

Embedded Single Board for OEM/ODM

# ONYX PICO-APL3

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 3.2 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
- 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 2.4GHz
Chipset	Intel® Atom™ Processor SoC
Memory Type	Onboard DDR3L 2GB (Optional to 4GB)
Memory Capacity	Up to 4 GB
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	Intel® N4200 processor, DDR3L 4GB, 1.1A@12V
System Cooling	Heat-spreader / heatsink optional
Dimension (L x W)	3.94" x 2.84" (100 mm x 72 mm)
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
MFTB (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 3.2 Gen 1 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)
TPM	TPM2.0 (Optional)
Touch	—