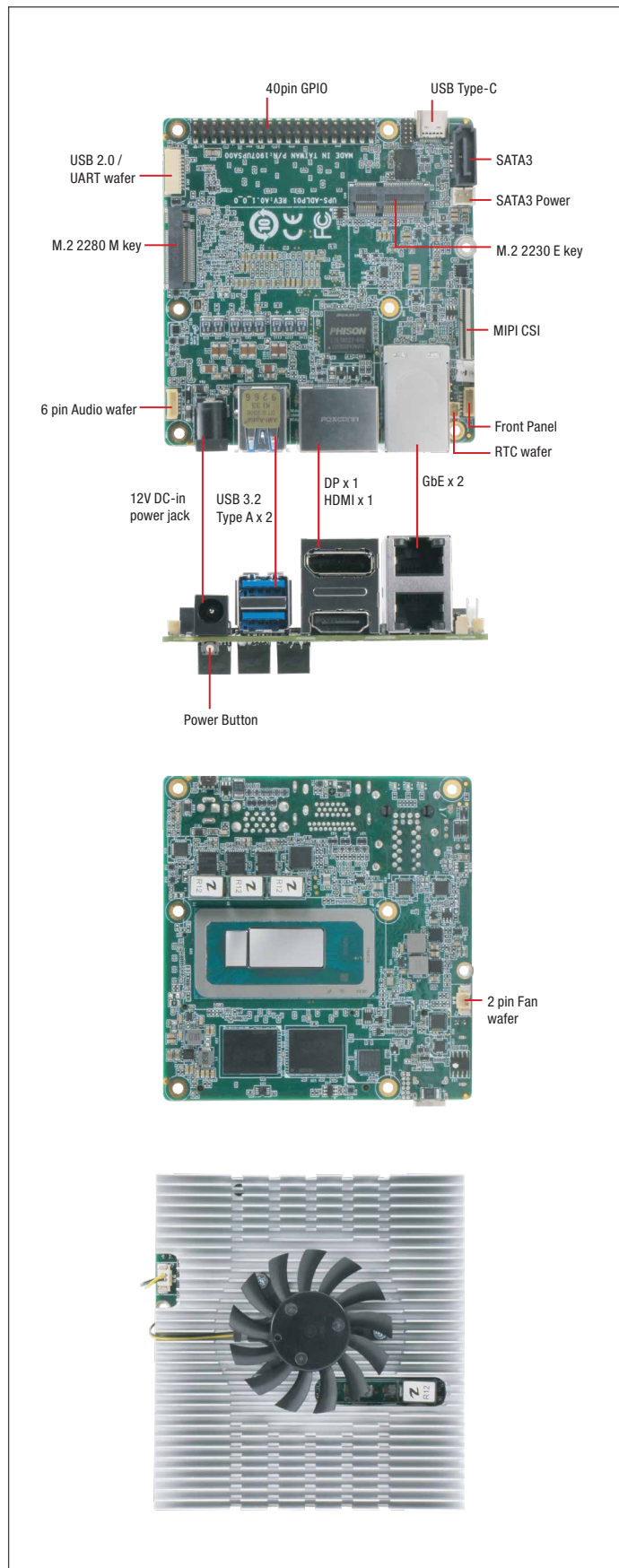


# UP Squared i12

UP Squared i12 Developer Board with 12th Generation Intel® Core™ i7/i5/i3/Celeron® Processor SoC (formerly Alder Lake-P)



## Features

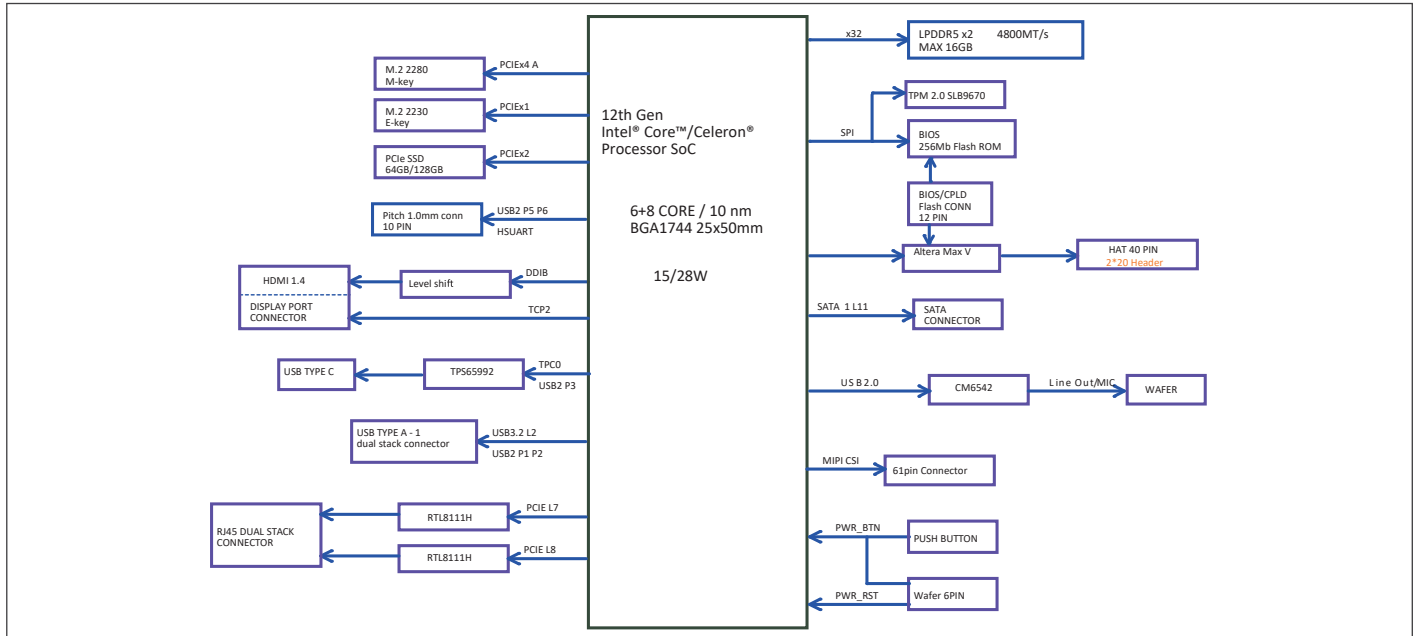
- 12th Generation Intel® Core™ i7/i5/i3/Celeron® Processor SoC
- Up to 16GB Onboard LPDDR5
- Up to 128GB Onboard SSD
- M.2 2230 E-Key/M.2 2280 M-Key/SATA III x 1
- 1GbE x 2
- HDMI 1.4b/DP 1.2 Connector x 1, DP 1.4a via USB Type-C x 1
- USB 3.2 Gen 2 (Type-A) x 2, USB 3.2 Gen 2 (Type-C) x 1, 10-pin USB 2.0 x 2/UART x 1
- Audio Jack x 1 (Line out + Mic in)
- 40-pin GPIO x 1
- 12V DC-in
- TPM 2.0



## Specifications

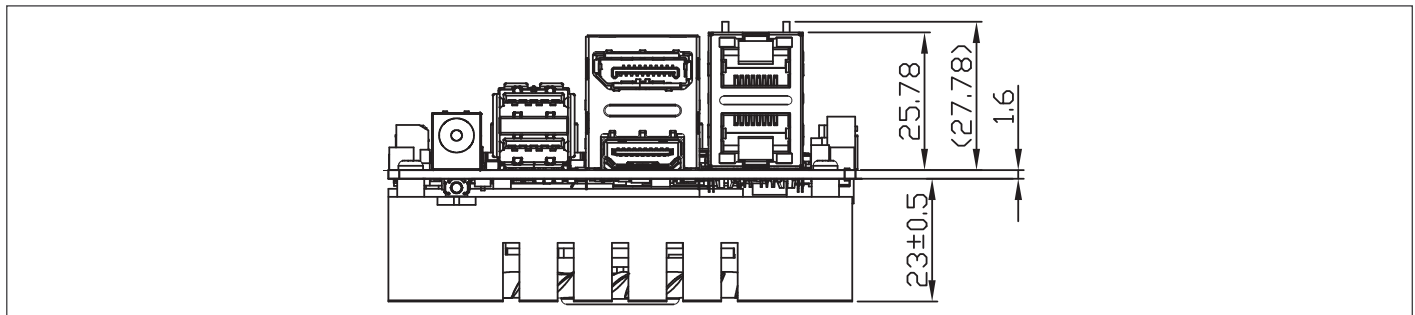
System	
Processor	12th Gen Intel® Core™ Processor SoC Intel® Core™ i7-1270PE (28W) Intel® Core™ i7-1260P (28W) Intel® Core™ i5-1250PE (28W) Intel® Core™ i5-1240P (28W) Intel® Core™ i3-1220PE (28W) Intel® Celeron® 7305E (15W)
Graphics	Intel® UHD Graphics
Memory	Up to 16GB Onboard LPDDR5
Storage	Up to 128GB Onboard SSD M.2 2280 M-Key NVMe x 1 (PCIe Gen 4.0 x 4) SATA III x 1
I/O	HDMI 1.4b/DP 1.2 STACK Connector x 1 DP 1.4a x 1 (via USB Type-C) 6-pin Audio Wafer x 1 (Line out + MIC in) 6-pin Front Panel x 1 2-pin Fan Wafer x 1 (12V) 2-pin RTC Battery Wafer x 1
Camera	MIPI-CSI via 61-Pin FPC connector
USB	10-pin USB 2.0 x 2/UART x 1 USB 3.2 Gen 2 (Type-A) x 2 USB 3.2 Gen 2 (Type-C for DP 1.4) x 1
Expansion	40-pin GPIO x 1 M.2 2230 E-Key x 1 (CNVI & PCIe Gen 3.0 [x1]) M.2 2280 M-Key NVMe x 1 (PCIe Gen 4.0 [x4]) SATA III x 1
Display Interface	HDMI 1.4b/DP 1.2 STACK Connector x 1 DP 1.4a x 1 (via USB Type-C)
Ethernet	1GbE RJ45 x 2 (Dual Stacked) (Realtek 8111H CG)
Security	Onboard TPM 2.0
RTC	Yes
OS Support	Windows®10 IoT Enterprise LTSC 2021 Ubuntu 22.04 Yocto 4.0
Power Requirement	
Power	12V DC-in
Power Supply Type	AT/ATX (AT as default)
Power Consumption (Typical)	26W~39W
Mechanical	
Dimension	3.37" x 3.54" (85.6mm x 90mm)
Net Weight	0.59 lbs (0.27kg)
Gross Weight	0.84 lbs (0.38kg)
Environment	
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C) / 0.5 airflow
Operation Humidity	0% ~ 90% relative humidity, non-condensing
MTBF	522,716 Hours
Certification	CE/FCC Class A, RoHS Compliant, REACH

## Block Diagram



## Dimension

Unit: mm



## Ordering Information

PART NUMBER	CPU	CORE	MEMORY	STORAGE
UPS-ADLPCR-A10-0800	Intel Celeron® 7305E	1P + 4E	8GB	—
UPS-ADLP13-A10-0800	Intel Core i3-1220PE	4P + 4E	8GB	—
UPS-ADLP15-A10-0800	Intel Core i5-1250PE	4P + 8E	8GB	—
UPS-ADLP15-A10-08128	Intel Core i5-1250PE	4P + 8E	8GB	128GB
UPS-ADLP17-A10-0800	Intel Core i7-1270PE	4P + 8E	8GB	—
UPS-ADLP17-A10-16128	Intel Core i7-1270PE	4P + 8E	16GB	128GB
UPS-ADLP15C-A10-0800	Intel Core i5-1240P	4P + 8E	8GB	—
UPS-ADLP17C-A10-0800	Intel Core i7-1260P	4P + 8E	8GB	—
UPS-ADLP17C-A10-1600	Intel Core i7-1260P	4P + 8E	16GB	—

## Optional Accessories

Part Number	Description
125X00088	12V 120W 10A Power Adapter. DC Jack with lock
EP-CBPC125V3PUS	Power cord for US
EP-CBPC250V3PEU	Power cord for EU
EP-CBPC250V3PUK	Power cord for UK
EP-CBUSB10PFL01	10pin header to USB2.0 Type A cable
170X000382	6pin header to audio jack cable

## Packing List

- UP Squared i12 with Active Heatsink