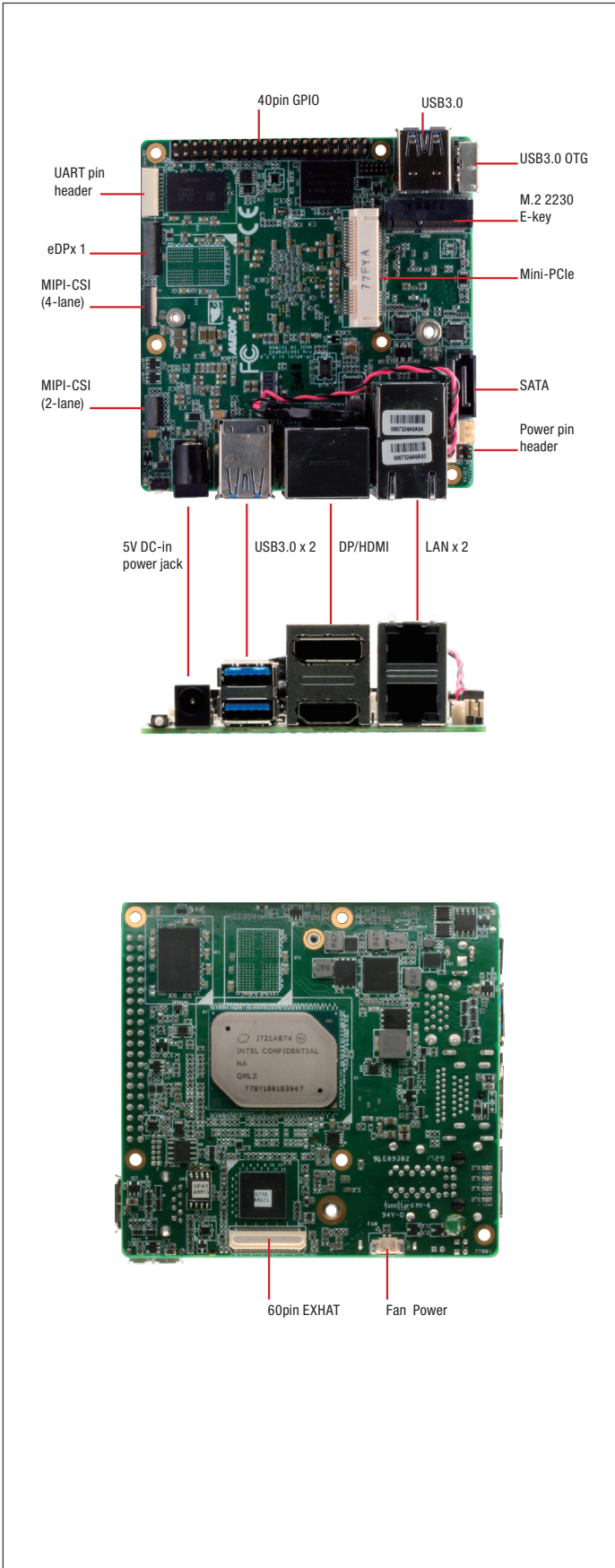


# UP Squared

UP Squared Developer Board with Intel® Apollo Lake SoC N4200/N3350 Processor SoC



## Features

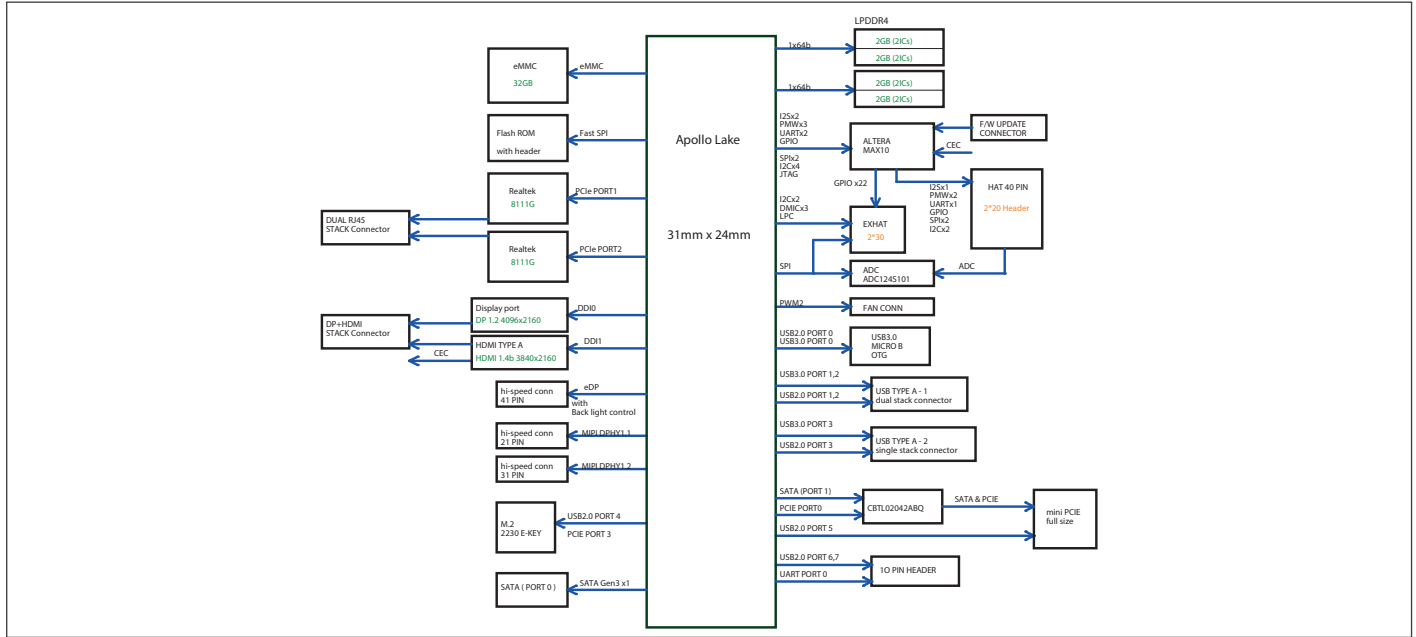
- Intel® Apollo Lake SoC N4200/N3350 Processor SoC
- Onboard LPDDR4 Memory up to 8GB
- Onboard eMMC Storage up to 128GB
- Gigabit LAN x 2, USB 2.0 x 2, USB 3.0 (Type A) x 3
- 5V DC-in, 4-6A
- 40 pin GPIO x 1
- DP/eDP/HDMI x 1
- MIPI-CSI (4-Lane & 2-Lane) x 1
- Mini-PCIe /M.2 2230 x 1
- SATA3 x 1
- 60pin EXHAT



## Specifications

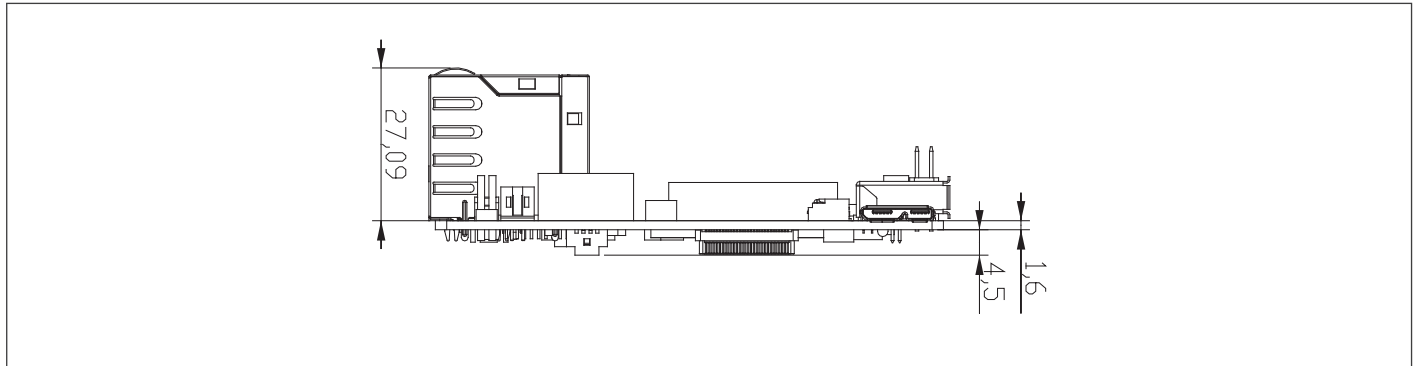
System	
Processor	Intel® Apollo Lake N4200/N3350/3940/E3950 Processor SoC
Graphics	Intel® Gen 9 HD, supporting 4K Codec Decode and Encode for HEVC4, H.264, VP8
I/O	HDMI x 1 DP x 1 I2S Audio Port
Camera	CSI 2-Lane + CSI 4-Lane
USB	USB 2.0 x 2 USB3.0 OTG x 1 USB3.0 (Type A) x 3
Expansion	40 pin GPIO x 1 Mini-PCIe x 1 M.2 2230 x 1 SATA3 x 1 60 pin EXHAT x 1
RTC	Yes
Power	5V DC-in @ 4A-6A
Dimension	3.37" x 3.54" / 85.60 mm x 90 mm
Memory	2GB (single channel) LPDDR4 4GB/8GB (dual channel) LPDDR4)
Storage	eMMC 32 GB / 64 GB / 128 GB
Display Interface	eDP
Ethernet	Gb Ethernet (full speed) RJ-45 x 2
OS Support	Microsoft Windows 10 (full), Windows IOT Core, Linux (ublinux, Ubuntu, Yocto), Android Nougat
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Operation Humidity	0% ~ 90% relative humidity, non-condensing
Certification	CE/FCC Class A, RoHS Compliant, REACH

### Block Diagram



### Dimension

Unit: mm



### Ordering Information

Part number	Description
UPS-APLC2-A20-0232	UP <sup>2</sup> (UP Squared) board with Apollo Lake Intel® Celeron™ Dual Core N3350 up to 2.4GHz, on board 2GB DDR4, 32GB eMMC
UPS-APLC2-A20-0432	UP <sup>2</sup> (UP Squared) board with Apollo Lake Intel® Celeron™ Dual Core N3350 up to 2.4GHz, on board 4GB DDR4, 32GB eMMC
UPS-APLP4-A20-0432	UP <sup>2</sup> (UP Squared) board with Apollo Lake Intel® Pentium™ N4200 Quad Core up to 2.5 GHz, on board 4GB DDR4, 32GB eMMC
UPS-APLP4-A20-0864	UP <sup>2</sup> (UP Squared) board with Apollo Lake Intel® Pentium™ N4200 Quad Core up to 2.5 GHz, on board 8GB DDR4, 64GB eMMC
UPS-APLP4-A20-08128	UP <sup>2</sup> (UP Squared) board with Apollo Lake Intel® Pentium™ N4200 Quad Core up to 2.5 GHz, on board 8GB DDR4, 128GB eMMC
UPS-APLX5-A20-0432	UP <sup>2</sup> (UP Squared) board with Apollo Lake Intel® Pentium™ E3940.4G memory 32G eMMC.Rev.1.0
UPS-APLX7-A20-0464	UP <sup>2</sup> (UP Squared) board with Apollo Lake Intel® Pentium™ E3950.4G memory 64G eMMC.Rev.1.0

### Packing List

- UPS-APL with Heatsink