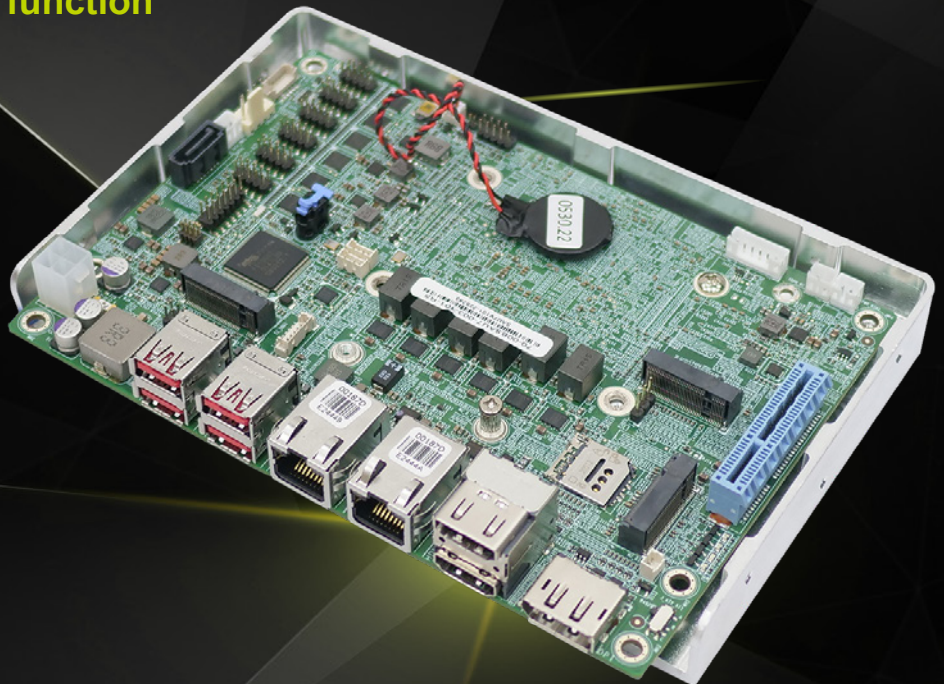


NANO-ADL-P

EPIC SBC supports Intel® Alder Lake-P/Raptor Lake-P Core™ i7/i5/i3 and Celeron® processor

- On-board LPDDR4x 3200 MHz 8GB, up to 32GB
- Support 2 x 2.5GbE with I226-V
- Support quadruple independent display
- Support PCIE X4, M.2 B key and M.2 A key expansion

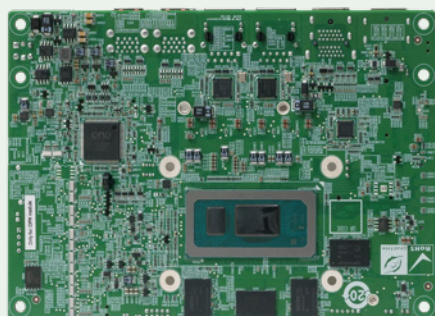
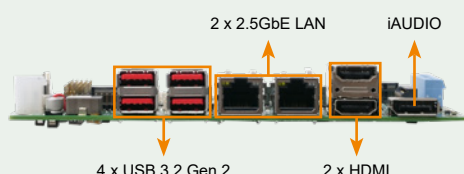
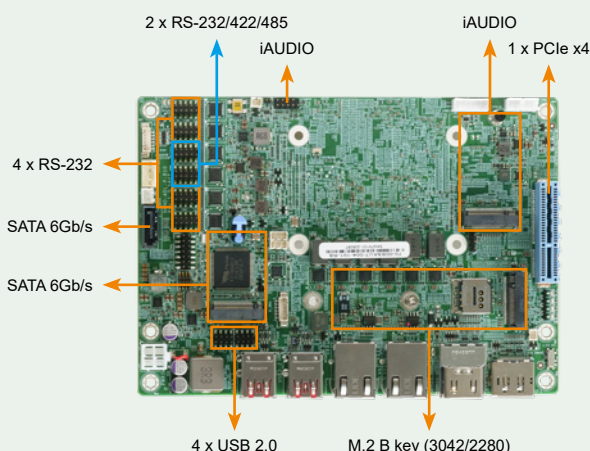
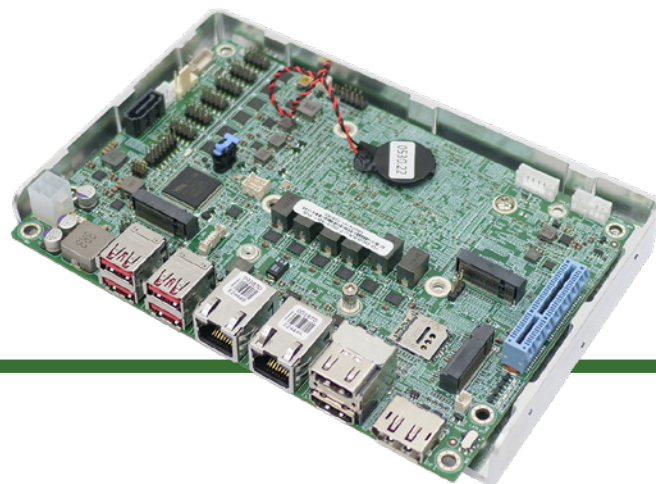
**High Performance Capability
with multi-tasking function**



www.ieiworld.com

NANO-ADL-P

EPIC SBC supports Intel® Alder Lake-P/Raptor Lake-P Core™ i7/i5/i3 and Celeron® 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



Support 12th/13th Intel® Alder Lake-P/Raptor Lake-P on-board SoC

Equipped with 12th/13th Intel® Alder Lake-P/Raptor Lake-P Celeron® 7305E, Core™ i3-1215UE, Core™ i5-1245UE and i7-1265UE on-board SoC.



Support Intel® I226V 2.5GbE Network Controller

Support RJ45 network interface via Intel® I226V 2.5GbE network controller to achieve up to 2.5GbE network transmission rate.



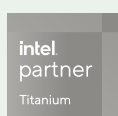
PCIe x4 Slot Available for Riser Card

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.

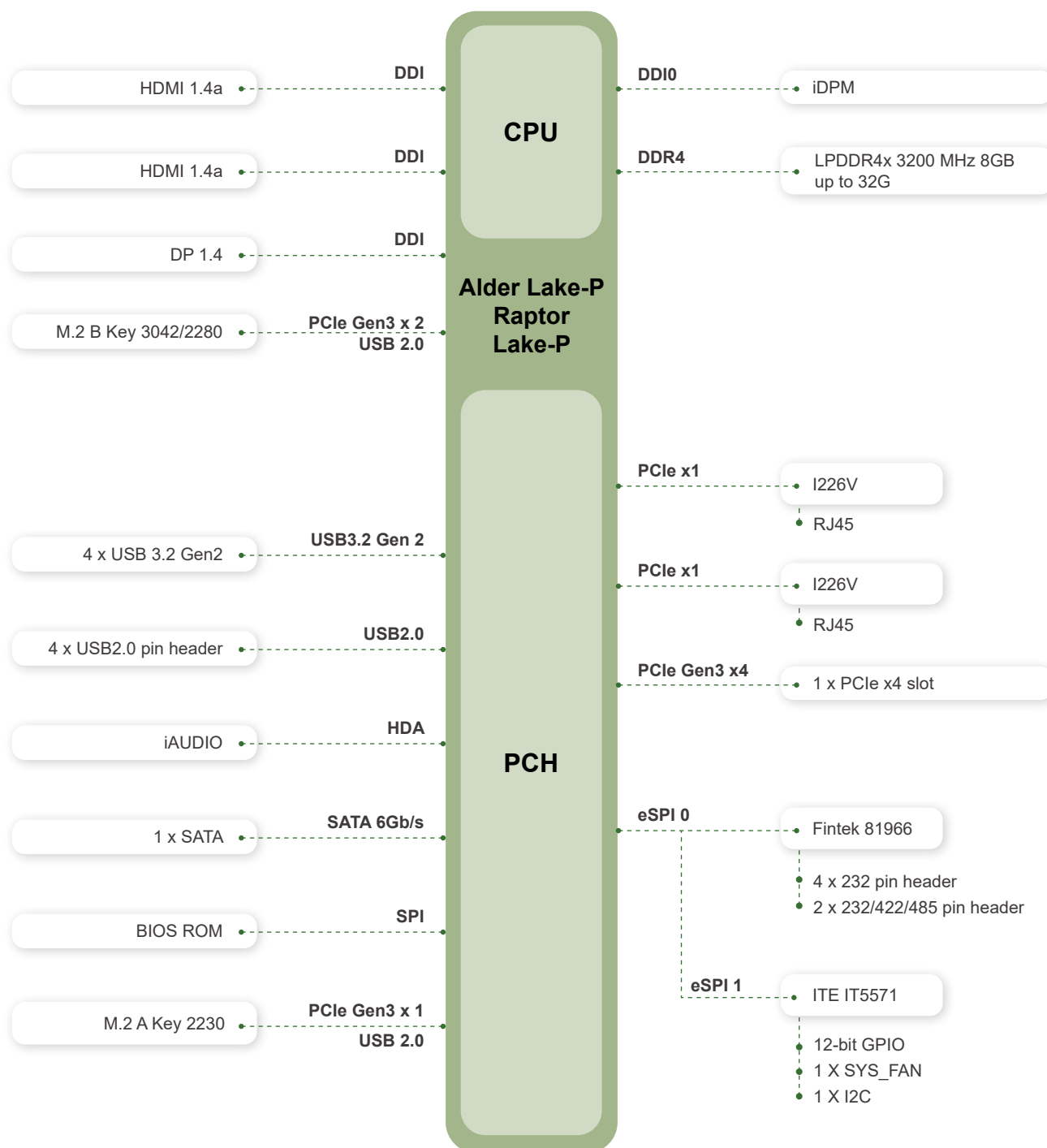


IEI-specific iDPM Interface

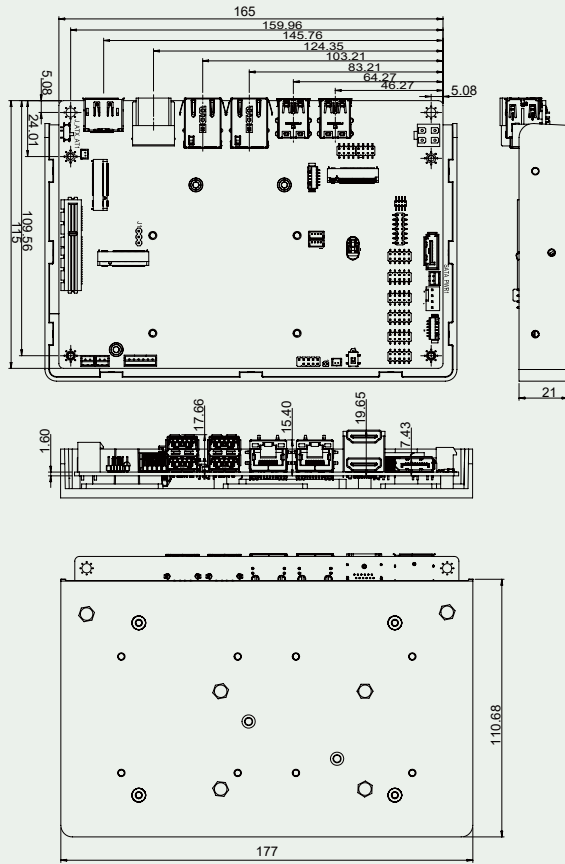
IEI uniquely designs a iDPM interface that can connect to display modules, enabling users to add LVDS/eDP/VGA display interface upon requirements.



NANO-ADL-P Block Diagram



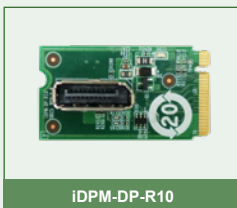
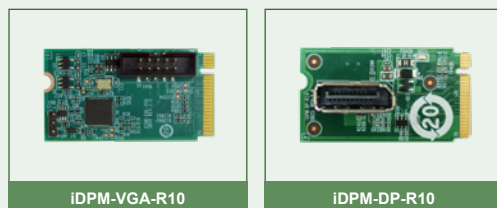
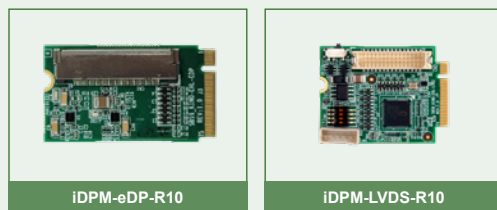
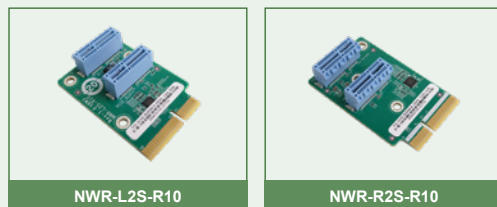
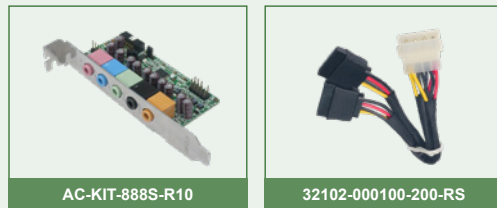
Dimensions



Specifications

Model	NANO-ADL-P
SoC	12th/13th Gen. Intel® Alder Lake-P/Raptor Lake-P on board SoC Intel® Celeron® 7305E (1.0 GHz, 5-core, 15W TDP) Intel® Core™ i3-1215UE (up to 4.4GHz, 6-core, 15W TDP) Intel® Core™ i5-1245UE (up to 4.4GHz, 10-core, 15W TDP) Intel® Core™ i7-1265UE (up to 4.7GHz, 10-core, 15W TDP)
BIOS	AMI UEFI BIOS
Memory	On-board LPDDR4x 3200 MHz 8GB up to 32GB
Graphics Engine	Intel® UHD Graphics for Celeron® and Core i3 Intel® Xe Graphics architecture for Core i5 and Core i7
Display Output	Quadruple independent display 2 x HDMI 1.4a (up to 60Hz @ 2160x3840) 1 x DP 1.4a (up to 4086 x 2160@60Hz) 1 x eDP/M 3040 slot (only for eDP/LVDS/VGA module)
Ethernet	LAN1: Intel® I226V 2.5GbE controller LAN2: Intel® I226V 2.5GbE controller (Colay with I226-LM)
External I/O Interface	4 x USB 3.2 Gen 2x1 (10Gb/s)
Internal I/O Interface	1 x SATA 6Gb/s 4 x USB 2.0 (24 pin, P=2.0) 2 x RS-232/422/485 (24S pin, P=2.0) 4 x RS-232 (24S pin, P=2.0)
SMBus	1 x I²C (14x1 pin) 1 x SMBUS (11x1 pin)
I2C	1 x I²C (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 3042/2280 (PCIe Gen3 x2 & USB 2.0) 1 x On-board SIM card socket (hinge type) for M.2 B key 1 x PCIe x4 slot (PCIe x4 signal, x4 & 2x1+2x1+1x1+1x1)
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 (The 12th Gen Intel® Core™ i7-1255UE CPU with 8 GB 3200 MHz LPDDR4x memory, max. loading, EU-PoE mode enabled)
Operating Temperature	-10°C ~ 60°C
Storage Temperature	-30°C ~ 70°C
Operating Humidity	5% ~ 95%, non-condensing
Dimension	115 mm x 165 mm
Weight	GW:900 g / NW:400 g
Certification	CE/FCC Compliant

Optional Accessories



Packing List

1 x NANO-ADL-P SBC with heat spreader	1 x SATA cable (PN: 32801-000201-300-RS)
1 x QIG	

Ordering Informaiton

NANO-ADL-P-CEC-R11	EPIC SBC supports Intel® Alder Lake-P Celeron® 7305E 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-i3EC-R11	EPIC SBC supports Intel® Alder Lake-P Core™ i3-1215UE 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-i5EC-R11	EPIC SBC supports Intel® Alder Lake-P Core™ i5-1245UE 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-i7EC-R11	EPIC SBC supports Intel® Alder Lake-P Core™ i7-1265UE 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
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
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-VGA-R10	eDP to VGA Connector converter board (for IEI Display Module)
iDPM-DP-R10	eDP to DP DisplayPort converter board (for IEI iDPM connector)
CM-WAFER-WF-R10	Cooler Module (W/FAN); Mechanical; for WAFER/NANO series; RoHS
CM-WAFER-WOF-R10	Cooler Module (W/O FAN); Mechanical; for WAFER/NANO series; RoHS