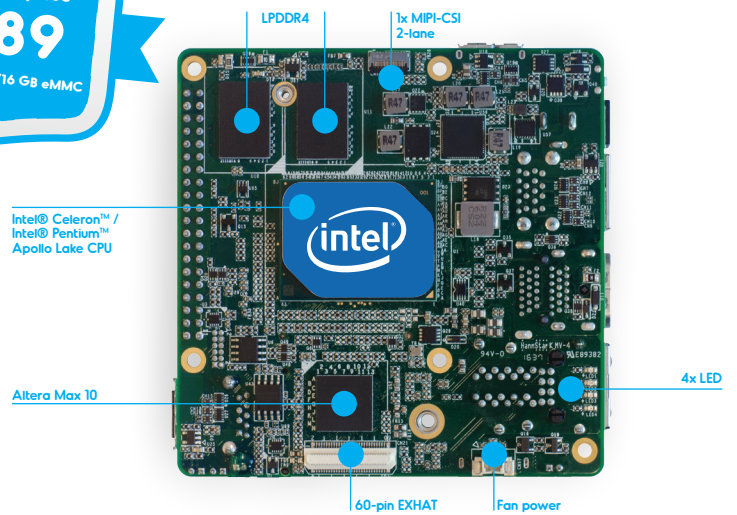
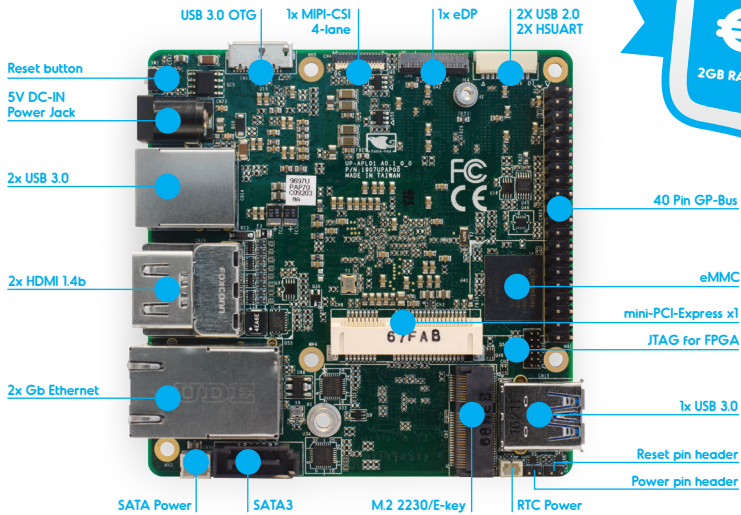


UP²

bridge the gap

specification



UP² (UP Squared) is world's fastest maker board with the high performance and low power consumption features of **Intel® Celeron™ and Pentium™ Processors (codename Apollo Lake)**.

The internal GPU is the new **Intel Gen 9 HD with 12 / 18 Execution Units**, supporting **4K Codec Decode and Encode** for HEVC⁴, H.264 and VP8. Thanks to the Vector Units Image Processing Unit and Precision Timing Management to synchronize CPU with I/O, improved determinism (cache QoS, Intel Virtualization Technology), all the graphic processing is effortless to UP² (UP Squared).

UP² (UP Squared) comes with **2GB/4GB/8GB LPDDR4** and **32GB/64GB/128GB eMMC**. A **40-pin GP-bus** provides the freedom for makers to build up their module. Additionally, there is a **60-pin EXHAT** for embedded applications. This allows for the exploration of more possibilities. The expansion capabilities of UP² (UP Squared) goes much further than this. Native **mini-PCI-e, M.2 2230 and SATA3** are all built in on the board. What more could one desire?

The board supports **Windows 10, Windows IoT Core, Ubilinux, Ubuntu, Yocto and Android Marshmallow**. It's really UP to you to decide which operating system is best for your application. Now, all you need is an UP² (UP Squared) to begin your project!

UP - Applications



Drones



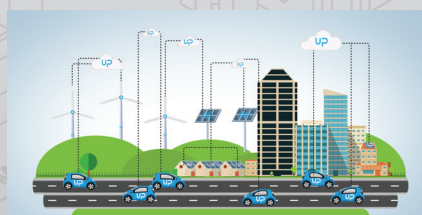
Education



Robotics



Media Center

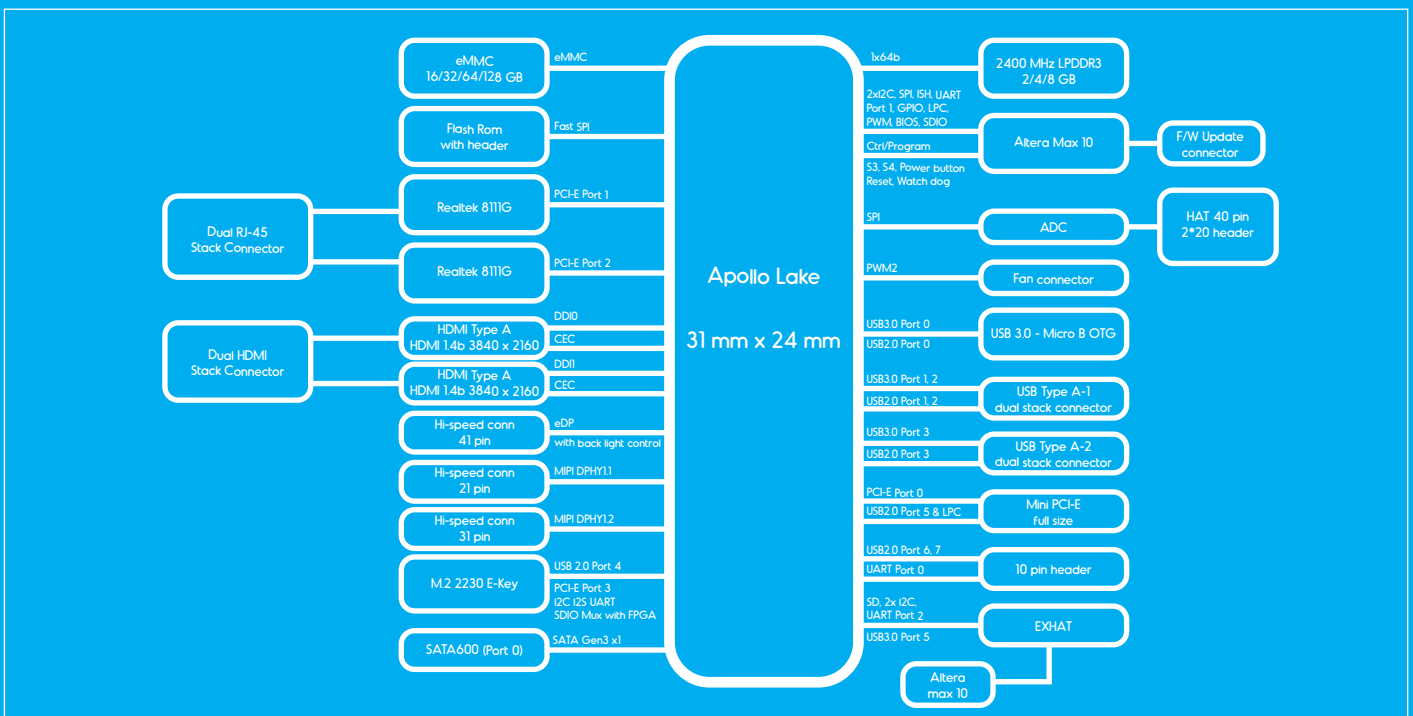


Internet of Things



Home Automation

 	<p>SOC Intel® Celeron™ N3350 (up to 2.4 GHz) Intel® Pentium™ N4200 (up to 2.5 GHz)</p> <p>Graphics Intel® Gen 9 HD, supporting 4K Codec Decode and Encode for HEVC4, H.264, VP8</p> <p>Video & Audio HDMI 1.4b x2 4K @ 30 hz I2S audio port</p> <p>Camera interface CSI 2-lane CSI 4-lane</p> <p>Display interface eDP</p> <p>Power 5V DC-in @ 4A 5.5/2.1mm jack</p> <p>Operating humidity 10%~80%RH non-condensing</p> <p>Operating Temperature 32-140°F / 0~60°C</p>	 	<p>Memory 2GB / 4GB / 8 GB LPDDR4</p> <p>Storage Capacity 32 GB / 64 GB / 128 GB eMMC</p> <p>USB 3x UB3.0 (Type A) + 1x USB 3.0 OTG (Micro B) 2x USB2.0+2 X UART (Tx/Rx) debug port (pin header)</p> <p>Ethernet 2x Gb Ethernet (full speed) RJ-45</p> <p>RTC Yes</p> <p>Expansion 40 pin General Purpose bus 60 pin EXHAT 1xmini-PCIe , M.2 2230, SATA3</p> <p>Compatible Operating system Microsoft Windows 10 (full), Windows IOT Core, Linux (ublinux, Ubuntu, Yocto), Android Marshmallow</p> <p>Dimensions 3.37" x 3.54" / 85.60 mm x 90 mm</p> <p>Certificate CE/FCC Class A, RoHS complaint, REACH</p>
------------------------------	--	------------------------------	--



UP - Pinout

2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

1	2	3	4	5
3V3	5V	GPIO0/ I2C1_SDA	5V	GPIO1/ I2C1_SCL
6	7	8	9	10
Ground	GPIO2/ ADC_in1	GPIO15/ UART_TXD	Ground	GPIO16/ UART_RXD
11	12	13	14	15
GPIO3/ UART_RTS/ADC_in2	GPIO17/ I2S_BCLK	GPIO4/ ADC_in3	Ground	GPIO5/ ADC_in4
16	17	18	19	20
GPIO18	3V3	GPIO19	GPIO6/ SPI_1_TXD	Ground
21	22	23	24	25
GPIO7/ SPI_1_RXD	GPIO20	GPIO8/ SPI_1_CLK	GPIO21/ SPI_1_FS0	Ground
26	27	28	29	30
GPIO22/ SPI_1_FS1	GPIO9/ I2C0_SDA	GPIO23/ I2C0_SCL	GPIO10	Ground
31	32	33	34	35
GPIO11	GPIO24/ PWM0	GPIO12/ PWM1	Ground	GPIO13/ I2S_WS_SYNC
36	37	38	39	40
GPIO25/ UART_CTS	GPIO14	GPIO26/ I2S_SDI	Ground	GPIO27/ I2S_SDO

Part number : UPS-APLC2-A10-0216 UPS-APLC2-A10-0232 UPS-APLC2-A10-0432	Intel® Celeron™ N3350 - 2 GB + 16 GB eMMC Intel® Celeron™ N3350 - 2 GB + 32 GB eMMC Intel® Celeron™ N3350 - 4 GB + 32 GB eMMC	UPS-APLP4-A10-0432 UPS-APLP4-A10-0864 UPS-APLP4-A10-08128	Intel® Pentium™ N4200 - 4 GB + 32 GB eMMC Intel® Pentium™ N4200 - 8 GB + 64 GB eMMC Intel® Pentium™ N4200 - 8 GB + 128 GB eMMC
---	---	---	--

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Single Board Computers](#) category:

Click to view products by [Aaeon](#) manufacturer:

Other Similar products are found below :

[MANO882VPGGA-H81](#) [SSD3200W-S-SLC-INN](#) [AmITX-SL-G-Q170](#) [IB100](#) [CM3-BT4-E3845](#) [MVME61006E-2173R](#) [20-101-0738](#) [PCE-4128G2-00A1E](#) [RSB-4220CS-MCA1E](#) [SHB230DGGA-RC](#) [IB909AF-5650](#) [AmITX-BT-I-E3815](#) [PICO841VGA-E3827](#) [IMB210VGGA](#) [MI981AF](#) [RSB-4221CS-MCA1E](#) [PCE-9228G2I-00A1E](#) [IB915F-3955](#) [IB909F-5010](#) [MI958F-16C](#) [UPS-P-8G-64GB-PACK](#) [S2600WFT](#) [IB915AF-6300](#) [S2600STB](#) [BBS2600BPS](#) [IB915F-6100](#) [Nit6QP_MAX](#) [MI990VF-X28-E](#) [MI990VF-6820](#) [MI991AF-C236](#) [94AC6636](#) [BANANA PI BPI-M4](#) [BLKNUC7I3DNHNC1978015](#) [BLKNUC7I5DNK1E 960791](#) [IOT-LS1012A-OXALIS](#) [NITX-300-ET-DVI](#) [94AC6633](#) [A33-OLINUXINO-N8G](#) [A64-OLINUXINO-1GE16GW](#) [A20-SOM-E16GS16M](#) [A20-SOM204-1G-M](#) [EMB-APL1-A10-3350-F1-LV](#) [PICO-APL1-A10-F001](#) [PICO-APL4-A10-F003](#) [ODYSSEY - STM32MP157C BOARD WITH SOM](#) [BEAGLEBONE GREEN GATEWAY DEV BOARD](#) [ODYSSEY - X86J4105864 8GB RAM 64GB EMMC](#) [ODYSSEY -X86J4105864 8GB/64GB ENTERPRISE](#) [ODYSSEY - X86J4105800 8GB RAM](#) [VISIONDK-STM32MP1 V.1.0](#)