

Corporate Introduction

Innodisk Corporation

The logo consists of a red square with a small red square above it, followed by the word "innodisk" in white lowercase letters.

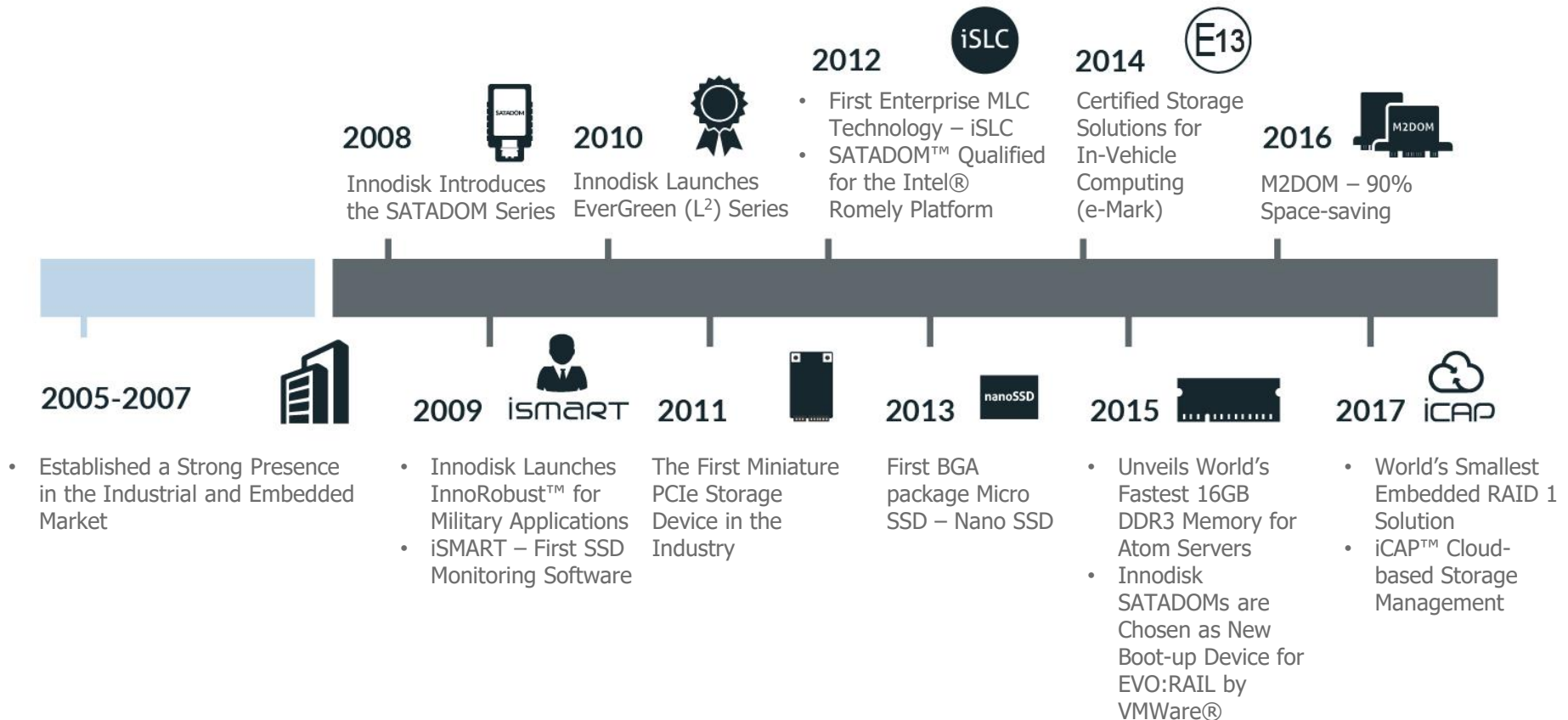
innodisk



Founded	2005
Headquarter	Taipei, Taiwan
Patents	82
Employees	568
Branches	China, Japan, Netherlands, USA

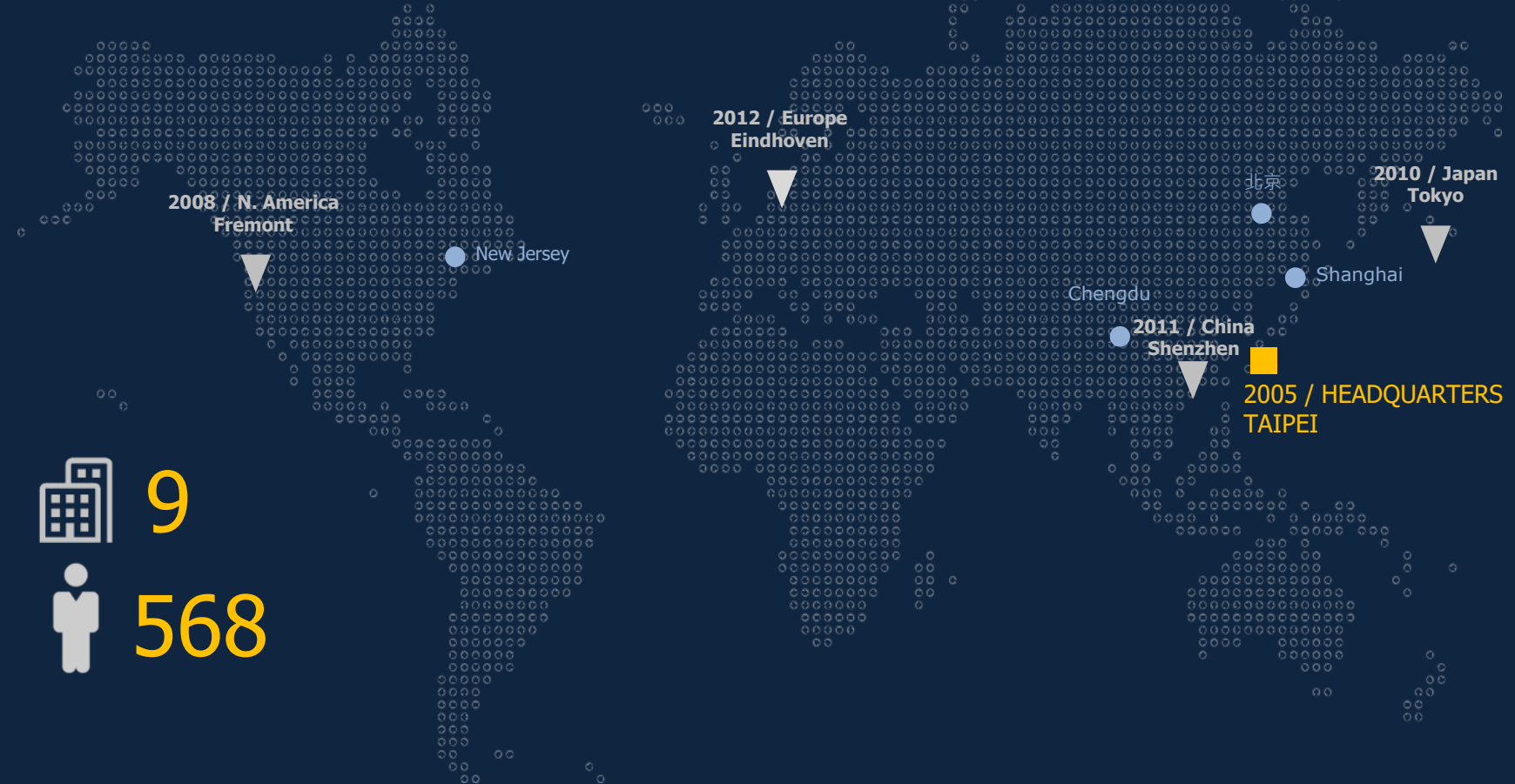
12 Years of Innodisk

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Worldwide Operations

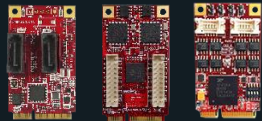
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Business Coverage

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EP mPCIe Storage / Communication /
Display Modules / RAID Cards



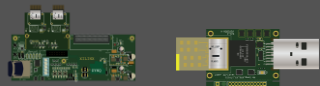
DRAM

Embedded / Wide Temp./ Coating / Server



Flash

SATADOM / ServerDOM™ / M.2



Mr. Loop

WiGig Wireless Communications



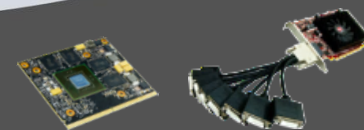
Antzer Tech

In-vehicle Communications



Accelstor

All Flash Array

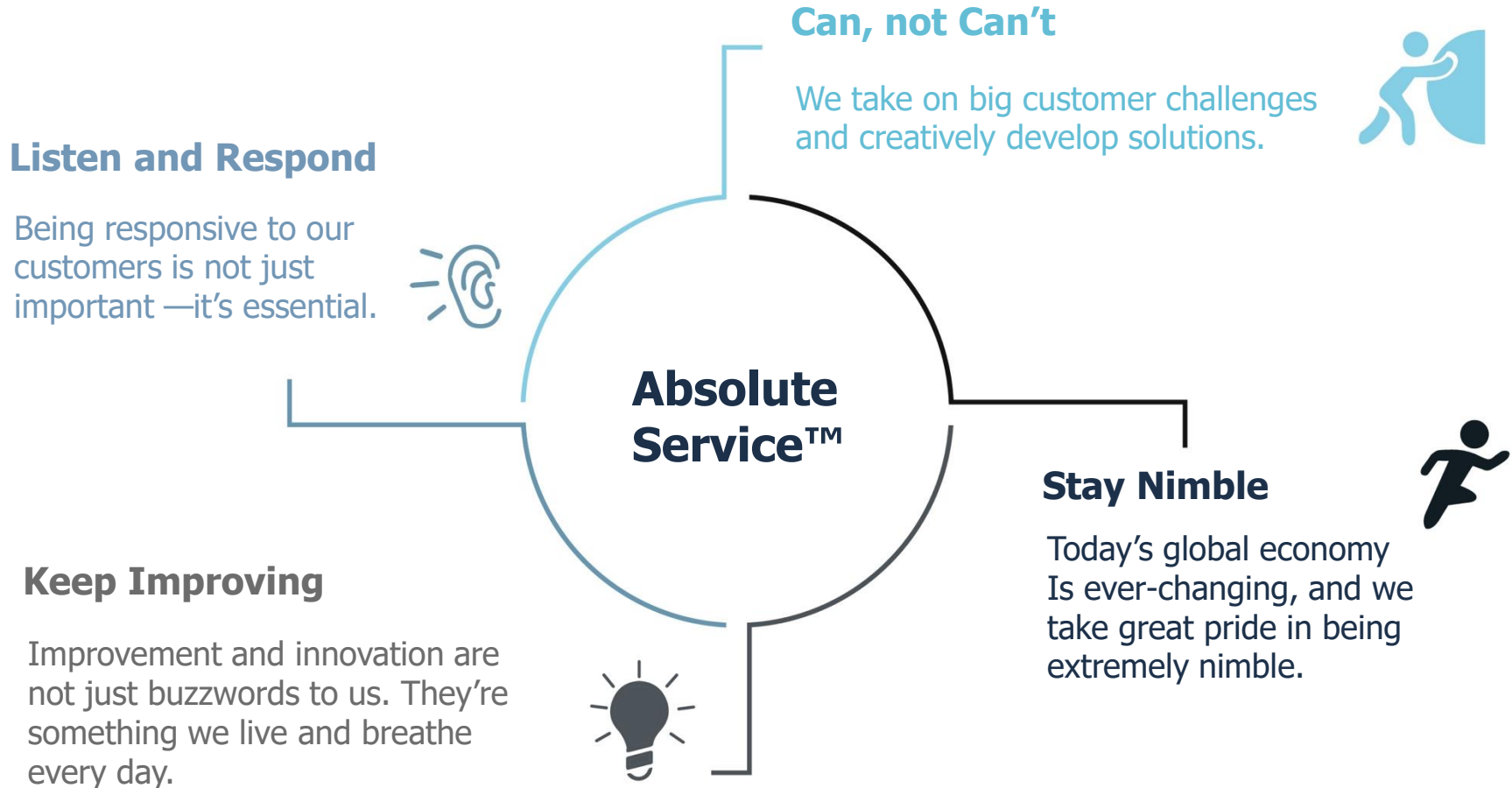


Aetina

Industrial Graphic Cards



Company Culture and Values



Absolute Integration™

Absolute Integration™ is our envisioned path that moves toward a more interconnected world.

“To us, integration is not merely the combination of hardware, software and firmware; it is a philosophy that assimilates all relevant elements to create an optimal solution.”

Our Main Pillars



Technical Aptitude by Design

Our advantage lies in our portfolio of hardware, software and firmware technology and how we arrange these basic building blocks into new works of innovation.

Deeply Rooted in the Market

The awareness of the pit falls and opportunities of vertical markets allow us to view the full picture when crafting the optimal solution.



We Are in It Together

To reach the optimal solution, working together with our partner from day one is paramount. The best possible outcome can be managed by developing solutions jointly.

In-Vehicle

By 2030, global automotive revenues could reach US \$6.7 trillion at a growth rate of around 4.4% annually.

Surveillance

Video surveillance and VSaaS Marketing is expected to reach US\$88 billion at a CAGR of 17.0% by the end of 2024.

Server

Rack server market is estimated to grow from \$36.47 Billion in 2016 to \$90.56 Billion by 2021, at a CAGR of 19.95%.

Aerospace and Defense

The global IoT in aerospace & defense market is expected to reach at \$40,950 million by 2023, growing at a CAGR of 11.8% from 2017 to 2023.

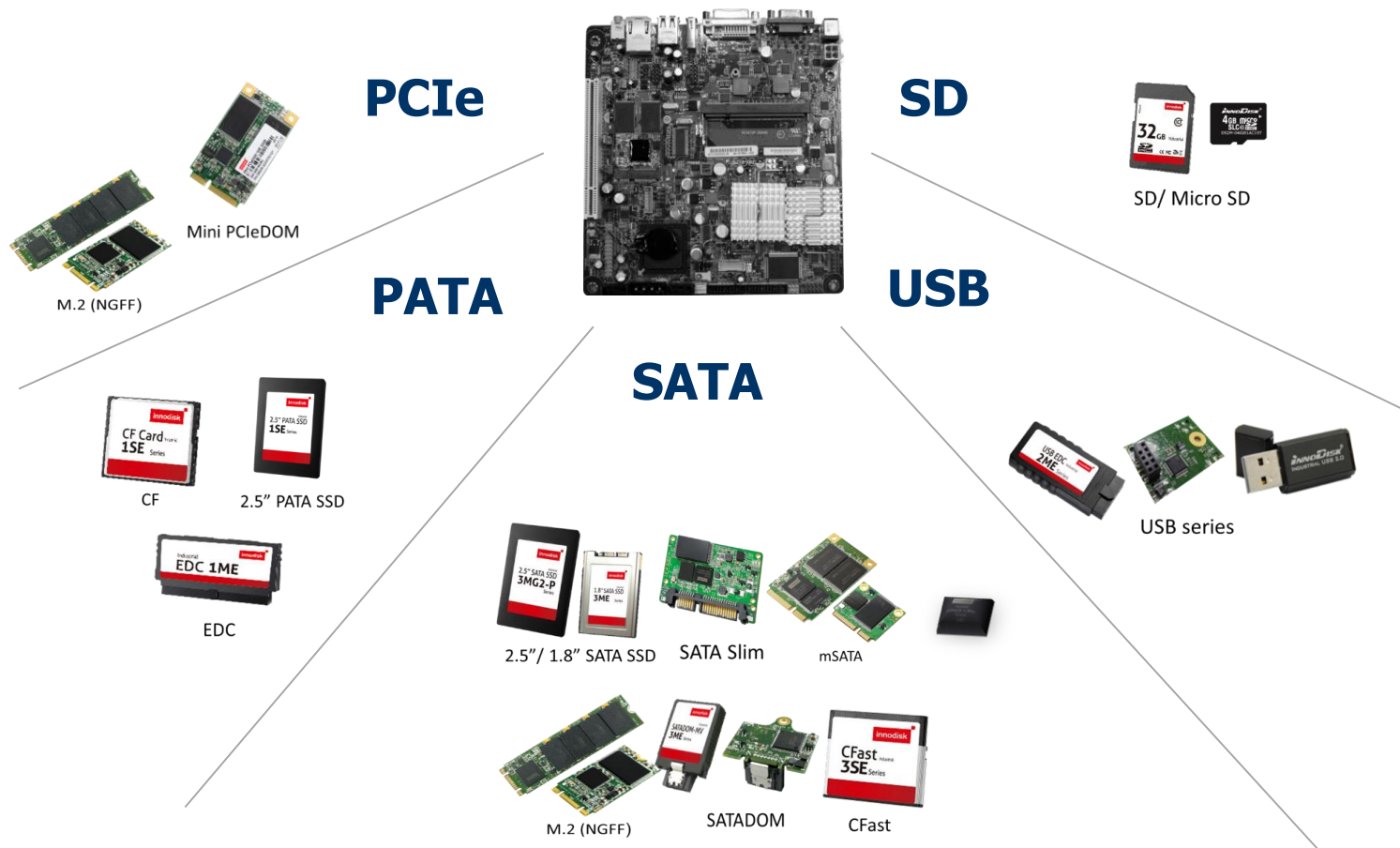


Applications and Technologies



Flash – Complete Storage Solutions

innodisk



DRAM – Purpose-built Memory Modules

Embedded Memory

Product:

- DDR4 UDIMM
- DDR4 SODIMM
- DDR4 Very Low-profile

Feature:

- Using only the highest quality Original IC
- Industry-first DDR4 2666 embedded memory

Server Memory

Product:

- DDR4 2666 RDIMM
- DDR4 ECC Very Low-profile
- DDR4 ECC DIMM
- DDR4 Mini DIMM

Features:

- Implemented ECC function
- Stringently tested with the in-house designed testing tool iRAM



Extreme Environment Memory

Product:

- DDR4 XR-DIMM
- DDR4 Wide Temp Very Low-profile
- DDR4 WT DIMM

Feature:

- Gold finger 30μ"
- Original wide temp. IC

EP – Complete I/O Expansion Solution

innodisk

2.5"

Communication

CANbus 、 PoE 、 Ethernet 、 Serial 、 Digital I/O



PCIe

Storage

SATA 、 USB



Display

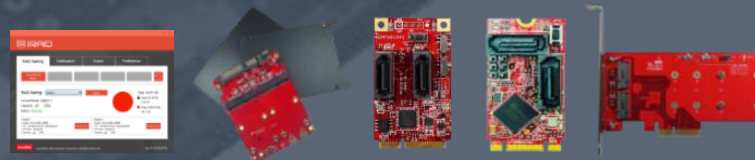
VGA 、 HDMI 、 DVI 、 LVDS



mPCIe

RAID

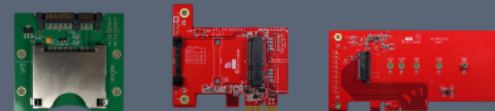
RAID 0 、 RAID1



M.2

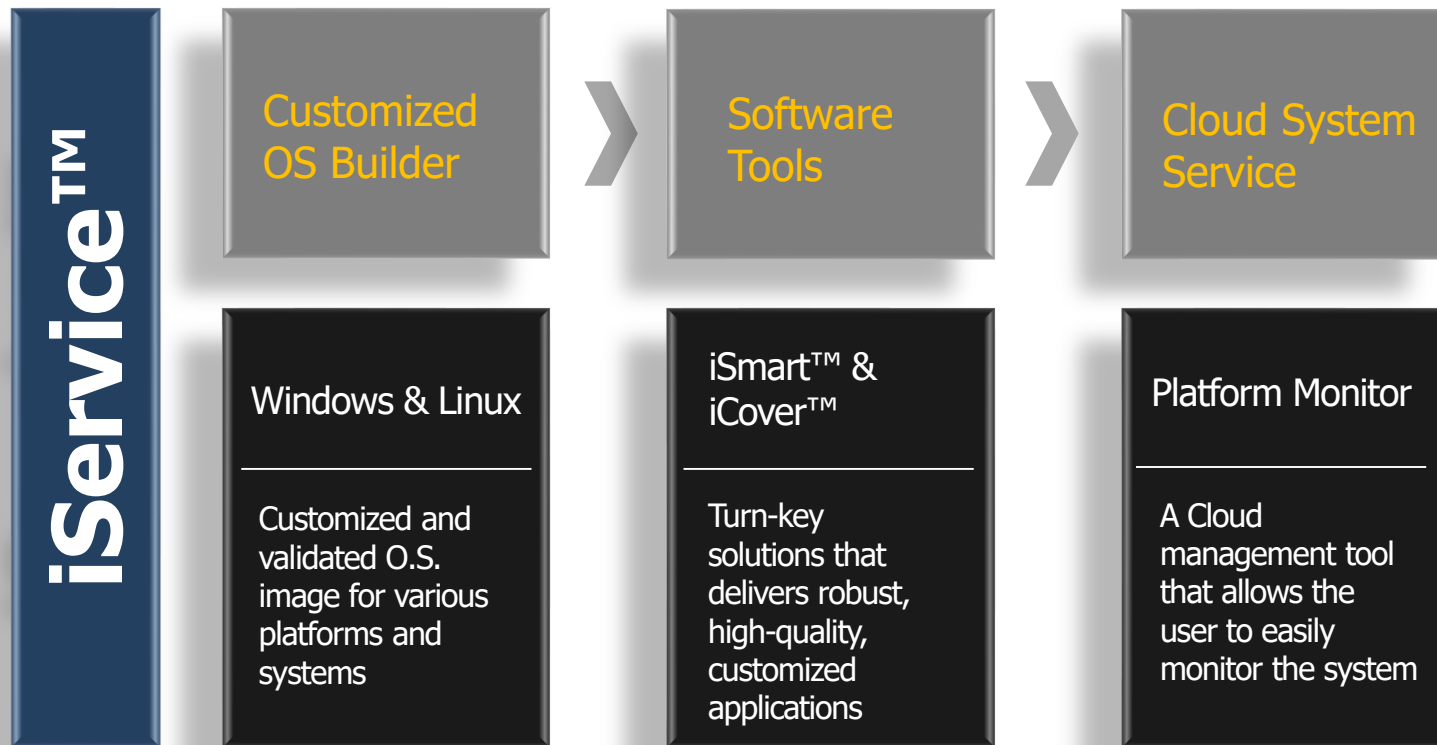
Testing tool

mPCIe 、 mSATA 、 M.2 、 CFast 、 SATADOM 、 CF



Software Implementation

iService™ is a dedicated software service for industrial systems



Partnership and Alliance

innodisk



2017

Microsoft officially supports SATADOM™ Boot-up Drive for Windows Server.



2016

Officially became Intel® IoT Solution Partner



2016

SATADOM™ is qualified on the EVO:Rail platform



2016

Innodisk was listed as one of Asia's 200 Best Companies Under A Billion in Forbes.



Application Notes

Write your story with us

A More Reliable Commute

Monitoring and Wi-Fi Systems for Railroad Application

innodisk

OVERVIEW

A European rail operator was looking to integrate a new monitoring and Wi-Fi system onboard, with the goal of enhancing customer experience and safety, as well as strengthening connectivity.



CHALLENGES

- Limited and constricted space
- Large capacity requirements
- High number of communication nodes
- Wide temperature variations and electromagnetic interference

SOLUTIONS

- RAID with dual SSD for high storage capacities and increased fault tolerance
- Tested and certified to withstand surge and HiPOT occurrences
- Customized Linux software and data recovery system

RESULTS

With the implementation of this monitoring and Wi-Fi system, the operator can ensure customer satisfaction as well as a stable and reliable connectivity. The operator is fully equipped to handle unforeseen situations and can ensure the highest degree of onboard safety.

Providing a Fail-safe Inspection

Solution for Machine Vision Devices in the Pharmaceutical Industry

innodisk

OVERVIEW

Innodisk's software and hardware-based RAID solution provided the customer with the performance and data integrity necessary to run sophisticated measurement and inspection instruments.



CHALLENGES

- System failure can lead to errors in marked samples or incorrect doses passing through inspection
- Replacing faulty devices can lead to costly downtime
- The customer needed a way to monitor their device's status to assure timely maintenance

SOLUTIONS

- Mirrored SSDs in RAID 1 configuration allowing the system to run at 100% capacity even if one SSD fails
- In case of device failure, the faulty SSD can quickly be swapped and RAID will automatically build
- iRAID allows the customer to easily keep tabs on the status of each device

RESULTS

With no effective way of monitoring their storage device status, it was hard to predict and prevent system failure. The Innodisk RAID solution offered an easily monitored system with in-built contingency measures that addressed all the issues faced by the client.

Clearing the Way for a Safe Delivery

Transportation of Hazardous Materials and Fleet Management

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OVERVIEW

A Chinese truck manufacturer approached Innodisk for a data recording solution for vehicles transporting hazardous materials. They were in need of a way to reliably store data as well as a way to connect to the onboard CANbus system to gather data from operations. This data would then be sent real-time to a centralized location for fleet management.

CHINA



CHALLENGES

- The customer needed to monitor and handle issues in a timely manner
- Secure data recording of the whole journey from start to destination
- The system had to be able to handle route planning and management
- Harsh operating conditions

SOLUTIONS

- Modules providing fast and rugged network performance
- Secure and fast data writing speeds
- Modules designed and tested for extreme thermal conditions
- All modules designed to withstand tough mechanical stress

RESULTS

Innodisk's solution allowed for effective planning, and ensured correct driver behavior. The solution helped streamline the transport process and increase productivity, saving costs for the operator, and more importantly, lowering the associated risks of transporting hazardous materials, creating an overall safer environment for the handling of hazardous materials.

Facilitating Rapid Data Exchange

High-Performance Memory for Network Probe

innodisk

OVERVIEW

Innodisk's 2400MT/s Very Low-profile (VLP) DRAM provided a perfect solution for a Chinese manufacturer of network probes. These network probes handle large amount of data, so reliable memory speed and capacity are imperative.



CHALLENGES

- Network probes require both high-speed and high-capacity memory
- Low error tolerance
- Heat dispersal issues due to the small-sized 1U cabinet

SOLUTIONS

- 8GB 2400MT/s DDR4 provides both the needed speed and capacity
- Implemented Error Correcting Code (ECC) ensures minimal errors
- The low profile of the VLP DIMM ensures optimized airflow and efficient heat dispersal

RESULTS

With Innodisk 8GB 2400MT/s VLP DIMM installed, the customer found that all requirements had been fully met. This solution ensured that the network probe could efficiently handle large data streams with no performance issues and efficient heat dispersal.

Eliminating Frame Loss

Tailor-made Storage for High-level Surveillance Systems

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OVERVIEW

Modern surveillance systems handle a lot more than just recording. As computational power grows, smart solutions such as facial recognition and data analytics require fast speeds and optimized firmware. An American partner of Innodisk was struggling with frame loss during data recording, and turned to Innodisk for help. After some deliberation, Innodisk could identify the problem and propose a viable solution.

USA



CHALLENGES

- The old surveillance setup exhibited regular frame loss during recording
- The customer needed assistance in locating the source of the frame loss
- A new customized solution was needed to secure stable video recording

SOLUTIONS

- Innodisk identified the problem to be interruptions from firmware operations
- The firmware was optimized and altered according to the requirements, effectively solving the frame loss issues

RESULTS

Innodisk helped the customer identify and rectify the original problem. Through innovative firmware optimization, the customer could deliver a reliable, high-level surveillance solution without worrying about loss of recording quality.

Ultra-Small and Secure Logging

Small Form Factor Storage for Network Logging Applications

innodisk

OVERVIEW

An American networking company approached Innodisk for a network logging storage solution. The client needed a small form factor, highly secure and customized device to handle the specific requirements of the networking environment.



CHALLENGES

- Strict data erasure requirements
- The SATA signal needed to be customized for the clients platform
- Constricted space

SOLUTIONS

- ATA security and quick erase functions with accompanying software
- Tailor-made firmware for enhanced system reliability/compatibility
- Ultra-small M.2 2242 form factor

RESULTS

After consulting with the client, Innodisk could provide a solution that met all of the client's requirements. After implementing the customized M.2 SSD, the network logging solution offered both security and compatibility.

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