



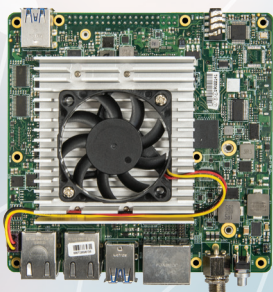
Xtreme

Quick Start Guide

UP Xtreme

The Powerful, Industrial, AI-Proof and expandable UP Xtreme is an ultra-low voltage SBC powered by Intel® 8th Core CPU.

What's in your kit?



- 1x UP Xtreme board
- 1x active heatsink (attached)
- 1x RTC battery (attached)

You will need the following, not included:

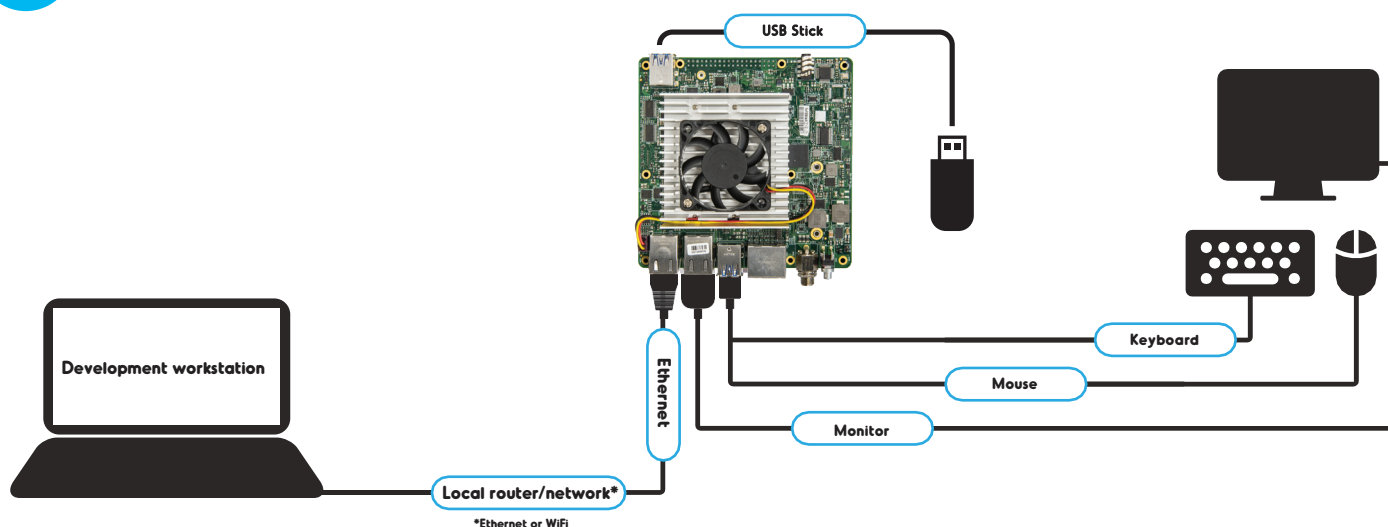
- 12-60V Power adapter and power cord
- USB drive for OS installation
- A monitor with either HDMI or DisplayPort
- USB keyboard and mouse
- Ethernet cable or WiFi (purchased separately)

1 Prepare your bootable USB drive

Please refer to <https://wiki.up-community.org/Setup> for instructions on how to prepare the bootable USB drive.



2 Connect hardware

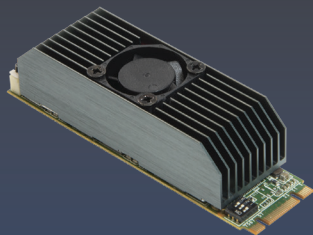


- Insert the USB drive before connecting the 12-60V DC adapter. Upon receiving power, the board will turn on automatically.
- The board is set to automatically try to boot from the inserted USB drive.
- You do not need to make changes to the BIOS settings to install the operating system.

For more info on the BIOS and how to change the BIOS password, see <https://wiki.up-community.org>

Caution: this is a high-performance board and may get hot during operation.

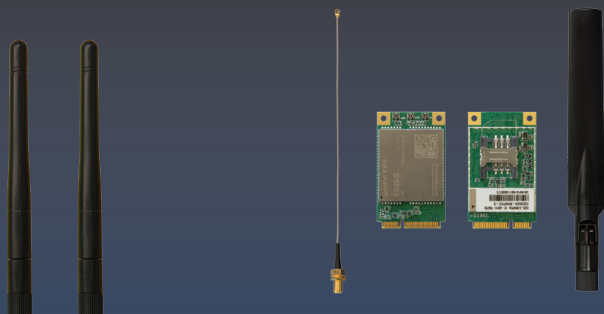
Optional accessories



AI hardware accelerator
UP AI Core XM 2280



WiFi Bluetooth Connectivity
M.2 Intel® AC-9260 WiFi Kit
(802.11ac, bluetooth 5.0)



LTE Connectivity
mPCIe Quectel 4G LTE
CAT4 Global module
EG-25G

Product specifications

System	UP Xtreme
SoC	Intel® Core™ i7-8665UE (up to 4.4 GHz)* Intel® Core™ i7-8565U (up to 4.60 GHz)* Intel® Core™ i5-8365UE (up to 4.1 GHz)* Intel® Core™ i3-8145UE (up to 3.9 GHz) Intel® Celeron 4305UE (up to 2.0 Ghz) *Intel AMT is only supported for i5 and i7
# of Cores	i3-8145UE/ Celeron 4305UE-Duo Core i7-8665UE/i7-8565U/i5-8365UE-Quad Core
Graphics	Intel® UHD Graphics 610-Celeron 4305UE Intel® UHD Graphics 620
VPU	optional (via M.2 2280, mPCIe, 100-pin)
FPGA	Intel® FPGA Altera MAX 5
MCU	STM32
System memory	4GB DDR4 8GB DDR4 16GB DDR4
Storage capacity	64GB
Power requirement	12~60V DC-IN (lockable connector)

China RoHS Requirements

Component Name	Hazardous or Toxic Materials or Elements						
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Chromium (Cr(VI))	Hexavalent Chromium (Cr(VI))	Polybrominated biphenyls (PBBs)	Polybrominated diphenyl ethers (PBDEs)
PCB and Components	0	0	0	0	0	0	0
Wires & Connectors for Ext. Connections	0	0	0	0	0	0	0
CPU & RAM	0	0	0	0	0	0	0
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 or 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 applicable only to use under normal conditions. 2. Individual components including the CPU, RAM/memory, HDD, optical drive, 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 °C. The device's permitted storage temperatures are (-40°C ~ 80°C) 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

