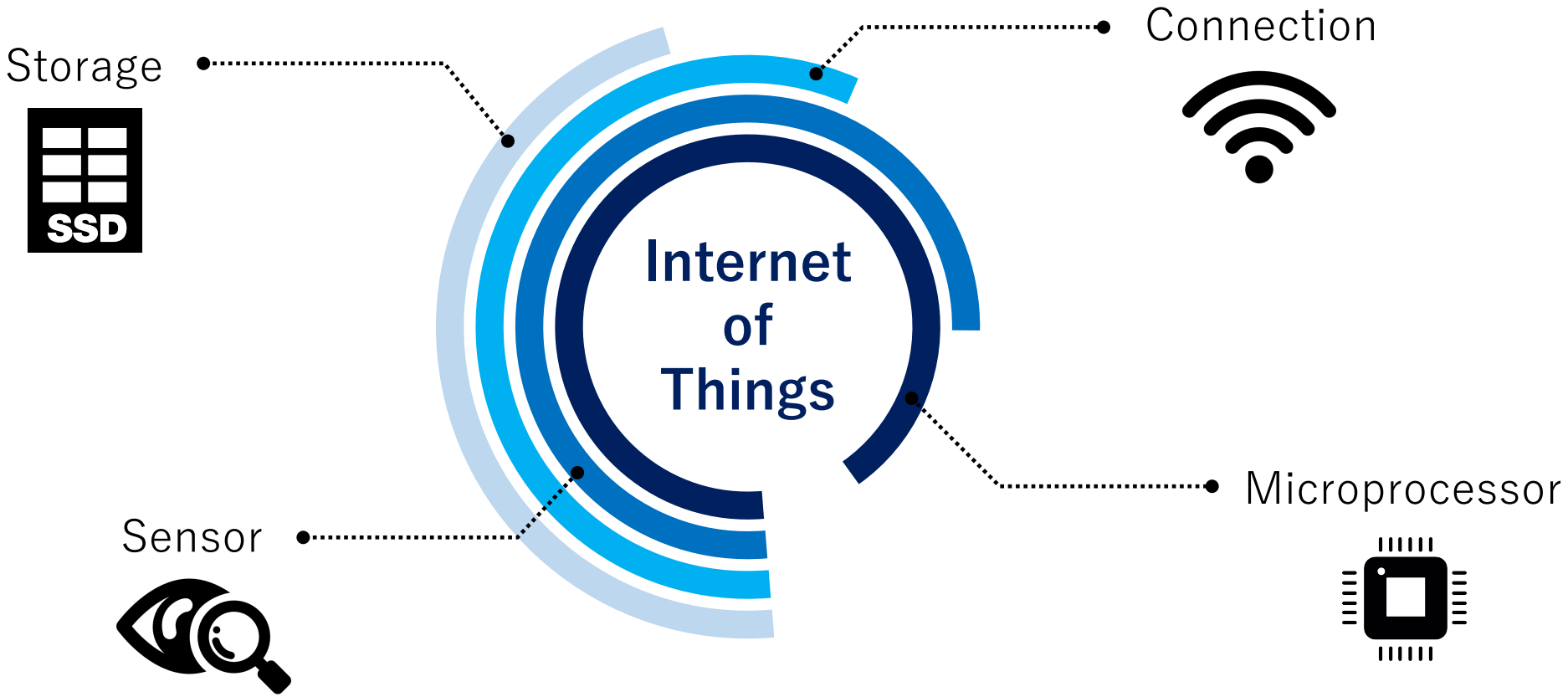
Our Future with Being Connected

IoT & Automotive with Flash Memory

K.S. Pua, CEO

Phison Electronics Corp

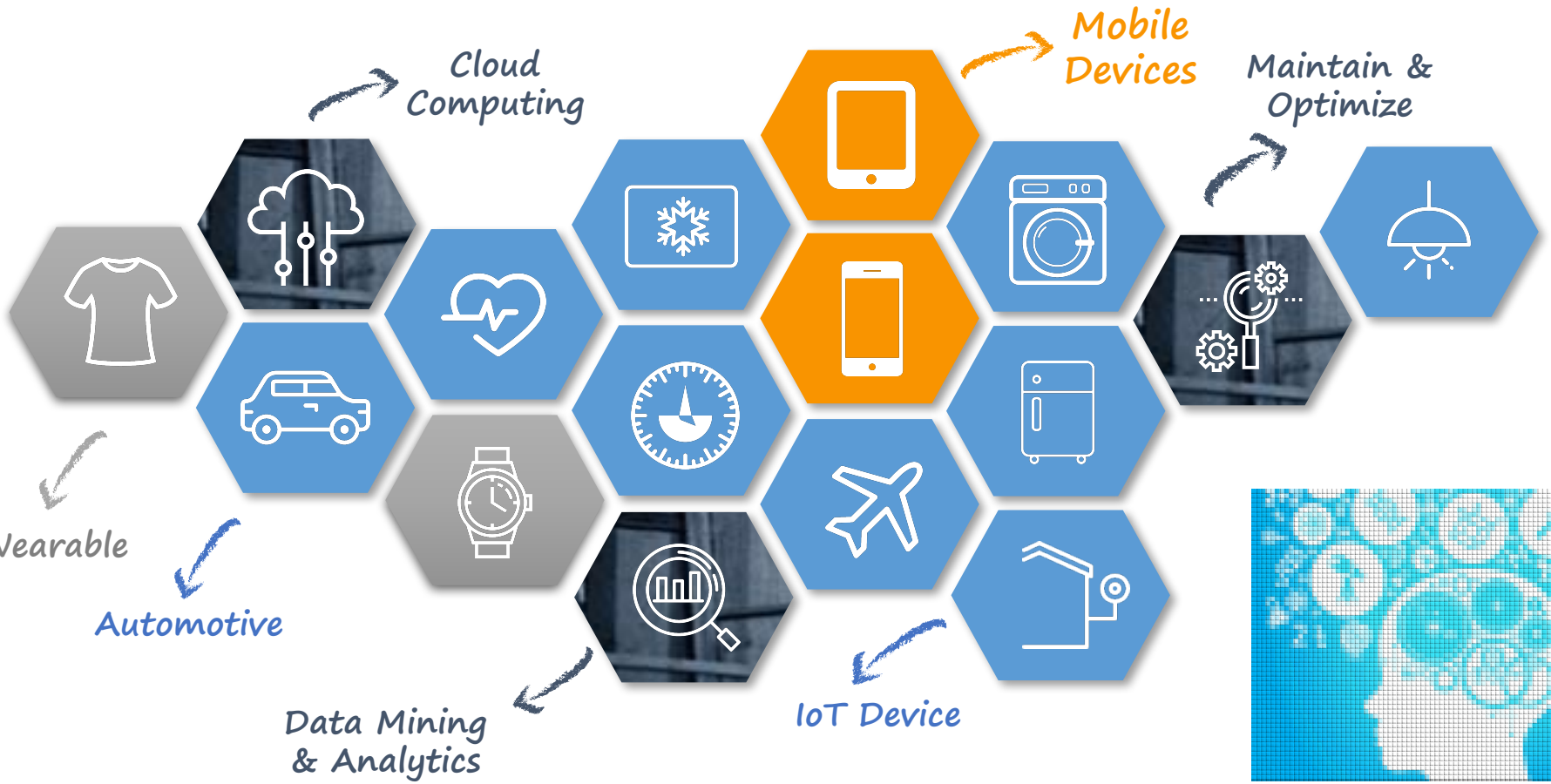
Making of IoT



Connected for Data Collection

PHISON
Knows What You Need

Internet of Things Overview



Big Data Storage paves way for Artificial Intelligence & Deep learning

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Not all IoT works!

fitbit JAWBONE GoPro Be a HERO.

In reality, IoT should make our lives more convenient and productive.

Automotive will be the most demanded IoT application.

Cloud Computing
Mobile Devices
Maintain & Optimize
Wearable
Automotive
IoT Device
Data Mining & Analytics
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Different Interfaces of Flash Storage for IoT

Interface

Storage

NAND Flash

SSD

SSD

DRAM

NOR Flash

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UFS “The” Next Storage Device in Cars

Infotainment

Instrument Cluster

Advanced Driver Assistant System (ADAS)

By 2025, On-board storage > 1TB
(by Daimler AG Mercedez-Benz @ 2017 Flash Memory Summit)

In the next 3 years...
- UFS 3.0 with
- **UniPro 1.8x**
- **MIPI M-PHY 4.x**
- 3D TLC

High Density Storage Transition from eMMC → UFS

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Breakdowns of Flash Storage Solutions

3D NAND Era

Compared to planar process, 3D NAND flash has better advantages in terms of density, power consumption and cost.

Flash Controller

Capability of making a controller from scratch – Starting from IP design to firmware architecture.

- IP Design
- ASIC Design
- Firmware Design

System Design

Smaller form factors means more challenges for system designers – signal quality, thermal analysis and compact board design.

Add-on Values

Understand customer requirements and make something better – Customization brings out the best of flash storages.

Who We Are & What We Do

We design flash memory controller.

We even design our own IP!

We build a strong relationship with NAND vendors.

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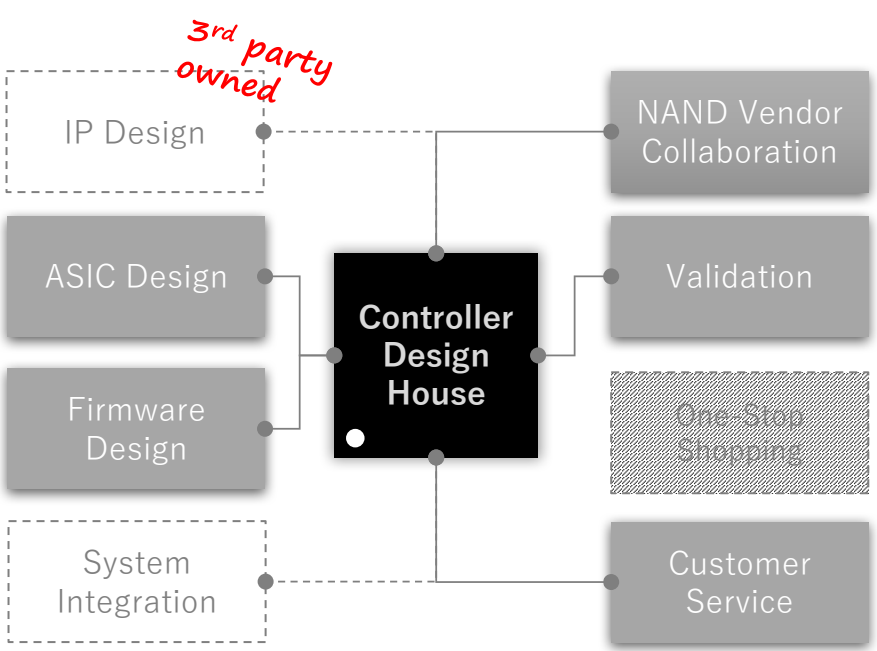
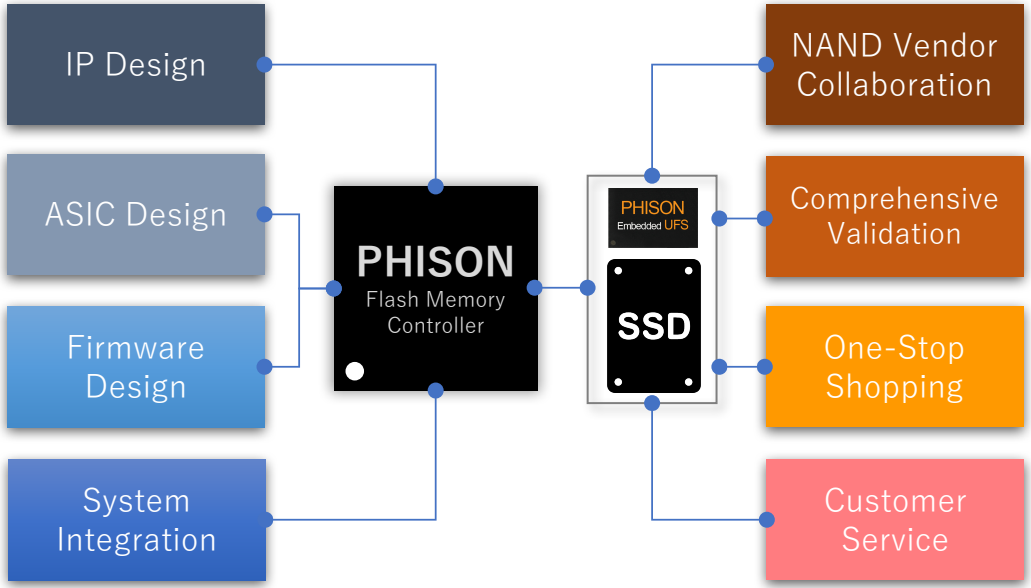
What Makes Phison Different from Competitors



Traditional Controller Design House



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Phison in-house high speed IPs are well-proven with our final solutions in market

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Beyond mobile....

MIPI Alliance collaboration enables high speed interfaces & technology for the next generation

mipi alliance

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