

Item no.: UPN-APLP4F-A10-0432

UPN-APLP4F-A10-0432 - UP Squared Pro Pentium Quad Core 04/32





Product Description

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After the success of UP Squared, the worlds fastest x86 pro maker board, AAEON gives you the UP Squared Pro.

Based on the powerful Intel platform, formerly Apollo Lake, UP Squared Pro is the latest addition to AAEON's wide range of UP products. It is built for industrial use and capable of enabling next generation industrial automation and AI solutions, with extension capabilities to existing modules or AAEON's next generation of AI modules.

Unleash the future of industrial automation and AI vision with 5G connectivity and take your solutions to the PRO level.

The expansion boards are available in M.2 2230, M.2 2280 and M.2 3052 that provides options for project specific requirements for the ultimate Edge solution. The boards industrial setup with multiple serial ports, Ethernet ports (with TSN), 5G support, audio ports, and a range of other features make it a perfect solution for different domains and products like automation, robotics, drones, machine vision, and the Internet Of Things.

System Level

- SoC: Intel(R) Pentium(TM) N4200 (up to 2.5 GHz)
 Number of cores: 4
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- Graphics: Intel(R) HD Graphics 500 VPU: optional (via M.2 2280) FPGA: Intel(R) FPGA Altera MAX 10

- PPGA: Intel(R)
 MCU: N/A
 Memory: 4 GB
 eMMC: 32 GB
 BIOS: UEFI
- RTC: Yes
- Wake on LAN (WoL): Yes
 Watchdog timer: Yes
- PXE: Yes •
- Compatible OS: Microsoft Windows 10 full version, Linux (Ubuntu, Yocto) •
- Pre-installed OS: Optional Windows 10
 Power requirement: 12 ~ 24 V DC-IN (lockable connector)
 Power supply type: AT (default)/ATX

- Power supply type: A1 (default)/A1X
 Power consumption (typical): 20 Watt
 Dimensions: 4 x 4" (10.16 x 10.16 cm)
 Operation temperature: 32°F ~ 140°F (0°C ~ 60°C)
 Storage temperature: -40°F ~ 176°F (-40°C ~ 80°C)
 Operation humidity: 0% ~ 90% relative humidity, non-condensing
 MTBF (hours): T.B.A.
 Certification: CE/FCC Class A, RoHS

Display

- HDMI: 1 (HDMI 1.4b)
- Display port: 1 (DP 1.2) 4K (at) 60 Hz
 MIPI DSI/eDP: 1x eDP

- Audio: Audio jack line-in/out
 USB 3.0 type A: 3
 USB 3.0 OTG Micro B: 1
 UART: 2x UART (Tx/Rx) debug port (pin header)
 Serial port: 2x RS232/422/485
 HDD interface: 1x SATA 3.0
 Expansion slot: 1x M.2 2230 E, 1x M.2 2280 M, 1x M.2 3042/3052 B co-lay
 AlO/DIO: N/A
 40-pin GP bus: 1
 100-pin GP bus: N/A
 MIPI-CSI: N/A
 SIM slot: Yes
 Others: Infineon TPM SLB9670 on board

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Connectivity

- Ethernet: 2x GbLAN (Intel i210 AT) support TSN
 WiFi: Optional (via. M.2 2230)
 Bluetooth: Optional (via. M.2 2230)
 LTE/4G: Optional (via. M.2 3042/3052)

Cooling

Cooling: Passive cooling (fanless)

Accessories

• Accessories: 1x RTC battery; 1x passive heatsink

Specifications

Scan this QR code to view the product All details, up-to-date prices and availability

