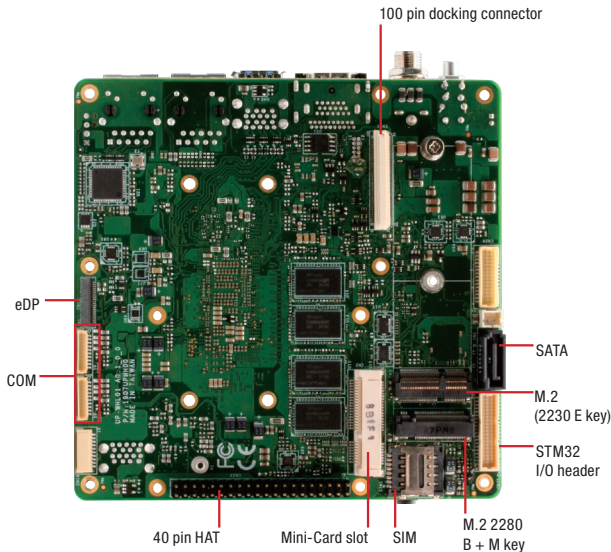
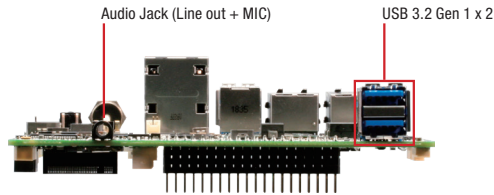
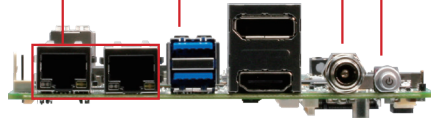


LAN x 2 USB 3.0 x 2 HDMI & DP Locable 12-60 DC in Power Button



eDP COM 40 pin HAT Mini-Card slot SIM M.2 2280 B + M key 100 pin docking connector SATA M.2 (2230 E key) STM32 I/O header

Features

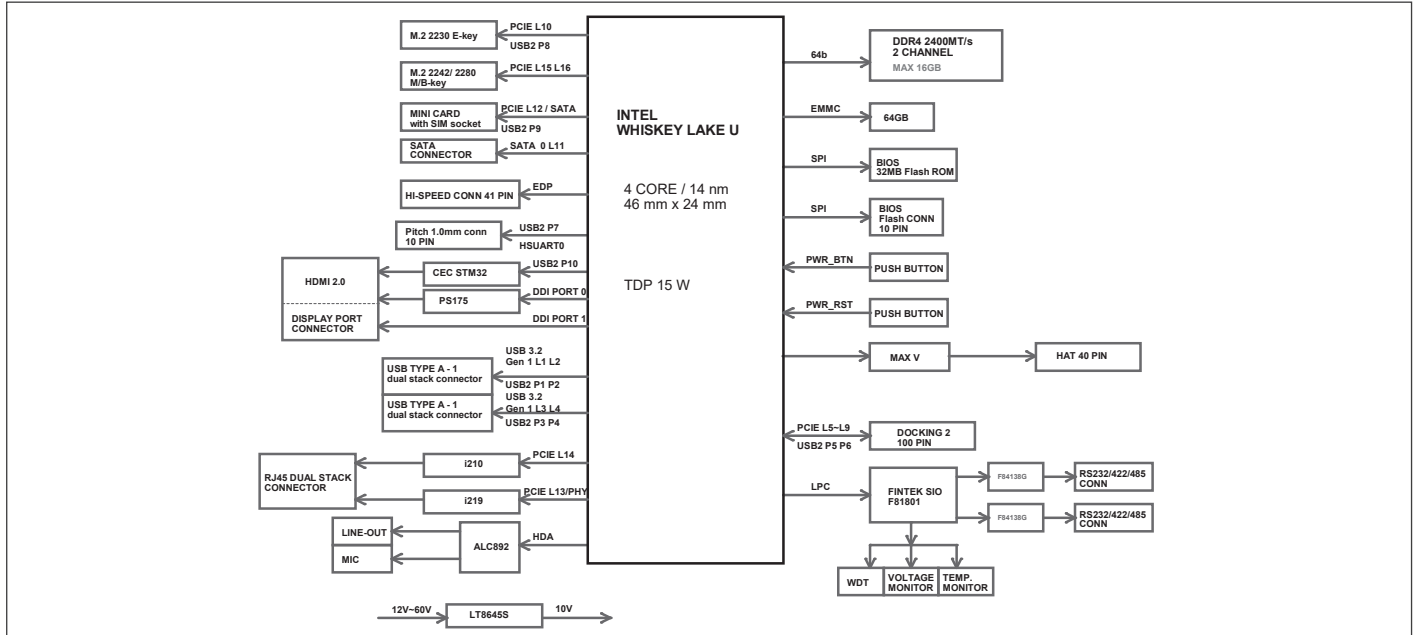
- Intel® WHL-U Core i7/i5/i3/Celeron® Processor SoC
- Onboard Single Dual Channel DDR4 memory, Max 16GB
- eMMC 64GB
- 40Pin HAT Connector
- 100pin docking connector
- SATA 6.0Gb/s x 3
- Mini-card slot x 1
- M.2 2280 B+M key x 1
- M.2 2230 Ekey x 1
- Audio Jack x 1 (line out + Mic)
- Lockable DC connector



Specifications

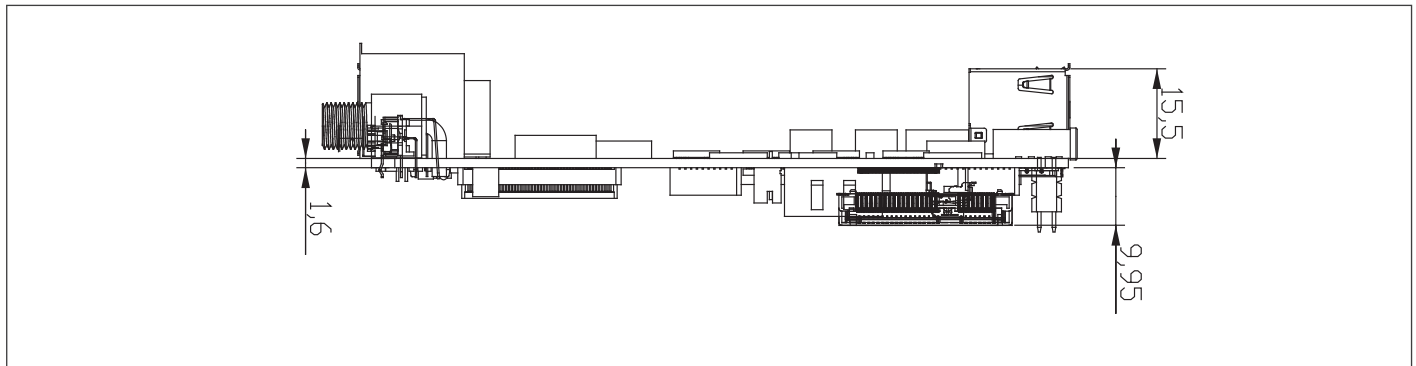
System	
Processor	8th generation Intel® Core i7/i5/i3/Celeron Processor SoC
Graphics	Intel® Graphics , GEN 9
I/O	RJ45 Ethernet Connector x 2 HDMI/DP STACK Connector x 1 Power Button / LED x 1 Audio Jack (Line out + MIC) x 1 DC connector (Lockable) x 1 STM32 connector x 1 eDP with Backlight control Header x 1 10 pin 1xUSB2.0 x 1 / HSIUART (TTL) x 1 SATA Connector with power connector (5V, GND) x 1 4 pin Fan connector x1 Power Button header x 1 Reset Pin header x 1 M.2 2230 E Key x 1 M.2 2280 B+M Key x 1 40 pin HAT connector x 1 mPCIe slot x 1 10 pin RS232/422/485 pin header x 2 100pin connector x 1
Camera	—
USB	USB 3.2 Gen 1 STACK Connector for 2 ports (Front) x 1 USB 3.2 Gen 1 STACK Connector for 2 ports (Rear) x 1
Expansion	M.2 2230 E Key x 1 M.2 2280 B+M Key x 1 mPCIe slot x 1 100pin connector x 1
RTC	RTC battery, CR2032 x 1
Power	12V - 60VDC (+-5%)
Dimension	122 x 120 mm
Memory	Onboard max up to 16GB DDR4
Storage	SATA3 (6Gb/s) x 3: a. SATA connector x 1 b. M.2 2280 SATA option (auto detect) x 1 c. minicard mSATA option (auto detect) x 1
Display Interface	HDMI2.0 x 1 DP1.2 x 1 eDP x 1 CEC support with STM32 on HDMI x 1
Ethernet	Intel i210/i211(Default i210) x 1 i219LM PHY x 1
OS Support	Win 10 Linux Ubuntu 18.04 with Kernel 5.0 Linux Yocto 2.7 with Kernel 4.19
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Operation Humidity	0% ~ 90% relative humidity, non-condensing
Certification	CE/FCC class A, RoHS Compliant, REACH

Block Diagram



Dimension

Unit: mm



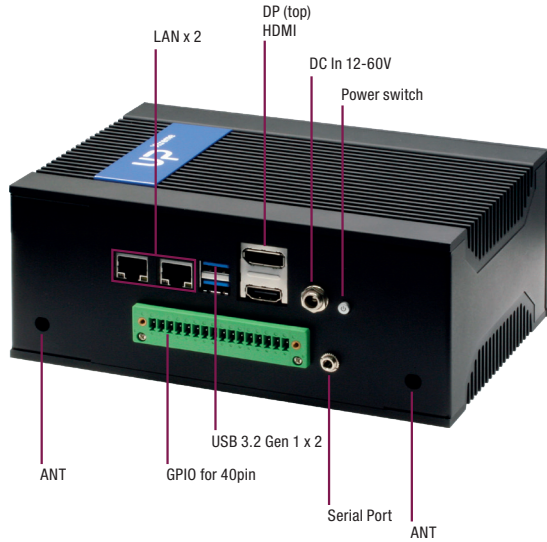
Ordering Information

Part number	CPU	RAM	Storage	LAN	USB	RS-232/422/485	Expansion Slot	Power	Operation Temp.
UPX-WHLI7-A20-16064	Core I7-8665UE	16GB	64GB	GbE x 2	USB 3.2 Gen 1 x 4 USB2.0 x 1	2	Mini card x 1 M.2 2280 B + M key x 1 M.2 2230 E key x 1	12-60V	32°F ~140°F (0°C ~ 60°C)
UPX-WHLI5-A20-08064	Core I5-8365UE	8GB	64GB	GbE x 2	USB 3.2 Gen 1 x 4 USB2.0 x 1	2	Mini card x 1 M.2 2280 B + M key x 1 M.2 2230 E key x 1	12-60V	32°F ~140°F (0°C ~ 60°C)
UPX-WHLI3-A20-08064	Core I3-8145UE	8GB	64GB	GbE x 2	USB 3.2 Gen 1 x 4 USB2.0 x 1	2	Mini card x 1 M.2 2280 B + M key x 1 M.2 2230 E key x 1	12-60V	32°F ~140°F (0°C ~ 60°C)
UPX-WHLCR-A20-04064	Celeron 4305UE	4GB	64GB	GbE x 2	USB 3.2 Gen 1 x 4 USB2.0 x 1	2	Mini card x 1 M.2 2280 B + M key x 1 M.2 2230 E key x 1	12-60V	32°F ~140°F (0°C ~ 60°C)
UPX-WHLI7C-A20-16064	Core I7-8565U	16GB	64GB	GbE x 2	USB 3.2 Gen 1 x 4 USB2.0 x 1	2	Mini card x 1 M.2 2280 B + M key x 1 M.2 2230 E key x 1	12-60V	32°F ~140°F (0°C ~ 60°C)

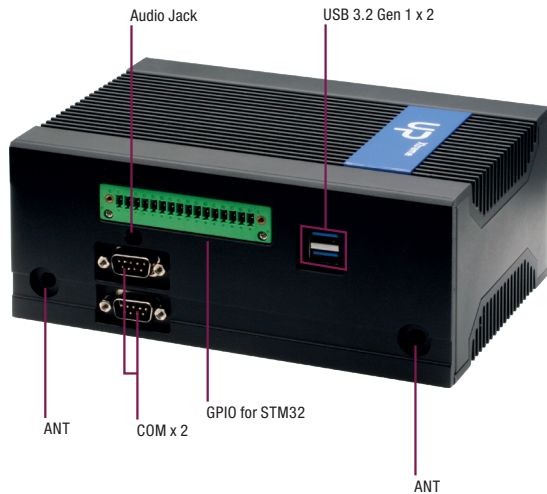
Packing List

- UPX-WHL01 with Heatsink + cooler

Front View



Rear View



Features

- Intel® WHL-U Core™ i7/i5/i3/Celeron Processor SoC
- Onboard Single Dual Channel DDR4 memory, up to 16GB
- eMMC 64GB
- GPIO x 2
- USB 3.2 Gen 1 x 4
- COM port x 2
- LAN x 2
- Audio Jack x 1 (line out+ Mic)
- 12-60V DC-in

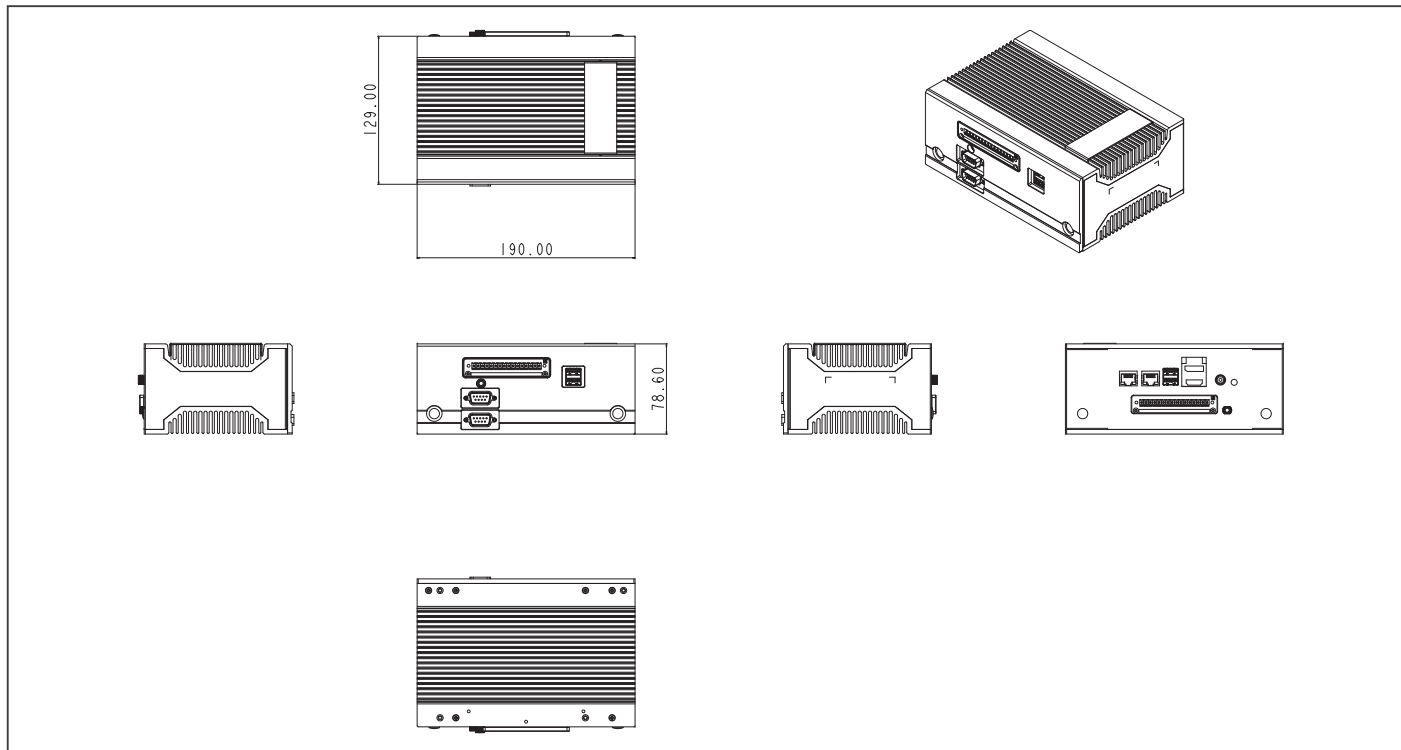


Specifications

System	
Processor	8th generation Intel® Core™ i7/i5/i3/Celeron® Processor SoC
Graphics	Intel® Graphics , GEN 9
I/O	LAN x 2 Power Button x 1 Power Input Audio Jack (Line out + MIC) x 1 GPIO x 2 COM port x 2 Serial Port x 1
Camera	—
USB	USB 3.2 Gen 1 STACK Connector for 2 ports (Front) x 1 USB 3.2 Gen 1 STACK Connector for 2 ports (Rear) x 1
Expansion	M.2 2230 E Key x 1 M.2 2280 B + M Key x 1 mPCIe slot x 1 100pin connector x 1
RTC	Yes
Power	12V - 60VDC (+-5%)
Dimension	190 x 78.6 mm
Memory	Onboard max up to 16GB DDR4
Storage	eMMC 64GB
Display Interface	HDMI x 1 DP X 1
Ethernet	Intel i210/i211(Default i210) x 1 i219LM PHY x 1
OS Support	Win 10 Linux Ubuntu 18.04 with Kernel 5.0 Linux Yocto 2.7 with Kernel 4.19
Operating Temperature	-4°F ~ 158°F (-20°C ~ 70°C)
Operation Humidity	0% ~ 90% relative humidity, non-condensing
Certification	CE/FCC Class A, RoHS Compliant, REACH

Dimension

Unit: mm



Ordering Information

Part number	CPU	RAM	Storage	LAN	USB	RS-232/422/485	Power	Operation Temp.	Others
UPX-EDGEI7-A10-1664-F01	Core™ i7-8665UE	16GB	64GB	GbE x 2	USB 3.2 Gen 1 x 4	2	12-60V	-4°F ~ 158°F (-20°C ~ 70°C)	—
UPX-EDGEI5-A10-0864-F01	Core™ i5-8365UE	8GB	64GB	GbE x 2	USB 3.2 Gen 1 x 4	2	12-60V	-4°F ~ 158°F (-20°C ~ 70°C)	—
UPX-EDGEI3-A10-0864-F01	Core™ i3-8145UE	8GB	64GB	GbE x 2	USB 3.2 Gen 1 x 4	2	12-60V	-4°F ~ 158°F (-20°C ~ 70°C)	—
UPX-EDGEICR-A10-0464-F01	Celeron® 4305UE	4GB	64GB	GbE x 2	USB 3.2 Gen 1 x 4	2	12-60V	-4°F ~ 158°F (-20°C ~ 70°C)	—
UPX-EDGEI7C-A10-1664-F01	Core™ i7-8565U	16GB	64GB	GbE x 2	USB 3.2 Gen 1 x 4	2	12-60V	-4°F ~ 158°F (-20°C ~ 70°C)	—
UPX-EDGEI7-A10-1664-FX1	Core™ i7-8665UE	16GB	64GB	GbE x 2	USB 3.2 Gen 1 x 4	2	12-60V	-4°F ~ 158°F (-20°C ~ 70°C)	With foundation kit image preload, AI CoreX 2280
UPX-EDGEI5-A10-0864-FX1	Core™ i5-8365UE	8GB	64GB	GbE x 2	USB 3.2 Gen 1 x 4	2	12-60V	-4°F ~ 158°F (-20°C ~ 70°C)	With foundation kit image preload, AI CoreX 2280

Packing List

- UPX-EDGE
- VISA Kit
- DIN-RAIL Kit
- SATA cable
- Screw packs

Optional Accessories

- **125530065A**
19Vdc/3.42A.65W power adapter
- **1702031830**
Power cord for USA
- **1702020912**
Power cord for Japan
- **9741364A00**
Wireless LAN Kit M.2 2230 802.11ac/a/b/g/n + BT4.0,2T2R,with 2 sets of cable & antenna (Enli,QCNFA364A)
- **PER-TAIX2-A20-2280**
AI Core XM 2280.N/A.M.2 2280 B+M key card. with Dual Myriad X