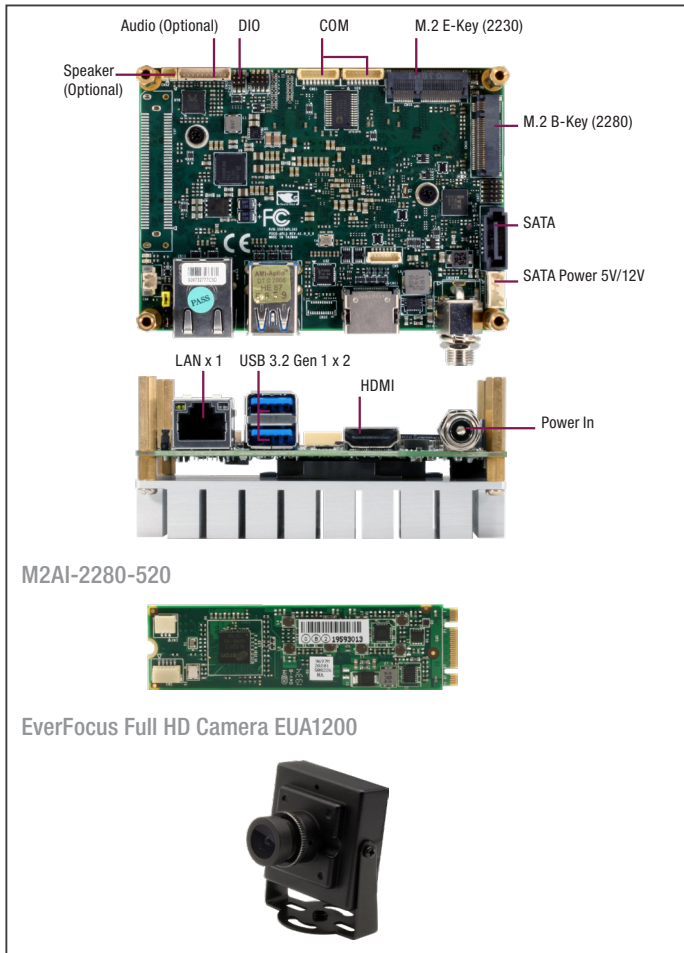


PICO-APL3-A10-FA1

PRELIMINARY

AI Edge Computing Kit with Kneron KL520 NPU



Specifications

SYSTEM	
FORM FACTOR	PICO-ITX
CPU	Intel® Celeron® Processor: Pentium N4200 (4C/4T, 1.10GHz, up to 2.50GHz, TDP 6W)
CHIPSET	Integrated with Intel® SoC
MEMORY TYPE	Onboard DDR3L 4GB
BIOS	UEFI
WAKE ON LAN	Yes
WATCHDOG TIMER	255 Levels
SECURITY	—
RTC Battery	Lithium Battery 3V/240mAh
DIMENSION	3.94" x 2.84" (100mm x 72mm)
Gross Weight	0.18 lbs. (0.08 kg)
OS Support	Windows 10 (64 bit)
POWER	
POWER REQUIREMENT	+12V
POWER SUPPLY TYPE	AT/ATX
CONNECTOR	Lockable DC Jack Connector
POWER CONSUMPTION	Intel® N4200 processor, DDR3L 4GB, 1.1A@12V
DISPLAY	
CONTROLLER	Intel® HD Graphics 505
LVDS/eDP	—
Display Interface	HDMI 1.4b x 1 (up to 3840 x 2160@30Hz)
Multiple Display	1 Simultaneous Displays
AUDIO	
CODEC	—
AUDIO INTERFACE	—
Speaker	—

Features

- Intel® Pentium® N4200 Processor SoC
- Onboard Storage eMMC 32GB
- Onboard DDR3L 4GB
- Single Gigabit Ethernet Support
- HDMI 1.4b for Display
- USB 3.2 Gen 1 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
- M2AI-2280-520 x 1
- EverFocus Full HD Camera EUA1200 x 1



EXTERNAL I/O	
ETHERNET	Realtek 8111 Gigabit Ethernet 10/100/1000Base, RJ-45 x 1
USB	USB 3.2 Gen 1 x 2
SERIAL PORT	—
VIDEO	HDMI 1.4b x 1 (up to 3840 x 2160@30Hz)
INTERNAL I/O	
USB	USB 2.0 x 2 (Internal, co-use with FAN connector)
SERIAL PORT	COM1 (RS232)
VIDEO	eDP x 1 (up to 3840x2160@60Hz, Optional)
SATA	SATA III x 1 +5V SATA Power Connector x 1 eMMC 32GB
AUDIO	—
DIO/GPIO	4-bit
SMBus/I2C	I2C/SMBus x 1 (I2C as default)
Touch	—
FAN	—
SIM	—
Front Panel	HDD LED, PWR LED, Power Button, Buzzer, Reset
Others	—
EXPANSION	
Mini PCI-E/mSATA	—
M.2	M.2 E-Key 2230 x 1 (PCIe/USB) M.2 B-Key 2280 x 1 (SATA/USB)
Others	—
ENVIRONMENT & CERTIFICATION	
OPERATING TEMP	32°F ~ 140°F (0°C ~ 60°C)
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
- M2AI-2280-520
- EverFocus Full HD Camera EUA1200

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-FAI1	Celeron® N4200 (Quad Core)	Onboard DDR3L 4GB	w/ Heatsink	HDMI x 1	SATA 3.0 x 1 M.2 2280 (B Key) x 1 eMMC 32GB	GbE x 1	USB 3.2 Gen 1 x 2 (Rear) USB 2.0 x 2 (Internal)	1	—	M.2 2230 (E Key) x 1	+12V (DC Jack)	0°C ~ 60°C	DIO 4 bit

Optional Accessories

Part Number	Description	Qty
1709070500	(TF) SATA Cable, 50cm	1
1702150155	(TF) SATA Power Cable, 15cm	1
1700040151	(TF) USB Cable, 15cm	2
1701090122	(TF) Flat Cable, D-Sub 9P(M), 9P 1.0mm Housing, 12cm	1
125530040C	(TF) Power Adapter.12V.40W.FSP.FSP040-DHAN3	1
1702031802	Power Cord (US Type)	1
1702031803	Power Cord (European Type)	1
170203180E	Power Cord (Japan Type)	1