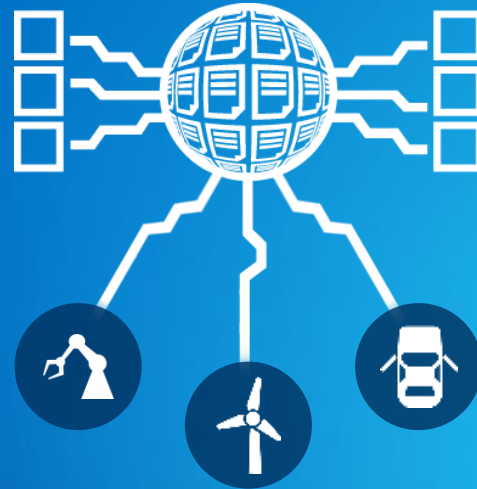


# Интернет вещей и «умных» устройств

## Лекция 2

### *Интернет вещей* *Internet of Things*





## SERVICES CREATION AND SOLUTIONS LAYER



THINGS



GATEWAY



NETWORK  
INFRASTRUCTURE



CLOUD/DATA CENTER  
INFRASTRUCTURE

NETWORK AND CLOUD



make it  
wearable

## Make it Wearable Winners Announced

Visit the finalists page to see who received  
the \$500,000 grand prize!

[FINALISTS PAGE](#) ▶

# DEVELOPMENT TRACK FINALISTS

The forerunners of the wearable technology movement



GRAND PRIZE

**NIXIE - FLYABLE & WEARABLE CAMERA**  
USA



2ND PLACE

**OPEN BIONICS - LOW-COST ROBOTIC HAND**  
UNITED KINGDOM



3RD PLACE

**PROGLOVE - PRODUCTION TOOL**  
GERMANY



**BABYBE - EMOTIONAL PROSTHETICS**  
CHILE



**FIRST V1SION - PLAYER PERSPECTIVE**  
SPAIN



**ARC PENDANT - THE SMART PENDANT**  
UNITED KINGDOM



**WRISTIFY - COOLING OR WARMING REFRESH**  
USA



**SNOWCOOKIE - YOUR SKIING 6TH SENSE**  
POLAND



**BABYGUARD - SMART HEALTHCARE**  
CHINA



**BLOCKS - SNAPABLE PLATFORM**  
UNITED KINGDOM

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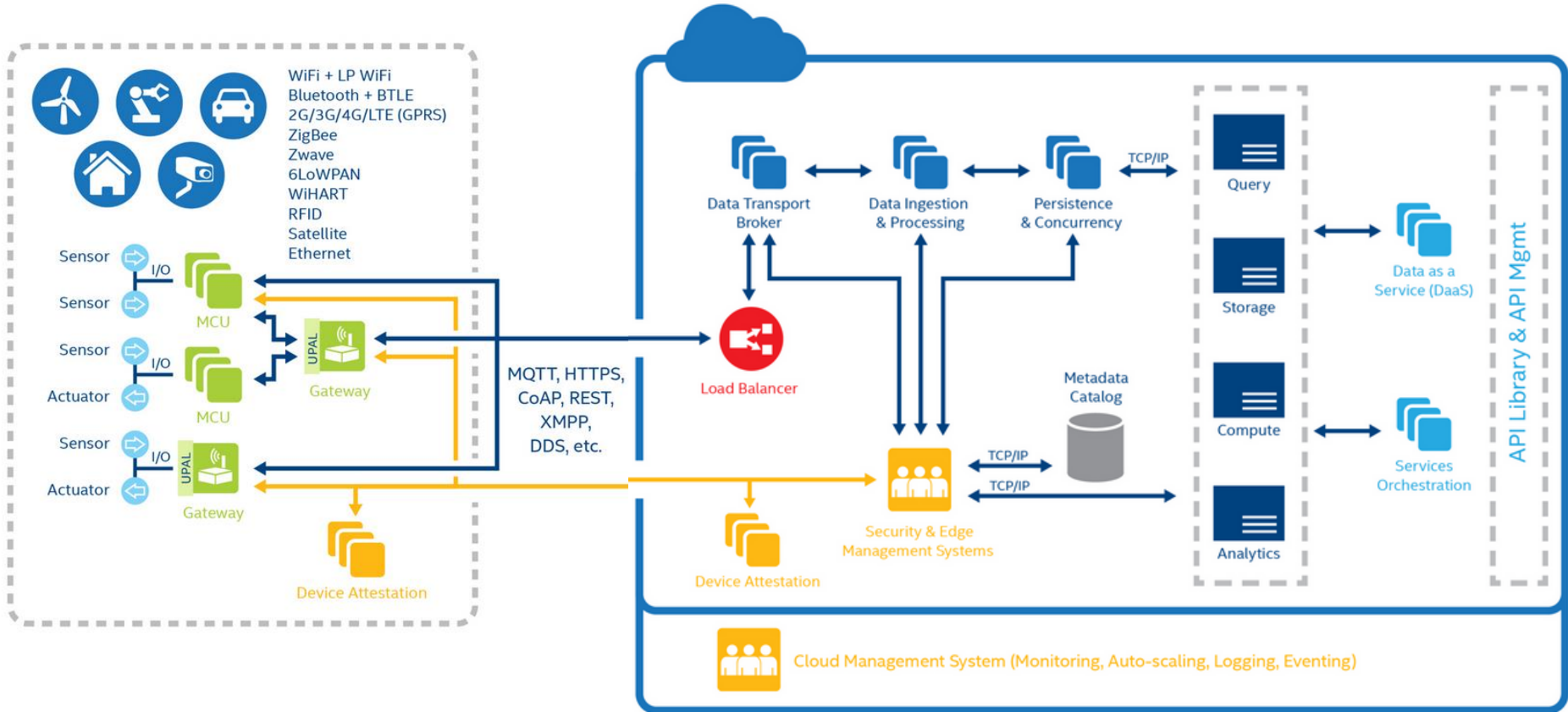


**BLOCKS - SNAPABLE PLATFORM**  
UNITED KINGDOM

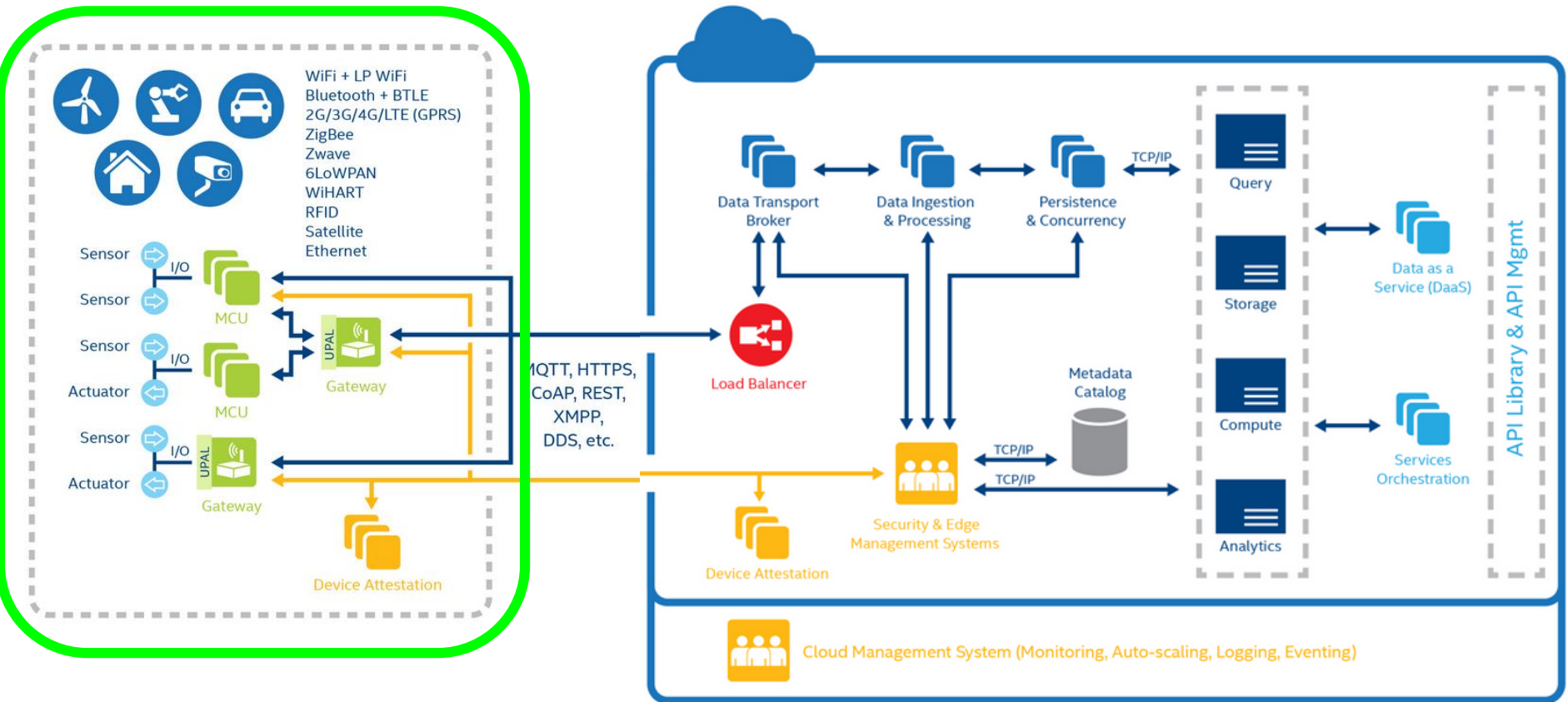
<https://www.youtube.com/watch?v=kfzqUsGMHE0>

<https://www.youtube.com/watch?v=Q3ur8wzzhBU>

# Internet of Things Concept



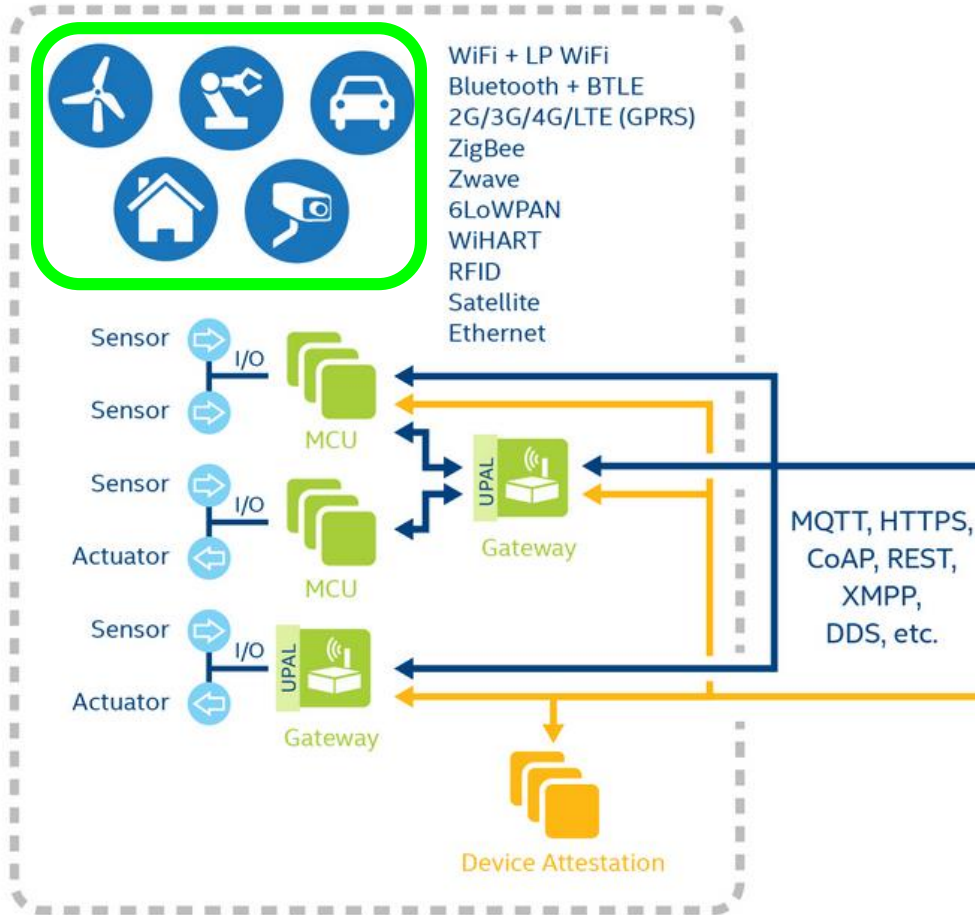
# Internet of Things Concept



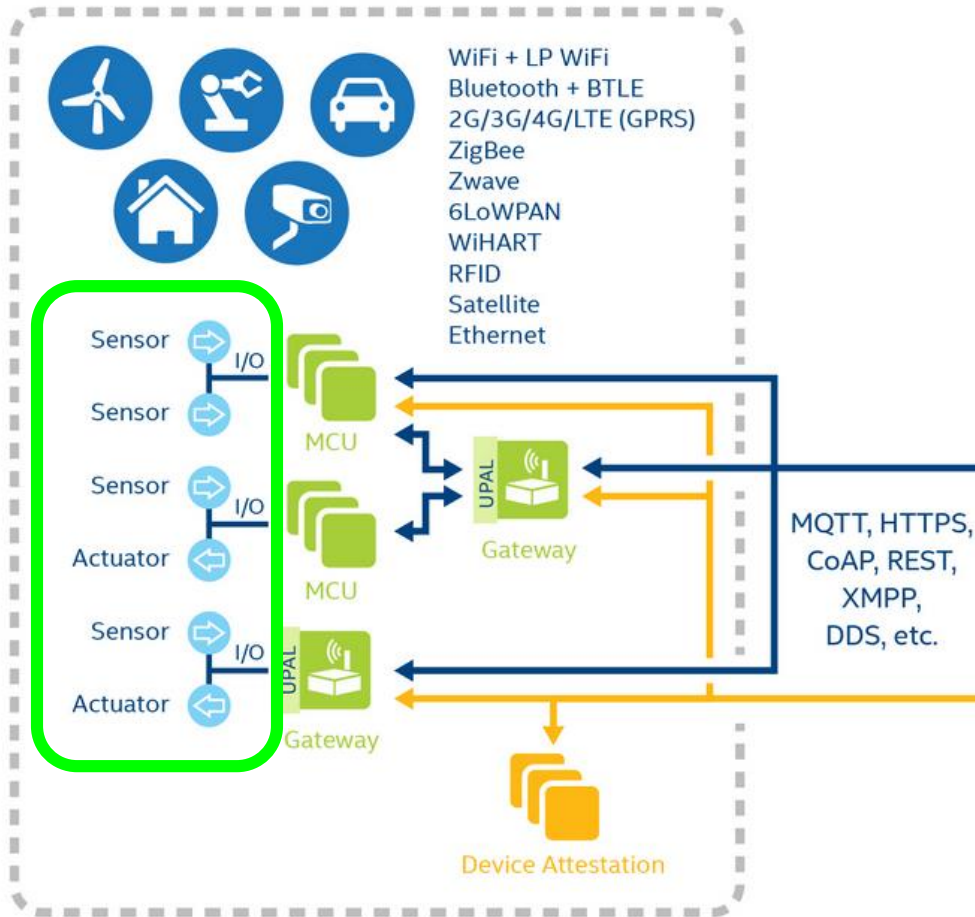


# Smart Device

- Device

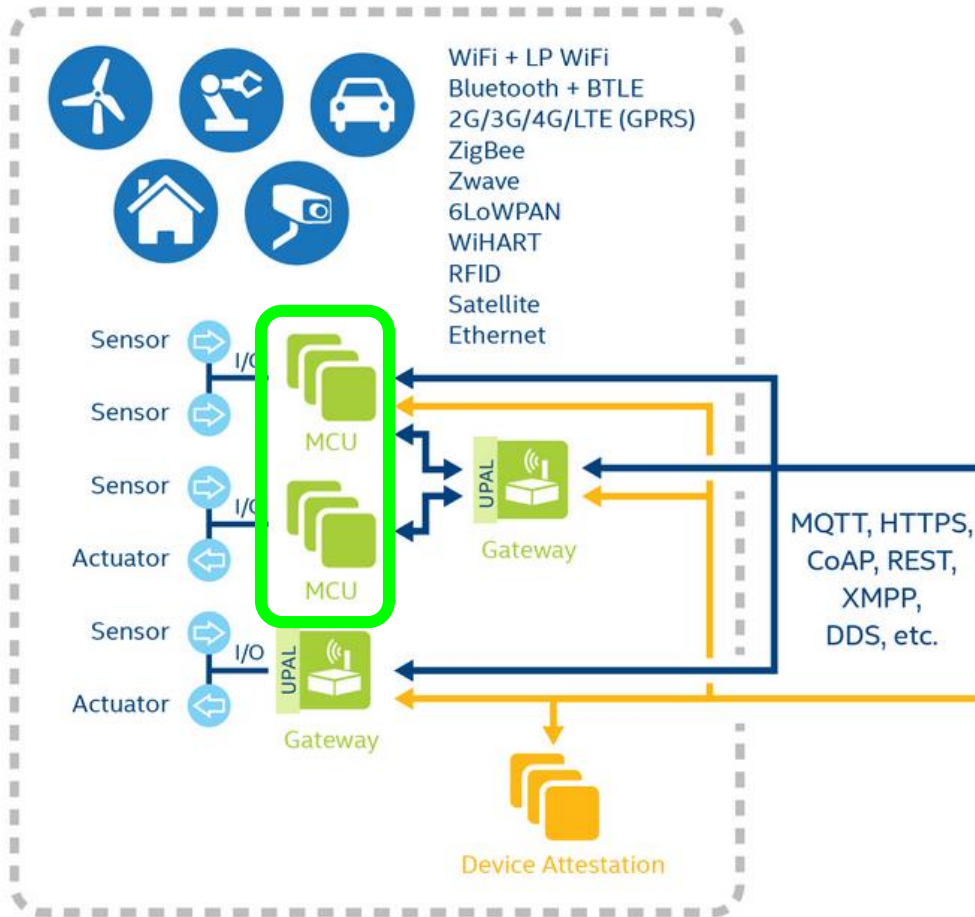


# Smart Device



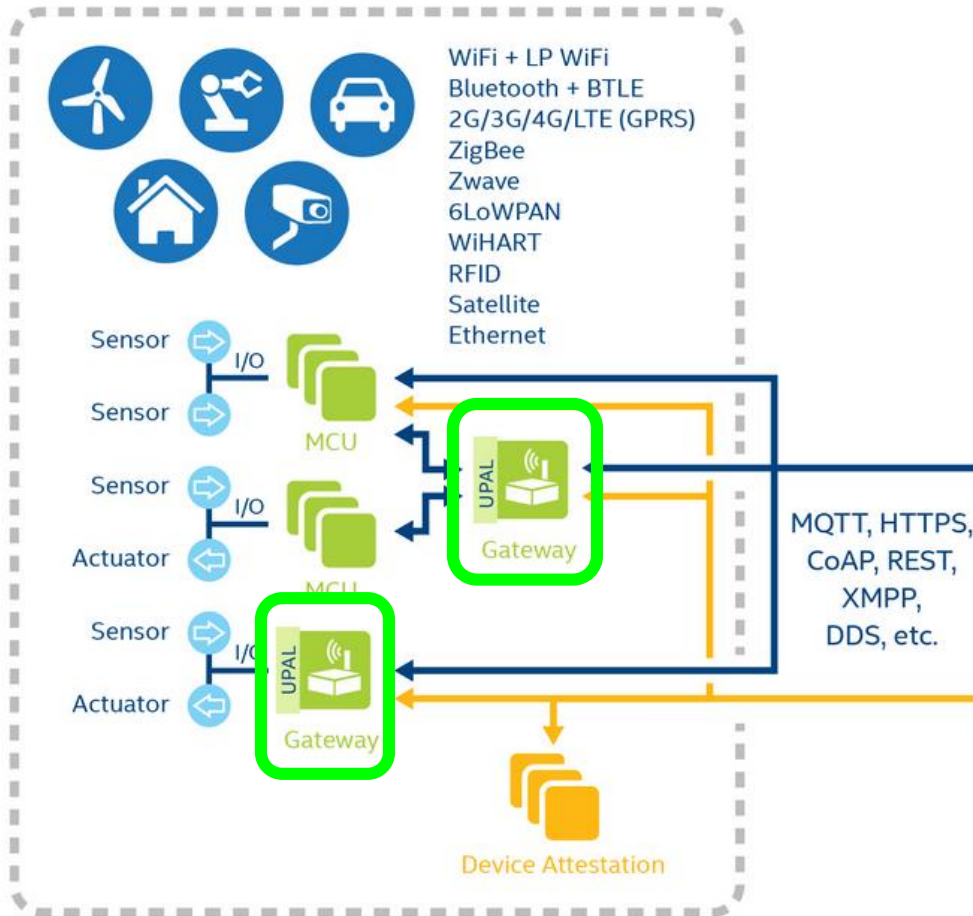
- Device
- Sensors & Actuators

# Smart Device



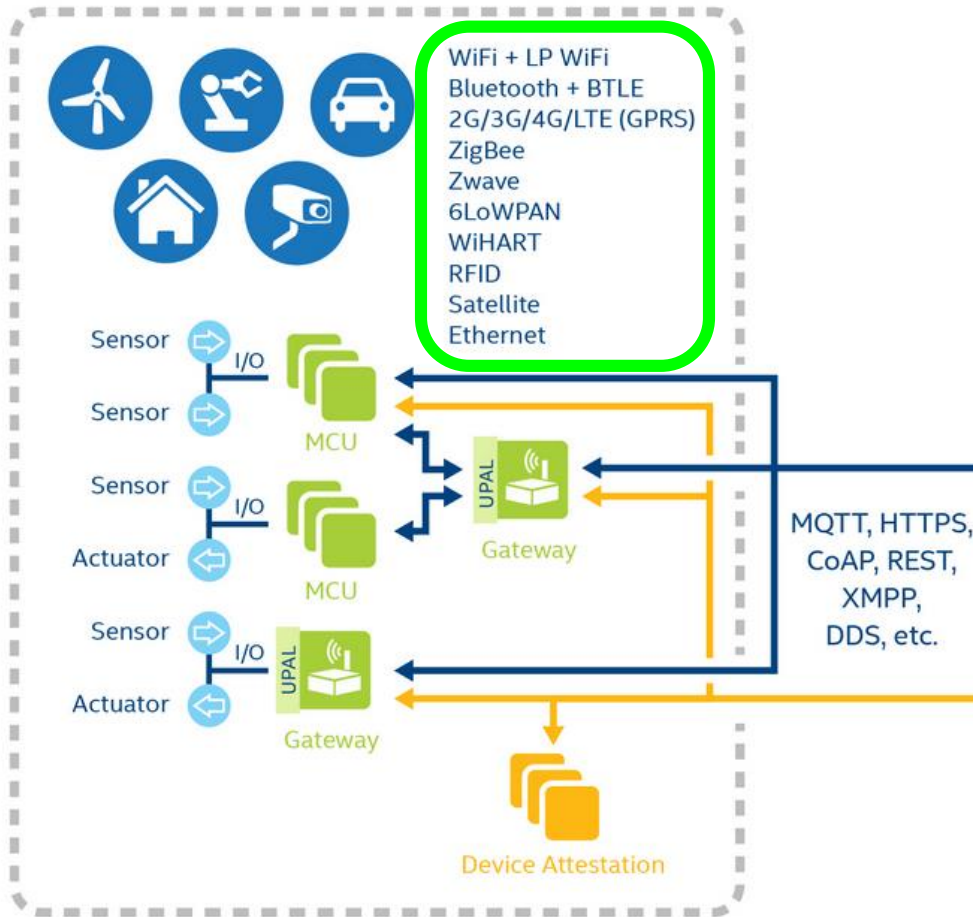
- Device
- Sensors & Actuators
- Memory / Memory & CPU

# Smart Device



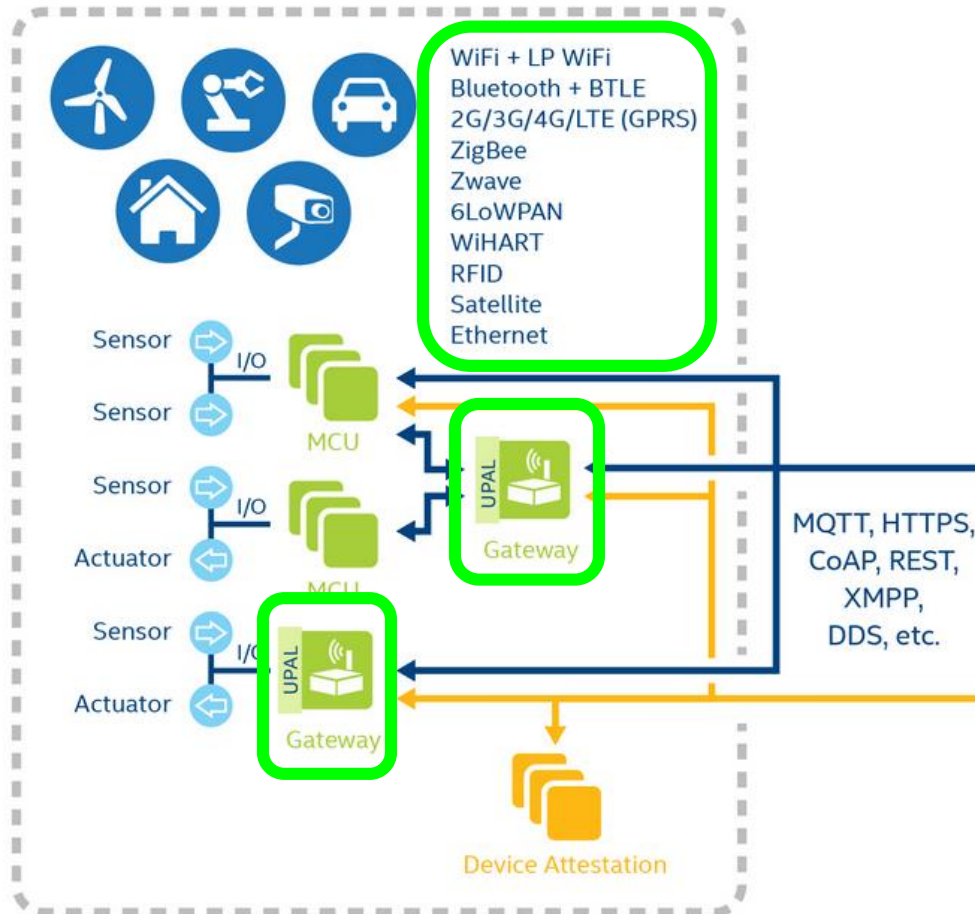
- Device
- Sensors & Actuators
- Memory / Memory & CPU
- Gateway

# Smart Device



- Device
- Sensors & Actuators
- Memory / Memory & CPU
- Gateway
- Inside connection

# Smart Device



- Device
- Sensors & Actuators
- Memory / Memory & CPU
- Gateway
- Inside connection
- Outside connection



# Sensors & Actuators

- Digital



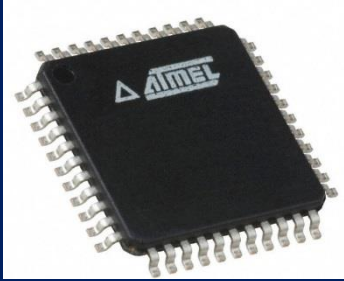
- Analog



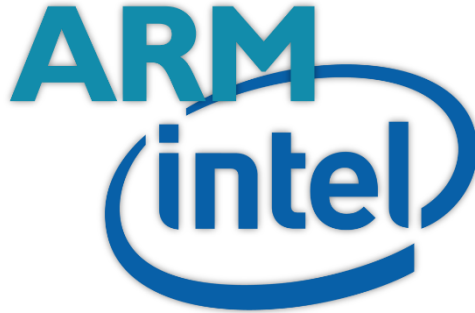


# Computing module

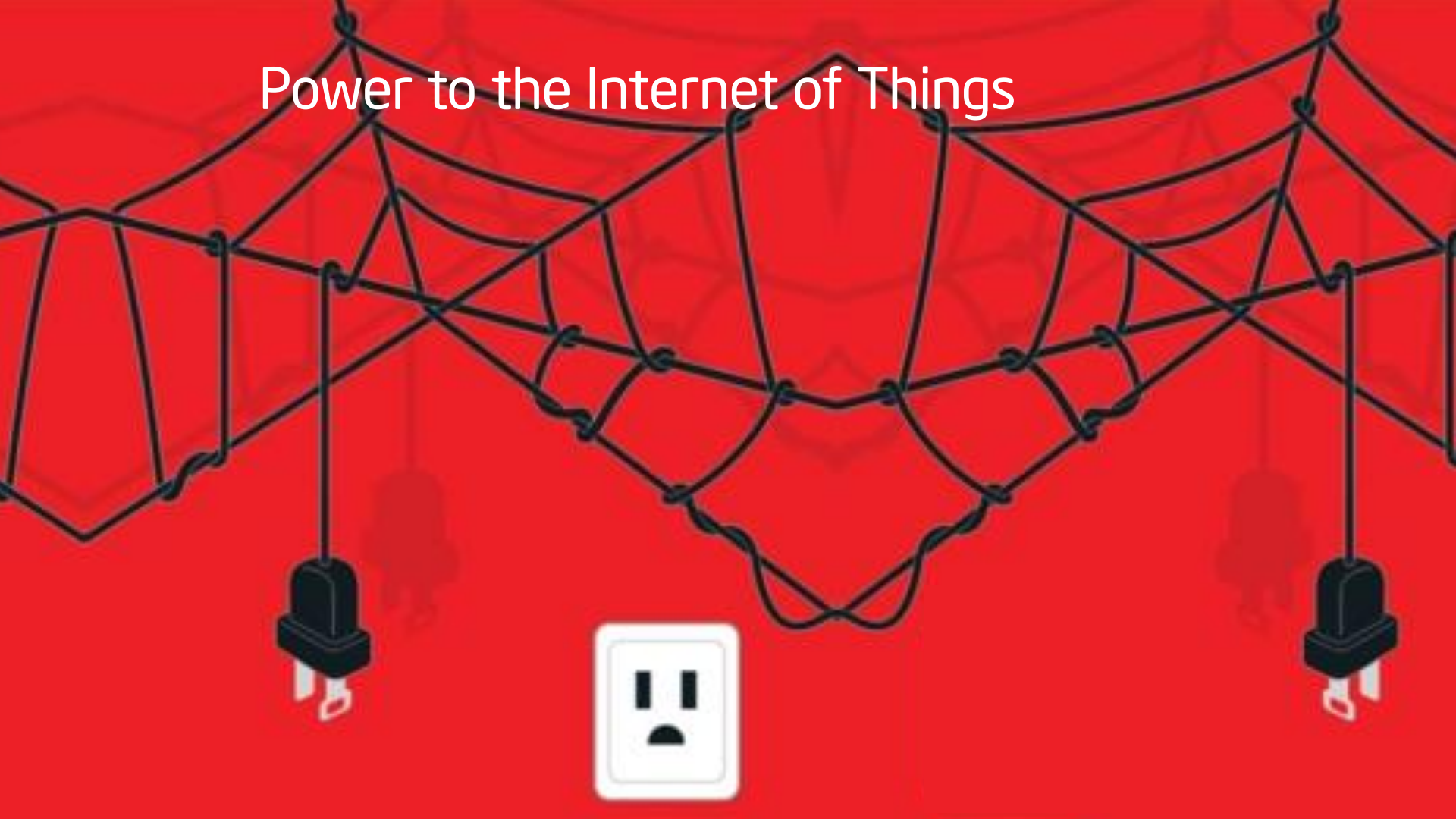
## Microcontroller



## Microprocessor



# Power to the Internet of Things



**Piezoelectric**

**Solar**

**Wi-Fi Backscatter**

**Thermoelectric**

# Thank You