

Features

- Intel® Pentium® N4200/ Celeron® 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

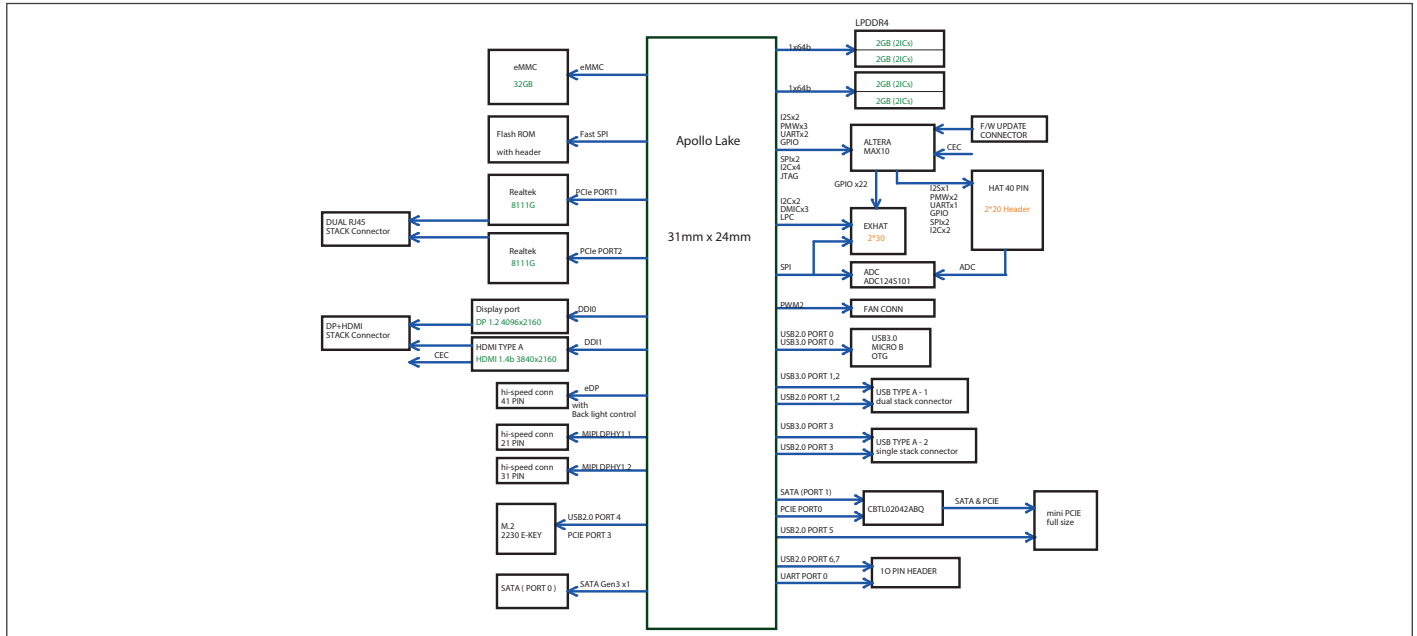
System	
Processor	Intel® Celeron® Processor N3350 Intel® Pentium® Processor N4200 Intel Atom® x7-E3950 Intel Atom® x5-E3940
Graphics	Intel® HD Graphics
Memory	Up to 8GB onboard LPDDR4
Storage	Up to 128GB onboard eMMC
I/O	HDMI 1.4b x 1 DP 1.2 x 1
Camera	MIPI-CSI via 21 Pin FPC connector x 1 MIPI-CSI via 31 Pin FPC connector x 1
USB	USB 2.0 x 2 (via 10 Pin Header x 1) USB 3.2 Gen 1 x 3 (Type-A) USB 3.2 Gen 1 OTG x 1 (Micro B)
Expansion	40-pin GPIO x 1 Full-sized mPCIe x 1 (PCIe & SATA [x1] , USB2.0 [x1]) M.2 2230 E-Key x 1 (PCIe [x1], USB2.0 [x1]) SATA III x 1 60 Pin EXHAT x 1
Display Interface	HDMI 1.4b x 1 DP 1.2 x 1 eDP 1.3 x 1
Ethernet	GbE x 2 (Realtek 8111H CG)
Security	fTPM
RTC	Yes
OS Support	Windows® 10 IoT Enterprise LTSC 2021 Windows IoT Core Linux Ubuntu 20.04 LTS Linux Yocto 3.1
Power Requirement	
Power	5V DC-in
Power Supply Type	AT/ATX (AT as default)
Power Consumption (Typical)	15.05W
Mechanical	
Dimension	3.37" x 3.54" (85.6 mm x 90 mm)
Net Weight	0.463 lbs (0.21kg)
Gross Weight	0.639 lbs (0.29kg)
Environment	
Operating Temperature	32°F ~ 140°F (0°C ~ 60°) / 0.5 airflow
Operation Humidity	0%~90% relative humidity, non-condensing
MTBF	173,446 Hours
Certification	CE/FCC Class A, RoHS compliant, REACH

Packing List

- UP Squared with Heatsink

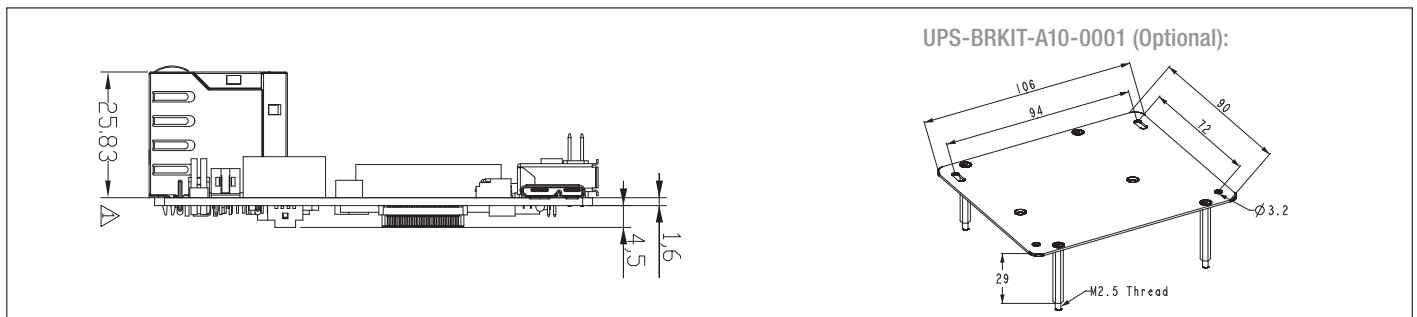


Block Diagram



Dimension

Unit: mm



Optional Accessories

Part Number	Description
1255200303	(TF)Power Adapter,AC/DC,100-240VAC,50/60Hz,1.4A,5V 6A,30W MAX.MW.GST60A05-P1J
170203180J	(TF)POWER CORD.3P-250V 13A.UK type.1830mm (for UK)
170X000799	(TF)Power Cord. 3P. 125V. 10A. 180D. USA. 1. 8M. I-SHENG. SP305B/IS-14N SVT 18/3 60C CT-12 Black (for US)
170X001024	(TF)Power Cord.3P.250V.10A.VDE.1.8M.I-SHENG.SP23/IS-14N H05VV-F 3G 0.75 CT-12.Black (for EU)
170X001231	(TF)Power Cord.3P.250V.10A.180D.1800mm.I SHENG ELECTRIC.SP-506A+IS-14N (for China)
170X000806	(TF)Power Cord. 3P. 125V. 7A. 1. 8M. I-SHENG. U4NCB3T6B1218002. SP305B/IS-14N VCTF. Black. BSMI (for Taiwan)
170X000803	(TF)Power Cord.3P.125V/7A.PSE Certificate.1.8M.I-SHENG.U4NCB3P6C1218002.SP305B/IS-14N VCTF 0.75/3 Black 1.8M (for Japan)
170X000810	(TF)Power Cord.3P.250V.16A.Korea.1.8M.I-SHENG.SP23/IS-14N H05VV-F 3G 0.75 CT-12 Black (for Korea)
170X000805	(TF)Power Cord.3P.250V.10A.SWISS.1.8M.I-SHENG.SP-027C/IS-14N H05VV-F 3G 0.75mm CT-12 Black (for Switzerland)
1709070500	SATA cable
1702150155	SATA power cable(15cm)
1702150306	SATA power cable(30cm)
170010015G	UART to USB cable
9651926001	(TF).M.2 2230 WiFi Kit.802.11ac.2.4G/5G.W/BT Intel.9260.NG.WG.NV.958867 w/2 cable & antenna
9741364A00	(TF).M.2 2230 Wireless.802.11 ac/a/b/g/n + BT 5.0.2T2R,Enli QCNFA364A.w/2 sets of cable and antenna
UPS-BRKIT-A10-0001	Bracket KIT of board fixture for all UP series

Ordering Information

Part number	CPU	CORE	MEMORY	STORAGE	HEATSINK
UPS-APLC2F-A20-0232	Intel® Celeron® Processor N3350	2 Core	2GB	32GB	FANLESS
UPS-APLC2F-A20-0432	Intel® Celeron® Processor N3350	2 Core	4GB	32GB	FANLESS
UPS-APL4F-A20-0432	Intel® Pentium® Processor N4200	4 Core	4GB	32GB	FANLESS
UPS-APL4F-A20-08128	Intel® Pentium® Processor N4200	4 Core	8GB	128GB	FANLESS
UPS-APL4F-A20-0864	Intel® Pentium® Processor N4200	4 Core	8GB	64GB	FANLESS
UPS-APLX5F-A20-0432	Intel Atom® x5-E3940	4 Core	4GB	32GB	FANLESS
UPS-APLX7F-A20-0464	Intel Atom® x7-E3950	4 Core	4GB	64GB	FANLESS
UPS-APLX7F-A20-0864	Intel Atom® x7-E3950	4 Core	8GB	64GB	FANLESS