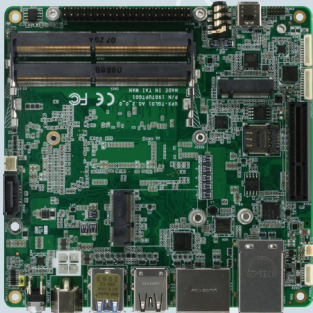# UP Xtreme i11

bridge the gap

Unleashing the new powerful UP Xtreme i11, powered by the 11th Gen Intel® Core™ processors with Iris® Xe graphics.

I/O interfaces includes:
3x USB 3.2 Gen 2 (Type A), 1 x USB 2.0, 1x USB 4.0 (Type C),
1 x 1GbLAN (i219), 1x 2.5Gb LAN (i225), HDMI 2.0b, 1x DP+ 1x DP 1.4(via USB Type C DP Alt/USB4.0),
40-pin GP-bus , COM Ports (2x RS232/422/485), M.2 2230 E key, M.2 2280 M key,
Supports 5G Module (M.2 3052 onboard SIM card slot).

WHAT'S IN YOUR PACKAGE?

1x UP Xtreme i11 board
1x active cooler (installed)
1x RTC battery (installed)

You will Need the Following, Not Included

- 12V Power adapter and Power cord.
- USB drive for OS installation.
- DDR4 SODIMM RAM (max. 64GB).
- Storage unit(SATA or M.2 2280 NVMe* interfaces).
- A monitor with HDMI or DP with respective cables.
- USB keyboard and mouse.
- Ethernet cable or WiFi module (optional, to be installed manually).
- UP AI Core XM 2280 M.2 module (optional, to be installed manually).

1 GET READY

Please refer to https://github.com/up-board/up-community/wiki/Setup for instructions on how to prepare the bootable USB drive for your preferred Operating System:

ubuntu®   yocto PROJECT·   Windows 10

- The **UP Xtreme i11** board comes with the already installed active cooler and RTC battery.
- **SODIMM RAM(max. 64GB) needs to be purchased separately and installed.**
- **Storage options (SATA Disk or NVMe Disk*) needs to be purchased separately and installed.**
- Please follow the initial installation steps (Step **2** and Step **3**) **carefully** before connecting cables and powering ON the system.

2 INSTALL RAM

SAMPLE DDR4 SODIMM
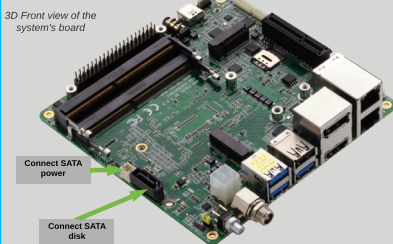(Upto 2x DDR4 2 cha nel SODIMM max. 64GB @3200 MT/s)
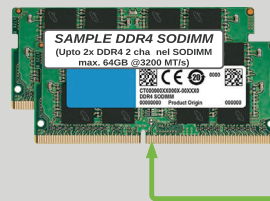
Connect each DDR4 SODIMM in each of the 2-channel SO-DIMM horizontal slots

3D Front view of the system's board

3 ADD STORAGE

STORAGE OPTONS:

3D Front view of the system's board

Connect SATA power

Connect SATA disk

Connect NVMe SSD via M.2 2280 M key

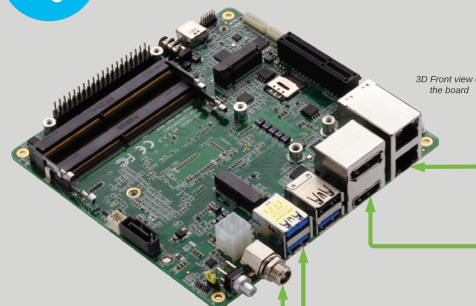*Back view of the system's board*

1. SATA disk via 1 x SATA 3.0   **OR**   2. NVMe SSD via M.2 2280 M key
(*if unused by AI Core XM 2280 M.2 module)
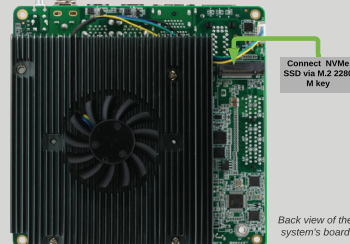
4 CONNECT HARDWARE

3D Front view of the board

1. Connect Ethernet
2. Connect Monitor
3. Connect your USB devices
4. Connect Power
12V

After installing both RAM and Storage**, your UP Xtreme i11 Board is now ready with RAM and Storage disks.

*** For connecting the RAM and Storage, please also refer the respective product on how to connect to their respective slots on UP Xtreme i11.*

5 HARDWARE SETUP DETAILS

1. Prepare a USB bootable drive for your preferred OS (Ubuntu, Yocto, Windows)
2. Insert the USB drive before connecting the 12V DC adapter.
3. Please connect HDMI before powering on the device. Upon receiving power, the board will turn on automatically.
4. The board is set to automatically try to boot from the inserted USB drive.
5. You do not need to make changes to the BIOS setting to install the operating system.

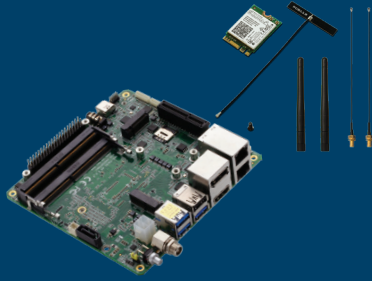For more info on the BIOS and how to change the BIOS password, see

https://github.com/up-board/up-community/wiki

Caution: This is a high performance system and may get hot during operation.

M.2 2230 WiFi Kit with UP Xtreme i11
Intel® WIreless-AC 9260
(802.11ac, Bluetooth 5.0)

UP AI Core XM 2280 with UP Xtreme i11
AI hardware accelerator with 2x Intel® Movidius™ Myriad X
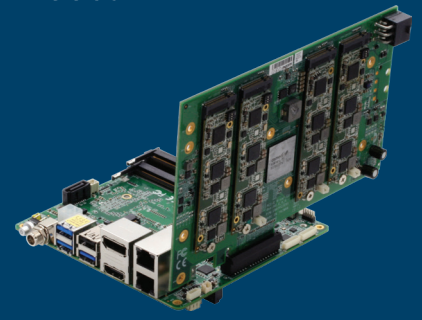
UP AI Core XP8 with UP Xtreme i11
AI hardware accelerator with 8x Intel® Movidius™ Myriad X

QUESTIONS?
REACH US HERE

UP Community
https://www.up-community.org

Product specifications

System	UP Xtreme Edge Compute Enabling Kit
SoC	Intel® Core™ i7-1185GRE (up to 4.4 GHz)
	Intel® Core™ i5-1145GRE (up to 4.1 GHz)
	Intel® Core™ i3-1115GRE (up to 3.9 GHz)
	Intel® Celeron® 6305E (up to 2.0 GHz)
# of Cores	i3-1115GRE Celeron 6305E-Duo Core
	i7-1185GRE/ i5- 1145GRE-Quad Core
Graphics	Intel® Irish® XeGraphics i7-1185GRE/i5-1145GRE
	Intel® UHD Graphics for 11th Gen Intel® Processors-i3-1115GRE/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 connector with power connector / 1x M.2 2280 M key (combo 2x PCIE[x1]) NVME
Power Requirement	DC-IN(12V) lockable power connector
Power Supply Type	AT/ATX(default AT mode)
Power Consumption(Typical)	32W

China RoHS Requirements

Component Name	Hazardous or Toxic Materials or Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr(VI))	Polybrominated biphenyls (PBBs)	Polybrominated diphenyl ethers (PBDEs)
PCB and Components	0	O	O	O	O	O
Wires & Connectors for Ext. Connections	0	O	O	O	O	O
CPU & RAM	0	O	O	O	O	O

This form is prepared in compliance with the provisions of SJ/T 11364.
O: The level of toxic or hazardous materials present in this component and its parts is below the limit specified by GB/T 26572.
X: The level of toxic of hazardous materials present in the component exceed the limits specified by GB/T 26572, but is still in compliance with EU Directive 2011/65/EU (RoHS 2).

Notes:
1. The Environment Friendly Use Period indicated by labelling on this product is applicableonly to use under normal conditions.
2. Individual componets including the CPU, RAM/memory, HDD, optical, and PSU are optional.
3. LCD Module and Touch Control Module only applies to certain products which feature these components.

Safety Precaution

Please read the following safety instructions carefully
It is advised that you keep this manual for future references

1. All cautions and warnings on the device should be noted.
2. Make sure the power source matches the power rating of the device.
3. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
4. Always completely disconnect the power before working on the system's hardware.
5. No connections should be made when the system is powered with a sudden rush of power as it may damage sensitive electronic components.
6. If the device is not to be used for a long time, disconnect it from the power supply to avoid damage by transient over-voltage.
7. Always disconnect this device from any power supply before cleaning.
8. While cleaning, use a damp cloth instead of liquid or spray detergents.
9. Make sure the device is installed near a power outlet and is easily accessible.
10. Keep this device away from humidity.
11. Place the device on a solid surface during installation to prevent it from falling.
12. Do not cover the openings on the device. This is to ensure optimal heat dissipation.
13. Keep an eye for high temperatures when the system is running.
14. Do not touch the heat sink or heat spreader when the system is running
15. Never pour any liquid into the openings. This could cause fire or electric shock.
16. As most electronic components are sensitive to static electrical charge, be sure to ground yourself when installing internal components to prevent static charge. Use a grounding wrist strap and contain all electronic components in any static-shielded containers.
17. If any of the following situations arise, please contact our service personnel:

    I. Damaged power cord or plug
    II. Liquid intrusion through the device
    III. Exposure to moisture
    IV. Device is not working as expected or in a manner as described in this manual
    V. The device is dropped or damaged
    VI. Any obvious signs of damage displayed on the device

18. Do not leave this device in an uncontrolled environment with temperatures beyond 60 ℃. The device's permitted storage temperatures are (-40℃ ~ 80℃) in order to prevent damage.

FCC Statement

This device complies with Part 15 FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.

Caution: There is a danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions and your local government's recycling or disposal directives.

Attention: Il y a un risque d'explosion si la batterie est remplacée de façon incorrecte. Ne la remplacer qu'avec le même modèle ou équivalent recommandé par le constructeur. Recycler les batteries usées en accord avec les instructions du fabricant et les directives gouvernementales de recyclage.

Regulatory

www.up-board.org /www.up-shop.org / www.up-community.org