

PICO-APL3-SEMI

PICO-SEMI Embedded Barebone Kit with Intel® Celeron/Pentium Processor SoC



Specifications

SYSTEM	
FORM FACTOR	PICO-SEMI
CPU	Intel® Atom® / Celeron® / Pentium® Processors: N4200 (4C/4T, 1.10GHz, 6W) N3350 (2C/2T, 1.10GHz, 6W)
CHIPSET	Integrated with Intel® SoC
MEMORY TYPE	Onboard DDR3L 1866, Single Channel, Non-ECC (Max. 4GB)
BIOS	UEFI
WAKE ON LAN	Yes
WATCHDOG TIMER	255 Levels
SECURITY	TPM2.0 (Optional)
RTC Battery	Lithium Battery 3V/240mAh
DIMENSION	W/o heat sink: 4.80" x 3.18" x 1.18" (122mm x 80.8mm x 30mm) W/ heat sink: 4.80" x 3.18" x 1.75" (122mm x 80.8mm x 44.4mm)
Gross Weight	W/o heat sink: 0.38 lb (0.17 kg) W/ heat sink: 0.91 lb (0.41 kg)
OS Support	Windows 10 (64 bit) Linux Ubuntu 16.04.2 / Kernel 4.8.0-36
POWER	
POWER REQUIREMENT	+12V
POWER SUPPLY TYPE	ATX
CONNECTOR	DC Jack Connector
POWER CONSUMPTION	Intel® N4200, DDR3L 8GB x 1, 1.08A, eMMC 32GB@ +12V(TYPICAL)
DISPLAY	
CONTROLLER	Intel® HD Graphics 500/505
LVDS/eDP	—
Display Interface	HDMI 1.4 x 1, 3840 x 2160 @30Hz
Multiple Display	1 Simultaneous Display
AUDIO	
CODEC	Realtek ALC269 (Optional)
AUDIO INTERFACE	Line-out (Optional)
Speaker	—
EXTERNAL I/O	
ETHERNET	Realtek 8111 1GbE, RJ45 x 1
USB	USB 3.2 Gen1 x 2
SERIAL PORT	COM1~2 (RS232, Optional)
VIDEO	HDMI 1.4 x 1

Features

- 180g Extreme Light System, Easy To Adapter Everywhere
- Gigabit Ethernet for Networking Connection
- USB 3.2 Gen 1 Connectivity
- HDMI
- M.2 2280 (B) M.2 2230 (E) Slot for WiFi/3G/4G Bluetooth Module
- Fix Holes for Antenna, Wallmount, DIN-Rail Kit Optional
- Lockable 12V DC Input



INTERNAL I/O	
USB	—
SERIAL PORT	—
VIDEO	—
SATA	eMMC5.1 32GB (Optional to 16/64GB)
AUDIO	Line-out (Optional)
DIO/GPIO	—
SMBus/I2C	—
FAN	—
Front Panel	HDD LED, PWR LED, Power Button, Buzzer, Reset
Others	—
EXPANSION	
Mini PCI-E/mSATA	—
M.2	M.2 2230 E-Key x 1 (PCIe 3.0 [x1] + USB2.0) M.2 2280 B-Key x 1 (SATA + USB2.0)
Others	—
ENVIRONMENT & CERTIFICATION	
OPERATING TEMP	32°F ~ 122°F (0°C ~ 50°C) with 0.5 m/s airflow
STORAGE TEMP	-40°F ~ 185°F (-40°C ~ 85°C)
OPERATING HUMIDITY	0% ~ 90% relative humidity, non-condensing
MTBF (HOURS)	110,000
EMC	CE/FCC Class A

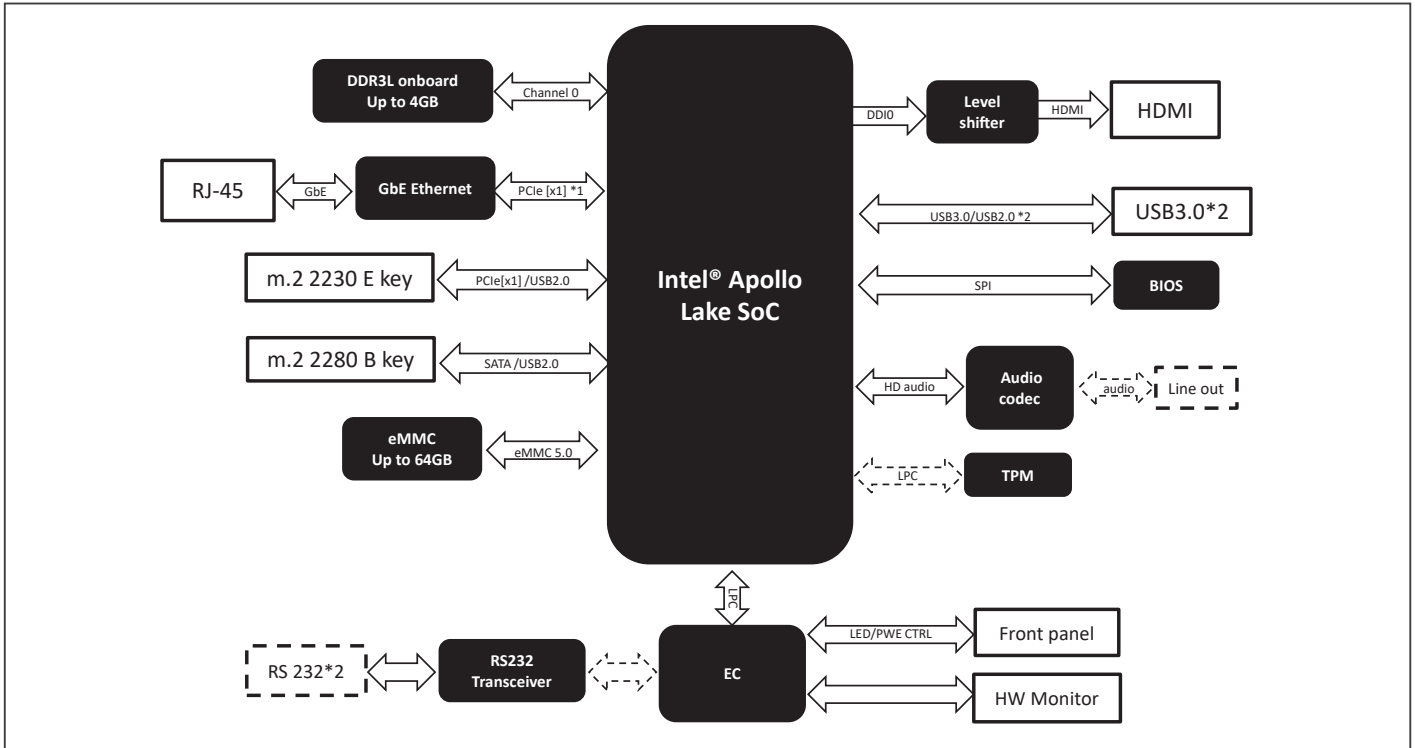
Packing List

- PICO-APL3-SEMI

Optional Accessories

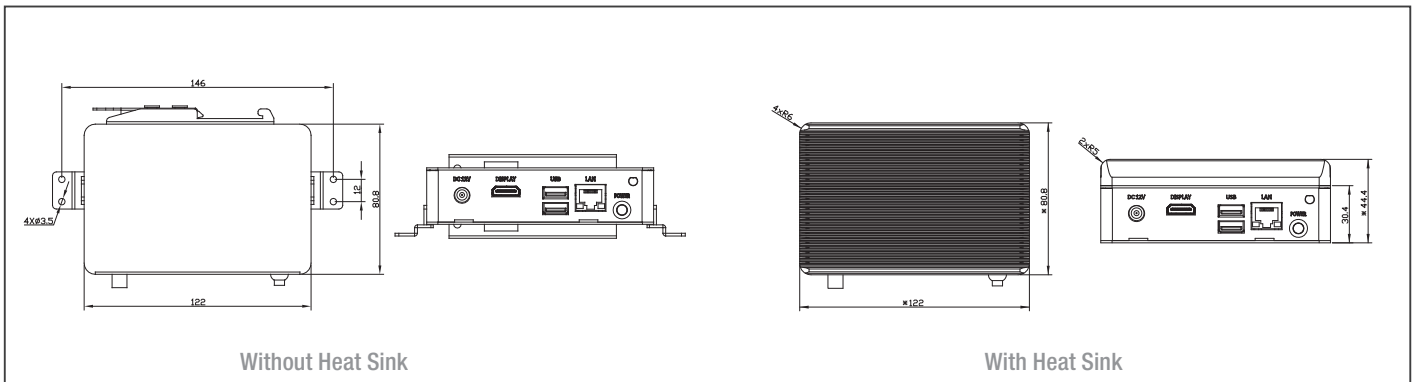
Part Number	Description	Qty.
125530040C	Power Adapter.12V.40W.FSP.FSP040-DHAN3.9NA0406805	1
125530060Z	Power Adapter 12V/5A 60W FSP060-DHAN3	1
1702031802	POWER CORD.3P-125V 10A 180D.1.8M USA (US Type)	1
1702031803	POWER CORD.3P-250V 10A 180D.1.8M.VDE (Europe Type)	1
170203180E	Power cord.3P.125V/7A.1.8M (Japan type)	1
1701090122	Flat Cable.120mm.for PICO-APL3.SEMI	2
1703100084	PHONE JACK Cable.80mm	1
9761SEMI00	WALL MOUNT KITS	1
9761SEMI01	DIN-RAIL Kits	1

Block Diagram



Dimension

Unit: mm



Ordering Information

Part number	CPU	Memory	Thermal	Display	Storage	LAN	USB	Expansion slot	Power	Operating Temp	Others
PICO-APL3-SEMI-A10-FS01	N3350	Onboard DDR3L 2GB	W/ heat sink	HDMI x 1	SATAIII x 1 eMMC 32GB	GbE x 1	USB3.2 Gen 1 x 2	M.2 2280 B-key x 1 M.2 2230 E-key x 1	+12V (ATX)	0~50°C	I2C x 1
PICO-APL3-SEMI-A10-FS02	N3350	Onboard DDR3L 4GB	W/ heat sink	HDMI x 1	SATAIII x 1 eMMC 32GB	GbE x 1	USB3.2 Gen 1 x 2	M.2 2280 B-key x 1 M.2 2230 E-key x 1	+12V (ATX)	0~50°C	I2C x 1
PICO-APL3-SEMI-A10-FS03	N4200	Onboard DDR3L 4GB	W/ heat sink	HDMI x 1	SATAIII x 1 eMMC 32GB	GbE x 1	USB3.2 Gen 1 x 2	M.2 2280 B-key x 1 M.2 2230 E-key x 1	+12V (ATX)	0~50°C	I2C x 1
PICO-APL3-SEMI-A10-FS04	N3350	Onboard DDR3L 2GB	W/O heat sink	HDMI x 1	SATAIII x 1 eMMC 32GB	GbE x 1	USB3.2 Gen 1 x 2	M.2 2280 B-key x 1 M.2 2230 E-key x 1	+12V (ATX)	0~50°C	I2C x 1
PICO-APL3-SEMI-A10-FS05	N3350	Onboard DDR3L 4GB	W/O heat sink	HDMI x 1	SATAIII x 1 eMMC 32GB	GbE x 1	USB3.2 Gen 1 x 2	M.2 2280 B-key x 1 M.2 2230 E-key x 1	+12V (ATX)	0~50°C	I2C x 1
PICO-APL3-SEMI-A10-FS06	N4200	Onboard DDR3L 4GB	W/O heat sink	HDMI x 1	SATAIII x 1 eMMC 32GB	GbE x 1	USB3.2 Gen 1 x 2	M.2 2280 B-key x 1 M.2 2230 E-key x 1	+12V (ATX)	0~50°C	I2C x 1