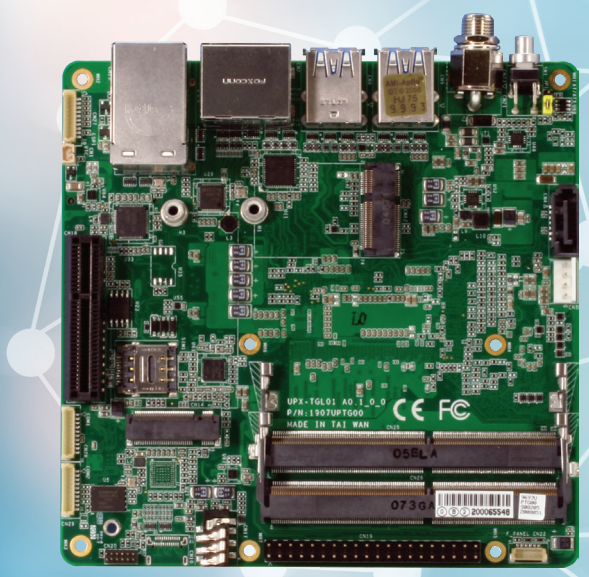
UP Xtreme

bridge the gap

specification

PRELIMINARY



UP Xtreme i11

Introducing the next generation in edge computing with 5G capabilities to deliver seamless connectivity, powered by the latest Intel® 11th Gen Core™ processors with Iris® Xᵉ graphics..

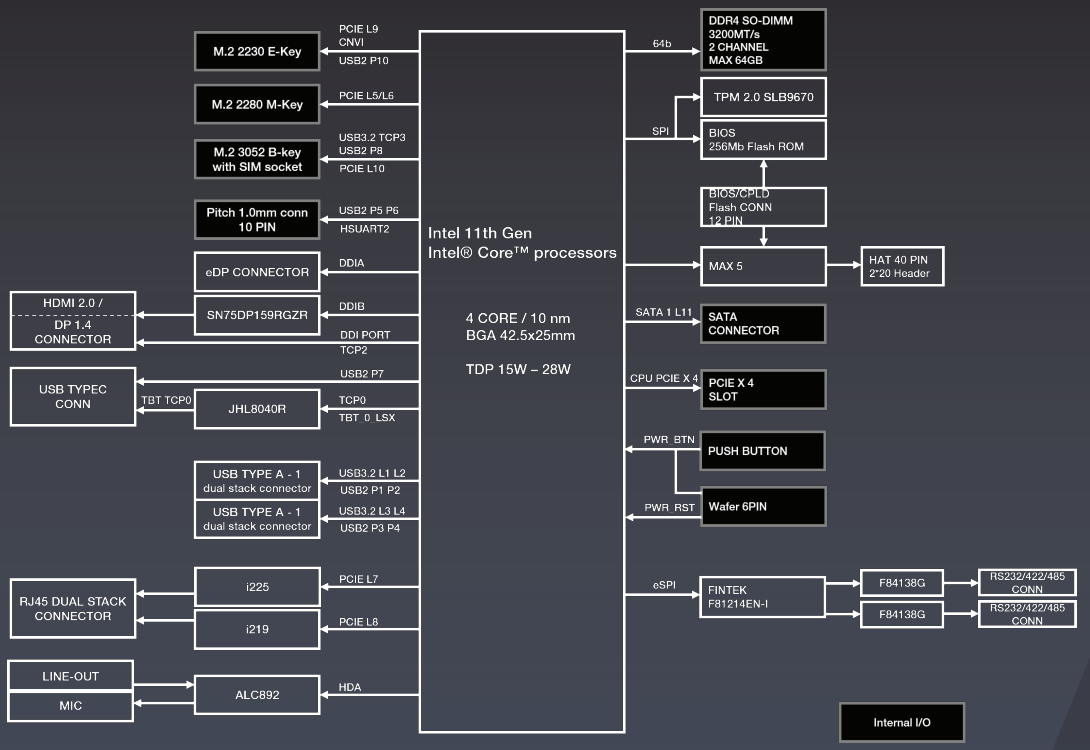
Exceptional graphics and I/O features boost speed, reliability, and efficiency. The Iris® Xᵉ graphics provide up to 96EUs, while the Intel Ethernet runs 2.6 Gb/s.

TECH SPECIFICATIONS

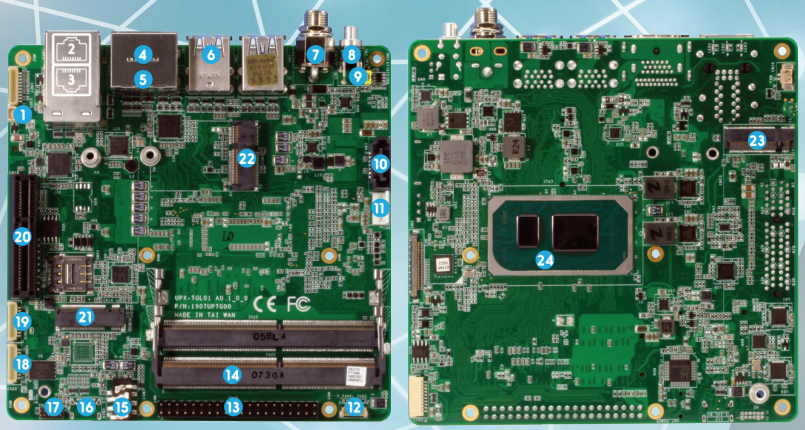
System	UP Xtreme i11
SoC	Intel® Core™ i7-1185G7E (up to 4.4 GHz) Intel® Core™ i5-1145G7E (up to 4.1 GHz) Intel® Core™ i3-1115G4E (up to 3.9 GHz) Intel® Celeron 6305E (up to 2.0 Ghz)
# of Cores	i3-1115G4E/ Celeron 6305E-Duo Core i7-1185G7E/i5-1145G7E-Quad Core
Graphics	Intel® Iris® Xe Graphics - i7-1185G7E/i5-1145G7E Intel® UHD Graphics for 11th Gen Intel® Processors-i3-1115G4E/ Celeron 6305E
VPU	Optional (via M.2 2280)
FPGA	Intel® FPGA Altera MAX V for 40-pin GP bus
System memory	2x DDR4 2 channel SO-DIMM VERTICAL MAX 64GB @ 3200MT/s
Storage capacity	via 1x SATA 3.0 CONN with POWER CONN / 1xM.2 2280 M key (combo 2x PCIE[x1]) NVME
BIOS	UEFI
RTC	Yes
WAKE ON LAN (WoL)	Yes
WATCHDOG TIMER	Yes
PXE	Yes
Compatible OS	Microsoft Windows 10 full version, Yocto project 3.0/3.1 Kernel 5.4, Ubuntu 20.04 Kernel 5.8
Power Requirement **Power Supply type** **Power Consumption**	12V DC-IN (lockable connector) AT/ATX 32W (typical)
Dimension (L x W) **Package dimension**	120mm x 122mm 229x181x97mm

Operating temp **Storage temp** **Operating humidity**	32°F ~ 140°F (0°C ~ 60°C) -40°F ~ 176°F (-40°C ~ 80°C) 0% ~ 90% relative humidity, non-condensing
Certification	CE, FCC Class A, RoHS compliant
Display	1 (HDMI 2.0b) 1x DP + 1x DP 1.4 (via USB Type C) 1 x eDP (4K@60hz)
Audio	HDMI Audio X 1, DP Audio X 1, Soundwire Codec for Audio Out/Mic In/, I2S
I/O	**USB:** 4 x USB 3.2 Gen 2 (Type A), 1 x USB 4.0 (Type C) **UART**: 1 x HSUART (pin header) **Serial Port**: Fintek F81801, 2x RS232/422/485 **HDD interface:** 1 x SATA 3.0 **40-pin GP-bus**: 1 **AIO/DIO:** via GP-bus **SIM Slot x1** **Others:** Infineon TPM SLB9670 on board
Expansion Slot	1x M.2 2280 M key (support NVME SSD) 1x M.2 2230 E key 1x M.2 3052 B key 1x PCI-e[X4] (adapter board accessory required)
Connectivity	Ethernet via 1 x 1GbLAN (i219), 1x 2.5Gb LAN (i225), *vPRO is only available in i7/i5 CPU WiFi 5/6 optional (via. M.2 2230) Bluetooth optional (via. M.2 2230) LTE/4G/5G optional (via. M.2 3052)
Cooling	Active cooler
Others	4 LEDs YRGB (under ethernet port) 1x power button 1x reset button
Longivity	2035
Country of Origin	Taiwan

block diagram



1) RTC battery connector
2) Gbps Ethernet port RJ-45 (Intel® i225)
3) Gbps Ethernet port RJ-45 (Intel® i219)
4) Display Port
4) HDMI
5) USB 3.2 (type A)
7) Lockable 12V DC-IN
8) Power button
9) Power mode jumper
10) SATA
11) SATA power 5V/12V
12) Power pin-header

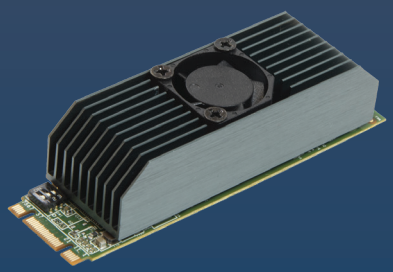


13) 40-pin HAT connector
13) DDR4 SO-DIMM
15) Audio jack
16) USB 4.0 (typce C) +DP 1.4
17) BIOS header
18) 10-pin RS232/422/485 header
19) 10-pin RS232/422/485 header
20) PCIE [x4] slot
21) M.2 3052 B key
22) M.2 2230 E key
23) M.2 2280 M key (support NVME SSD)
24) CPU

Artifical Intelligence on the edge

Expand your UP Xtreme i11 Board to fit your exact needs

M.2 2230 WiFi kit
Intel® Wireless-AC 9260
(802.11ac, Bluetooth 5.0)



UP AI Core XM 2280
AI hardware accelerator with
2x Intel® Movidius™ Myriad™ X