AAEON®
an ASUS assoc. co.

UP Board Introduction

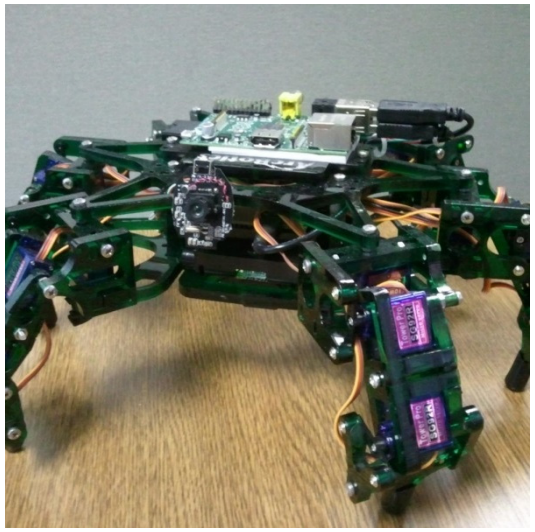
What is Maker

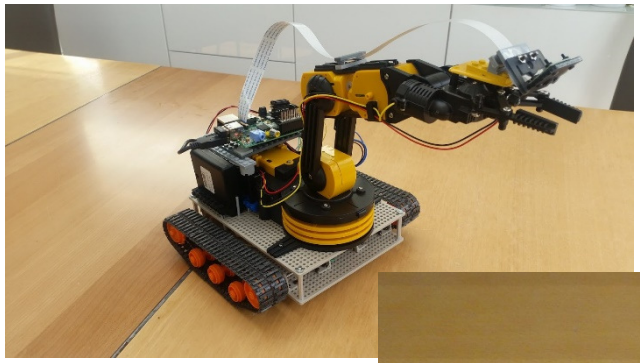
RaspberryPi

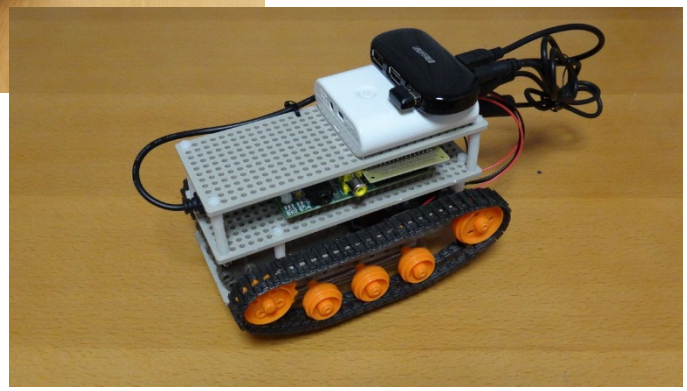
Raspberry Pi 3 model B

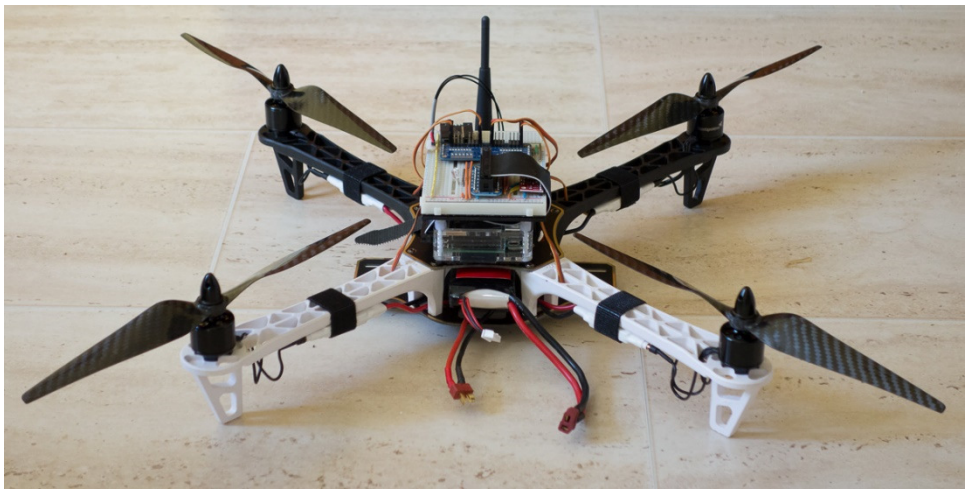
- 5 million units sold world wide each year
- Open source for everyone
- USD 35 selling price buying online
- Thousands of add-on HAT modules
- Do it yourself and make what you want it to be
- Robots, Drones, Home media center, mini-NAS server… etc

Maker applications









Build it yourself robots and drones plus much more!

Why UP

Professional maker + Industrial application

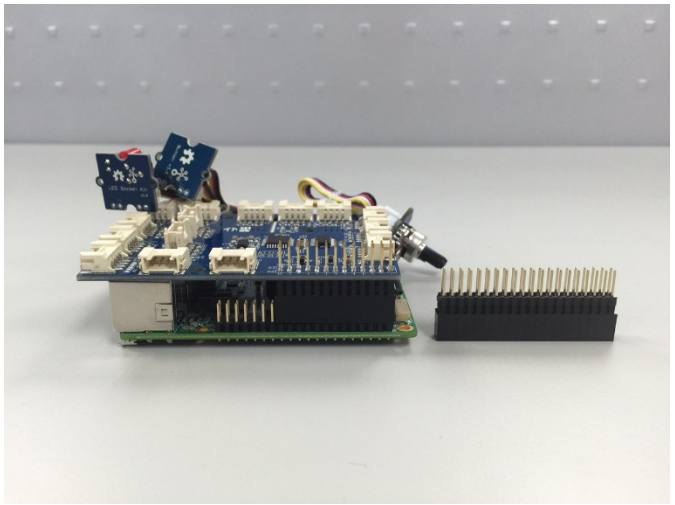
•For professionals who requires high CPU processing performance and real time response

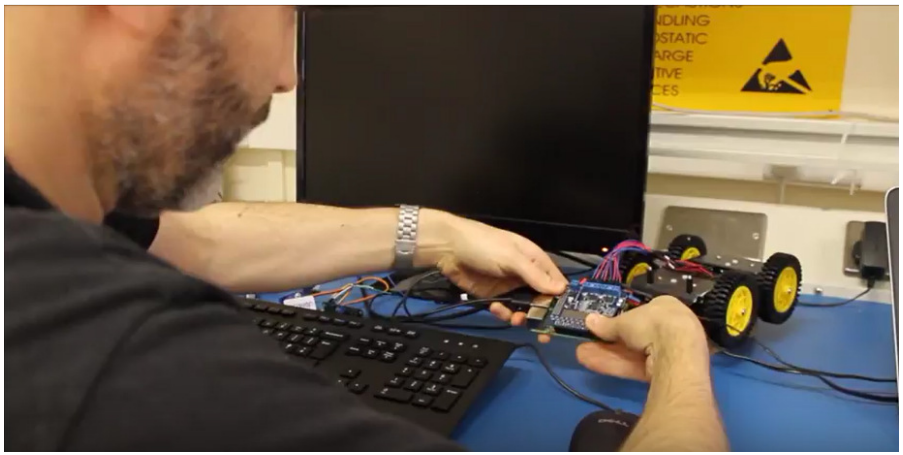
•Imagine all you can do with Raspberry Pi and much more, all add-on HAT modules from Pi can be used on UP board

•6x USB 2.0, 1x USB 3.0, 1x HDMI, 1x eDP, 1x MIPI DSI, 4GB RAM, 64GB eMMC and up to 1.92Ghz Intel x5-Z8350 CPU

•UP is not only for makers but also industrial application where performance and size is the key factor. At low price as well!

UP with add-on HAT modules



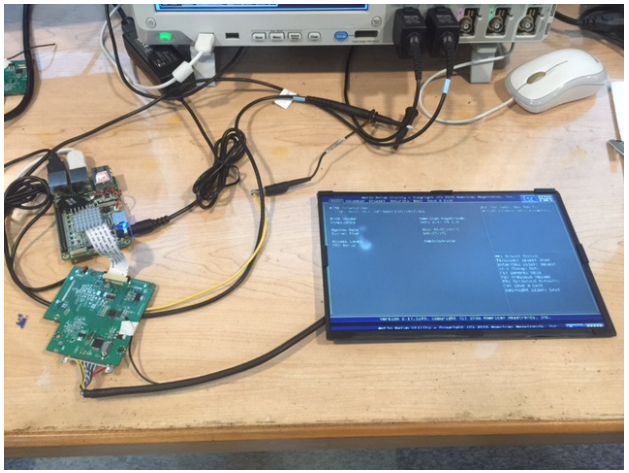


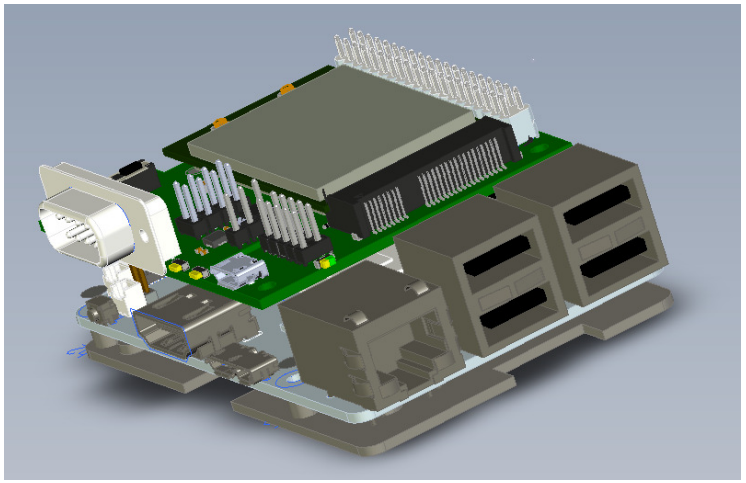
https://youtu.be/NKESXBM0YJ8

UP supports all available Pi HAT modules plus more multi-function pins

- In the video we demonstrate UP connecting to a stepper motor HAT module that can control the movement of the wheels in the motor car
- UP offers more multi-function pins compare to Raspberry Pi which provides more application usage for customized HAT module

UP with add-on HAT modules



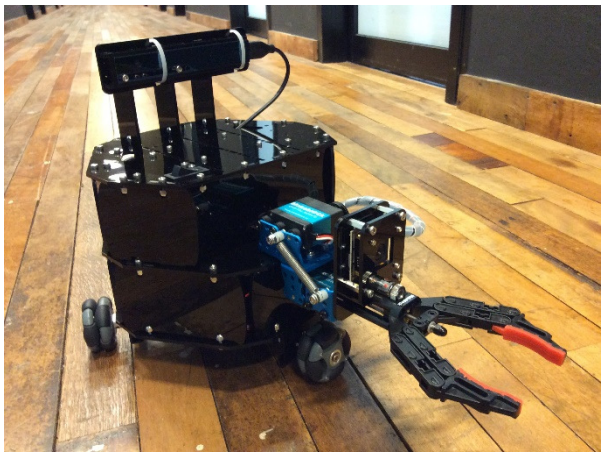


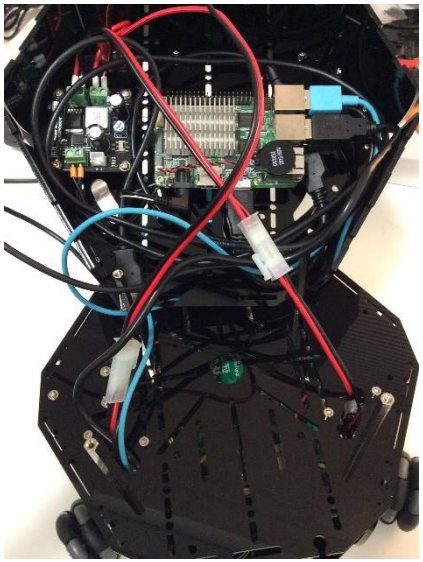
UP supports all available Pi HAT modules plus more multi-function pins

•With 3G/LTE, WIFI/BT, Lora and other expansion modules through HAT, UP is able to have great flexibility in all types of communication protocols

•UP also supports MIPI DSI and eDP display panel

Intel application with UP





Intel adapted UP board in their Real Sense kit and Robotics demo

•Intel Real Sense 3D camera team partner with AAEON to create a Intel Real Sense Kit bundling UP board + Real sense 3D camera to sell as turn key solution for developers

•Besides Intel Real Sense team, Intel Robotics and Droid team also in discussion of cooperation

Intel IDF announcement with UP

Largest Intel annual event, the Intel IDF will announce partnership with UP

•AAEON and Intel Real Sense team will sign contract for the Real Sense kit and announce it on Intel IDF, 4/13

•UP is presented in the rehearsal!

UP Kick starter campaign

KICKSTARTER Discover Start a project About us Search Projects

UP - Intel x5-Z8300 board in a Raspberry Pi2 form factor

UP, the credit card computer board for makers powered by Intel Quad Core Atom X5-8300 1.84GHz, running Linux, Windows 10, and Android

Pre-order

Created by

UP

671 backers pledged €105,117 to help bring this project to life.

UP specs

X86
64bit
RTC/ WOL/PXE

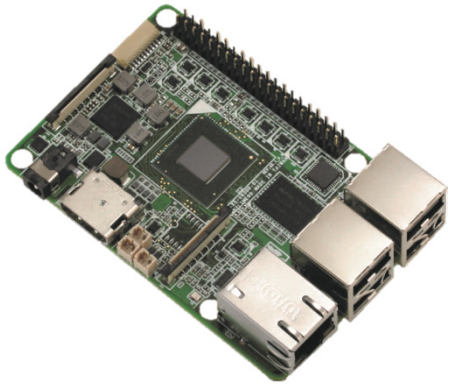
Industrial
operation temp.
0-60 C

3 years available
longevity

Customization
feasibility

eMMC up to 64GB
up to 166MB/s read
up to 45 MB/s write

Memory up to
4GB DDR3L



40 pin GP-bus
Same Pinout of
Raspberry Pi2

Android Lollipop
Windows 10
Linux,and more

14 nm technology
2W SDP CPU

Hardware Security
AES new Instruction

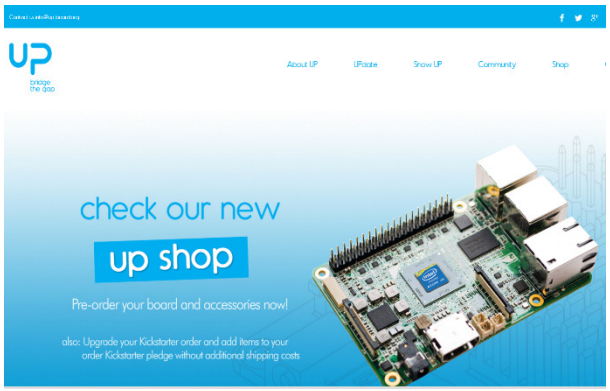
1x USB 3.0 OTG
4x USB 2.0
2x USB2.0 pin header
1 Gb Ethernet

Intel Atom
QuadCore x5-Z8350
up to 1.92Ghz

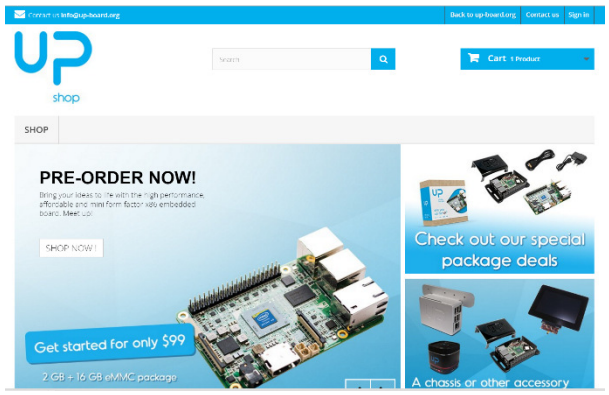
Intel HD Gen 8
w/12 Graphic
Execution Units

HDMI
DSI for LCD/TFT
MIPI for Camera

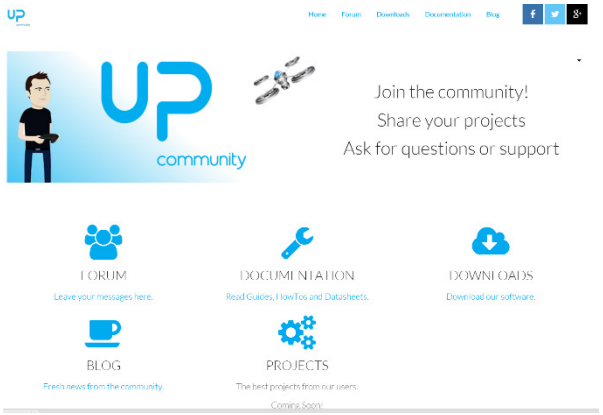
UP support



Know more about UP



Get your UP board



Join the community

Free download Linux OS*/ Windows IoT Core image
Free download 3D chassis stp file
Free download android sdk

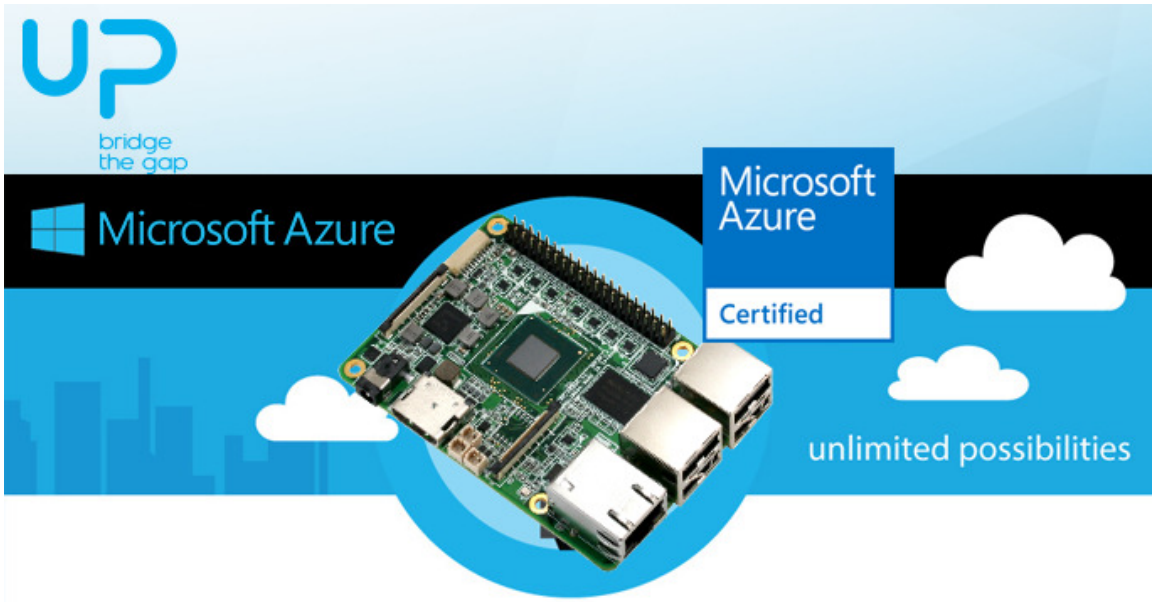
Open block diagram
Open pin definition
Open 3D board stp. file

*limited editions

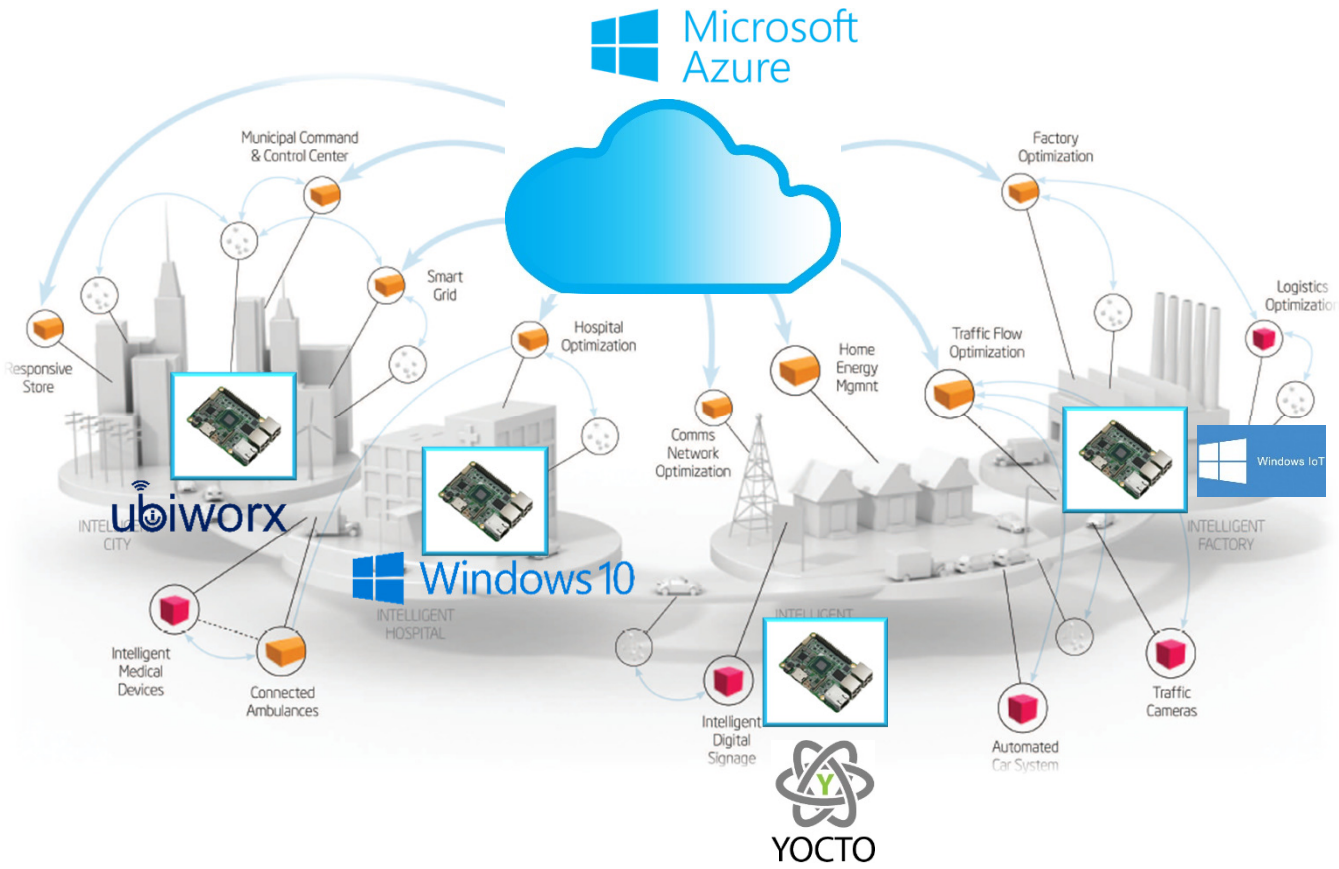
UP Eco-system

www.aaeon.com

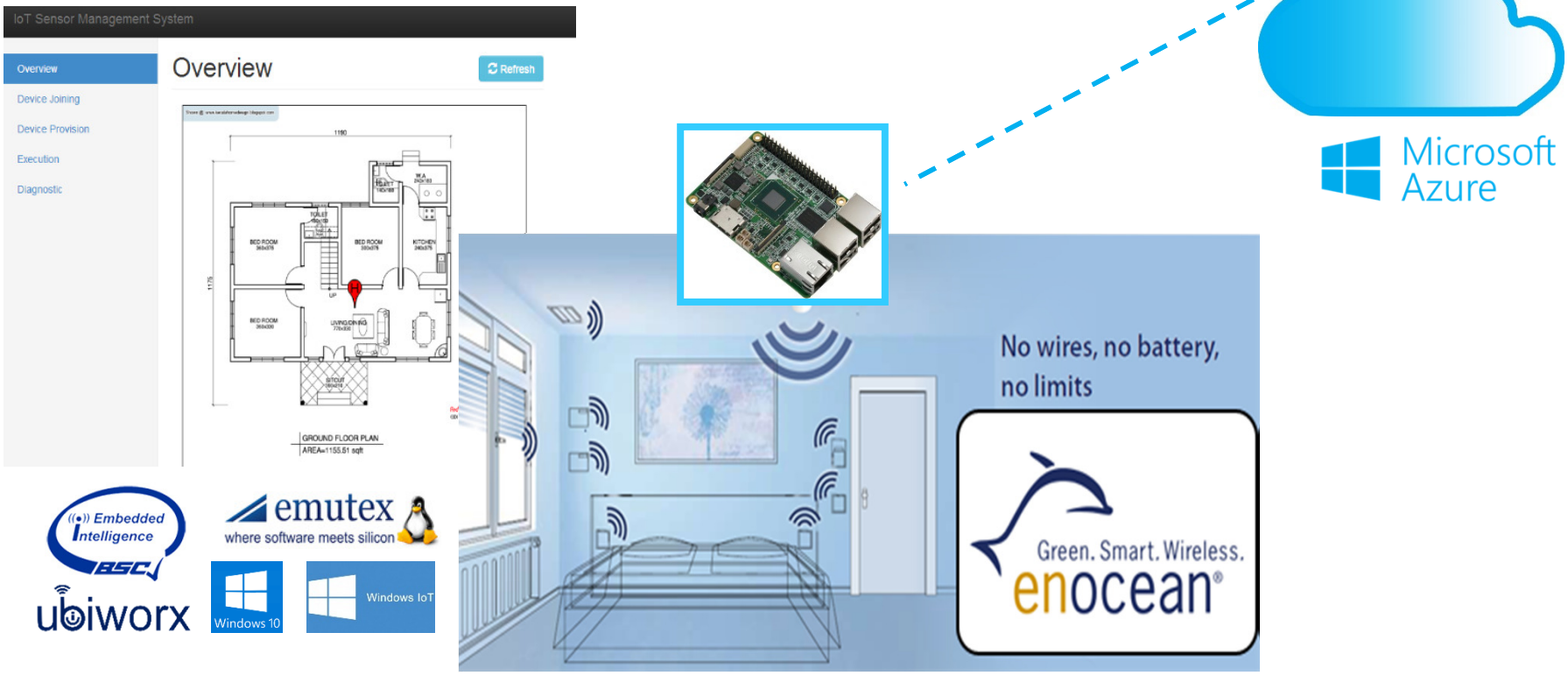
UP with Microsoft Azure certify



UP with IoT


Microsoft Azure
Municipal Command & Control Center
Smart Grid
Responsive Store
Hospital Optimization
Home Energy Mgmnt
Comms Network Optimization
Traffic Flow Optimization
Factory Optimization
Logistics Optimization
ubiworx
Windows 10
Windows IoT
INTELLIGENT CITY
INTELLIGENT HOSPITAL
INTELLIGENT FACTORY
Intelligent Medical Devices
Connected Ambulances
Intelligent Digital Signage
Automated Car System
Traffic Cameras
YOCTO

UP in Smart Home



UP in Smart Vending

UP in Digital Signage

Microsoft Azure

Windows 10

Windows IoT

RockTouch

signagelive
delivering media to your screens

Order Information

- **Packing list**
  - 1x UP board
  - 1x Quick start up guide

	Description	PN
MP	x5-8350, 64 bit 1GB RAM, 16GB eMMC	UP-CHT01-A10-0116
	x5-8350, 64 bit 2GB RAM, 16GB eMMC	UP-CHT01-A10-0216
	x5-8350, 64 bit 2GB RAM, 32GB eMMC	UP-CHT01-A10-0232
	x5-8350, 64 bit 4GB RAM, 32GB eMMC	UP-CHT01-A10-0432
	x5-8350, 64 bit 4GB RAM, 64GB eMMC	UP-CHT01-A10-0464

Selling point

- Credit card size high performance PC board
- Flexible expansion with thousands of HAT modules
- Multifunction pins compare to Raspberry Pi
- Multi-displays support, HDMI, eDP, MIPI DSI
- Extensive I/O ports: 6x USB 2.0, 1x USB 3.0, 1x GbE, UART
- Multi OS support, Windows 8.1/10, Linux, Android
- Community service for any technical issues
- Strong partnership with Intel

THANK
YOU!