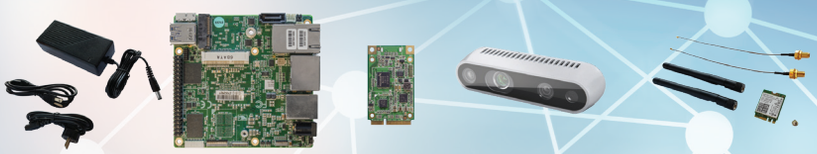
UP AI EDGE

bridge the gap






$699

# UP Squared
# RoboMaker Developer Kit

The UP Squared RoboMaker Developer kit is the easiest way to get started with your robotics project powered by AWS RoboMaker. Utilize the power of AI Core X with Intel® Movidius™ Myriad™ X VPU, Intel® RealSense™ Camera and Intel® Distribution of OpenVINO™ to add intelligence to your robot application with the option to easily upgrade to a physical robot.

intel REALSENSE TECHNOLOGY

intel MOVIDIUS inside

intel ATOM x7 inside

## Hardware overview

- UP Squared board with Intel Atom® X7-E3950 processor 4 GB of RAM and 64 GB eMMC
- RealSense D435I camera
- AI Core X Mini PCIe* card with the Intel® Movidius™ Myriad™ X Vision Processing Unit (VPU)
- Intel AC3165 WiFi kit
- Power Supply
- US & EU power Cord

## Preinstalled Software

- Ubuntu* 16.04 desktop
- Intel® Distribution of OpenVINO™ toolkit 2019 R1.1 release
- Intel® Media SDK
- Drivers for Intel® VTune™ Amplifier, Intel® Energy Profiler, Intel® Graphics Performance Analyzers
- MRAA and UPM I/O and sensor libraries for C++, Python*, Java*, and JavaScript*

## aws RoboMaker Service

easily develop, test, and deploy robotics applications



Cloud Extensions for ROS



Development Environment



Simulation



Fleet Management

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

# UP Squared RoboMaker Developer Kit sample applications



UP Bot simulation




Hello world



Robot monitoring




Navigation and person recognition



D435 SLAM




Self-driving using RL



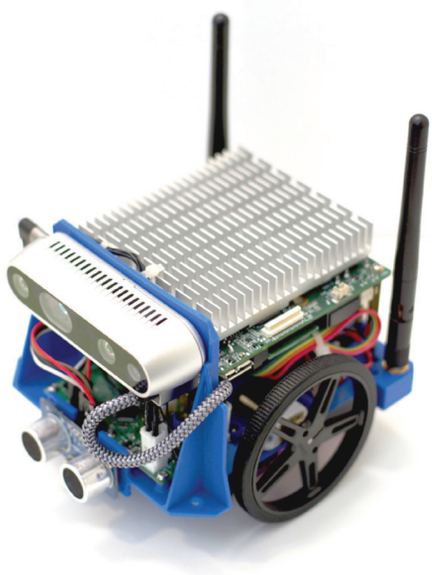
Object-following using RL

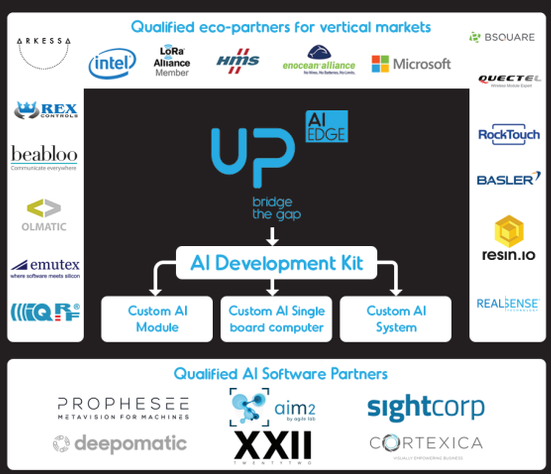



Voice commands

## Upgrade the kit to a robot on wheels!

1. Follow the UPBot building instructions
2. 3D print, purchase and assemble the additional components
3. Upgrade your software with the project published on GitHub






UP is a brand of AAEON Technology Europe, an associate company of ASUS group, focused on Embedded Computing, Artificial Intelligence on the Edge, Internet Of Things and Industry 4.0. UP's mission is to spread the intelligence in all the world around us. UP bridges the gap between the world of prototypes and the world of high-grade mass-produced intelligent systems solutions. UP gives affordable and easily accessible and support of all the latest technologies to embedded industry.

UP bridge the gap

For more information about UP, please visit:
www.up-board.org
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