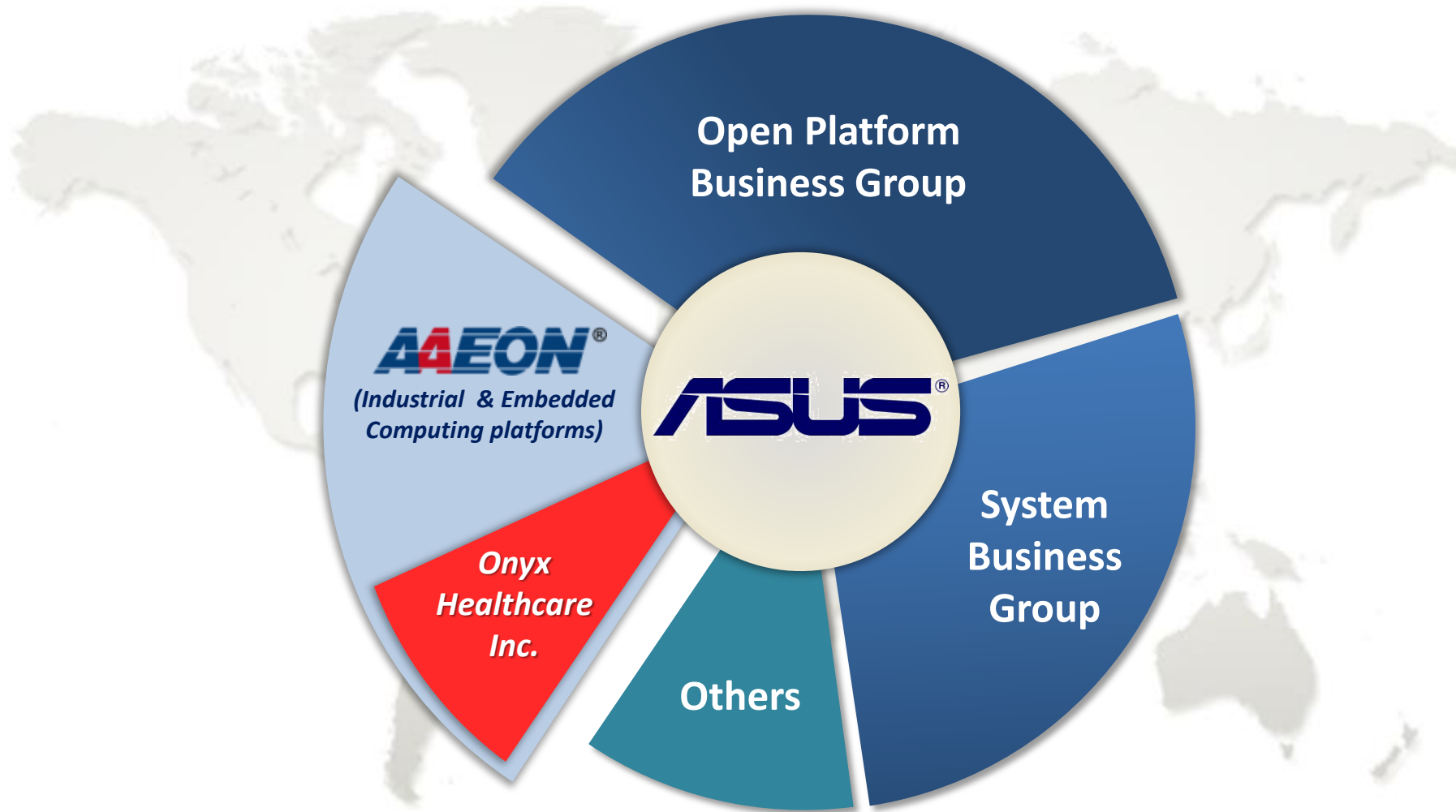




Intelligent IoT Gateways

Presenter: Maciej Talalaj
Role: Sales Manager
Poland, Czech Republic, Slovakia

ASUS Group



AAEON

Founded:	1992
Acquired by ASUS:	2011
Employees:	700 (Europe: 40)
Location:	Taipei, Taiwan
Mftg Sites:	Taipei, Taiwan / SuZhou, China
Products:	Industrial Motherboards, Embedded CPU Boards, Industrial Computers, Panel Computers, IoT Gateways , Embedded Box Computers, Industrial Mobile Computers
2016 Revenue:	US\$160 million (projected)



Global Presence

Headquartered in Taipei, Taiwan, AAEON is now serving its global partners in 16 locations worldwide.



Vertical Focus & Applications



Retail & Fiscal

- Mobile POS & Online Payment
- Smart Retail / Vending
- Fiscal & Tax-collection



Smart Manufacturing

- Robot
- Machine vision
- Digital Factory
- Logistics & Warehousing



Intelligent Transportation

- Fleet Management
- Rolling Stock
- Passenger Information System
- In-vehicle Signage & Security



Network Security

- Firewall / UTM
- Network appliance
- Video Surveillance

IoT Platform + Solution



AAEON Joins the IQRF A

2016-09-29

Eindhoven, The Netherlands – September :

AAEON, the leading manufacturer of advan

As part of the IQRF Alliance, AAEON will ha increasingly used in different markets like s wireless solution in an UP IoT gateway, it o and IQMESH network protocol.

News

AAEON joined the IQRF A

29 SEPTEMBER 2016

We have a pleasure to announce that AAEC IQRF Alliance. AAEON is one of the leading manufacturers of advanced industrial and computing platforms. Being established in company has many experience in IT busine

AAEON joined the IQRF Alliance



We have a pleasure to announce that AAEON joined the IQRF Alliance. AAEON is one of the leading designers and manufacturers of advanced industrial and embedded computing platforms. Being established in 1992, the company has many experience in IT business.

AAEON is manufacturer and provider of integrated solutions, hardware and services with focus on reliability and high quality. The product portfolio includes industrial motherboards and systems, industrial displays, rugged tablets and much more.

AAEON became a member of the ASUS group in 2011 focusing on innovation and quality of the products even more. At the IQRF Alliance Meeting in Prague, May 2016, AAEON met solutions and products presented by the IQRF Alliance members. Reliable and robust products and solutions built on the IQRF technology persuaded AAEON to initiate closer cooperation with the IQRF Alliance.

IQRF Alliance

iance

Udostępnij 0

id embedded computing platforms, has become

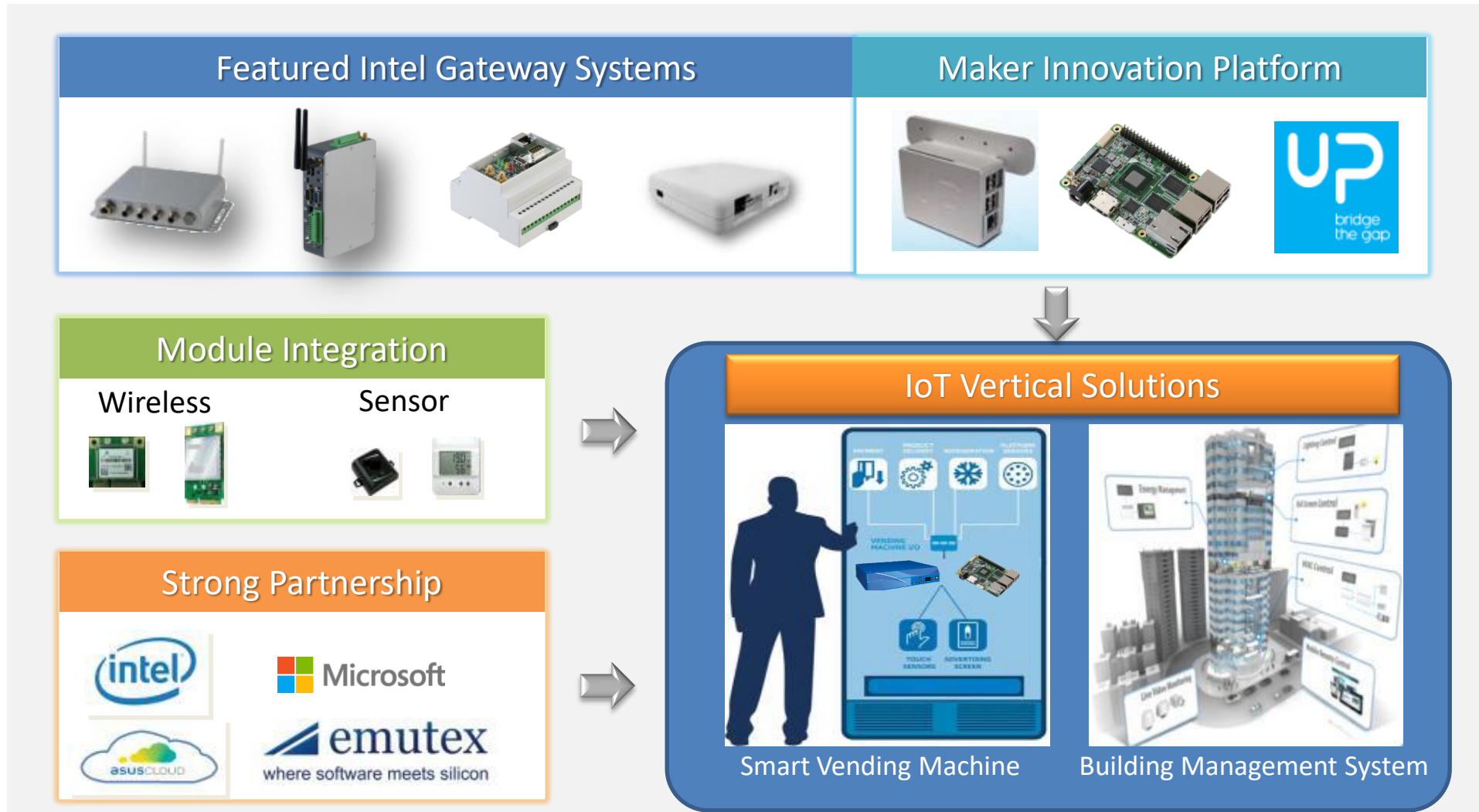
inity to create a versatile IoT gateway, by supporting different markets including smart cities, smart : of the integration of an IQRF wireless solution in ion with a secure wireless communication IoT

IoT ecosystem



* Continuously expanding our ECO Partners.

IoT solutions



Intelligent IoT gateways from AAEON

- 7 years of longevity
- easy integration with IQRF modules, Bluetooth, WiFi, 3G
- Intel x86 inside – real-time data analysis on local server, no need to constantly send the data to the cloud, no delays
- advanced security protocols – McAfee Embedded Control Security
- operation in wide temperature range
- rugged design
- full scalability of computing power

Intel Quark Gateway Systems

- Intel[®] Quark SoC X1000 Series
- Moon Island Capable with McAfee Security
- Onboard 1GB DDR3 800MHz SODIMM
- USB 2.0 x 2
- Operating temperature from -20C to +70C
- 10/100 Ethernet x 2
- RS-232/422/485 x 1, RS-232 x 1
- VDC 9~24V (Lockable VDC connector)
- Mini PCIe expansion for connectivity
- Various designs for different environments

AIOT-QG



General purpose

AIOT-QA



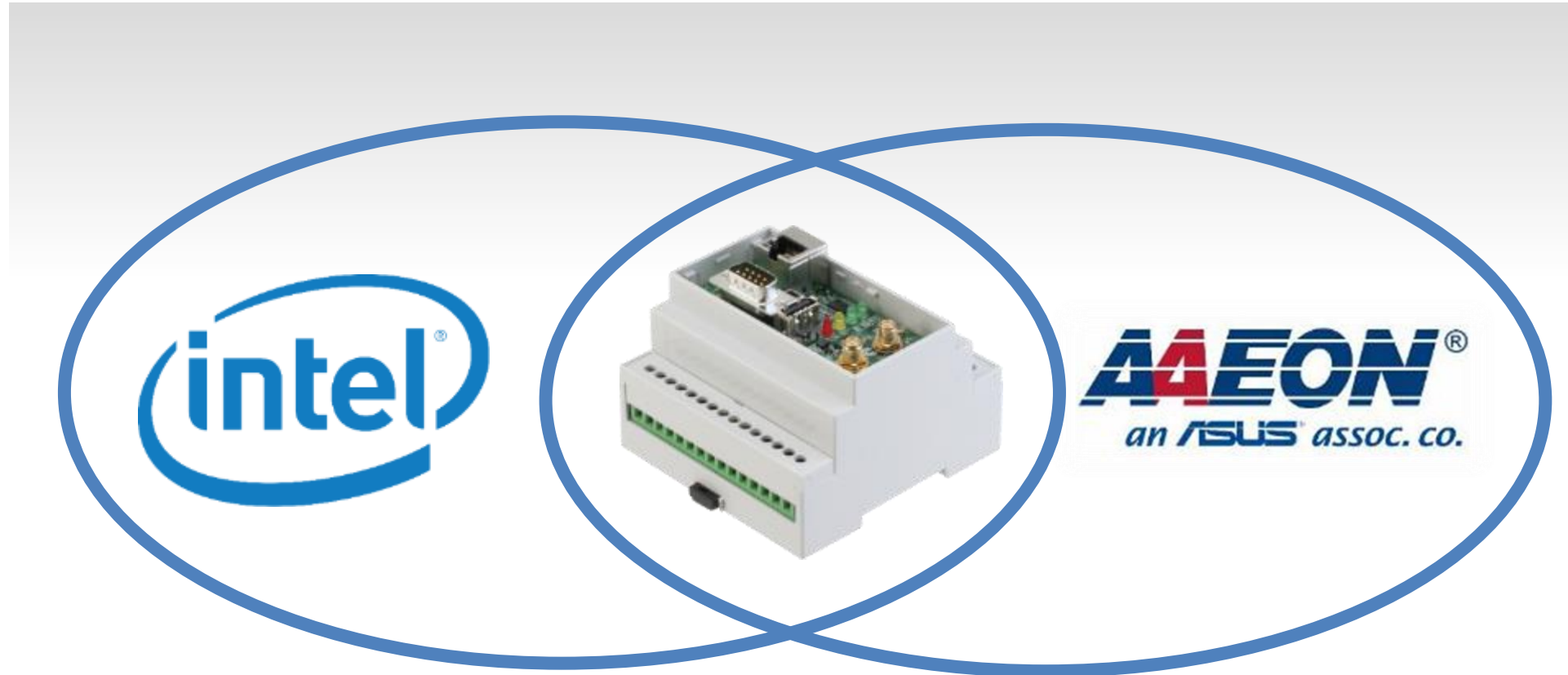
Rugged design

AIOT-QM



Outdoor, IP67, M12 connectors

Innovation in Building Management



Din Rail Mount BMS **AIOT-DRM**

DRM Value Proposition



Base PLC

+



Industrial I/O MODs

+



Gateway

> 500 \$

AIOT-DRM - a gateway with PLC function

Cost Effective: **Reduced Total Cost** (Equipment & Integration)

Secure: **Intel Moon Island Security and Manageability**

Flexible: **Modular design**



Up to 50% Saving of Hardware investment

- **PC board I/O**

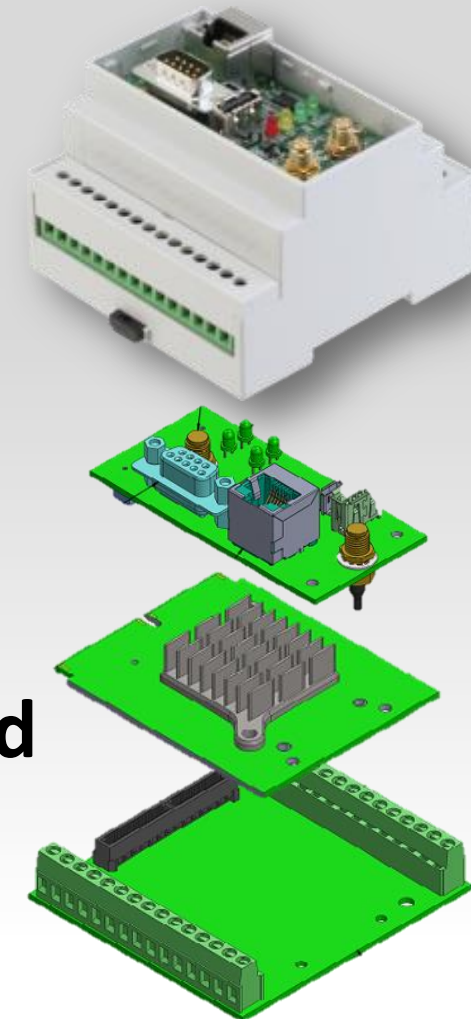
10/100 LAN x1, USB2.0 x1, COM x1
Antenna hole(SMA type) for wireless

- **Intel Quark PC module**

Intel Quark SoC X1021 Dual Core
On board DDR3 512 MB memory & 4GB eMMC

- **Customizable Industrial I/O board**

4 x isolated 4-20mA current loop receivers
1 x isolated 4-20mA current loop transmitter
6 x non-isolated 24V Digital Inputs
2 x non-isolated 24V/100mA Digital Outputs
Power DC24V input



Home Automation Gateway

Features

- Intel[®] Bay Trail CPU
- SO-DIMM DDR3L Memory
- 16GB eMMC Storage Onboard
- 1 x Ethernet, 2 x USB3.0/2.0
- 1 x HDMI + 1 x eDP(pin header)
- 1 x RS232/422/485
- 2 x PCIe Mini-Card (for Wi-Fi module or mSATA)
- 1 Power Button

Environment

- Power Requirement: 12Vdc
- Operating Temp: 0°C ~ 50°C
- Storage Temp: -40°C ~ 80°C
- Fanless

OS Support

- Windows 7, 8.1, 10
- Wind River Linux



Industrial Automation Gateway

Features

- Aluminium chassis, fanless operation
- Intel[®] Bay Trail / Skylake CPU
- SO-DIMM DDR3L Memory, up to 8 GB
- mSATA slot
- 2 x Ethernet, 4x USB
- 1 x HDMI
- 2 x RS232/422/485
- 1 x full size PCIe Mini-Card with SIM slot
- 1 Power Button

Environment

- Power Requirement: 12Vdc lockable jack
- Operating Temp: -30°C ~ 70°C
- Storage Temp: -30°C ~ 80°C
- Fanless

OS Support

- Windows 7, 8.1, 10
- Linux



HMI Gateway

Features

- Aluminium chassis, fanless operation
- Screen sizes 10.4" – 21.5"
- IP65 front bezel
- Capacitive touch screen, hardness 7H
- Intel[®] Bay Trail / Skylake CPU
- SO-DIMM DDR3L Memory, up to 8 GB
- CFast™ slot + 2.5" SATA SSD
- 2 x Ethernet, 4x USB
- 1 x RS232/422/485
- 2 x full size PCIe Mini-Card with SIM slot

Environment

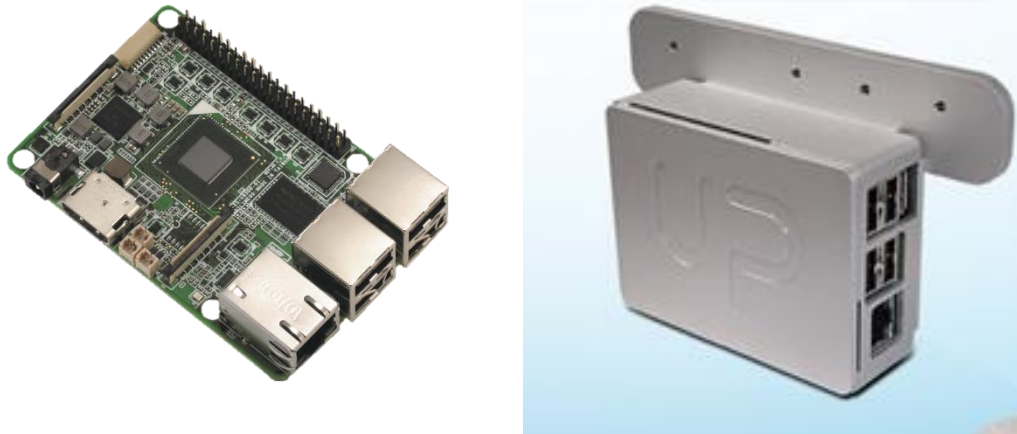
- Power Requirement: 9-30V DC
- Operating Temp: -10°C ~ 60°C
- Storage Temp: -30°C ~ 80°C
- Fanless

OS Support

- Windows 7, 8.1, 10
- Linux



UP – Quad Core Intel x5-Z8350 CPU board in a Raspberry Pi form factor



**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**

**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**

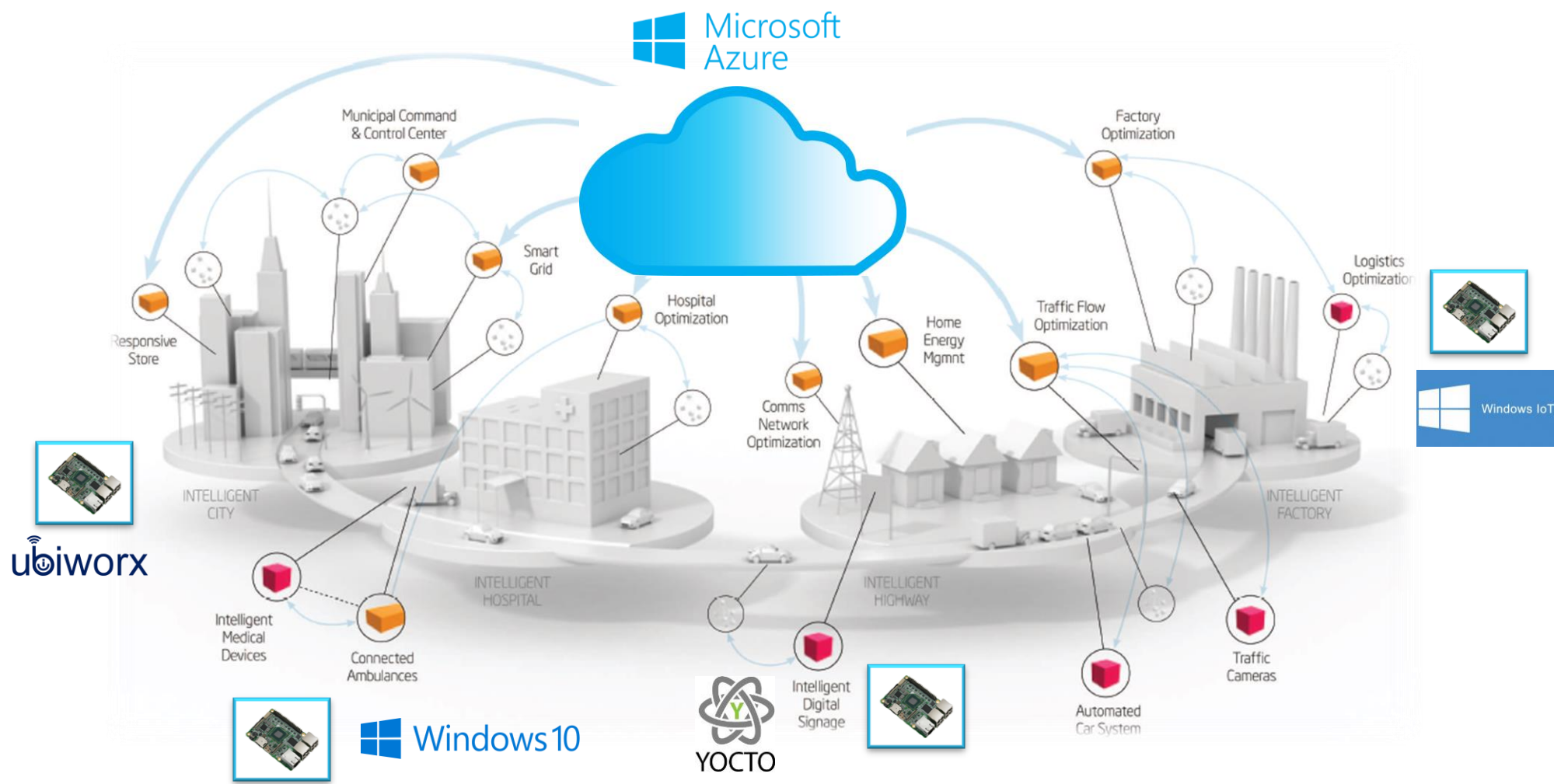
**HDMI
DSI for LCD/TFT
MIPI for Camera**

UP
bridge the gap

Microsoft Azure

Microsoft Azure
Certified

unlimited possibilities





Thank You!