

ARTIK™

The Ultimate Platform Solution for IoT

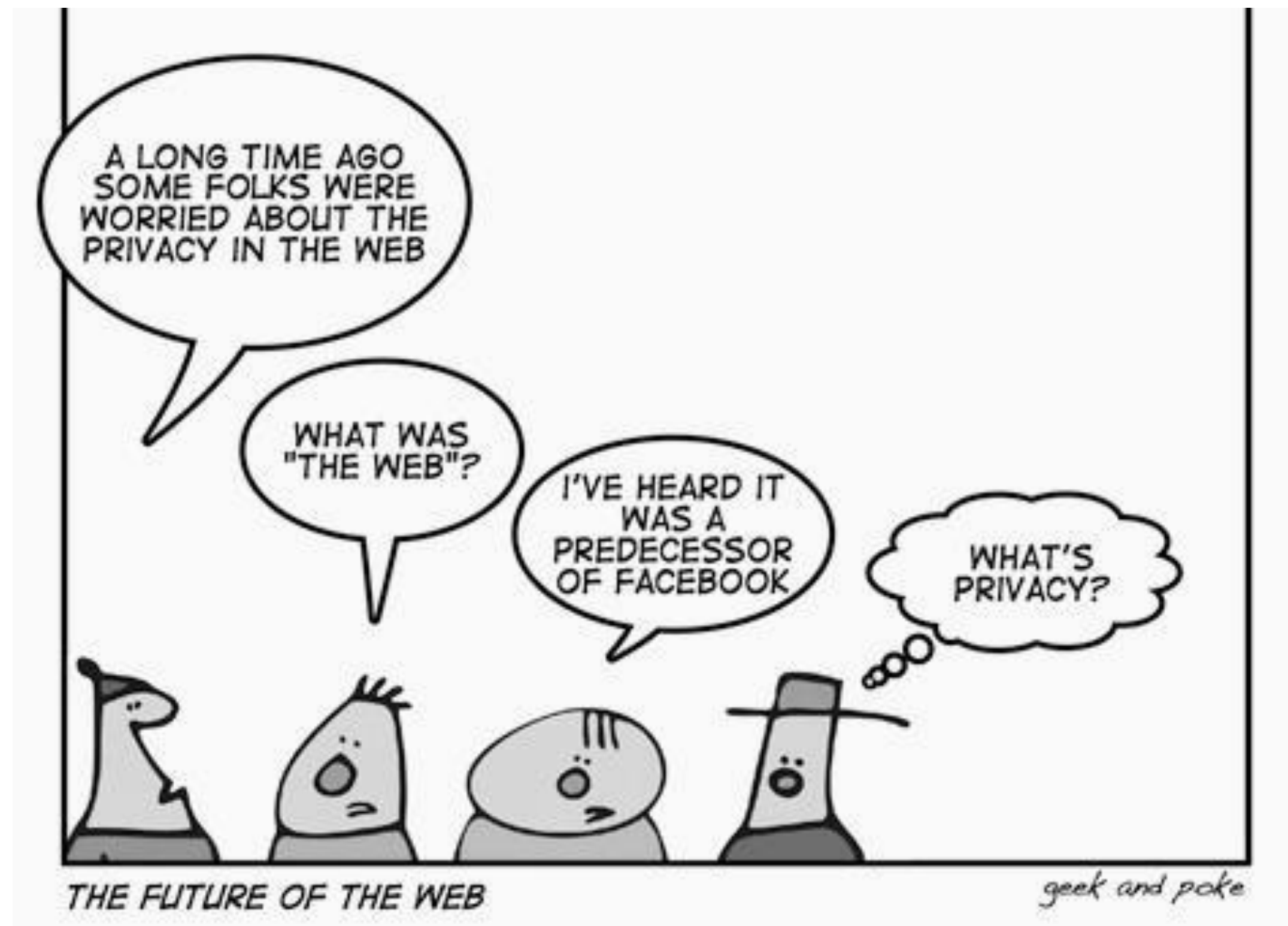
2015. 9. 17

MyungKoo Kang (VP)

Samsung Electronics

Future Changes from IoT

Privacy in the Web

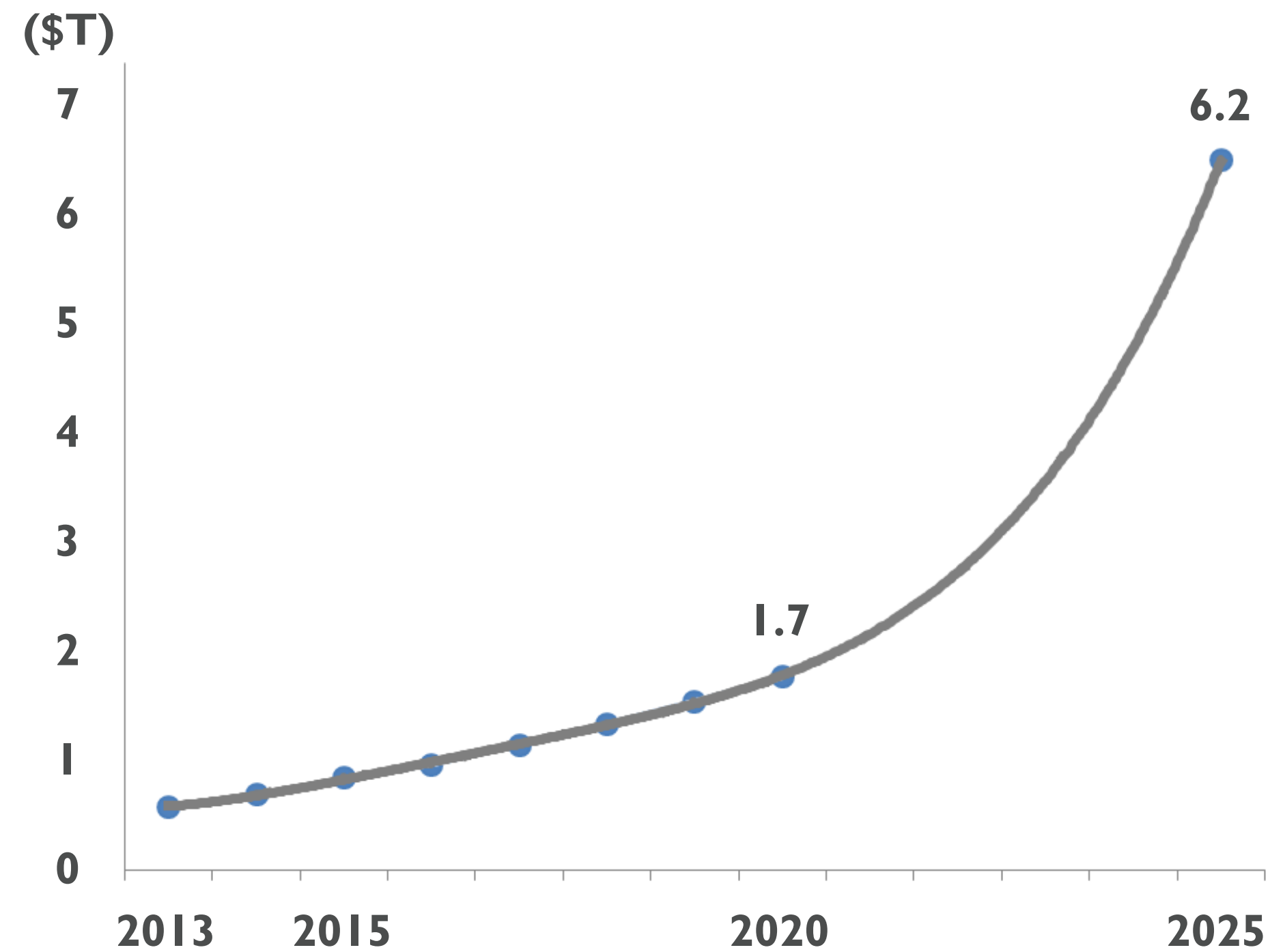


Security in SmartGrill



IoT Market Forecast

Global IoT Economic Value Forecasts



Source : IDC, Gartner, Mckinsey&Company

Emerging BIG market size and growth of IoT

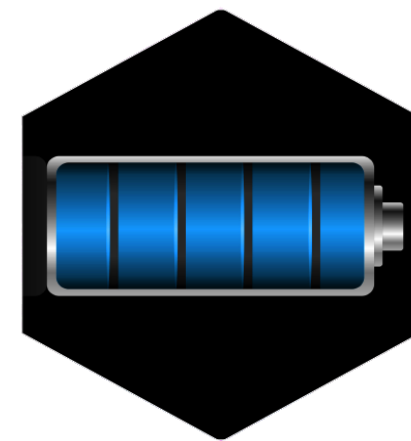
- IoT market size to reach \$ 2 Trillion by 2020 and \$ 6 Trillion by 2025
- Connected devices(things) to hit 32 Billion by 2020
- IoT data growth to over 4.4 ZB

Challenges for IoT



Scaling

Fragmentation
One size does not fit all



Power

Battery life
Battery size



Compatibility

Billions of devices. Diverse networks
Emerging standards



Security/Privacy

70% Internet traffic
unencrypted



Data

Massive quantity. Analytics
Cloud solutions



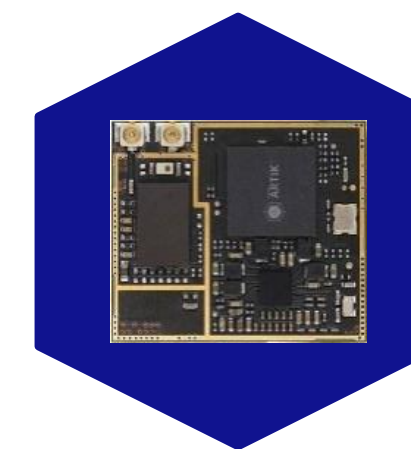
Development

Limited tools,
eco-system support



Time to Market

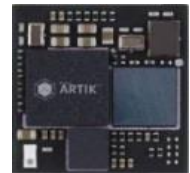




Limited tools,
eco-system support



Vendor Reliability

Fast production ramp
Mass production

ARTIK – Key Differentiations

	Complete Module Lineup	Pre-certified modules with processors, memory, connectivity and sensors Best power, form factor and performance Software compatibility across the family
	Leveraging Samsung Scale & Quality Manufacturing	Samsung chips (memory, AP etc.) Unique packaging technology (ePoP) Utilize Samsung manufacturing expertise and brand
	Best in class end-to-end security and privacy	Embedded, hardware-based secure element Trusted Execution Environment
	Hybrid cloud solution	Local and distributed cloud intelligence Data storage and analytics
	Ecosystem	Strong developer community Best in class partners across the value chain

ARTIK Product Family

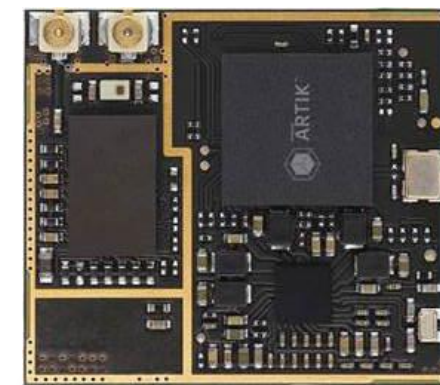
ARTIK
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12mm x 12mm
250MHz Dual Core
HW Secure Element
9-axis Accelerometer



ARTIK
5



25mm x 29mm
1GHz Dual Core
HW Secure Element
512MB LPDDR3, 4GB NAND



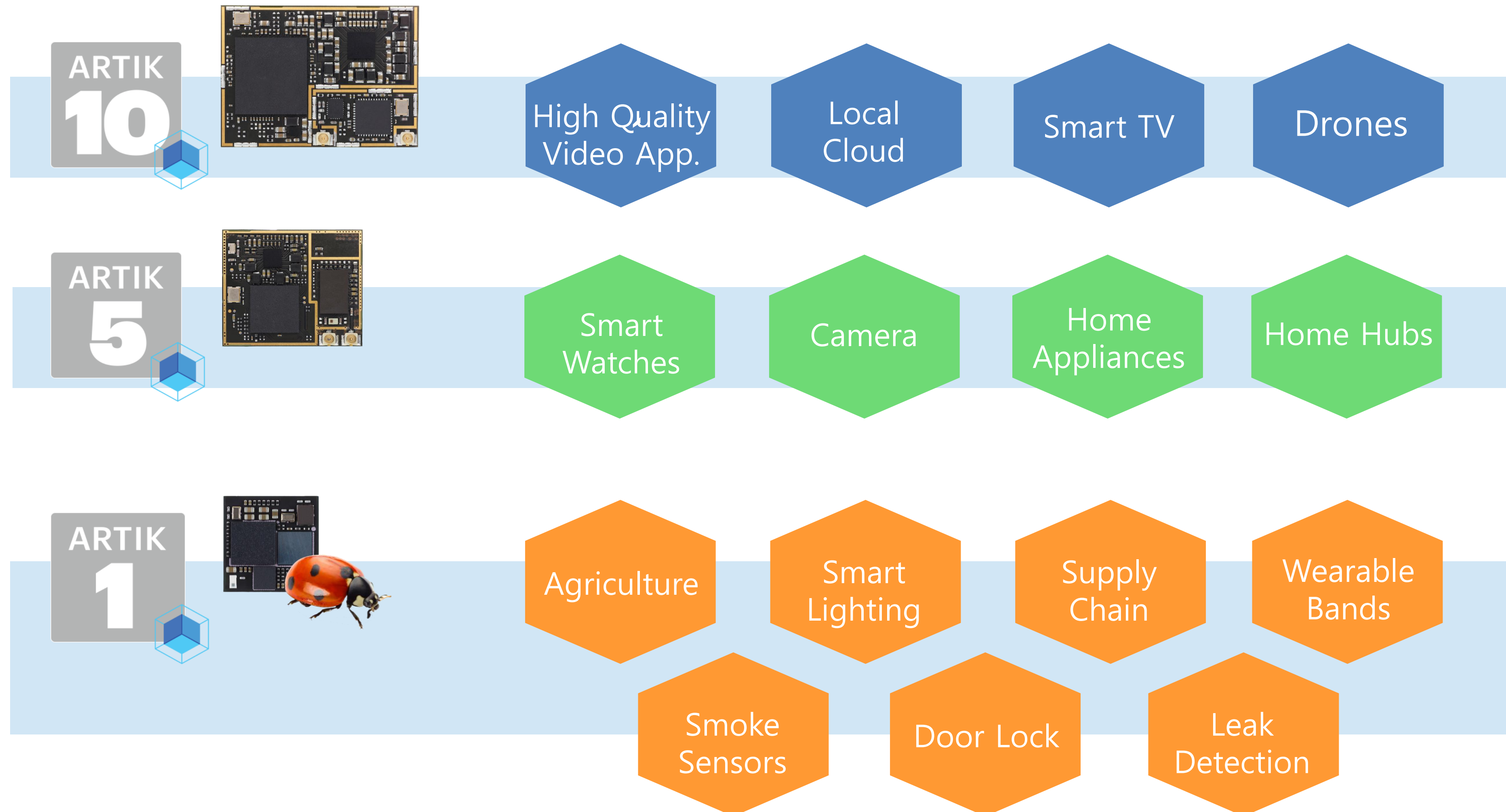
ARTIK
10



29mm x 39mm
1.3GHz Octa Core
HW Secure Element
2GB LPDDR3, 16GB NAND

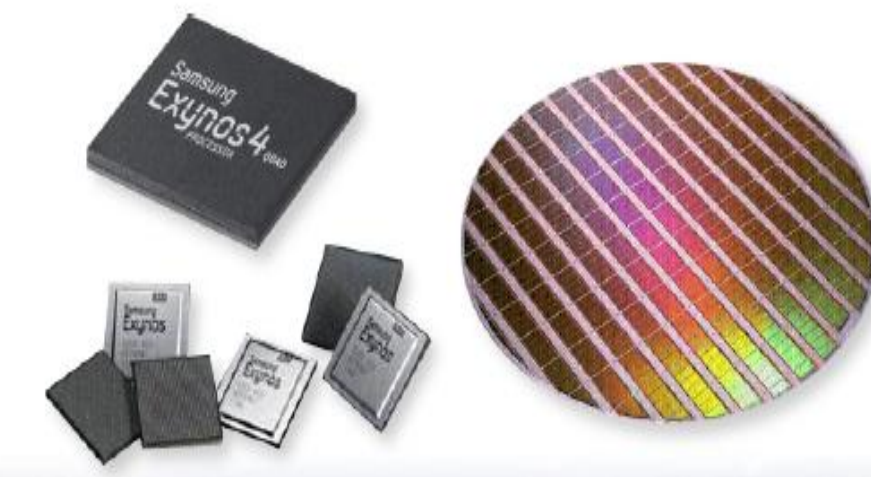
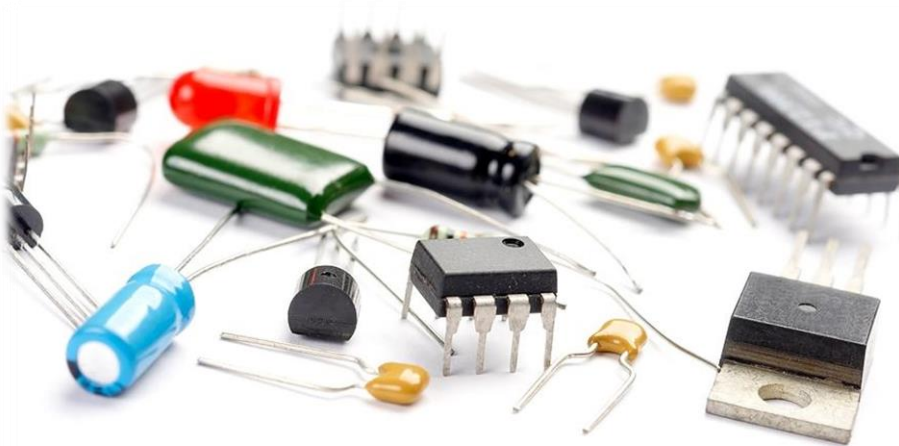




Potential Applications of ARTIK



ARTIK Differentiated - Production Ready Hardware

One Stop Shopping Solutions

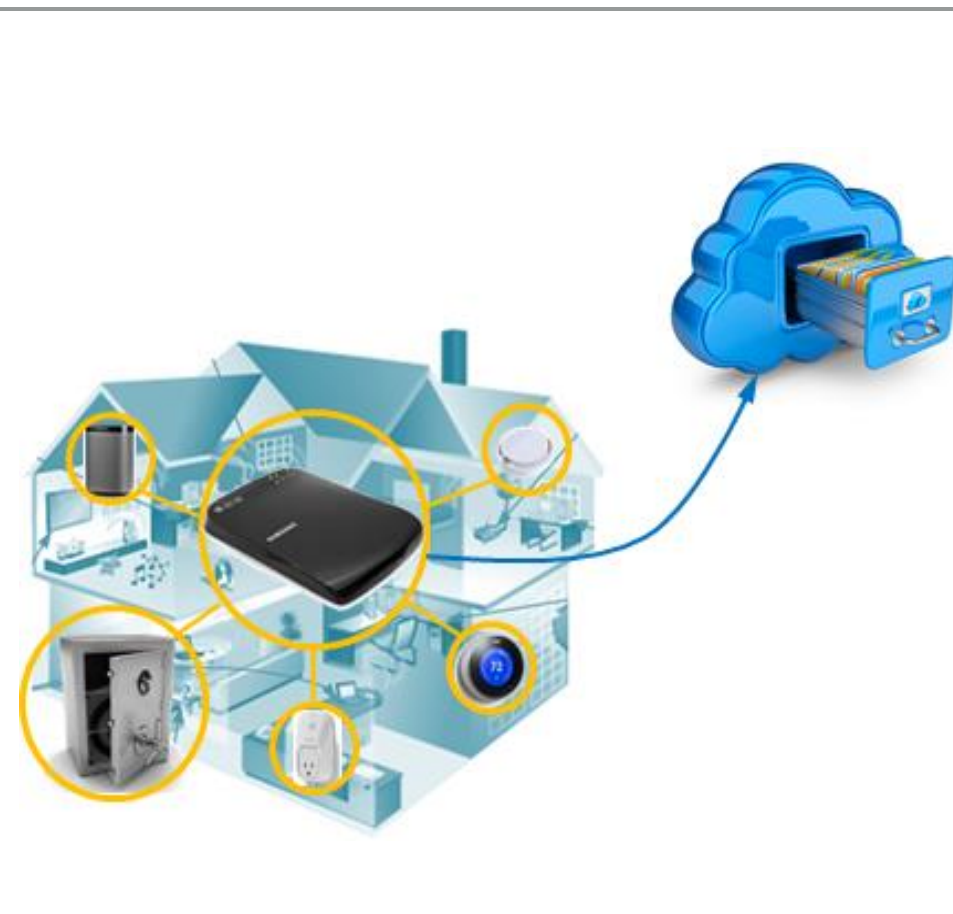
			
Manufacturing Expertise	Pre-certified Integrated Module	Broad Range of Connectivity	Increased Developer Productivity

ARTIK Differentiated – Open & Advanced Software

Essential features provided on top of Open Source SW Stack



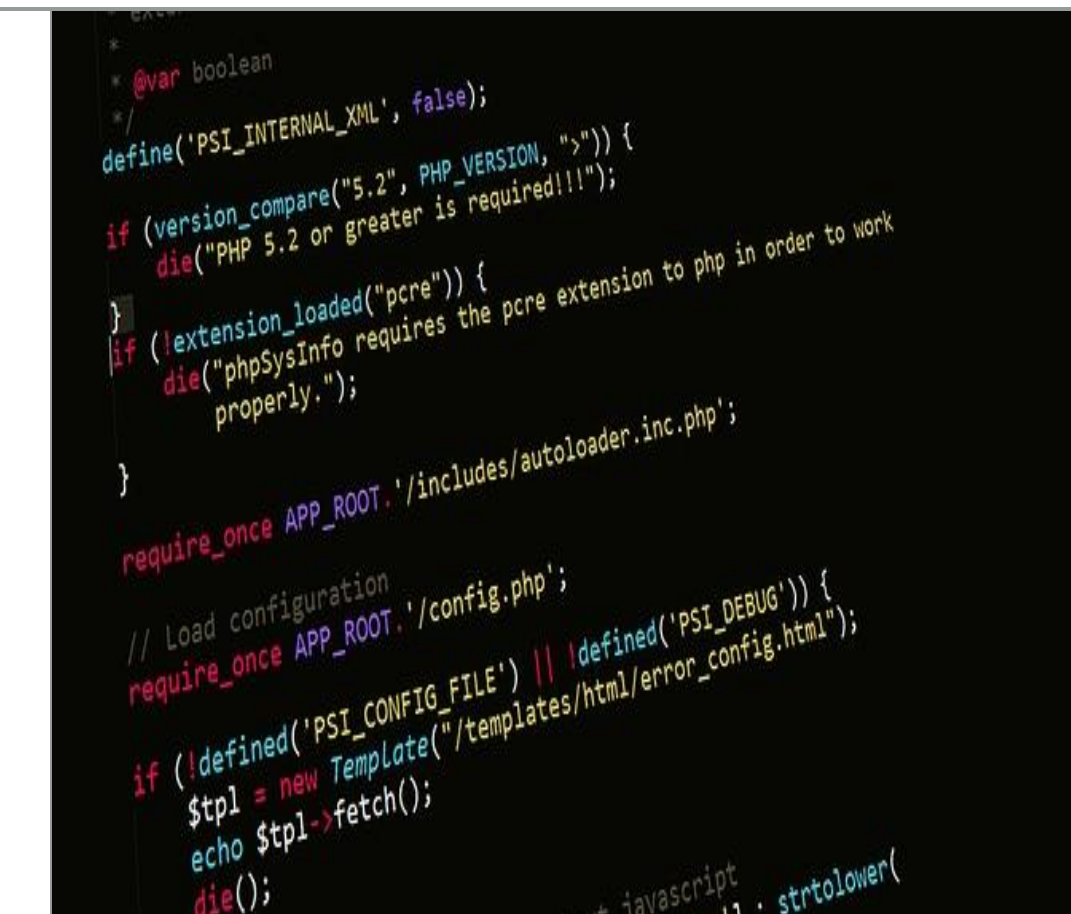
Advanced Security



Local & Open Cloud

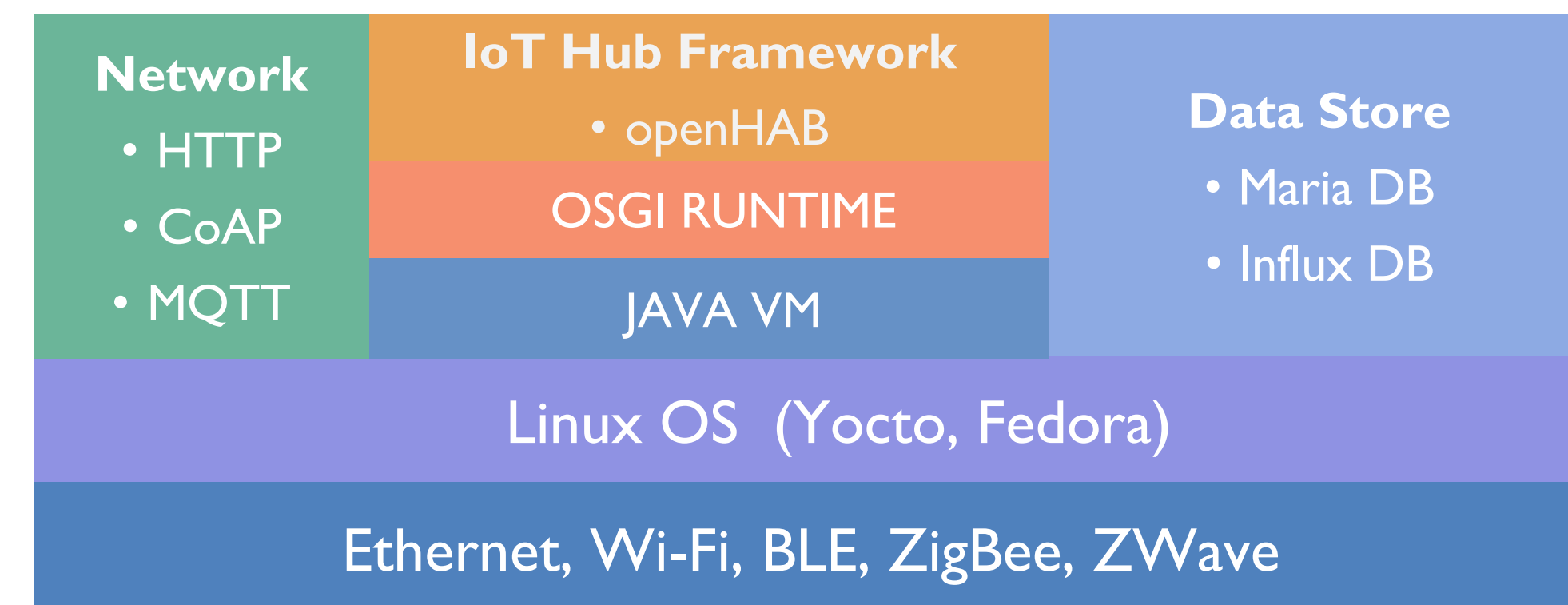
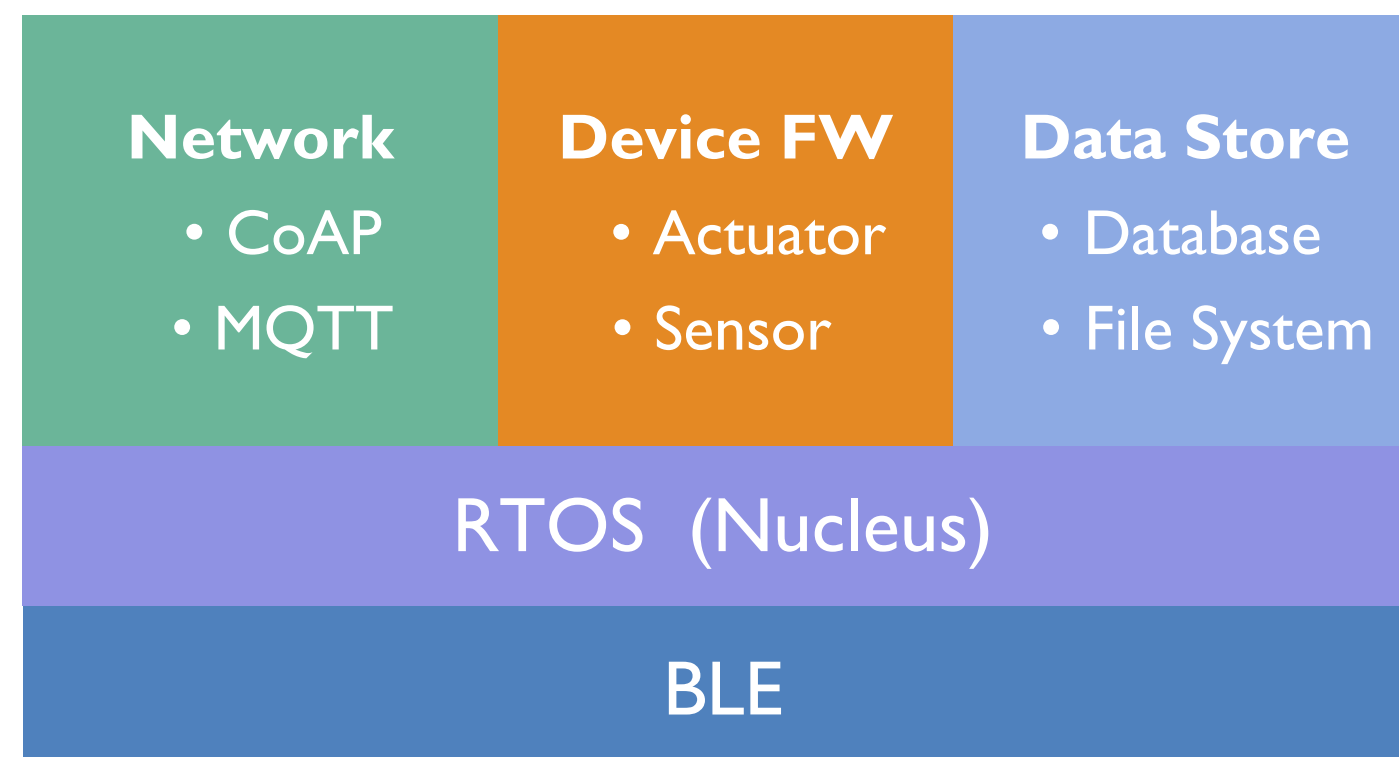


Open Source



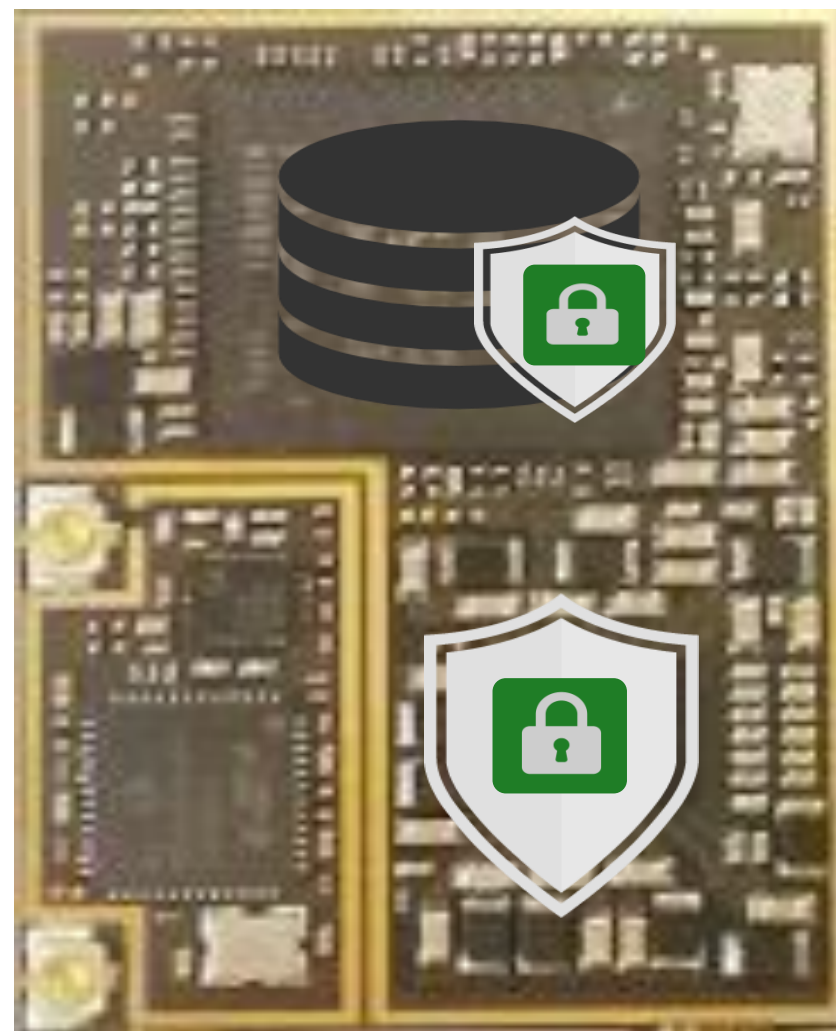
Software Development Kits

Software Stack



ARTIK Differentiated – End-to-End Security Solution

Proven security technologies
Combining hardware and software security



Application Security

- Easy to use Secure Pairing & Anomaly Detection

Platform Security

- Trusted Execution Environment (Secure OS)
- Secure Boot

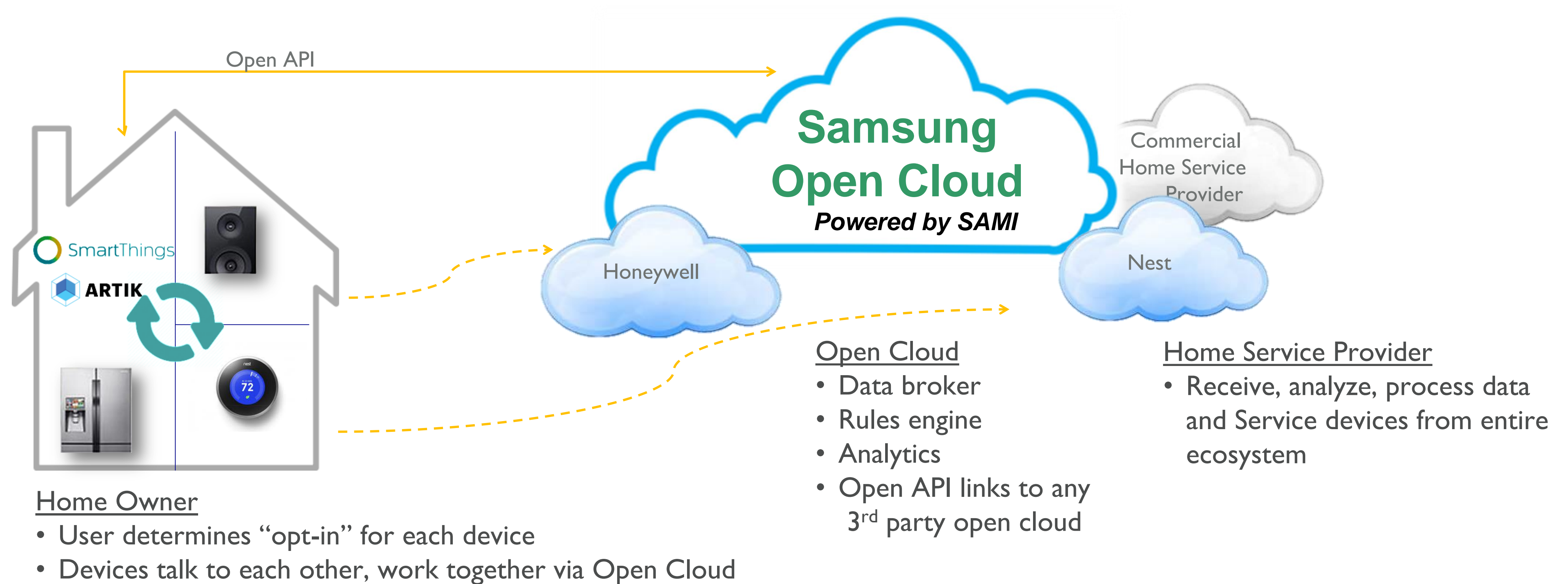
Hardware Security

- **ARM**'TRUSTZONE'

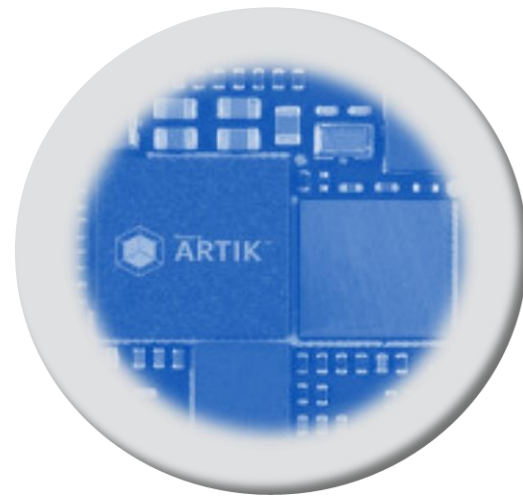
Secure Element

ARTIK Differentiated – Open Cloud

Connect devices to be analyzed and visualized anytime, anywhere



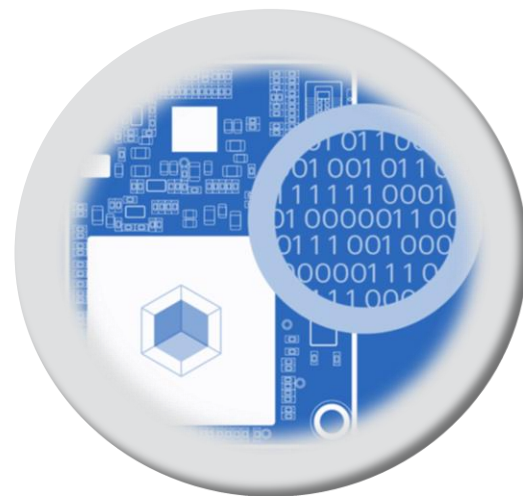
ARTIK Differentiated – The IoT Enabler



Mass Production Ready HW Module Platform
with world's smallest, low power module



Turnkey SW solution
with local intelligence



Best in class end to end security solution
through an embedded, secure element and trusted execution environment