

UP Squared Pro

The ultimate Edge solution - Unleash the future of industrial automation and AI vision with 5G connectivity to shorten the deployment process and take your solutions to the **PRO** level.



UP² Pro - intelligent industry, powered by Intel.

After the success of UP², an official Intel AI & IoT platform, now we give you the UP² Pro.

UP² Pro is built for industrial use with multiple serial ports, multiple LAN ports, 5G support, and various M.2 expansion slots. UP² Pro also enables the next generation industrial automation and AI solutions, users can easily add on AI accelerators, powered by extension capabilities to Intel® Movidius™ Myriad™ X or the upcoming Intel Movidius™ chip.

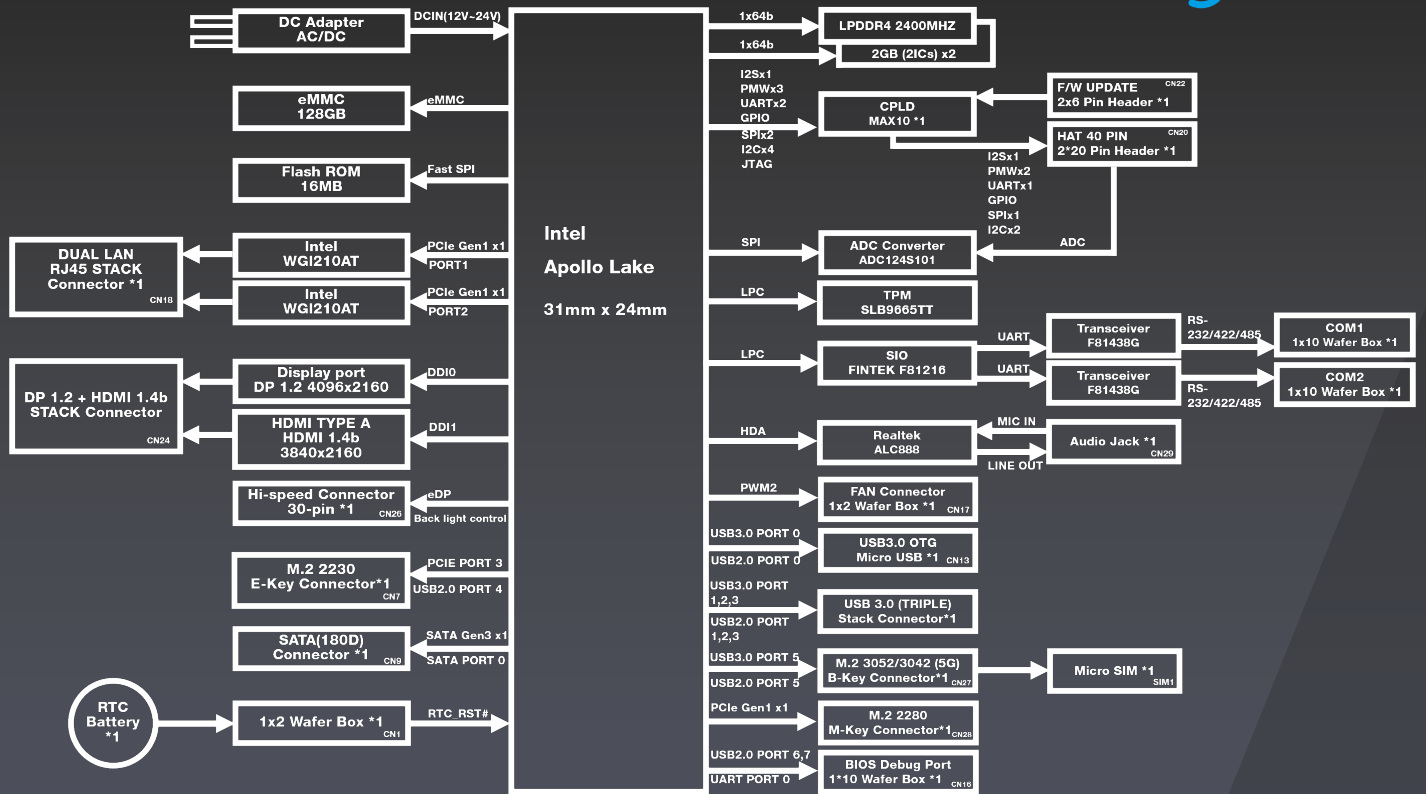
UP² Pro embedded with 40-pin HAT expansion and versatile I/O (SATA3, M.2 2230 E key, M.2 2280 M key, M.2 3052 B Key) to allow for seamless integration. UP² Pro is ready to connect for 5G, AI accelerator, WiFi, Bluetooth.

With Intel processors, FPGAs and accelerators deliver power-efficient performance and specialized capabilities for new industrial use cases, like Automation, Robotics, Drones, Machine Vision, and Internet of Things.

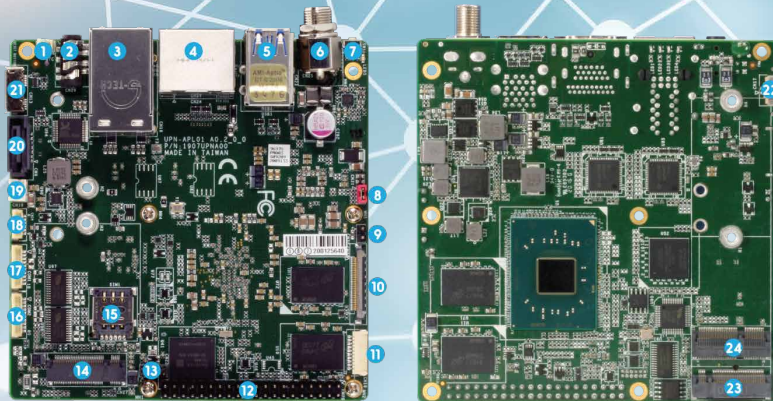
SPECIFICATIONS

CPU	Intel® Celeron® Duo Core N3350 (up to 2.4 GHz) Intel® Pentium® Quad Core N4200 (up to 2.5 GHz) Intel Atom® Quad Core x7-E3950 Processor (up to 2.0 GHz)	Display	1 (HDMI 1.4b) 1x DP 12 (4K@60hz) 1x eDP
Graphics	Intel® HD Graphics 500 for Celeron® N3350 Intel® HD Graphics 505 for Pentium® N4200 / Intel Atom® x7-E3950	COM Ports	FINTEK F81216, 2x RS232/422/485
FPGA	Intel® FPGA Altera MAX 10	UART	2x UART (Tx/Rx) debug port (pin header)
Memory	2GB / 4GB / 8GB	HDD interface	1x SATA 3.0
Storage	32GB / 64GB	SIM slot	1x SIM slot
Expansion Slot	1x M.2 E key 2230 1x M.2 M key 2280 1x M.2 B key co-lay 3042/3052	TPM	Infineon TPM SLB9670 on board
Ethernet	2 x GbLAN (Intel i210 AT) support TSN	Expansion HAT (40pin)	GPIO, SPI, I2C, I2S, PWM, UART, 3V3, 5V, GND, GPIO
Audio	Audio Out/Mic In	Power	12V~24V DC-IN (lockable connector) 1x Power Button / LED
USB	3x USB 3.0 Type A 1x USB 3.0 OTG	Dimension	101.6 x 101.6mm (4" x 4")
		Compatible OS	Microsoft Windows 10 full version, Linux (Ubuntu, Yocto)

block diagram



- 1) RTC Battery Connector
- 2) Audio
- 3) LAN Dual Port
- 4) HDMI 1.4b + DP 1.2 Port
- 5) USB 3.0 Triple Port
- 6) DC Jack
- 7) PowerButton
- 8) Power Pin Header (12V)
- 9) Power Pin Header (24V)
- 10) eDP
- 11) USB Panel
- 12) 40-pin HAT connector



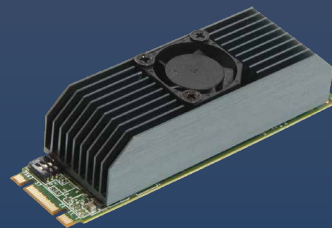
- 13) BIOS update
- 14) M.2 B Key co-lay 3042/3052
- 15) SIM card
- 16) 10-pin RS232/422/485 header
- 17) 10-pin RS232/422/485 header
- 18) Power Pin-header (Power switch & reset)
- 19) SATA Power
- 20) SATA
- 21) USB 3.0 OTG
- 22) FAN
- 23) M.2 M Key 2280
- 24) M.2 E Key 2230

Artificial Intelligence on the edge

Expand your UP Squared Pro board to fit your exact needs



M.2 2230 WiFi kit
Intel® Wireless-AC 9260
(802.11ac, Bluetooth 5.0)



UP AI Core XM 2280
AI hardware accelerator with
2x Intel® Movidius™ Myriad™ X