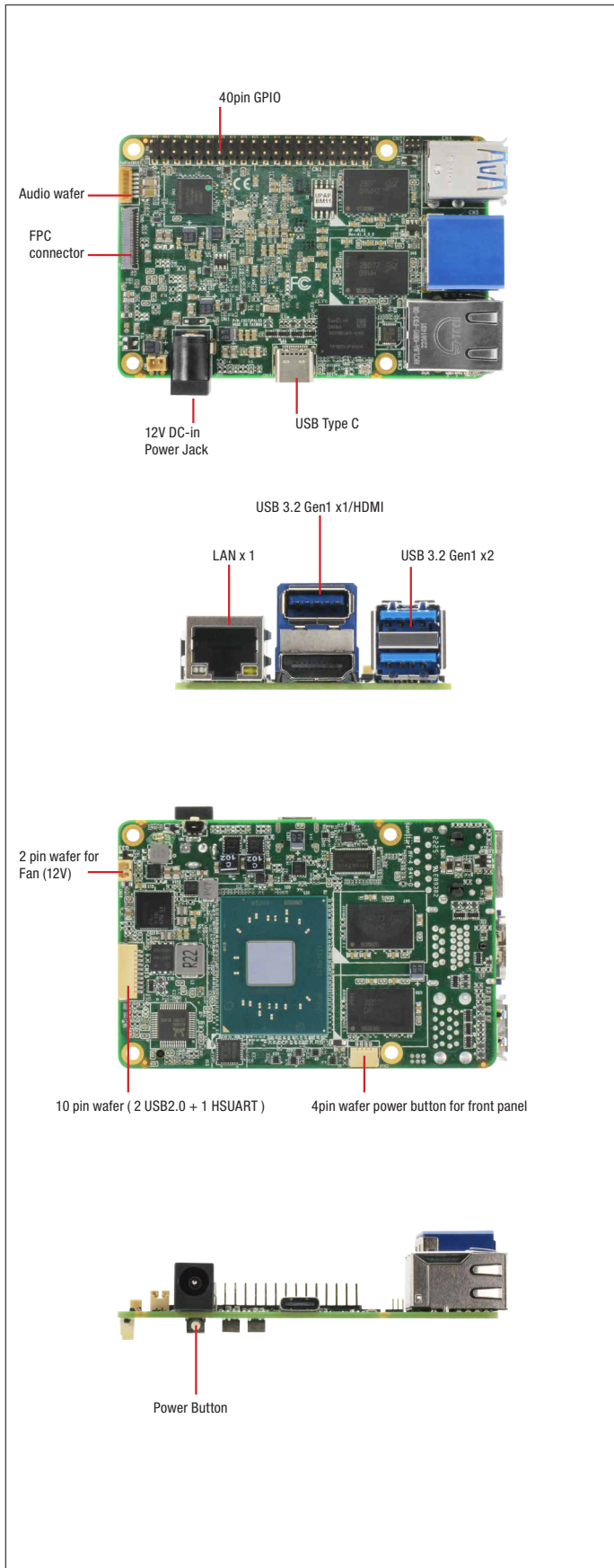


UP 4000

UP Developer Board with Intel® Celeron® N3350/ Intel® Pentium® N4200/ Intel Atom® x7-E3950 Processor SoC



Features

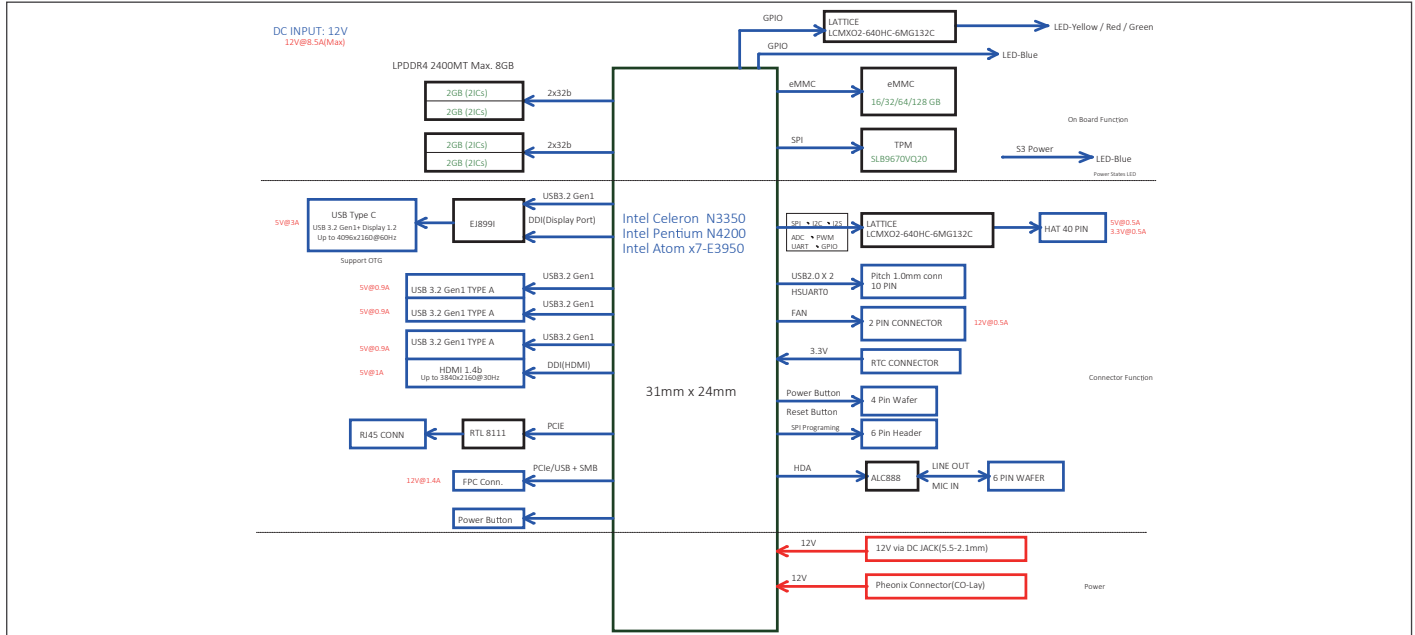
- Onboard LPDDR4 Memory up to 8GB
- Onboard eMMC Storage up to 64GB
- Dual displays up to 4K at 60Hz
- Support M.2 2230 E-Key / M.2 2280 M-Key / M.2 3052 B-Key (via carrier board)
- 40 pin GPIO x 1
- 6 pin wafer for Audio x 1
- TPM 2.0



Specifications

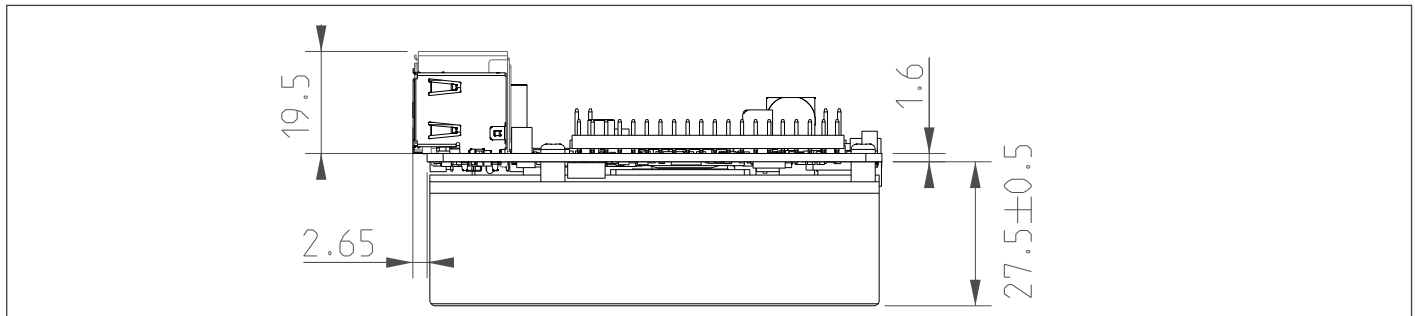
System	
Processor	Intel® Celeron® N3350/ Intel® Pentium® N4200/ Intel Atom® x7-E3950 Processor SoC
Graphics	Intel® Gen 9 HD, supporting 4K Codec Decode and Encode for HEVC4, H.264,VP8
I/O	2 pin wafer for Fan (12V) x 1 2 pin wafer for RTC Battery x 1 6 pin wafer for Audio (Line out + MIC in) x 1 10 pin wafer (2 USB2.0 + 1 HUART) x 1 HAT 40 pin header x 1 4pin wafer power button for front panel x 1 41 pin FPC connector for high speed expend x 1 power button x 1
Camera	—
USB	USB 3.2 Gen 1 (Type A) x 3 USB 2.0 pin header (10 pins in total) x 2 USB 3.2 Gen 1 OTG via USB Type-C x 1
Expansion	40 pin GPIO x 1 via carrier board: M.2 2230/2242/2280 x 1 M.2 3052 x 1
RTC	Yes
Power	12V DC-in @5A (phoenix Terminal co-lay)
Dimension	3.34" x 2.20" (85mm x 56mm)
Memory	onboard LPDDR4 max to 8GB
Storage	16GB/ 32GB/ 64GB eMMC
Display Interface	HDMI 1.4bx 1 DP 1.2 via USB TYPE C Connector
Ethernet	1 Gb Ethernet (full speed) RJ-45 x 1
OS Support	Microsoft Windows 10 (full), Windows IOT Core Yocto project 3.1 Kernel 5.4 Ubuntu 18.04
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C), 0.5m/s airflow
Operation Humidity	10% ~ 80% relative humidity, non-condensing
Certification	CE/FCC Class A, RoHS Compliant

Block Diagram



Dimension

Unit: mm



Ordering Information

Part number	CPU	Memory	Storage	TPM 2.0	Gbe LAN	Audio wafer
UP-APL03C2F-A10-0216	Apollo Lake N3350(F1)	2GB	16GB	yes	Realtek RTL8111H	yes
UP-APL03C2F-A10-0232	Apollo Lake N3350(F1)	2GB	32GB	yes	Realtek RTL8111H	yes
UP-APL03C2F-A10-0432	Apollo Lake N3350(F1)	4GB	32GB	yes	Realtek RTL8111H	yes
UP-APL03P4F-A10-0432	Apollo Lake N4200(F1)	4GB	32GB	yes	Realtek RTL8111H	yes
UP-APL03P4F-A10-0864	Apollo Lake N4200(F1)	8GB	64GB	yes	Realtek RTL8111H	yes
UP-APL03X7F-A10-0464	Apollo Lake E3950(F1)	4GB	64GB	yes	Realtek RTL8111H	yes

Optional Accessories

Part Number	Description
EP-PS12V5A60WFJ	12V@5A Power Supply
EP-CBPC125V3PUS	US Type Power Cord Plug 1800±30mm
EP-CBPC250V3PEU	EU Type Power Cord Plug 1800±30mm
EP-CBPC250V3PUK	UK Type Power Cord Plug 1800±30mm
EP-CBUSB10PFL01	USB 2.0 Type A to 10-pin header cable
UP-WIFIKIT-A10-7001	USB 2.0 10-pin header to WiFi kit (b/g/n)
UP-BTKIT-A10-0001	USB 2.0 10-pin header to Bluetooth kit
UP-APL03CB-A10-0001	Carrier Board. M.2 2230 E and M.2 3042/3052 B. For WiFi & 4G/5G expansion
UP-APL03CB-A10-0002	Carrier Board. M.2 2280 for AI or Storage expansion

Packing List

- UP 4000 with Heatsink