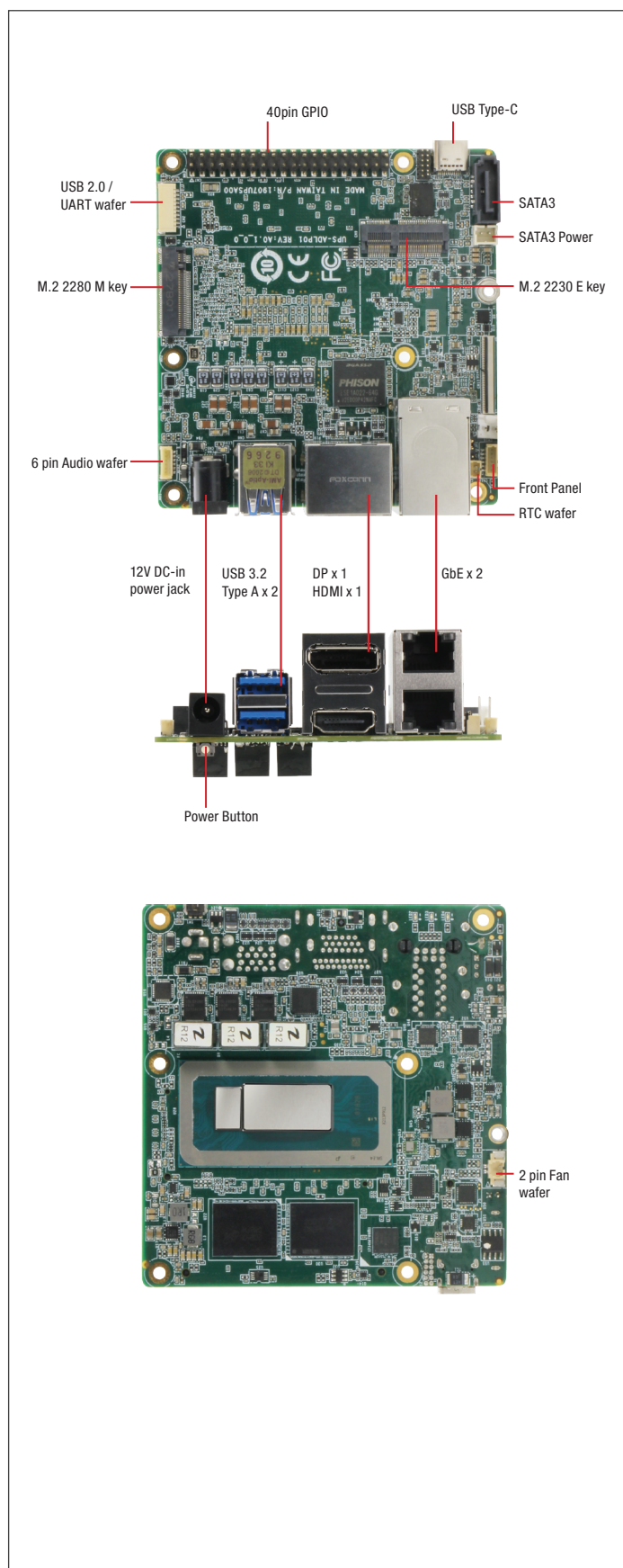


UP Squared i12

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

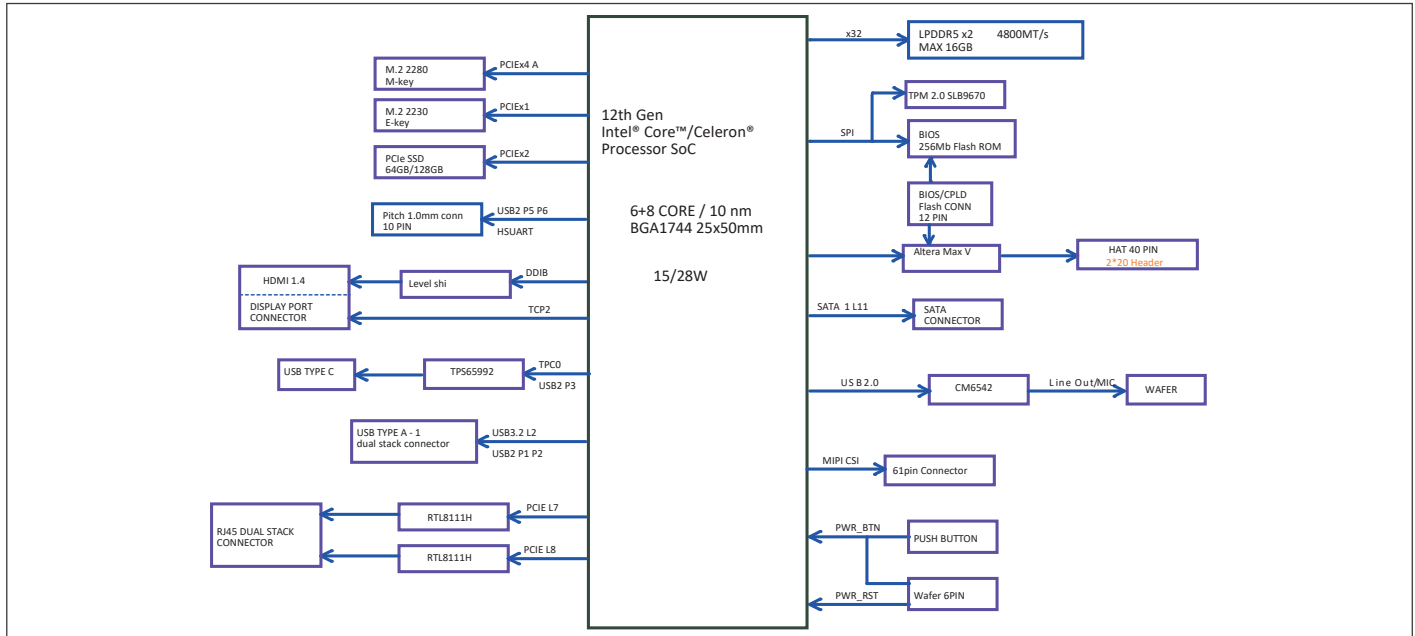


Specifications

System	
Processor	12th Gen Intel® Core™ Processor SoC Intel® Core™ i7-1260P (28W) Intel® Core™ i5-1240P (28W) 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

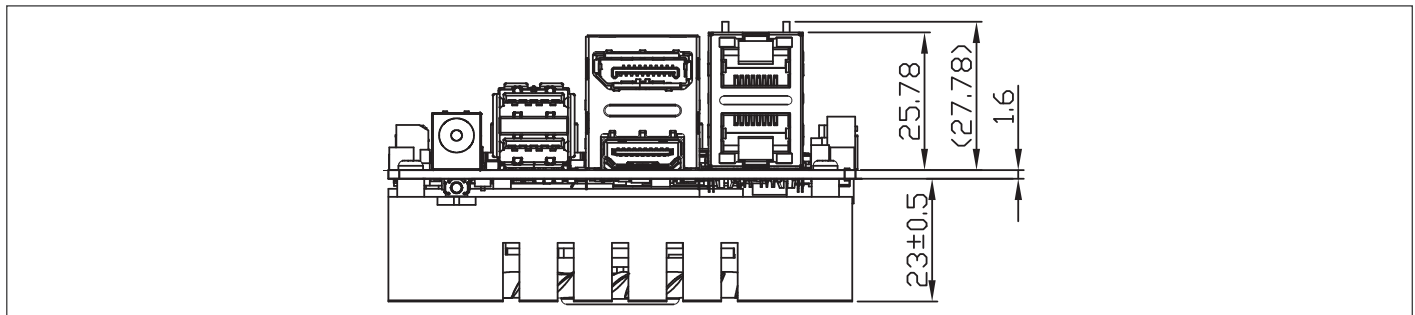


Block Diagram



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

Optional Accessories

Part Number	Description
125X00088	(TF)AC/DC Adapter,100-240VAC/2A,120W,12VDC/10A,PLUG 2.1mm.FSP.FSP120-AHAN3
EP-CBPC125V3PUS	USA Power Cord Plug 10A 125V Connector SP-305B+IS-14 SVT 18/3 60 0.75mm 1800±30mm cable length Black UL
EP-CBPC250V3PEU	EU Power Cord Plug 16A 250V Connector 10A 250V VDE H05VV-F 3G 0.75mm 1800±30mm cable length
EP-CBPC250V3PLUK	UK Power Cord Plug 13A 250V 3X 0.75mm*1800±30mm cable length
EP-CBUSB10PFLD1	USB 2.0 to 10-pin header cable. 150±10mm
170X000382	(TF)Cable.6P.Pitch=1.0mm.150mm.FLYINGWAY.FWAA-1473.Audio Jack Cable
RE-WFKIT-9260NVP	Intel 9260 Wifi Kit ,Intel® Wireless-AC 9260, 802.11AC, 2x2 AC+BT, M.2 2230, No vPro with 2X External Antennas & 2 X RF Cables and integrated Antennas 2.4GHz/5GHz
EP-SSM280256TKS	M.2 SSD 2280 256GB,PCIe Gen3 x 4, M Key,3D TLC, Kingston OM8PDP3256B-A01
UPCR-CAMB-A10-0001	MIPI-CSI Camera RVP Converter kit

Packing List

- UP Squared i12 with Active Heatsink