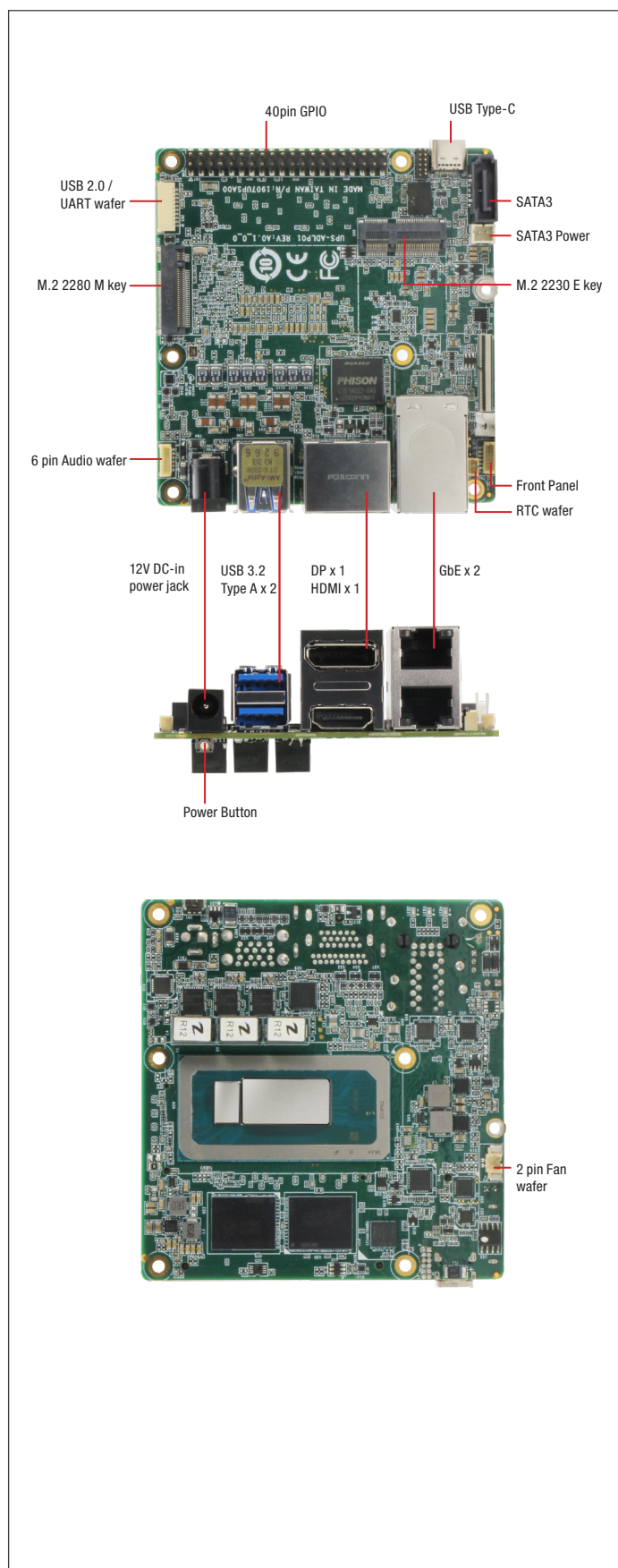


UP Squared i12

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



Features

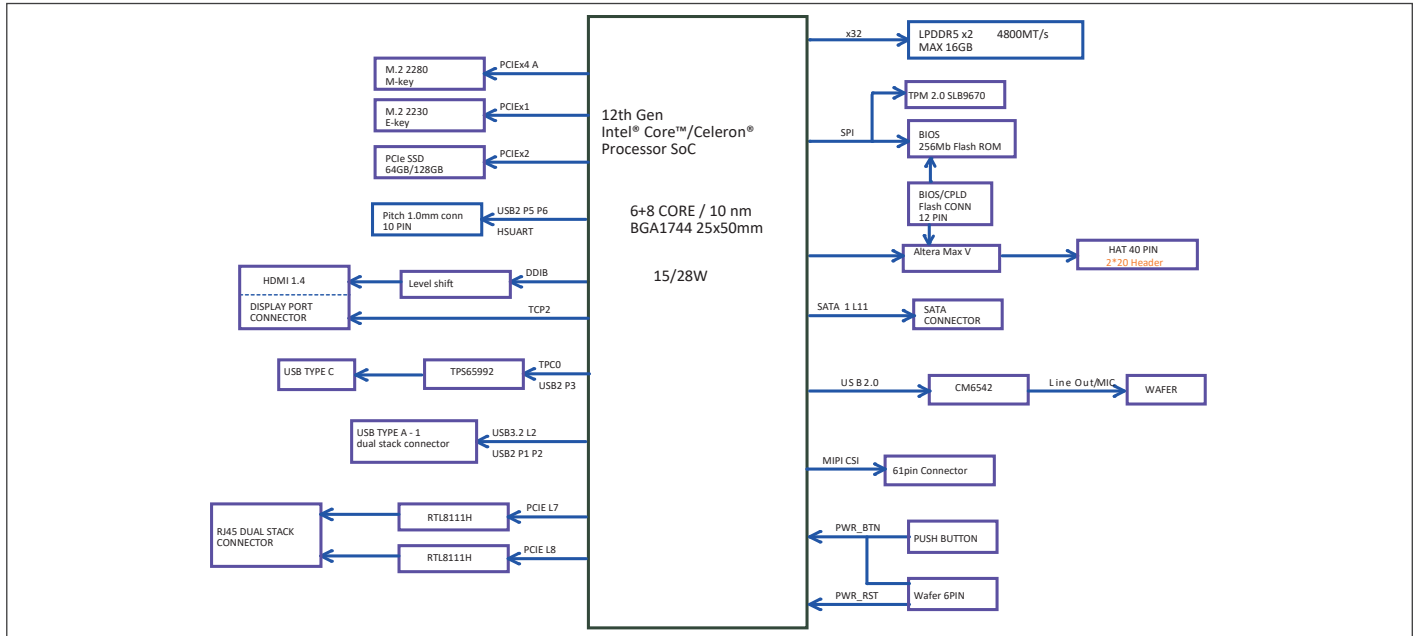
- 12th Generation Intel® Core™ i7/i5/i3/Celeron® Processor SoC
- Up to 8GB Onboard LPDDR5
- M.2 2230 E-Key/M.2 2280 M-Key/SATA III x 1
- GbE x 2
- HDMI 1.4b/DP 1.2 Connector x 1, DP 1.4a via USB Type-C x 1
- USB 3.2 Gen 2 (Type-A) x 2, USB 3.2 Gen 2 (Type-C) x 1, 10-pin USB 2.0 x 2/UART x 1
- Audio Jack x 1 (Line out + Mic in)
- 40-pin GPIO x 1
- 12V DC-in
- TPM 2.0



Specifications

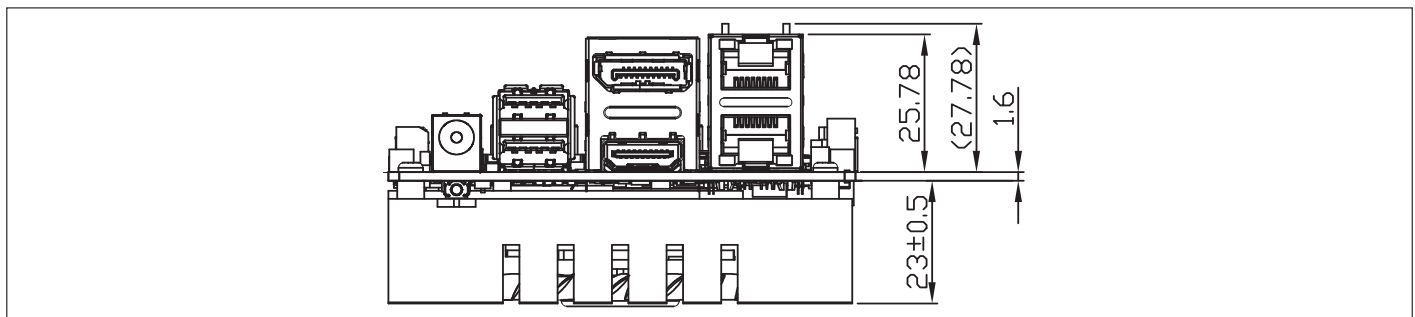
System	
Processor	12th Gen Intel® Core™ Processor SoC Intel® Core™ i7-1270PE (28W) Intel® Core™ i5-1250PE (28W) Intel® Core™ i3-1220PE (28W) Intel® Celeron® Processor 7305E (15W)
Graphics	Intel® UHD Graphics
Memory	Up to 8GB Onboard LPDDR5
Storage	M.2 2280 M-Key x 1 (PCIe Gen 4.0 x 4) SATA III x 1
I/O	2-pin Fan Wafer x 1 (12V) 2-pin RTC Battery Wafer x 1 6-pin Audio Wafer x 1 (Line out + MIC in) SATA III Connector x 1 M.2 2280 M-Key x 1 M.2 2230 E-Key x 1 HDMI 1.4b/DP 1.2 STACK Connector x 1 DP 1.4a x 1 (via USB Type-C) 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 6-pin Front Panel x 1 HAT 40-pin Header 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 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
UPS-ADLPCR-A10-0800	Intel® Celeron® Processor 7305E	1P + 4E	8GB
UPS-ADLP13-A10-0800	Intel® Core™ i3-1220PE Processor	4P + 4E	8GB
UPS-ADLP15-A10-0800	Intel® Core™ i5-1250PE Processor	4P + 8E	8GB
UPS-ADLP15-A10-1600	Intel® Core™ i5-1250PE Processor	4P + 8E	16GB
UPS-ADLP17-A10-0800	Intel® Core™ i7-1270PE Processor	4P + 8E	8GB
UPS-ADLP17-A10-1600	Intel® Core™ i7-1270PE Processor	4P + 8E	16GB
UPS-ADLP151240-A10-0800	Intel® Core™ i5-1240P Processor	4P + 8E	8GB
UPS-ADLP171260-A10-0800	Intel® Core™ i7-1260P Processor	4P + 8E	8GB
UPS-ADLP171260-A10-1600	Intel® Core™ i7-1260P Processor	4P + 8E	16GB

Packing List

- UP Squared i12 with Active Heatsink

Optional Accessories

Part Number	Description
1702031803	Power cord for EU.(TF)POWER CORD.3P-250V 10A 180D.1.8M.VDE.FAN-JET.YP-22/YC-12
1702031802	Power cord for US.(TF)POWER CORD.3P-125V 10A 180D.1.8M.USA.FANJET.YP12/YC-12
170203180J	Power cord for UK.(TF)Power Cord.3P.250V 10A.UK type.1830mm
170203180E	Power cord for Japan.(TF)Power cord.3P.125V/7A.1.8M.PSE YP12/YC12 Certificat
170203180B	Power cord for China.(TF)POWER CORD.3P(M).3P(F).1.8m.250V 10A 180D.CHINA.FAN-JET.YP-03/YC-12
1702031811	Power cord for Taiwan.(TF)Power Cord.3P-125V/7A.180D.1.8M.TWN/BSMI.FANJET.YP-12/YC-12
1709070500	SATA cable.(TF)SATA CABLE.7P Pitch 1.27mm.50cm
1702150155	SATA power cable(15cm).(TF)Power Cable.15P SATA(F).2P 2.0mm Housing(PH).15cm
1702150306	SATA power cable(30cm).(TF)Power Cable.15P SATA(F).2P 2.0mm Housing(PH).30cm
1700100156	UART to USB cable.(TF)USB Cable.10P 1.0mm Housing.USB A(F)
9741364A00	Wireless LAN Kit M.2 2230 802.11ac/a/b/g/n + BT4.0,2T2R,with 2 sets of cable & antenna. (Enli.QCNFA364A)
9651926001	Wireless BT Kit (TF).M.2 2230 WiFi Kit.802.11ac.2.4G/5G,W/BT Intel.9260.NG.WG.NV.958867 w/2 cable & antenna