

athena A2 Kit
AloT Kit

KEY FEATURES

- Intel® Apollo Lake J3455 Processor
- 1 x IP camera (2MP, 1080P@30fps, H.264)
- 1 x Movidius Myriad X (Supports OpenVINO™) (Optional)
- Supports LPDDR4 2400MHz 4GB, up to 8GB
- 2 x USB 3.2 Gen1, 1 x M.2 Key B, 1 x M.2 Key M, 1 x M.2 Key E
- 2 x Realtek Gigabit LAN
- 1 x HDMI 1.4b
- 1 x micro SD card slot
- 1 x 32GB eMMC
- 1 x micro SIM socket
- TPM 2.0 onboard IC
- 12V DC-In/ PoE (PD) with 25.5W (Optional)

SPECIFICATIONS

Form Factor

Dimensions	6.5-in x 3.8-in
------------	-----------------

Processor System

CPU	Intel® Atom Apollo Lake J3455 processor
Chipset	SoC
Socket	N/A
BIOS	AMI SPI 128 Mbit

Memory

Technology	Onboard LPDDR4 2400 MHz
Capacity	4 GB, up to 8GB
Socket	N/A

Graphics

Controller	SoC integrated graphics
HDMI	HDMI 1.4b Max resolution up to 3840x2160@30Hz
DisplayPort	N/A
VGA	N/A
LVDS	N/A
eDP	N/A
DVI	N/A
MultiDisplay	N/A

Expansion Slot

PCIe	N/A
PCI	N/A
mini-PCIe	N/A
M.2	1 x M.2 (Key E, 2230) with PCIe x1 and USB 2.0 for Wireless
SIM Socket	1 x micro SIM Socket connected to M.2 Key B 3042/3052

Audio

Interface	N/A
-----------	-----

Ethernet

Controller/ Speed	LAN: 1 x Realtek RTL8111G/RTL8111H-CG with 10/100/1000 Mbps (PoE (PD) with 25.5W) LAN: 2 x Realtek RTL8111G/RTL8111H-CG with 10/100/1000 Mbps (IP Camera Header)
Connector	1 x RJ-45

Rear I/O

HDMI	1 x HDMI 1.4b
DisplayPort	N/A
VGA	N/A
DVI	N/A
Ethernet	1 x 1 Gigabit LAN, PoE (PD) with 25.5W (Optional)
USB	2 x USB 3.2 (Gen1)
Audio	N/A
COM	N/A
PS2	N/A
others	1 x micro SD connector

Internal Connector

USB	2 x USB 2.0 header
COM	N/A
Parallel	N/A
GPIO	N/A
TPM	TPM 2.0 onboard IC
LVDS	N/A
eDP	N/A
VGA	N/A
SATA PWR Output	1 x 4-pin SATA Power
Speaker Header	N/A
IPCAM interface	LAN signal 1x6 header Power 1x2 header
40-pin GP-bus	40 pin General Purpose bus

Storage

M.2	1 x M.2 (Key B, 3042/3052) with PCIe x1 and USB 3.2Gen1, USB 2.0 1 x M.2 (Key M, 2280) with PCIe x2
mSATA	N/A
SATA	1 x SATA3 (6Gb/s)
eMMC	Onboard eMMC 32GB

Watchdog Timer

Output	From Super I/O to drag RESETCON#
Interval	256 Segments, 0, 1, 2, ...255sec

Power Requirements

Input PWR	12V DC-In (DC Jack) PoE (PD) with 25.5W (LAN Port) (Optional)
Power On	AT/ATX Supported - AT : Directly PWR on as power input ready - ATX : Press button to PWR on after power input ready

Environment

Operating Temp	0°C ~ 50°C
Storage Temp	-40° C ~ 85° C
Operating Humidity	10% ~ 90%
Storage Humidity	10% ~ 90%

Others

IP camera	2MP, 1080P @30fps, H.264
Movidius	1 x M.2 (Key M, 2280) Movidius Myriad X (Supports OpenVINO™) (Optional)
Adapter	1 x AC-in 100~240V, DC-out 12V
OS Support	Linux Ubuntu 16.04
Accessories	1 x IP Camera Signal Cable 1 X IP Camera Power Cable 1 x SATA Data Cable 1 x SATA Power Cable 1 x Heatsink Fan 8 x Standoffs