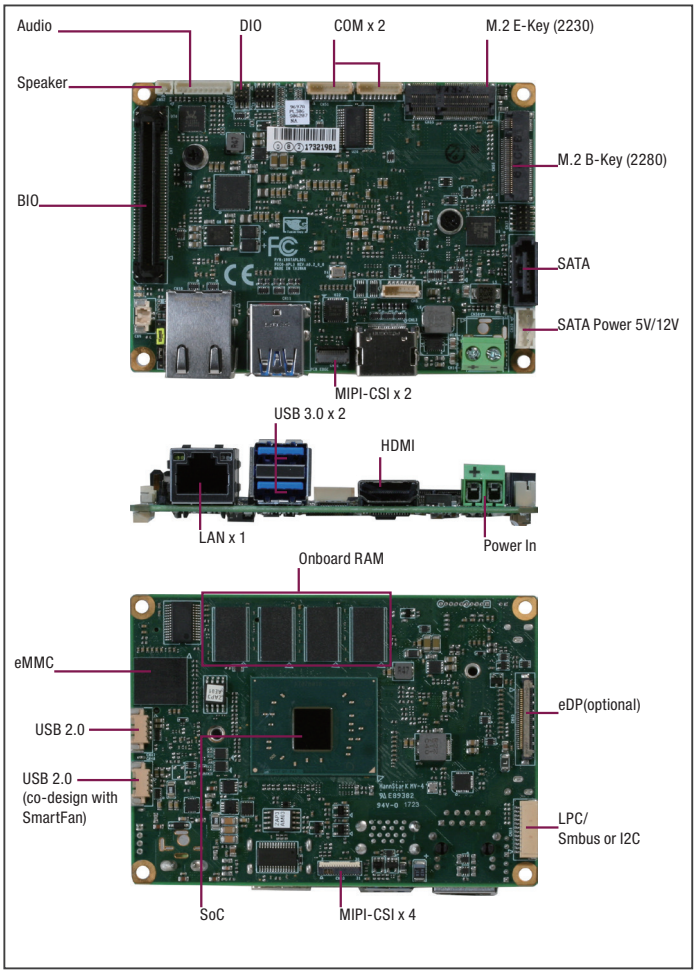
Pico-ITX Board with Intel® Pentium® N4200/ Celeron® N3350/ Atom™ Processor SoC



Features

- Intel® Pentium® N4200/ Celeron® N3350/ Atom™ Processor SoC
- Onboard Storage eMMC 32GB (Optional to 16GB/64GB/128GB)
- Onboard DDR3L 2GB or 4GB
- Single Gigabit Ethernet Support
- HDMI 1.4b, eDP for Display
- BIO Reserved (Optional)
- USB 3.0 x 2, USB 2.0 x 2, SATA 6.0Gb/s x 1
- M.2 B Key (2280) x 1, M.2 E Key (2230) x 1
- Onboard HDA Audio Supports (Line in, Line-out, MIC)
- MIPI-CSI 2 Lanes x 1 for 2M Camera (Optional)
- MIPI-CSI 4 Lanes x 1 for 8M Camera (Optional)

Specifications

System	
Form Factor	Pico-ITX
CPU	Intel® Atom™ Processor SoC
CPU Frequency	Up to 2.4 GHz
Chipset	Intel® Atom™ Processor SoC
Memory Type	Onboard DDR3L 2G (Optional to 4G)
Max. Memory Capacity	Up to 4GB
BIOS	AMI/SPI
Wake On LAN	Yes
Watchdog Timer	255 Levels
Power Requirement	+12V, AT/ATX
Power Supply Type	Lockable & phoenix Terminal co-lay
Power Consumption (Typical)	Intel® N4200 processor, DDR3L 4GB, 1.1A@12V
System Cooling	Heat-spreader, heatsink & cooler (Optional)
Dimension	3.94" x 2.84" (100mm x 72mm)
Gross Weight	0.55 lb (0.25 kg)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C),
Storage Temperature	-40˚F ~ 176˚F (-40˚C ~ 80˚C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	110,000
Certification	CE,FCC
Display	
Chipset	Intel® Atom™ Processor SoC
Resolution	HDMI 1.4b: 3840 x 2160@30Hz Internal eDP: 3840 x 2160@60Hz (Optional) DDI (Optional from BIO)
LCD Interface	eDP

I/O	
Storage/SSD	SATA 6.0Gb/s x 1, 5V/12V Power reserved M.2 2280 (B Key) x 1 eMMC 16GB (optional to 32GB/64GB/128GB)
Ethernet	Realtek 8111G x 1
USB Port	USB 3.0 x 2 Rear IO USB 2.0 x 2 (Internal, co-use with FAN connector)
Serial Port	COM1: RS-232 COM2: RS-232
Audio	ALC269 (Included Amp)
DIO	4-bit
Expansion Slot	M.2 2230 x 1 (E-Key) BIO x 1 (Optional) I2C, Smbus, I2S MIPI-CSI x 2 Lanes (Optional) MIPI-CSI x 4 Lanes (Optional)
SIM	—
TPM	TPM2.0 (Optional)
Touch	—

Packing List

- PICO-APL3

Optional Accessories

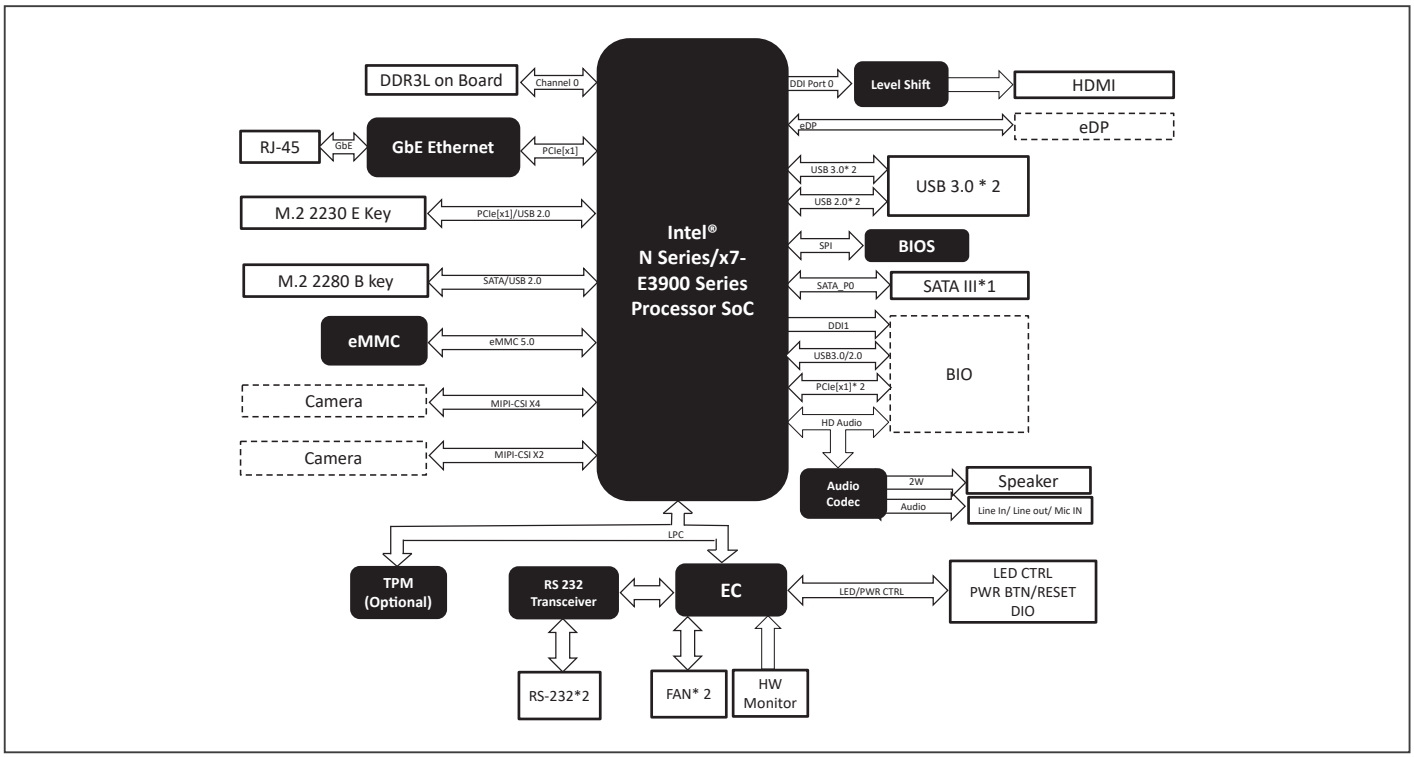
Part Number	Description	Qty
1709070500	(TF) SATA Cable, 50cm	1
1702150155	(TF) SATA Power Cable, 15cm	1
PICO-APL3-HSK01	Heatsink, used with heat spreader	1
PICO-APL3-HSP01	Heat Spreader	1
1700040151	(TF) USB Cable, 15cm	2
1701090122	(TF)Flat Cable, D-Sub 9P(M), 9P 1.0mm Housing, 12cm	2
1709100254	(TF) Phone Jack Cable, 25cm	1
1255300408	(TF)Power Adapter, 12V, 40W, FSP, FSP040-RHAN2.9NA0404990, ESD	1
1702030176	(TF)Power Cable, 3P DC jack, TERMINAL*2.17cm, TKS-G21-LN05	1

*Please refer to PICO-APL3-SEMI page for further option.

*eDP cable custom by required.

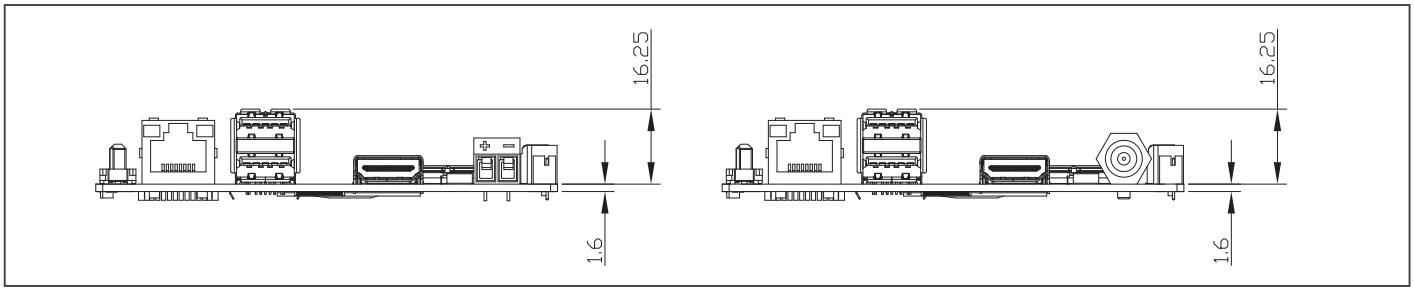
Note: All specifications are subject to change without notice.

Block Diagram



Dimension

Unit: mm



Ordering Information

Part Number	CPU	Memory	Thermal	Display	Storage	LAN	USB	RS-232	RS-232/422/485	Expansion Slot	Power	Temp.	Others
PICO-APL3-A10-0001	Celeron® N3350 (Dual Core)	Onboard DDR3L 2GB	W/o Heatspreader	HDMI x 1	SATA 3.0 x 1 M.2 2280 (B Key) x 1 eMMC 32GB	GbE x 1	USB 3.0 x 2 (Rear) USB 2.0 x 2 (Internal)	2	—	M.2 2230 (E Key) x 1	+12V (Phoenix Terminal)	0°C ~ 60°C	DIO 4 bit Full Audio with Amp
PICO-APL3-A10-0002	Celeron® N3350 (Dual Core)	Onboard DDR3L 4GB	W/o Heatspreader	HDMI x 1 eDP x 1	SATA 3.0 x 1 M.2 2280 (B Key) x 1 eMMC 32GB	GbE x 1	USB 3.0 x 2 (Rear) USB 2.0 x 2 (Internal)	2	—	M.2 2230 (E Key) x 1	+12V (Phoenix Terminal)	0°C ~ 60°C	DIO 4 bit Full Audio with Amp
PICO-APL3-A10-0003	Pentium® N4200 (Quad Core)	Onboard DDR3L 4GB	W/o Heatspreader	HDMI x 1	SATA 3.0 x 1 M.2 2280 (B Key) x 1 eMMC 32GB	GbE x 1	USB 3.0 x 2 (Rear) USB 2.0 x 2 (Internal)	2	—	M.2 2230 (E Key) x 1	+12V (Phoenix Terminal)	0°C ~ 60°C	DIO 4 bit Full Audio with Amp
PICO-APL3-A10-DC04	Celeron® N3350 (Dual Core)	On board DDR3L 2GB	W/o Heatspreader	HDMI x 1	SATAIII x 1 M.2 2280 (B Key) x 1 eMMC 32GB	GbE x 1	USB 3.0 x 2 (Rear) USB 2.0 x 2 (Internal)	2	—	M.2 2230 (E Key) x 1	+12V (DC Jack)	0°C ~ 60°C	DIO 4 bit Full Audio with Amp