

Item no.: RE-UPS-X70864F-RBM02

RE-UPS-X70864F-RBM02 - UP Squared RoboMaker Pro Kit [8 GB]

from **2.197,16 EUR**

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shipping weight: 1.20 kg

Manufacturer: UP Bridge the Gap



Product Description

RE-UPS-X70864F-RBM02 - UP Squared RoboMaker Pro Kit [8 GB]

The new UP Squared Robomaker Pro kit provides an easy path building robotic project. The kit combines the expertise of a number of partners - Intel(R), Cogniteam and Amazon Web Services - to bring efficient computer vision technology to new places with revolutionary Intel(R) Vision products and allow users to develop AI and machine vision into their robots in as little as one day. With the right performance, cost and power efficiency at every node, you can scale vision technology across your infrastructure and unlock new possibilities for visual data.

Leveraging the power of AWS Robomaker which bridges the gap between the virtual testing environment and the field. The deep integration of hardware together with Amazon RoboMaker delivers an unprecedented experience for a developer, speeding up the time to production.

With all the essential components at your disposal, you can leverage this kit to build proof of concept that can quickly scale to production. Hardware overview

- UP Squared board with Intel Atom(R) X7-E3950 processor, on board 8GB DDR4, 64 GB eMMC
- Passive cooler pre-installed
- RealSense D435I camera
- AI Core X Mini PCIe card with the Intel(R) Movidius(TM) Myriad(TM) X
- Intel AC9260 WiFi kit
- Servo and DC motor with encoder
- Cogniteam Motor Control Board
- Wheels

System level spec

- SoC: Intel(R) Atom (TM) x7-E3950 (up to 2.0 GHz)
- # of cores: 4
- Graphics: Intel(R) HD Graphics 505
- VPU: Built-in Intel(R) Movidius(TM) Myriad(TM) X
- FPGA: Intel(R) FPGA Altera MAX 10
- Memory: 8 GB
- eMMC: 64 GB
- BIOS: UEFI
- RTC: Yes
- Wake on LAN (WoL): Yes
- Watchdog timer: Yes
- PXE: Yes
- Compatible OS: Microsoft Windows 10 full version, Linux (ubinux, Ubuntu, Yocto)
- Pre-installed OS: Ubuntu 18.04
- Power requirement: 5 V DC-in (at) 6 A, 5.5/2.1 mm jack
- Power supply type: AT (default)/ATX
- Power consumption (typical): 18 Watt
- Dimensions: 3.37" x 3.54" (90 x 91 mm)
- MTBF (hours): 173,446 hours

Display

- HDMI: 1x (HDMI 1.4b)
- Display port: 1x (DP 1.2) 4K (at) 60 Hz
- MIPI DSI/eDP: 1x eDP

I/O

- Audio: I2S audio port
- USB 2.0 type A: 2x
- USB 2.0 pin header: 2x
- USB 3.0 type A: 3x
- USB 3.0 OTG Micro B: 1x
- UART: 2x UART (Tx/Rx) debug port (pin header)
- HDD interface: 1x SATA 3.0
- 40-pin GP bus: 1x
- MIPI-CSI: 1x MIPI-CSI 2 lane, 1x MIPI-CSI 4 lane
- SIM slot: No

Connectivity

- Ethernet: 2x GbLAN (RealTek RTL8111H-CG)
- WiFi: WiFi 802.11 AC 2T2R
- Bluetooth: Bluetooth v4.2 (BLE)
- LTE/4G: N/A

Cooling

- Cooling: Passive cooling (fanless)

Environment

- Operation temperature: 32°F ~ 140°F (0°C ~ 60°C)
- Storage temperature: -40°F ~ 176°F (-40°C ~ 80°C)
- Operation humidity: 0% ~ 90% relative humidity, non-condensing

Others

- Software: (1) Getting started: Connect all parts within the kit; (2) Setup WiFi; (3) Simulation example
- ROS2 support: Yes

Accessories

- 1x Intel(R) RealSense(TM) depth camera D435i: (1) Depth Field of View (FOV): 87° +/-3° x 58° +/-1° x 95° +/-3°; (2) Depth output resolution & frame: Up to 1280 x 720 active stereo depth resolution; (3) Rate: Up to 90 fps
- Battery (not included in the kit): (1) Battery prerequisite (not included in the kit): Lipo battery with T connector 7.4 V 2 cell; (2) Battery charger (not included in the kit): Charger 2S-3S 7.4-11.1 V for Lipo battery
- Cogniteam motor module: (1) 2x motors: 1x servo and 1x DC; (2) 1x low level controller; (3) 1x wheel module with 4x wheels

Package

- Net weight: 1.2 kg
- Package dimensions (L x W x H): 34.5 x 25 x 10 cm
- Gross weight: 1.7 kg

Specifications

**Scan this QR code to
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All details, up-to-date
prices and availability

