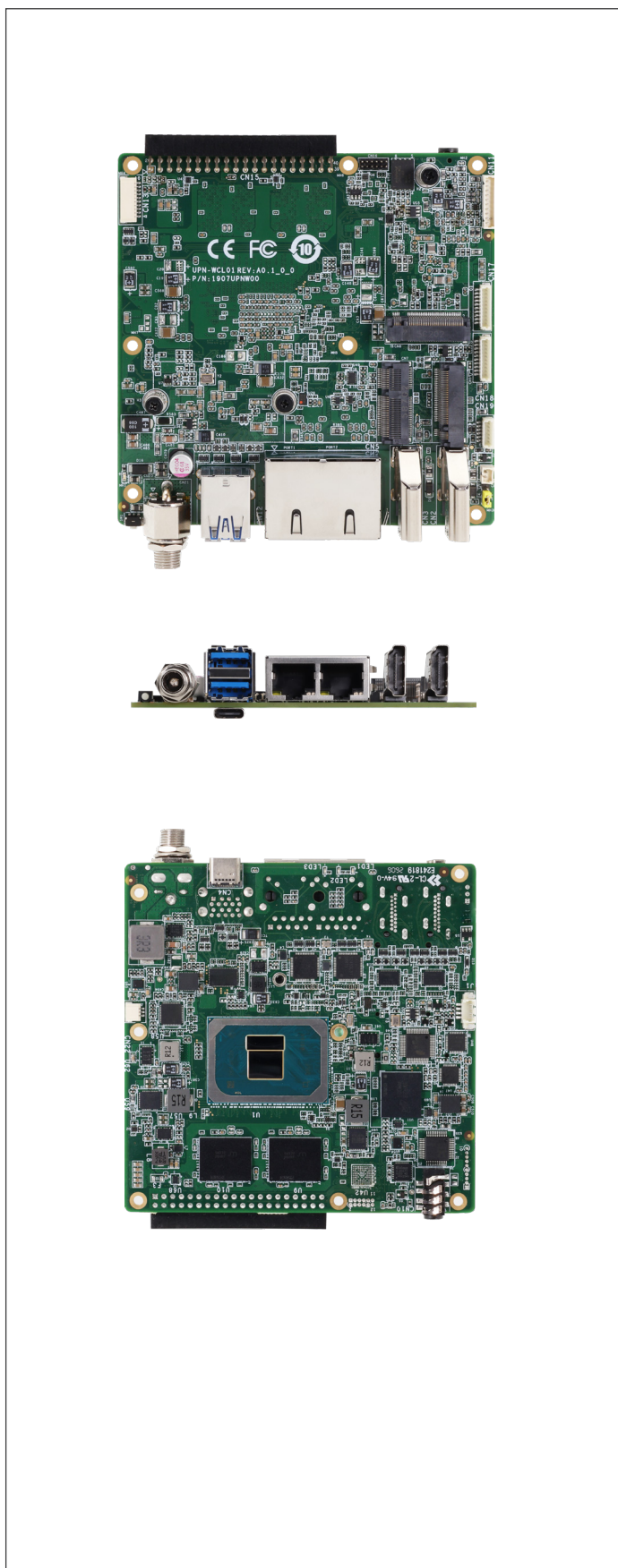


UP Nexus WCL PRELIMINARY

UP Developer Board with Intel® Core™ processors (Series 3)



Features

- Intel® Core™ processors (Series 3)
- Onboard LPDDR5, up to 48GB
- Onboard UFS Storage, up to 256GB
- 2.5GbE x 2 (Intel® Ethernet Controller I226-IT)
- USB 3.2 (Type-A) x 2
- USB 3.2 Gen 2x2 (Type-C) x 1
- 40-pin GPIO x 1
- HDMI 2.1 (TMDS) x 2 / DP 1.4a via USB Type-C
- RS-232/422/485 via 10-pin Header x 2
- M.2 2230 E-Key, M.2 2280 M-Key, M.2 2242 M-Key x 1
- 12V-24V DC-in

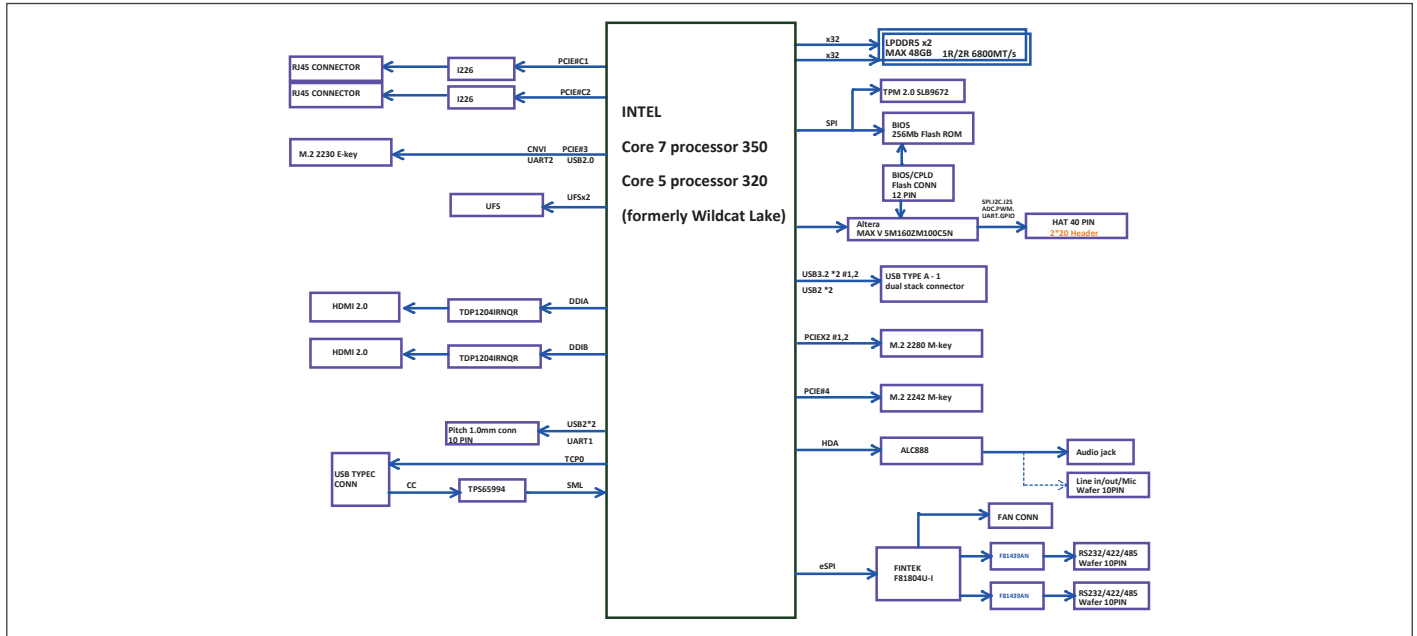


Specifications

System	
Processor	Intel® Core™ 7 processor 350 Intel® Core™ 5 processor 320
Graphics	Intel® Graphics
Memory	Up to 48GB onboard LPDDR5
Storage	Up to 256GB onboard UFS
I/O	HDMI 2.1 (TMDS) x 2 DP 1.4a via USB Type-C Audio Jack x 1 (Mic-in + Line-out) RS-232/422/485 via 10-pin Header x 2
Camera	—
USB	USB 2.0 x 2 (via 10 Pin Header x 1) USB 3.2 Gen 2 (Type-A) x 2 USB 3.2 Gen 2x2 (Type-C) x 1
Expansion	40-pin GPIO x 1 M.2 2230 E-Key x 1 (CNVI, PCIe Gen 4 [x1], USB 2.0, UART) M.2 2280 M-Key x 1 (PCIe Gen 4 [x2]) M.2 2242 M-Key x 1 (PCIe Gen 4 [x1])
Display Interface	HDMI 2.1 (TMDS) x 2 DP 1.4a via USB Type C
Ethernet	2.5GbE x 2 (Intel® Ethernet Controller I226-IT)
Security	TPM 2.0
RTC	Yes
OS Support	Windows 11 Ubuntu 24.04
Power Requirement	
Power	12V-24V DC in
Power Supply Type	AT/ATX
Power Consumption (Typical)	TBD
Mechanical	
Dimension	4" x 4" (101.6mm x 101.6mm)
Net Weight	TBD
Gross Weight	TBD
Environment	
Operating Temperature	-4°F ~ 140°F (-20°C ~ 60°C) / 0.5 airflow with active cooler
Operation Humidity	0% ~ 90% relative humidity, non-condensing
MTBF	TBD
Certification	CE/FCC Class A, RoHS Compliant, REACH

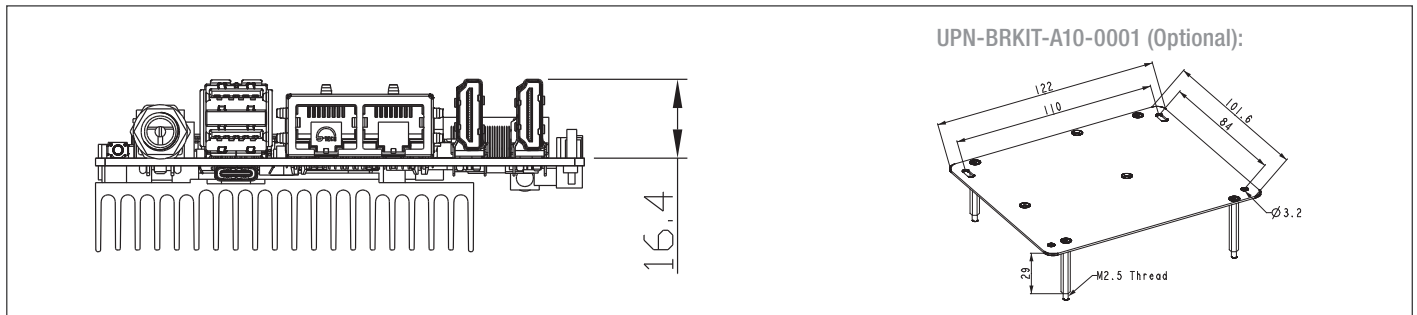


Block Diagram



Dimension

Unit: mm



Ordering Information

Part Number	CPU	Memory	Storage	Operating Temp.	Cooling
UPN-WCL01-A10-350-32128	Intel® Core™ 7 processor 350	32GB	128GB	-20°C ~ 60°C	Active cooler
UPN-WCL01-A10-350-16128	Intel® Core™ 7 processor 350	16GB	128GB	-20°C ~ 60°C	Active cooler
UPN-WCL01-A10-320-16128	Intel® Core™ 5 processor 320	16GB	128GB	-20°C ~ 60°C	Active cooler

Optional Accessories

Part Number	Description
1255X00032	(TF)AC/DC Adapter.Input AC:100~240V.Output DC:12V.MAX 72W.6.0A.180D.W/ LOCK.EDAC.EA10681U(120)
170X000799	(TF)Power Cord. 3P. 125V. 10A. 180D. USA. 1. 8M. I-SHENG. SP305B/IS-14N SVT 18/3 60C CT-12 Black
170X001024	(TF)EU Power Cord.3P.250V.10A.VDE.1.8M.I-SHENG.SP23/IS-14N H05VV-F 3G 0.75 CT-12.Black
170X001231	(TF)China Power Cord.3P.250V.10A.180D.1800mm.I SHENG ELECTRIC.SP-506A+IS-14N
170X000806	(TF)Power Cord. 3P. 125V. 7A. 1. 8M. I-SHENG. U4NCB3T6B1218002. SP305B/IS-14N VCTF. Black. BSMI
170X000803	(TF)Power Cord.3P.125V/7A.PSE Certificate.1.8M.I-SHENG.U4NCB3P6C1218002.SP305B/IS-14N VCTF 0.75/3 Black 1.8M
170X000810	(TF)Power Cord.3P.250V.16A.Korea.1.8M.I-SHENG.SP23/IS-14N H05VV-F 3G 0.75 CT-12 Black
170X000805	(TF)Power Cord.3P.250V.10A.SWISS.1.8M.I-SHENG.SP-027C/IS-14N H05VV-F 3G 0.75mm CT-12 Black
UPCR-CAN1-A10-0001	UP CAN Bus Carrier Board with USB/UART interface for UP product line
UPN-BRKIT-A10-0001	Bracket KIT of board fixture for all UP series

Packing List

- UP Nexus WCL with Active Cooler