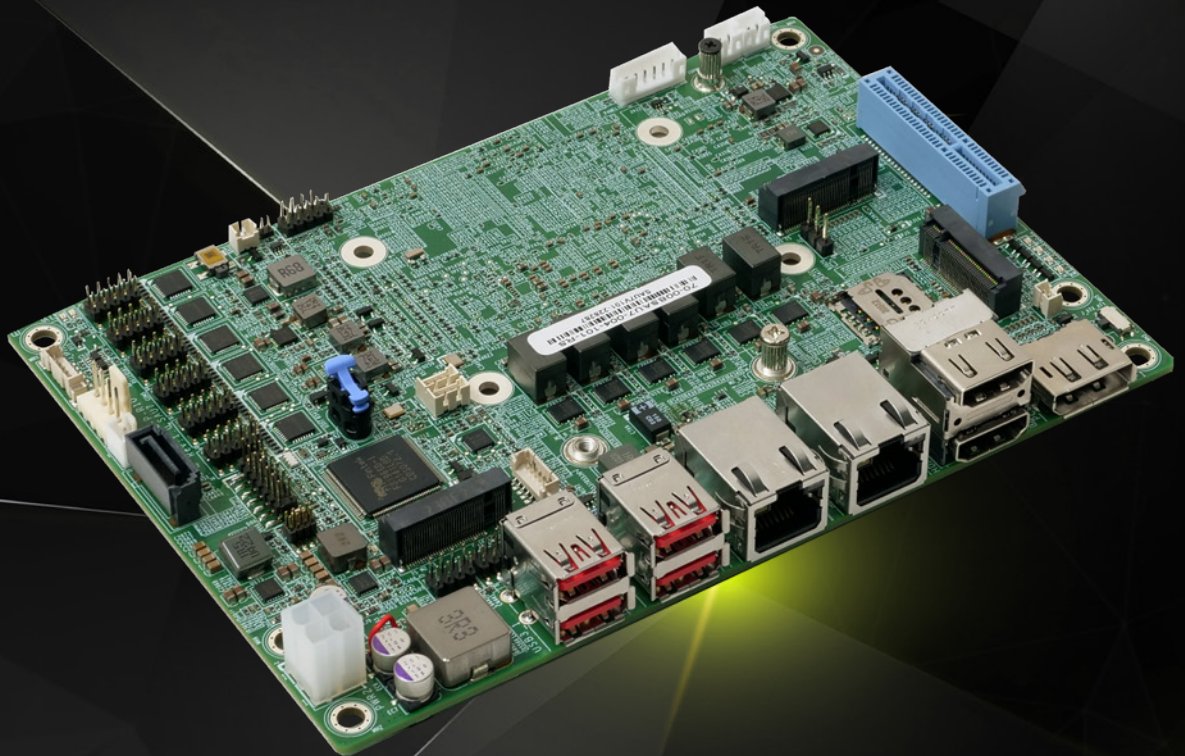


# NANO-ADL-P

EPIC SBC supports Intel® Alder Lake-P Core™ i7/i5/i3 and Celeron® processor with 8GB LPDDR4x memory on board default

- Supports 12th Gen. Intel® mobile Alder Lake-P on board SoC
- On-board LPDDR4x 3200 MHz 8GB , up to 16GB
- Support 2 x 2.5GbE with i225-V
- Support quadruple independent display
- Support PCIE X4,M.2 B key and M.2 A key expansion

**High Performance Capability  
with multi-tasking function**



Backplane  
Systems  
Technology

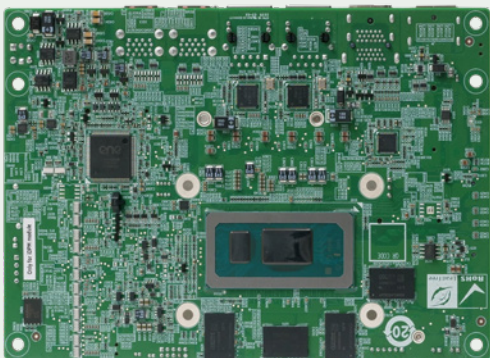
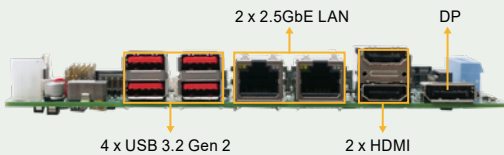
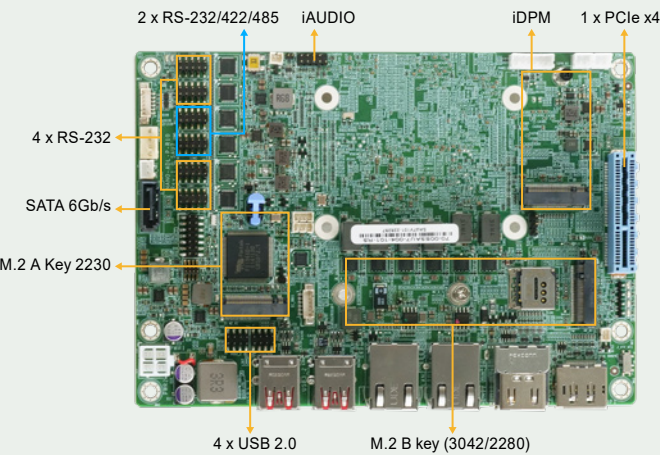
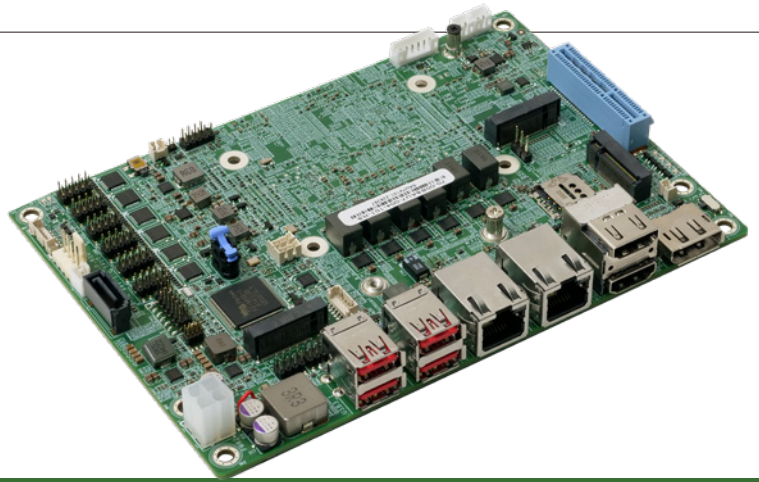
Backplane Systems  
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# NANO-ADL-P

EPIC SBC supports Intel® Alder Lake-P Core™ i7/i5/i3 and Celeron® processor with 8GB LPDDR4x memory on board default



## Support 12th Intel® mobile AlderLake-Pon board SoC

Equipped with 12th Core™ i7/i5/i3 and Celeron® on-board processor.



## Support Intel® I225V 2.5GbE Network Controller

Support RJ45 network interface via Intel® I225v 2.5GbE network controller to achieve 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.



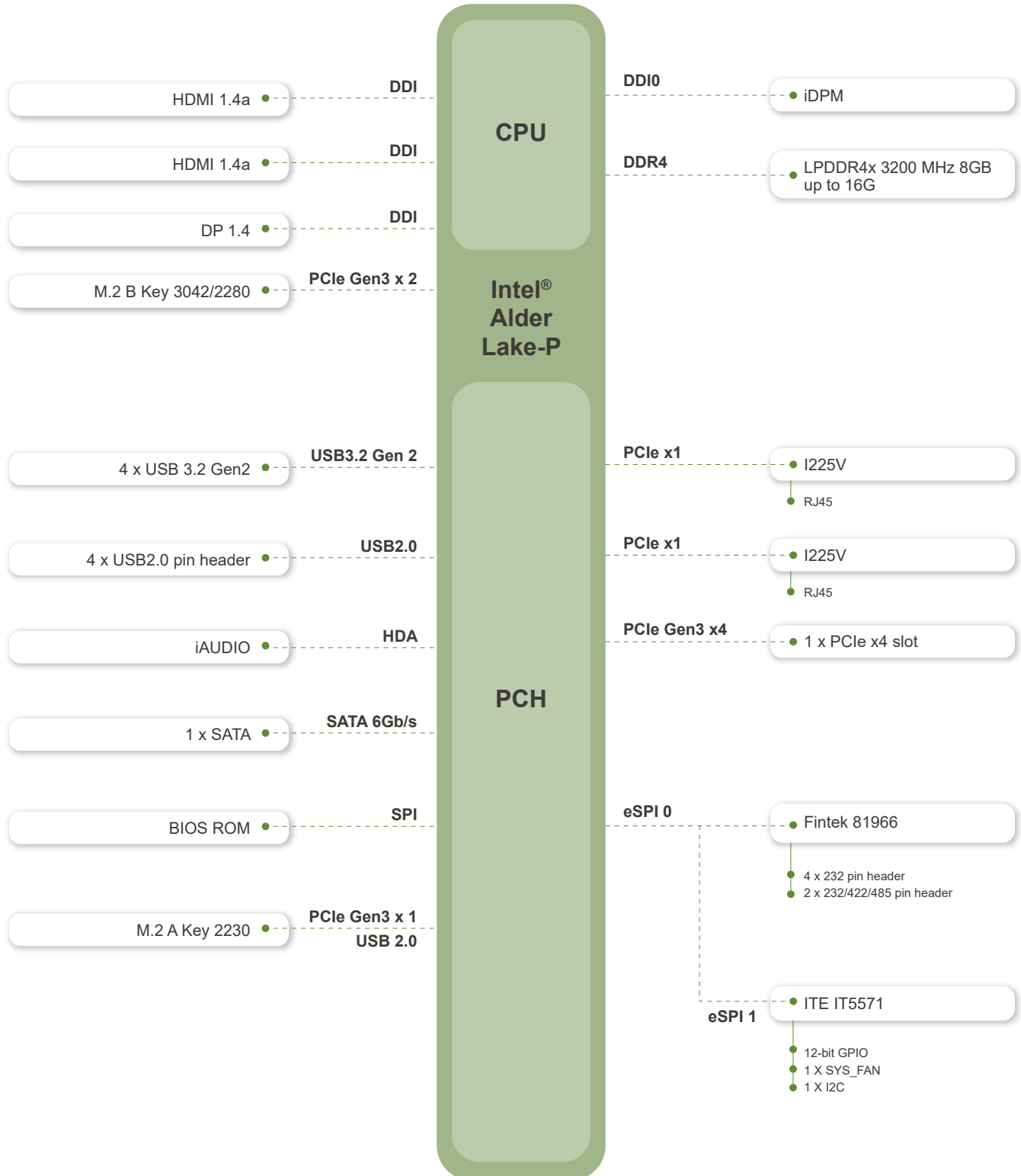
Backplane Systems Technology

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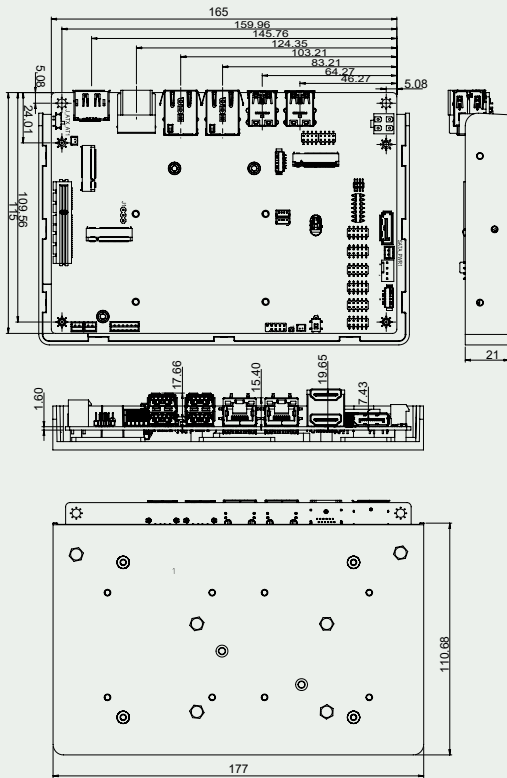
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# NANO-ADL-P Block Diagram

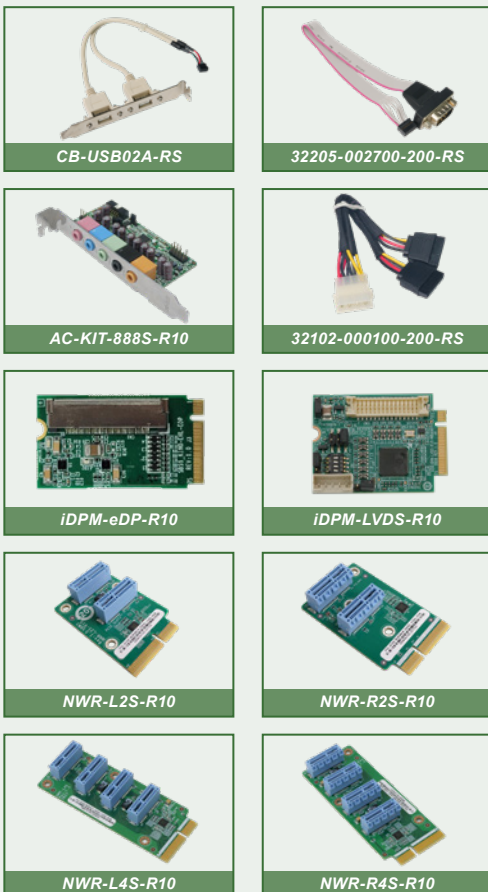




### Dimensions



### Optional accessories



### Specifications

Model	NANO-ADL-P
SoC	12th Gen. Intel® mobile Alder Lake-P on board SoC
BIOS	AMI UEFI BIOS
Memory	On-board LPDDR4x 3200 MHz 8GB up to 16GB
Graphics Engine	Intel® UHD Graphics for Celeron® 7305 and Core i3-1215U Intel® Xe Graphics architecture for Core i5-1235U and Core i7-1255U
Display Output	Quadruple independent display 2 x HDMI 1.4a (up to 4096 x 2160@30Hz) 1 x DP 1.4a (up to 4096 x 2160 @60Hz) 1 x IDPM 3040 slot (only for IEI eDP/LVDS/VGA module)
Ethernet	2 x Intel® I225V 2.5GbE controller (Colay with I225-LM)
External I/O Interface	4 x USB 3.2 Gen 2 x1(10Gb/s)
Internal I/O Interface	1 x SATA 6Gb/s 4 x USB 2.0 (2x4 pin, P=2.0) 2 x RS-232/422/485 (2x5 pin, P=2.0) 4 x RS-232 (2x5 pin, P=2.0)
SMBus/I2C	1 x I <sup>2</sup> C (1x4 pin) 1 x SMBUS (1x4 pin)
Audio	1 x IAUDIO, support IEI AC-KIT-888S Audio Module (2x5 pin)
Front Panel	1 x Front Panel Power LED&HDD LED (1x6 pin) Power Button (1x2 pin) Reset Button (1x2 pin)
Expansion	1 x M.2 A Key for Wi-Fi & BT 2230 (PCIe Gen3 x 1 & USB 2.0) 1 x M.2 B Key W/ SIM Header (PCIe x2) 3042/2280 1 x PCIe x4 slot (PCIe x4 signal, x4 &x2+x2&x2+x1+x1)
Digital I/O	1 x 12-bit Digital I/O (2x7 pin)
TPM	Intel® PTT
FAN connector	1 x CPU Fan Connect (1x4 pin)
Power supply	12V DC power supply Support AT/ATX mode
Watchdog Timer	Software Programmable support 1~255 sec. System reset
Power Consumption	12V@4.62A (12 th Gen Intel® Core™ i7-1265UE CPU with 8 GB 3200 MHz LPDDR4x memory, max. loading, EuP mode enabled)
Operating Temperature	0°C ~ 60°C
Storage Temperature	-30°C ~ 70°C
Operating Humidity	5% ~ 95%,non-condensing
Diemension	115 mm x 165 mm
Weight	GW:900 g / NW:400 g
Certification	CE/FCC Compliant

### Packing List

1 x NANO-ADL-P single board computer	1 x SATA cable
1 x I/O shielding	1 x QIG

### Ordering Information

NANO-ADL-P-CC-R10	EPIC SBC supports Intel® Alder Lake-P Celeron® 7305 processor with 8GB LPDDR4x memory on board default, with Dual HDMI,DP,iDPM,M.2 A key, M.2 B key, USB 3.2, SATA 6Gb/s, COM, IAUDIO,PCIe x4 for riser card and RoHS
NANO-ADL-P-i3C-R10	EPIC SBC supports Intel® Alder Lake-P Core™ i3-1215U processor with 8GB LPDDR4x memory on board default, with Dual HDMI,DP,iDPM,M.2 A key, M.2 B key, USB 3.2, SATA 6Gb/s, COM, IAUDIO,PCIe x4 for riser card and RoHS
NANO-ADL-P-i5C-R10	EPIC SBC supports Intel® Alder Lake-P Core™ i5-1235U processor with 8GB LPDDR4x memory on board default, with Dual HDMI,DP,iDPM,M.2 A key, M.2 B key, USB 3.2, SATA 6Gb/s, COM, IAUDIO,PCIe x4 for riser card and RoHS
NANO-ADL-P-i7C-R10	EPIC SBC supports Intel® Alder Lake-P Core™ i7-1255U processor with 8GB LPDDR4x memory on board default, with Dual HDMI,DP,iDPM,M.2 A key, M.2 B key, USB 3.2, SATA 6Gb/s, COM, IAUDIO,PCIe x4 for riser card and RoHS

### Optional Accessories

CB-USB02A-RS	Dual port USB cable with bracket, 300mm, P=2.0
32205-002700-200-RS	RS-232 cable, 200 mm, p=2.0 mm
AC-KIT-888S-R10	Realtek ALC888S 7.1 Channel HD Audio peripheral board,RoHS
32102-000100-200-RS	SATA power cable, MOLEX 5264-4P to SATA15P
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)
NWR2-L2S-N-R10	PCIe x4 to two PCIe x2 riser card for NANO on the left side
NWR2-R2S-N-R10	PCIe x4 to two PCIe x2 riser card for NANO on the right side
NWR-L4S-N-R10	PCIe x4 to four PCIe x1 riser card for NANO on the left side
NWR-R4S-N-R10	PCIe x4 to four PCIe x1 riser card for NANO on the right side