AAEON-IQRF Solutions for IoT

Webinar presenters :
Marco Barbato, Product & Technical Director AAEON Europe
Simon Chudoba, CEO IQRF Alliance

Date: September 1st, 2017

Marco Barbato
Director of PSM

Simon Chudoba
CEO IQRF Alliance

IQRF® | Alliance

Solutions for IoT

.webinar // Internet of Things

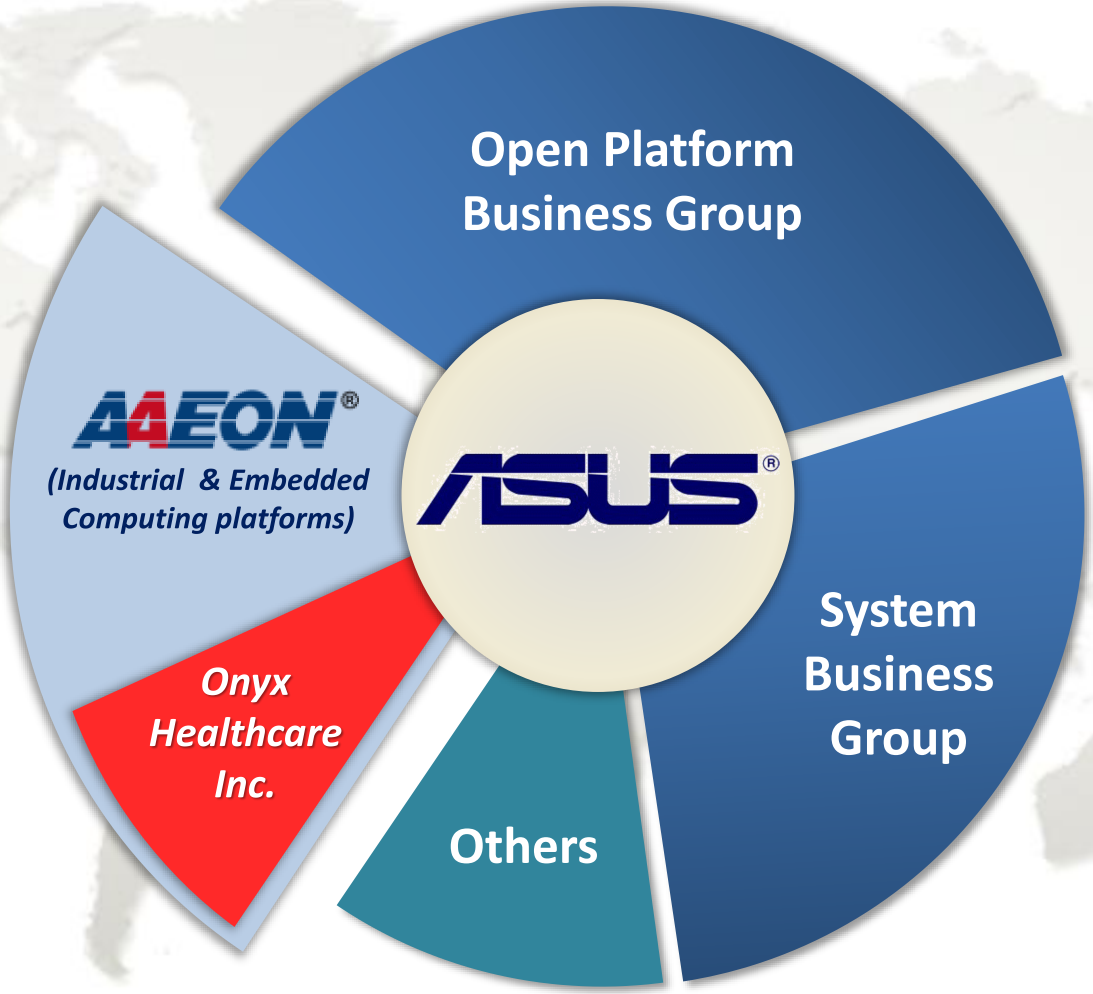
Date and time //

Friday, 1st of September 2017, 14:00 (Amsterdam, GMT +01:00)

Your presenters

ASUS® Group

The Industrial IoT company of ASUS



Open Platform Business Group

AAEON®
(Industrial & Embedded Computing platforms)

Onyx Healthcare Inc.

ASUS®

System Business Group

Others

ASUS Company Profile

ASUSTeK Computer Inc.

Taipei Headquarters

Founded:	April 1, 1989
Capital:	NT$ 7.43bn in 2016 (USD$247.6M)
Chairman:	Jonney Shih
CEO:	Jerry Shen
Employees:	6,743
Location:	TW, China, Global
Revenue:	NT$ 467bn, 2016 Group (USD$15.6bn)
Product:	Motherboard, Notebook and etc.

AAEON Corporate

Company Name: AAEON Technology Inc.

Founded: 1992 (Acquired by ASUS in 2011)

Capital: NT$ 960 million

Employees: 850+

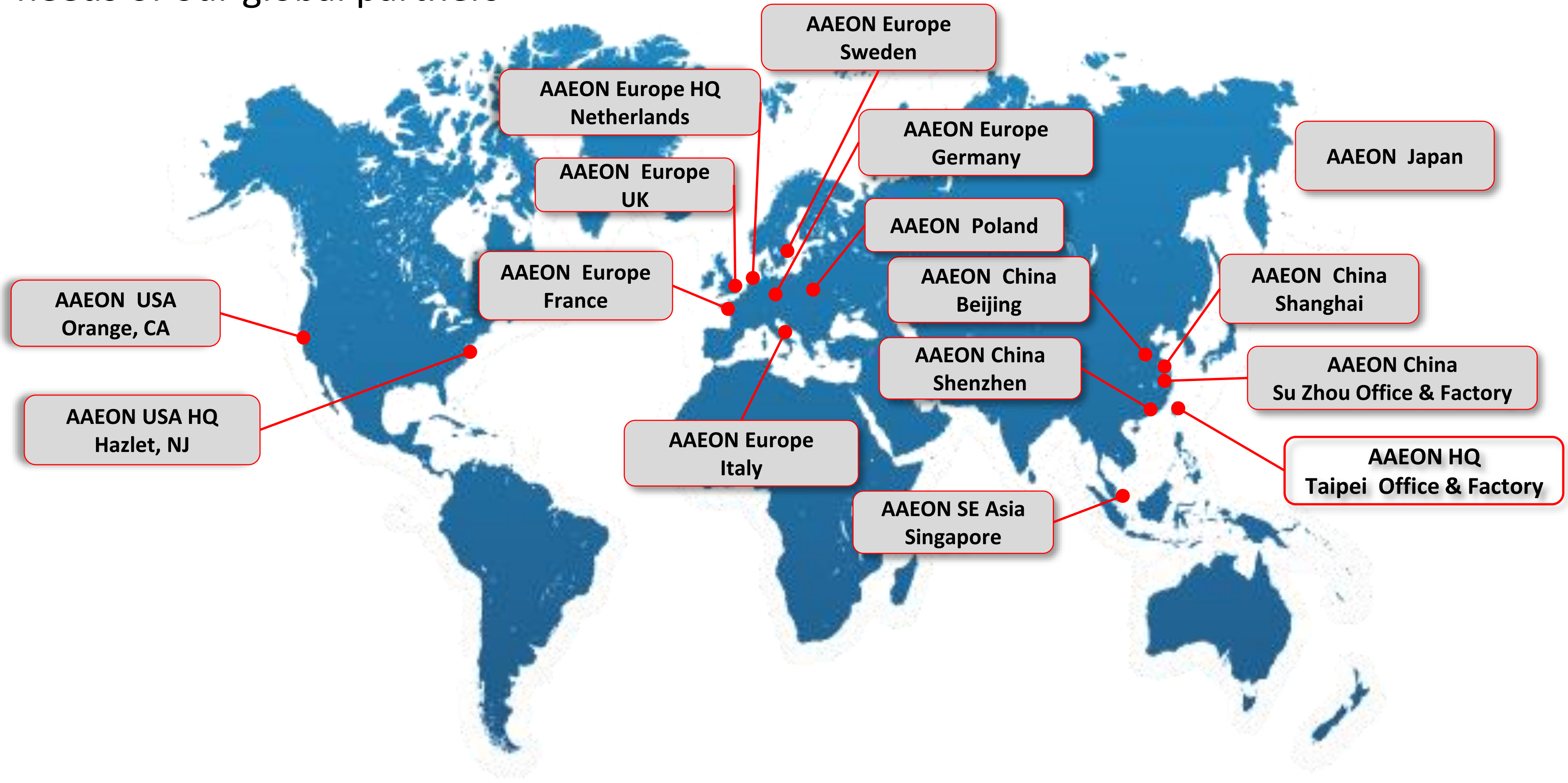
Location: Taipei, Taiwan

Corporate Headquarters

AAEON
an ASUS assoc. co.
研揚科技

AAEON Worldwide Offices

Headquartered in Taipei, Taiwan, AAEON now has 15 locations worldwide to serve the needs of our global partners


AAEON Europe Sweden

AAEON Europe HQ Netherlands

AAEON Europe Germany

AAEON Japan

AAEON Europe UK

AAEON Poland

AAEON Europe France

AAEON China Beijing

AAEON China Shanghai

AAEON USA Orange, CA

AAEON China Shenzhen

AAEON China Su Zhou Office & Factory

AAEON USA HQ Hazlet, NJ

AAEON Europe Italy

AAEON HQ Taipei Office & Factory

AAEON SE Asia Singapore

Focus • Agility • Competitiveness

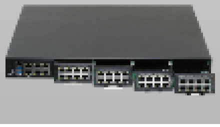
AAEON Product Divisions

ECD

3.5”, 5”, PC-104 SBCs
COM
Carrier ODM
PICMG SBCs

NSD

Firewall
NVR

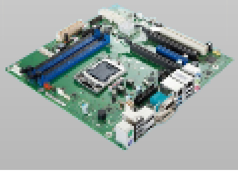


SPD

Embedded Box PC
HMI/Panel PC
Industrial display

IPCBU

Industrial Mother Board *(ATX, Mini-ITX, etc.)*



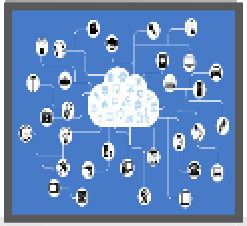
DMS

ODM solutions
Board&System level
Vertical applications

RMD

Semi-rugged & Rugged Tablet PC Handheld PC

IIoT



IIoT Gateways, End Nodes, Devices

Up! Bridge the Gap

IoT Pro Makerts to Industrial

The Idea

=

The Most Popular platform
for prototyping

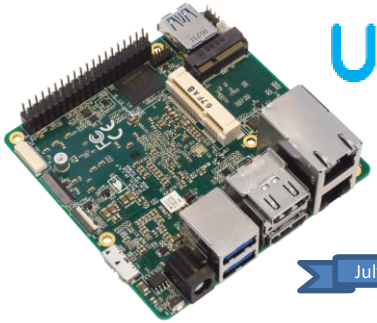
+

+ intel

The Most Scalable Hardware
with multi OS Support

Industrial Grade Electronic Manufacturing
Process and Components

UP
bridge the gap
MP



UP²
bridge the gap
July

UP
bridge the gap
Aug

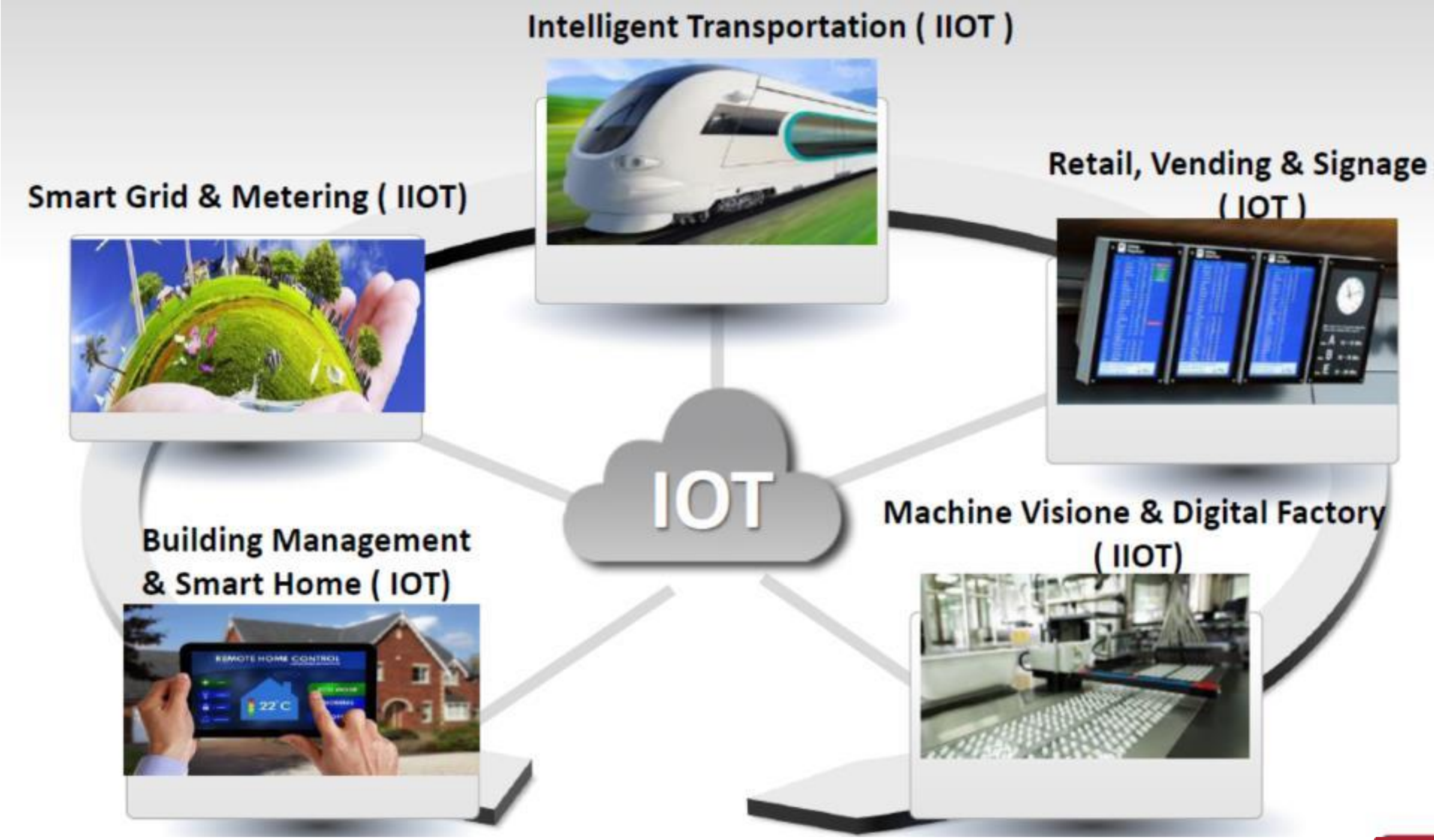
UP website

UP Community
>3000 members

UP Shop

UP Ecosystem partners

AAEON Europe - Focus in IoT and IIOT



Intelligent Transportation (IIOT)

Smart Grid & Metering (IIOT)

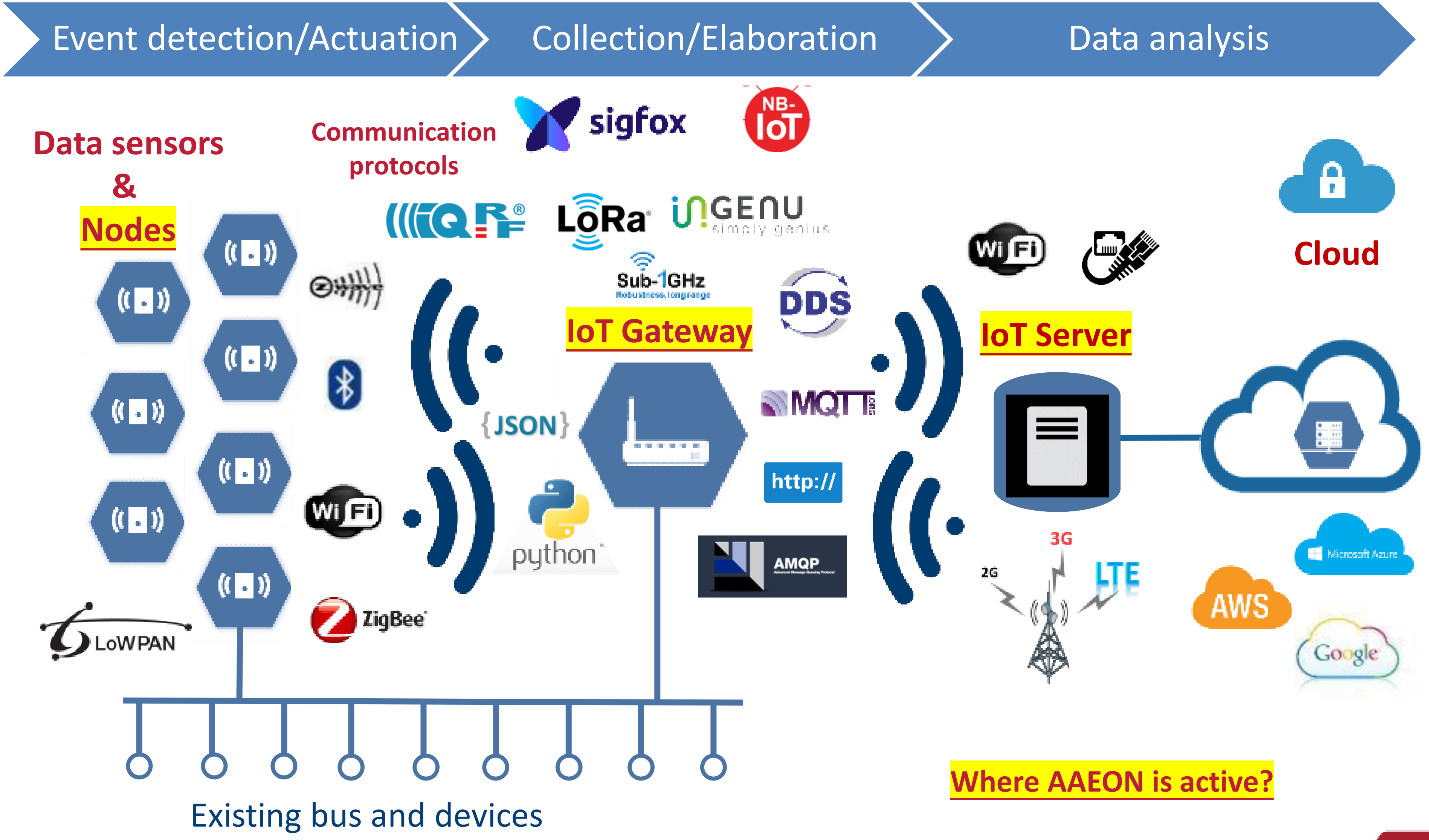
Retail, Vending & Signage (IOT)

IOT

Machine Visione & Digital Factory (IIOT)

Building Management & Smart Home (IOT)

IoT application pattern



Event detection/Actuation → Collection/Elaboration → Data analysis

Data sensors & Nodes

Communication protocols

IoT Gateway

IoT Server

Cloud

Existing bus and devices

Where AAEON is active?

sigfox
NB-IoT
IQRF®
LoRa
INGENU simply genius
Sub-1GHz
Robustness, long range
DDS
MQTT
http://
AMQP
{JSON}
python
Wi Fi
Wi Fi
ZigBee
6LoWPAN
2G
3G
LTE
Microsoft Azure
AWS
Google

AAEON IoT solution offering

Standard solutions

IP68 Outdoor IIoT Gateway

WiFi Lte IQRF LoRa

IIoT LoRA Gateway & Network Server

WiFi LoRa

Indoor IoT Gateway

WiFi IQRF

Automation 3G Gateway

WiFi Lte IQRF

Starter kit PoC

IQRF starter kit

UP IQRF
IoT Starter Kit
UP with IQRF adapter
IQRF Nodes
IQRF Router
Sensor kit
Relay kit

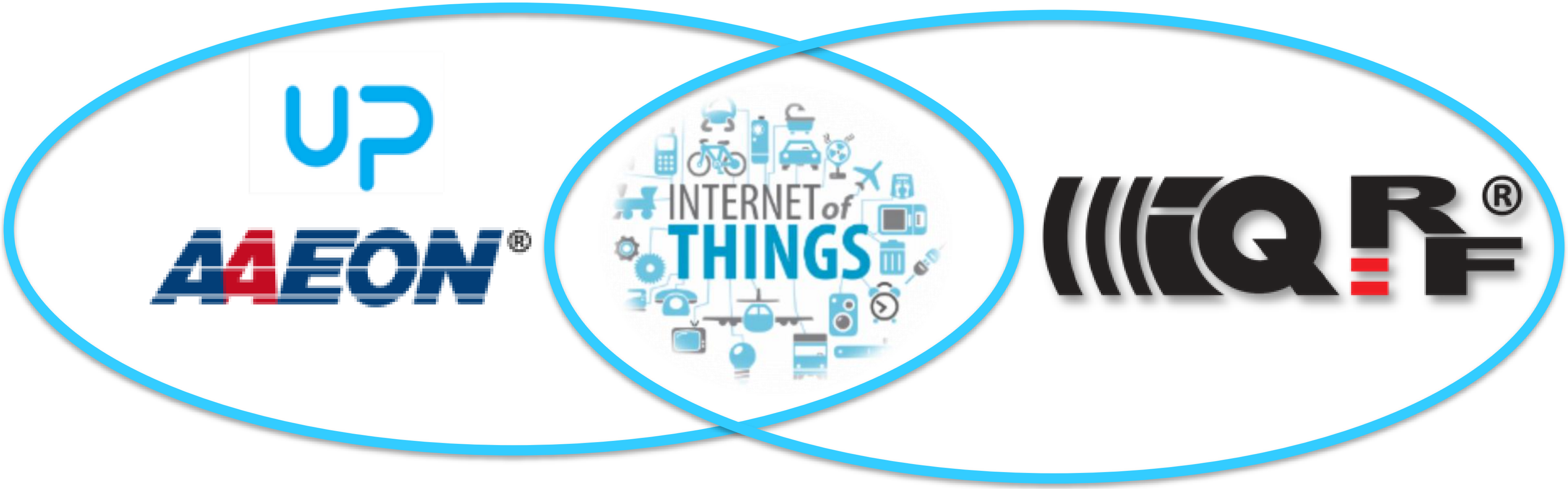
EnOcean starter kit

LoRa starter kit

3G starter kit

Trusted Ecosystem partners (RF, APP, S/I)

Partnering to enable Industrial IoT


UP
AAEON®
INTERNET of THINGS
IQRF®

IQRF® Alliance

Member

Indoor Lighting

Building Automation

Street Lighting

IQRF®

Logistic

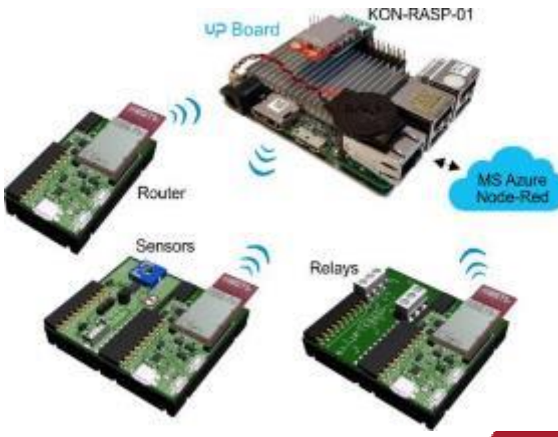
Automation

Intelligent Parking

IQRF-ready offering

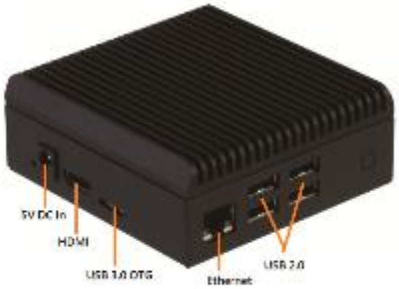
- Fast Prototyping
  - Starter kit based on UP board with transceiver, sensors and all SW supply
  - Reference

    http://iqrfalliance.org/product/iot-starter-kit
  - Release: Ready
  - Where to buy: UP-shop, IQRF shop


UP Board
KON-RASP-01
Router
MS Azure
Node-Red
Sensors
Relays

IQRF-ready offering

- Indoor Gateway bundle kit
- Elements: UP-GWS01 + GW-USB-06
  - Reference:
    http://iqrfalliance.org/product/gw-usb-06
    http://www.aaeon.com/en/p/tiny-gateway-system-with-upboard
  - Release: ready
  - Where to buy: UP-shop.org and http://iqrf.shop


5V DC In
HDMI
USB 3.0 OTG
Ethernet
USB 2.0

IQRF-ready offering

- Outdoor Gateway kit
  - Elements: UP-GWS03 + IQRF transceiver
  - Reference: TBD
  - Release: sampling
  - Where to buy: AAEON shop

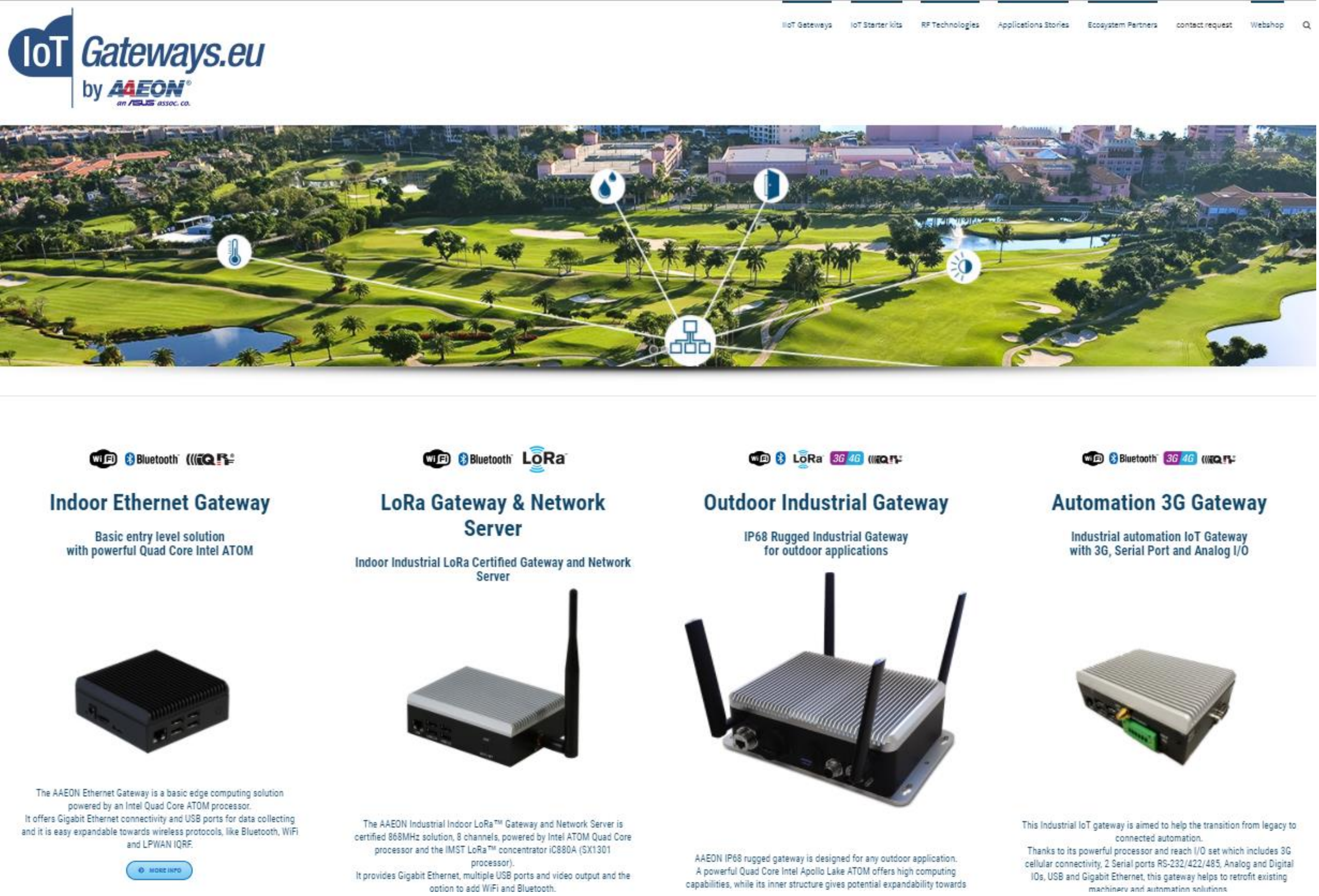
Additional resources

IQRF® Alliance

http://www.iqrfalliance.org/news/142-iqrf-summit-2017-presentations-and-photos

IoT Gateways.eu by AAEON®

http://www.industrialgateways.eu


IoT Gateways.eu
by AAEON
an ASUS assoc. co.
IIoT Gateways
IoT Starter kits
RF Technologies
Applications Stories
Ecosystem Partners
contact request
Webshop
Wi Fi
Bluetooth
IQRF
LoRa
3G 4G
MORE INFO

Indoor Ethernet Gateway

Basic entry level solution
with powerful Quad Core Intel ATOM

The AAEON Ethernet Gateway is a basic edge computing solution powered by an Intel Quad Core ATOM processor.
It offers Gigabit Ethernet connectivity and USB ports for data collecting and it is easy expandable towards wireless protocols, like Bluetooth, WiFi and LPWAN IQRF.

LoRa Gateway & Network Server

Indoor Industrial LoRa Certified Gateway and Network Server

The AAEON Industrial Indoor LoRa™ Gateway and Network Server is certified 868MHz solution, 8 channels, powered by Intel ATOM Quad Core processor and the IMST LoRa™ concentrator iC880A (SX1301 processor).
It provides Gigabit Ethernet, multiple USB ports and video output and the option to add WiFi and Bluetooth.

Outdoor Industrial Gateway

IP68 Rugged Industrial Gateway
for outdoor applications

AAEON IP68 rugged gateway is designed for any outdoor application.
A powerful Quad Core Intel Apollo Lake ATOM offers high computing capabilities, while its inner structure gives potential expandability towards

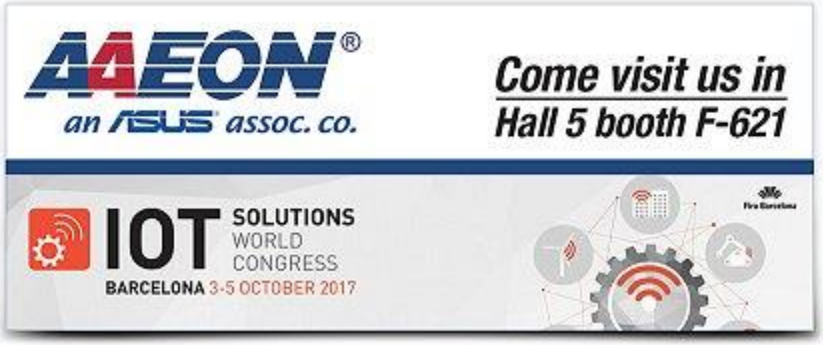
Automation 3G Gateway

Industrial automation IoT Gateway
with 3G, Serial Port and Analog I/O

This Industrial IoT gateway is aimed to help the transition from legacy to connected automation.
Thanks to its powerful processor and reach I/O set which includes 3G cellular connectivity, 2 Serial ports RS-232/422/485, Analog and Digital IOs, USB and Gigabit Ethernet, this gateway helps to retrofit existing machinery and automation solutions.

Upcoming events

TRADESHOWS



AAEON®
an ASUS assoc. co.

Come visit us in
Hall 5 booth F-621

IOT SOLUTIONS WORLD CONGRESS
BARCELONA 3-5 OCTOBER 2017

Fira Barcelona

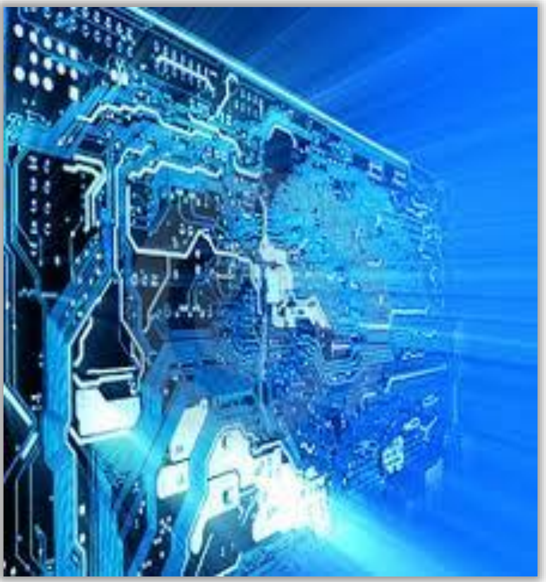
See&Touch

IQRF®

Demo

WEBINARS

http://www.aaeon.com/en/nc/webinar-information/



Thanks