

# Company Profile of XSLAB

## 엑세스랩 회사소개서





To Begin

# We Are Arm Enterprise Computing Company.

## Arm Server for The Better World.

For over 12 years, XSLAB has been at the forefront of developing low-power manycore Arm servers, making it the first Arm Server Company in Korea. As the pioneer, we takes pride in its leading edge technical expertise and specialisation that encompasses hardware, software and cloud services. We are determined to stand strong as a global leader.

## Pioneer of Arm-Based Servers in Korea.

XSLAB is innovating a high-performance acceleration solution for data centers and server environments. Built on Arm architecture, XSLAB offers the best TCO with scalability and efficiency for workloads such as virtualisation, storage, and AI inference. By adopting Arm Neoverse, the latest servers achieve even greater levels of scalability and efficiency.





...

p. 4

Introduction  
회사 소개



...

p. 10

Business Area  
사업 분야



...

p. 14

Primary Technology  
주요 기술



...

p. 19

Reference  
사업 사례



“Introduction

회사  
소개

”





CEO  
FunFun Yoo  
유명환

*CEO of XSLAB Inc.*  
*fmr.* Technical Committee at NIRS  
*fmr.* Policy Advisory Committee at Guro-gu, Seoul  
*fmr.* Mentor at NAVER D2 Startup Factory  
*fmr.* Adj. Professor at Hanyang University  
*fmr.* Mentor at SW Maestro in MSIT

Employees  
**18**  
(As of 25.1)

R&D Personal  
**78%**  
(As of 25.1)





“R&D Over 14 Years to Create  
A Truly Korean Arm Server

Since 2011, we have been the first company in Korea to design, develop, and manufacture our own Arm server motherboards. We maintain a stable foundation through established partnerships with key players across the value chain.

“Full-Stack Arm Server Company  
with Software from UEFI to BMC

We handle the in-house development and porting of the entire software stack required for the server motherboard's operation, from the UEFI firmware—the successor to BIOS—through to the operating system and its drivers.

“Total Arm Server Solution from  
Cloud to Cluster Management SW

Furthermore, our expertise extends to deploying and managing cloud environments, including platforms such as OpenStack and Kubernetes. We are currently developing software for the remote administration of the supercomputer cluster at KISTI.



Real  
*Korean*  
Server



Arm  
Server  
*Full Stack*



Total  
*Solution*  
Develop





2011

Start Planning

Arm server development plan, Overseas analysis, and Technology acquisition



2012

First Prototype

Development of the 1st Arm server prototype, Completion of ETRI's Arm server-related project.



2014

Second Prototype

Development of the 2nd Arm server prototype, Announced at NAVER DEVIEW



2015

V-Raptor™ Prototype

NAVER's conditional purchase contract, Development of V-Raptor™ 1st and 2nd prototypes.



2018

Establishment

Established XSLAB, Selected TIPS of Ministry of SMEs

2019

Investment & Delivery

Investment from Bluepoint, Sunbo Angel Partners, Release of V-Raptor™ SQ, Delivered V-Raptor™ SQ to Univ. of Hawai'i, Development of KISTI Heterogeneous Supercomputer Cluster Management Solution



2021

Server Development

Pre-A Investment from Quantum Ventures Korea, Contract of Arm server and -based cloud software for Kakao



2022

Shopping Mall Opened

Opened shopping mall, Delivered VDI thin client to SK Broadband & KOEN, Contract of Arm/AI chip based pet robot for MOTIE, Participated in COMEUP 2022



2023

Participated in COMPUTEX

Participated in COMPUTEX, Delivered Arm server & system to Sama Aluminum, Delivered Arm server & VDI thin client to KATECH, Delivered Arm server to Samsung Electronics



2024

Distributor Agreement

Signed a distribution agreement with HS Hyosung Information System, Delivered Arm server to Yeonmu Tech, Control Works, Terrazen Health, Investment from Hyosung Ventures





# Arm Server Full Stack Solution



하드웨어팀

## Hardware

Arm motherboard circuit design  
& production, Power, memory, storage,  
communication/network, Display circuit  
design, Component structural design



임베디드소프트웨어팀

## Embedded SW

UEFI (BIOS), OS, and driver (BSP)  
development/porting, Firmware upgrade  
and patching development, BMC SW  
development, OpenBMC porting



하이레벨소프트웨어팀

## High-level SW

BMC, OpenBMC-based back/frontend  
SW development, Server cluster remote  
manage SW development, OS & app  
deployment manage SW development



인프라스트럭처소프트웨어팀

## Infrastructure SW

Dev/Deployment of Arm server-based  
virtualisation SW, high avaiability SW,  
Cloud SW  
(OpenStack, Kubernetes, etc.)





# “Business Area

사업  
분야

”





Customised Arm Server

- V-Raptor™ series Arm servers
- Industrial and special-purpose Arm servers
- Custom hardware and software OEM/ODM



Arm Server-Based Cloud BlueShift™

- Self-built BlueShift™ for education and small businesses
- OpenStack-based deployment and Kubernetes support
- Various Arm-based instances on a monthly subscription



Arm Server-Based Cloud & SW Support

- Build own Arm server-based cloud (OpenStack, Kubernetes)
- Custom, dedicated cloud services



Low-Power AI NPU-Based Edge AI

- Development of a dongle and Arm server supporting low-power edge AI (16.8 Tops@INT8)
- NPU chip module solution similar to Google Edge TPU



Server Remote Management SW

- Proprietary BMC solutions and firmware update solutions
- Industrial terminals and dedicated remote management SW
- Customised cluster remote management SW



Arm-Based Terminals

- OEM/ODM Arm-based display terminals
- Migration of x86 such as POS, kiosks, and DIDs, to Arm
- OEM/ODM of laptops based on Android, Linux, and Chromium



We Create Low-power & Heat, High-performance Arm Servers.

Arm Server

**We Create Low-power & Heat, High-performance Arm Servers.**



**The Benifits of Arm Server.**

XSLAB V-Raptor series of Arm servers delivers better performance than x86 servers while consuming lower power. Furthermore, low heat allows operation without external cooling, even in industrial environments like factories. We offer a diverse lineup, ranging from low-power edge servers to high-performance many-core servers, on the application.

**Arm Server Full Stack Company.**

XSLAB internally develops its entire range of hardware, software, and cloud infrastructure. This results in superior compatibility between our products and their integrated software. We also independently design and offer a variety of features not commonly seen in servers, including BMC storage-based OS recovery, OLED displays, and server nodes.





## V-Raptor™ Representative Products

### V-Raptor™ Altra WS



#### Faster AI Operation with Less Power

Up to **128C**, Ampere Altra Arm Processor  
Up to 4TB, DDR4 Memory (ECC)  
Up to 4x Faster AI inference than Xeon Gen 4  
NVIDIA GPU Configuration

### V-Raptor™ SQ nano



#### Personal Arm Server in Your Hands

**24C**, SCA211 Efficiency Arm Processor  
Up to 32GB, DDR4 Memory (ECC)  
Very Small Size (width 19cm)  
OLED Display & USB 3 4x Ports

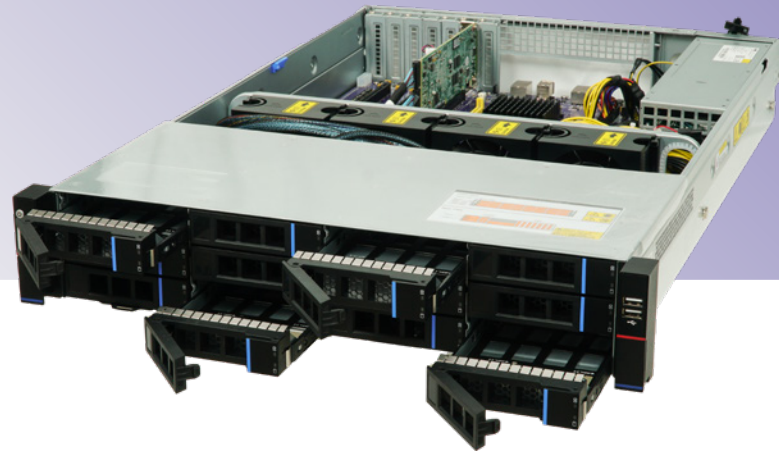
### V-Raptor™ SQ mini



#### Exceptional CCTV Monitoring

**24C**, SCA211 Efficiency Arm Processor  
Up to 64GB, DDR4 Memory (ECC)  
VMS Partnership with NX Optix  
OLED Display & PCIe Expansion

### V-Raptor™ LX



#### Built for Big Data and Massive Storage

**16C**, LX2160A Performance Arm Processor  
Up to 128GB, DDR4 Memory (ECC)  
SATA/SAS 12x Drive Bays  
Dedicated RAID Card Provided



# “Primary Technology

주요  
기술

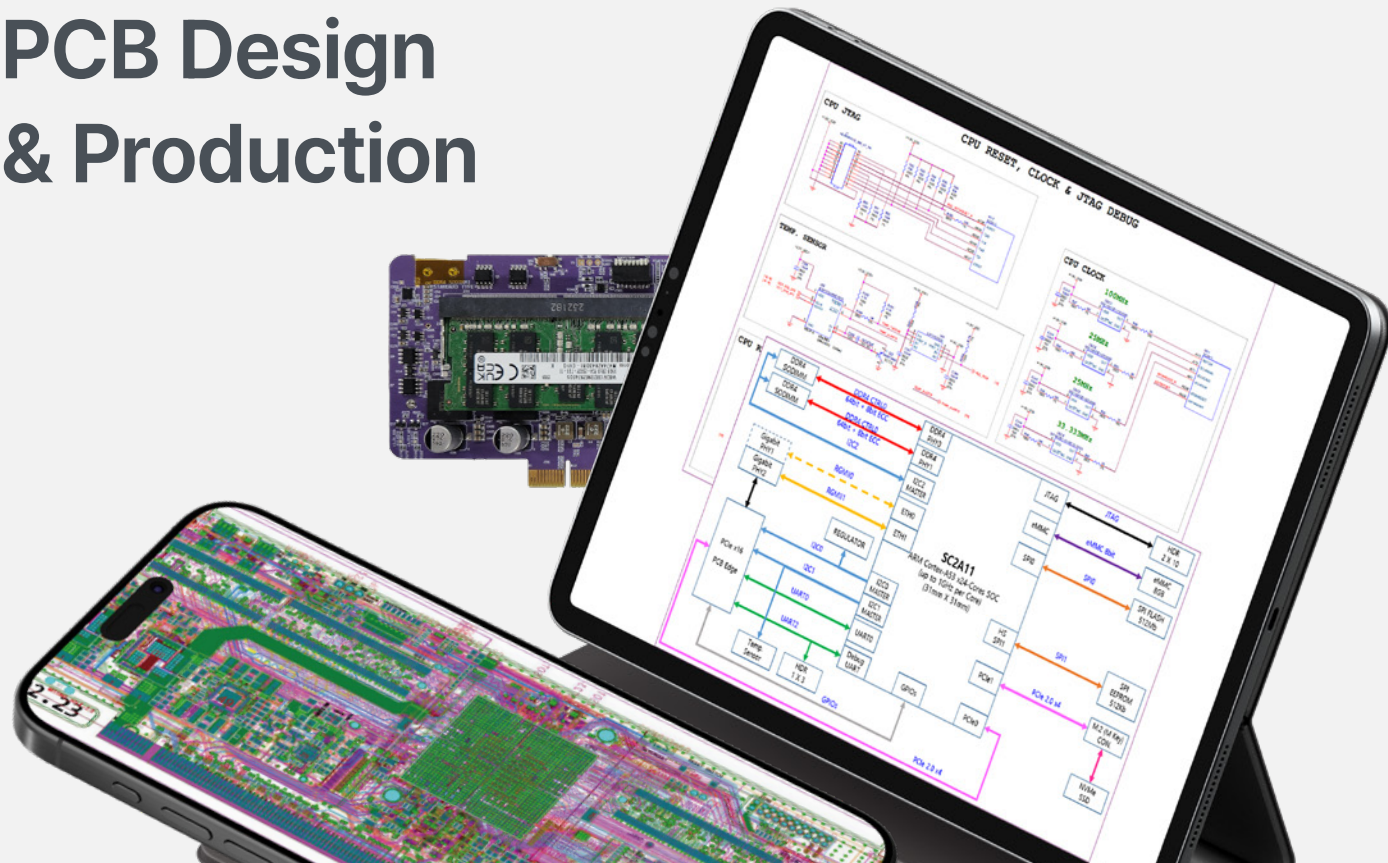
”



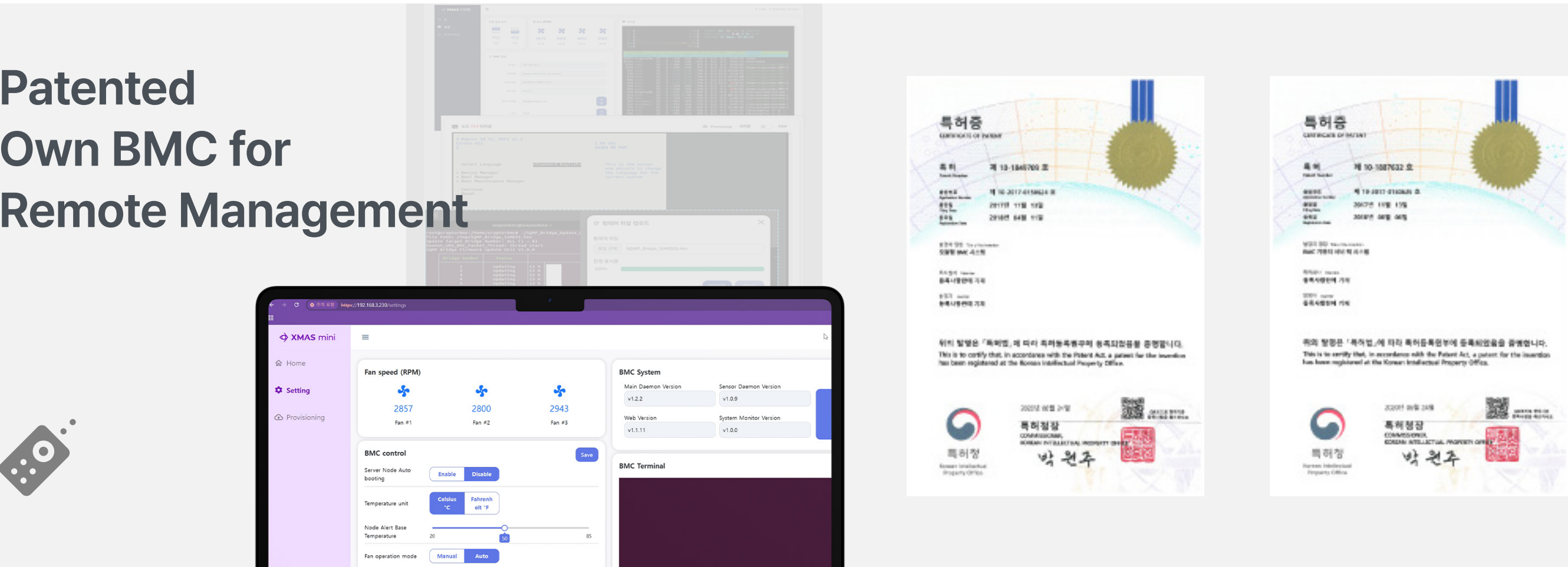
Primary Technology  
주요 기술



PCB Design  
& Production

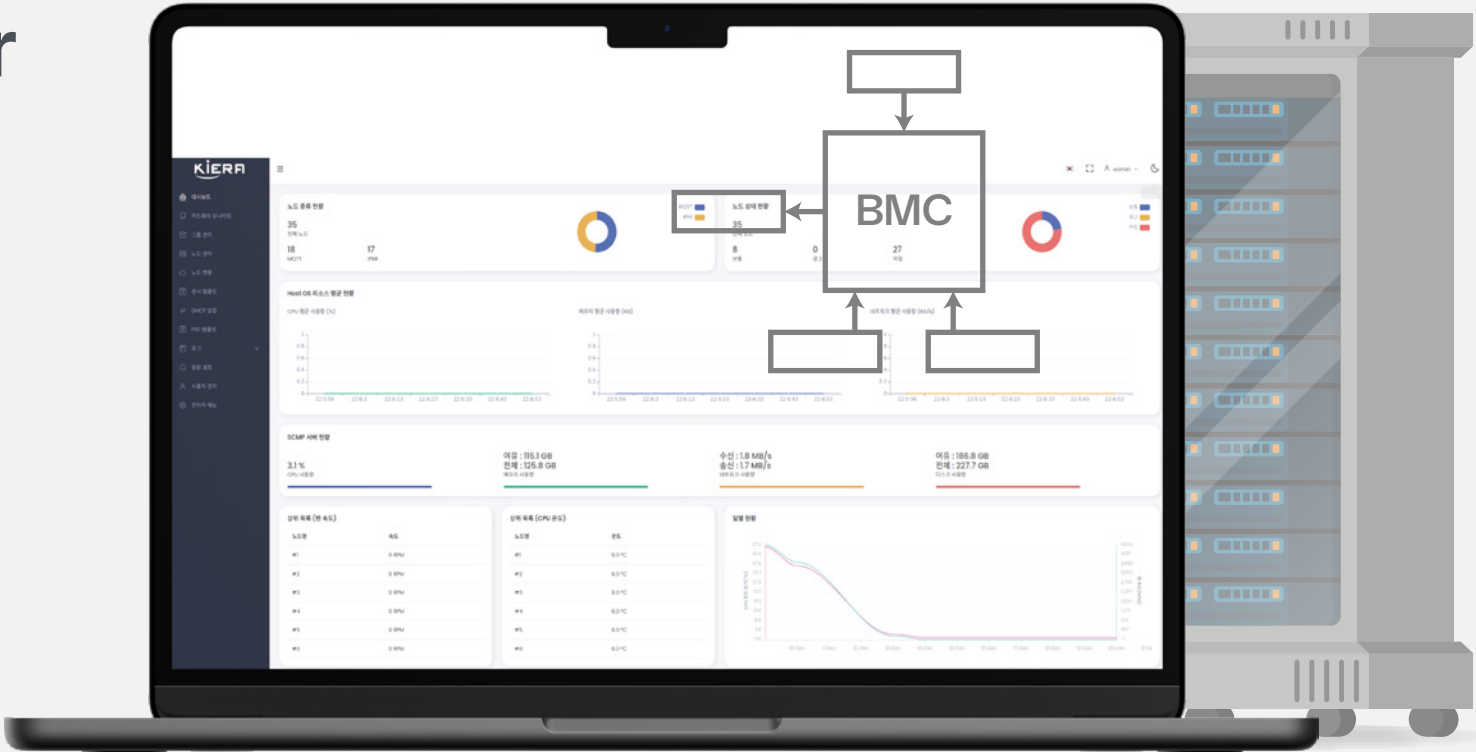


Patented  
Own BMC for  
Remote Management

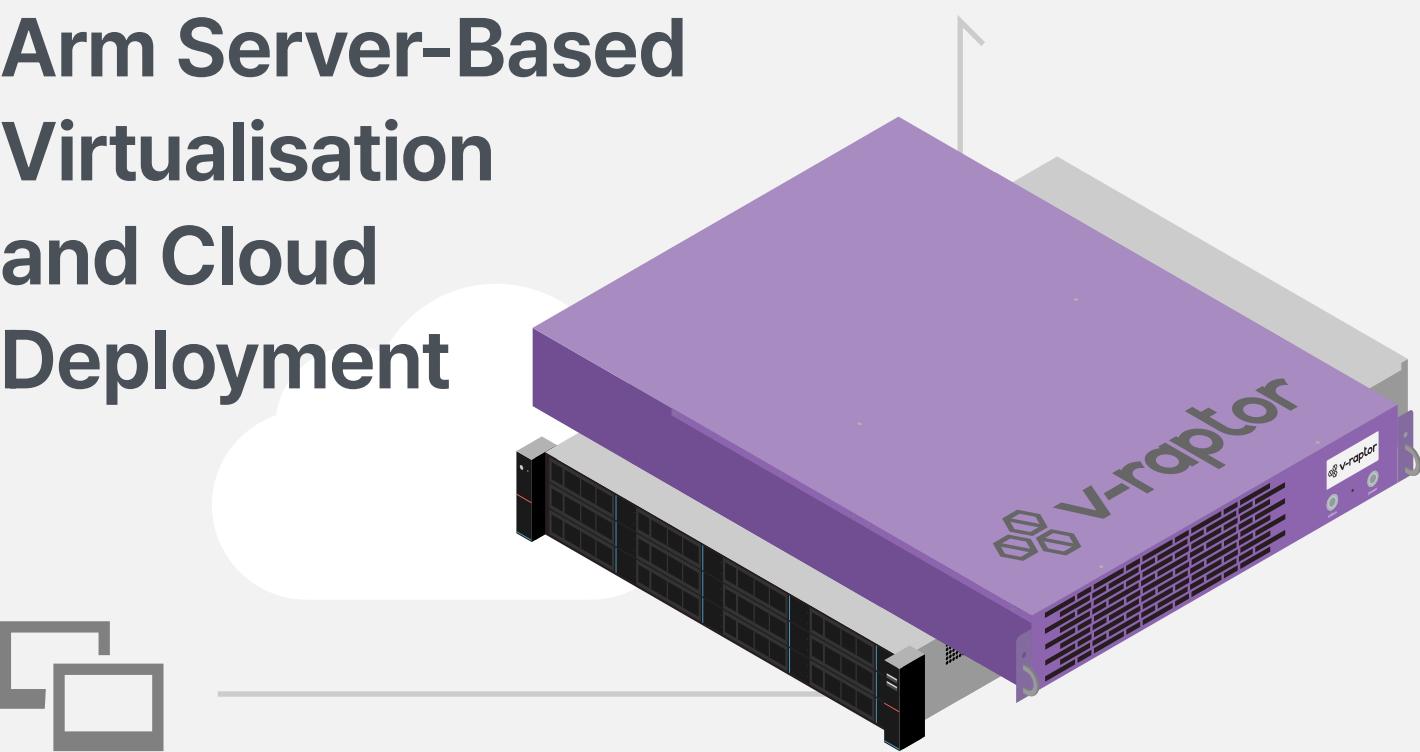


Heterogeneous Supercomputer  
Cluster Remote Management  
Software

Developed for  한국과학기술정보연구원  
Korea Institute of Science and Technology Information



Arm Server-Based  
Virtualisation  
and Cloud  
Deployment

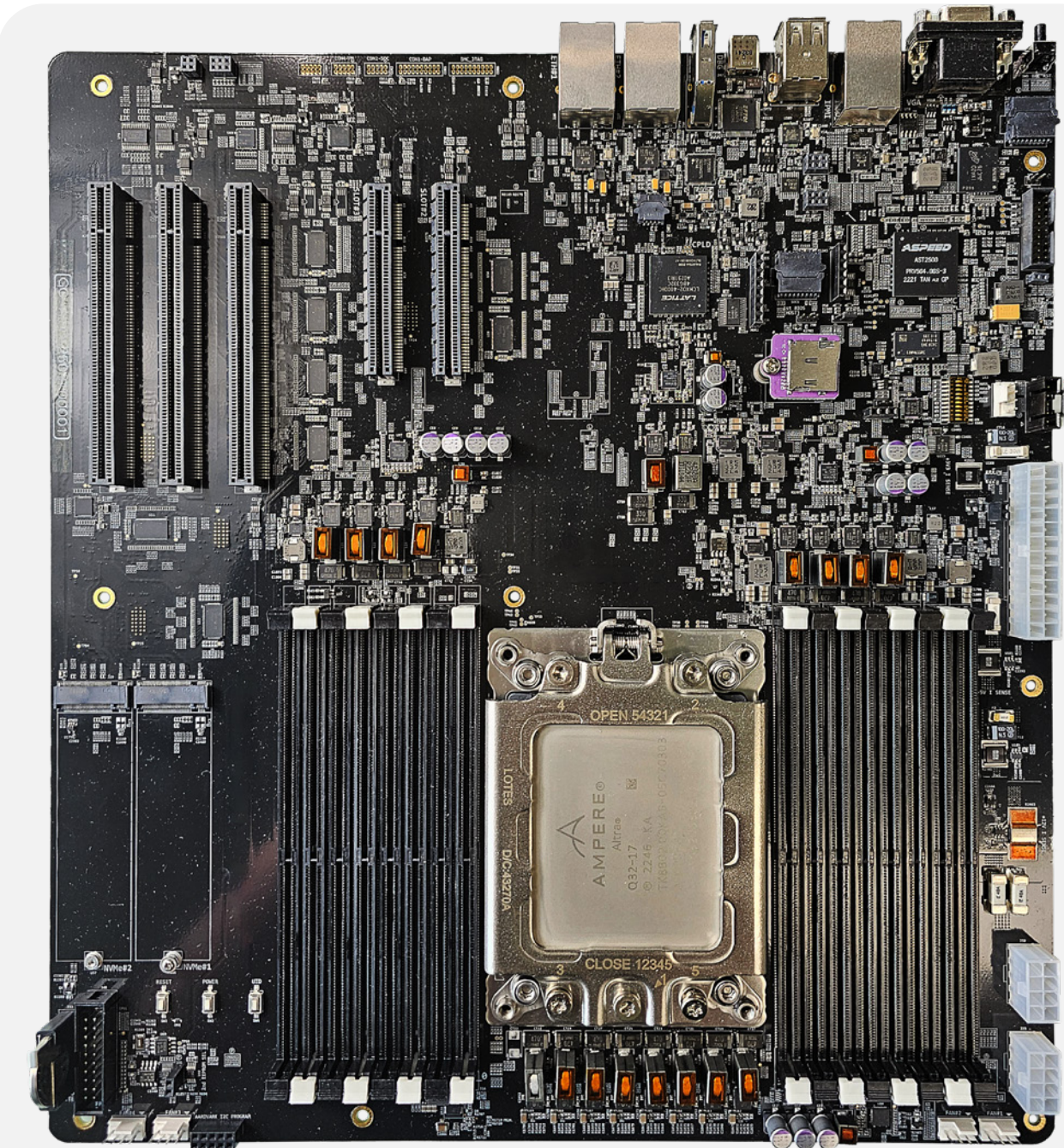






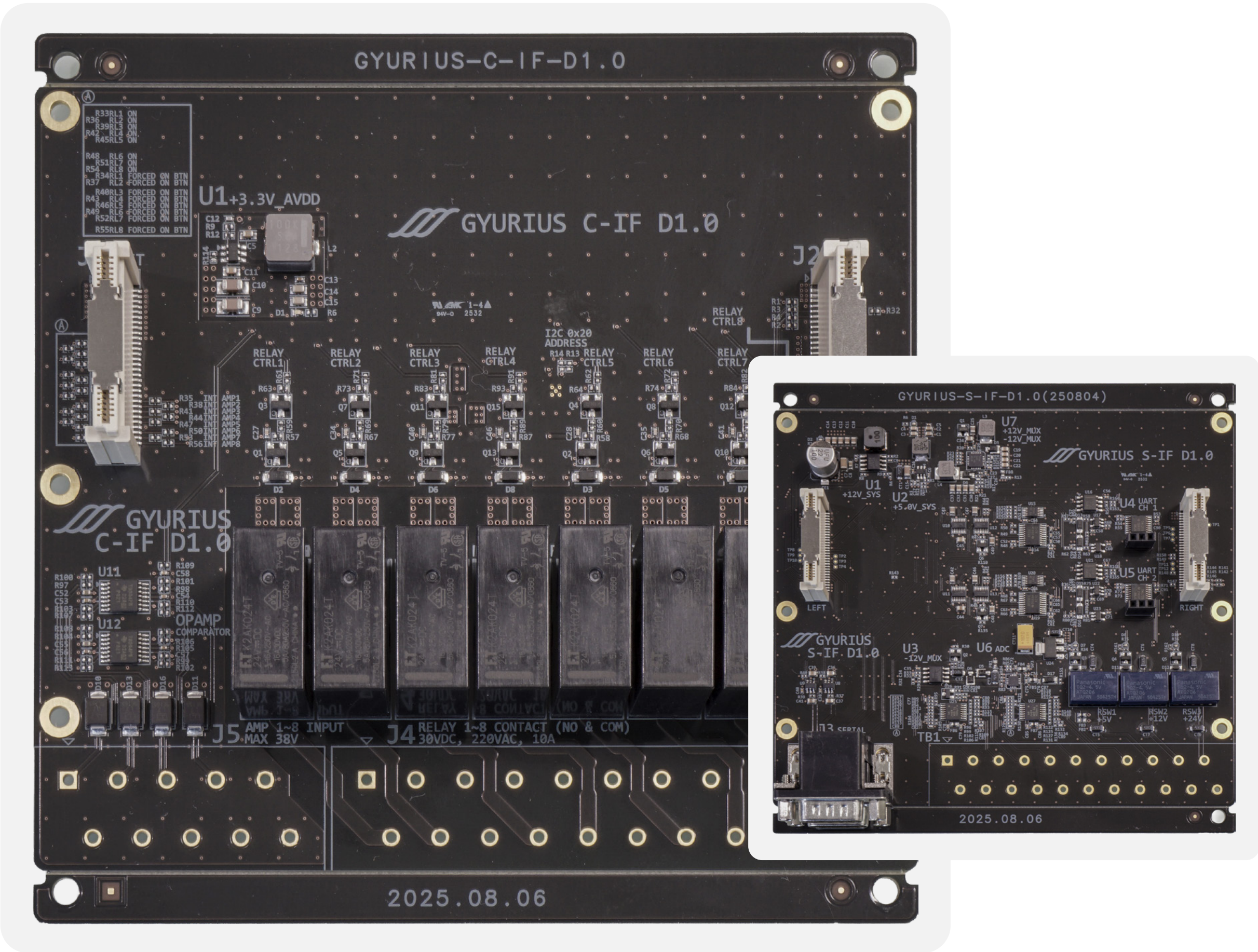
PCB Design  
& Production

V-Raptor™ LX PCB



V-Raptor™ Altra PCB

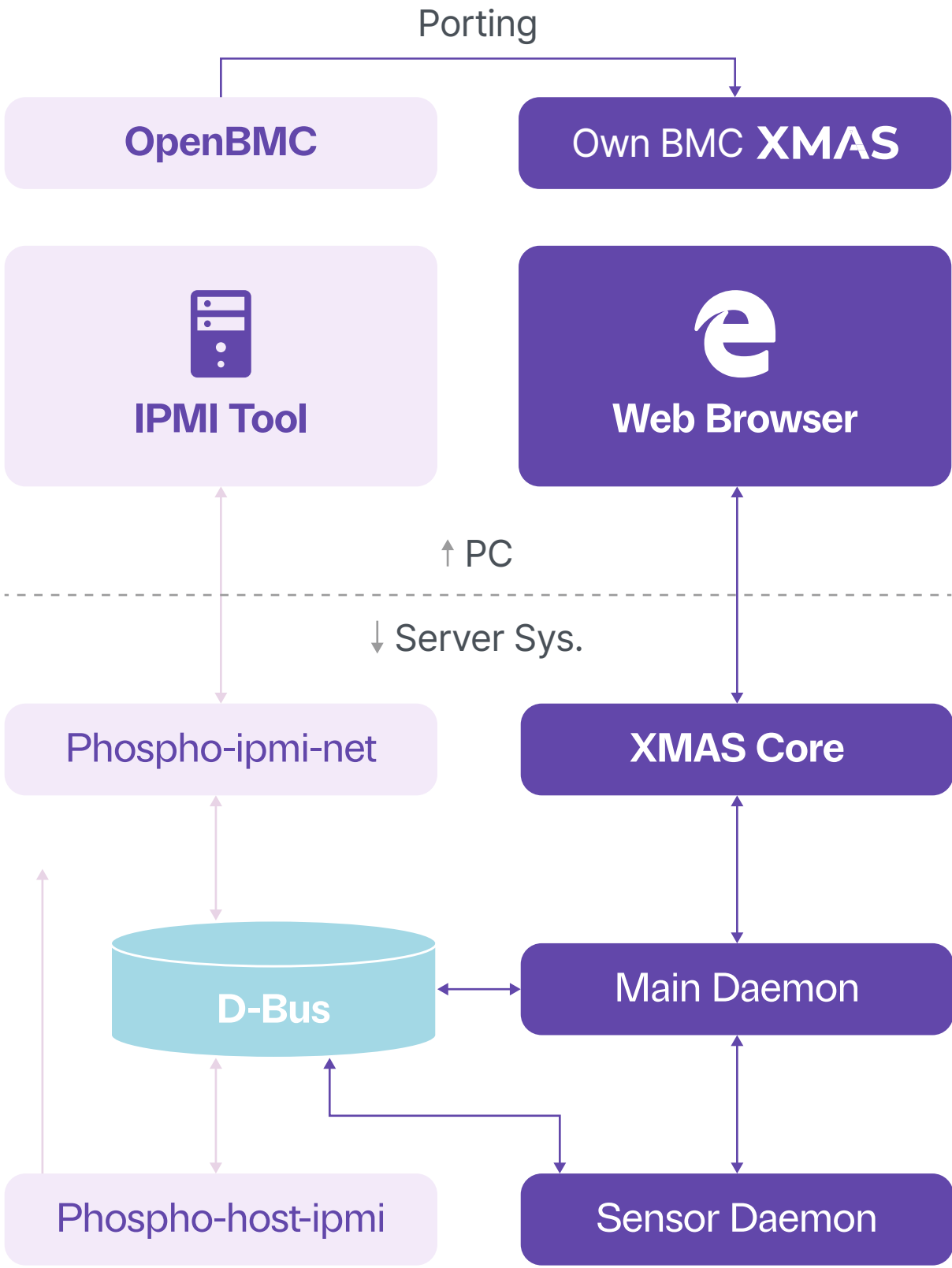
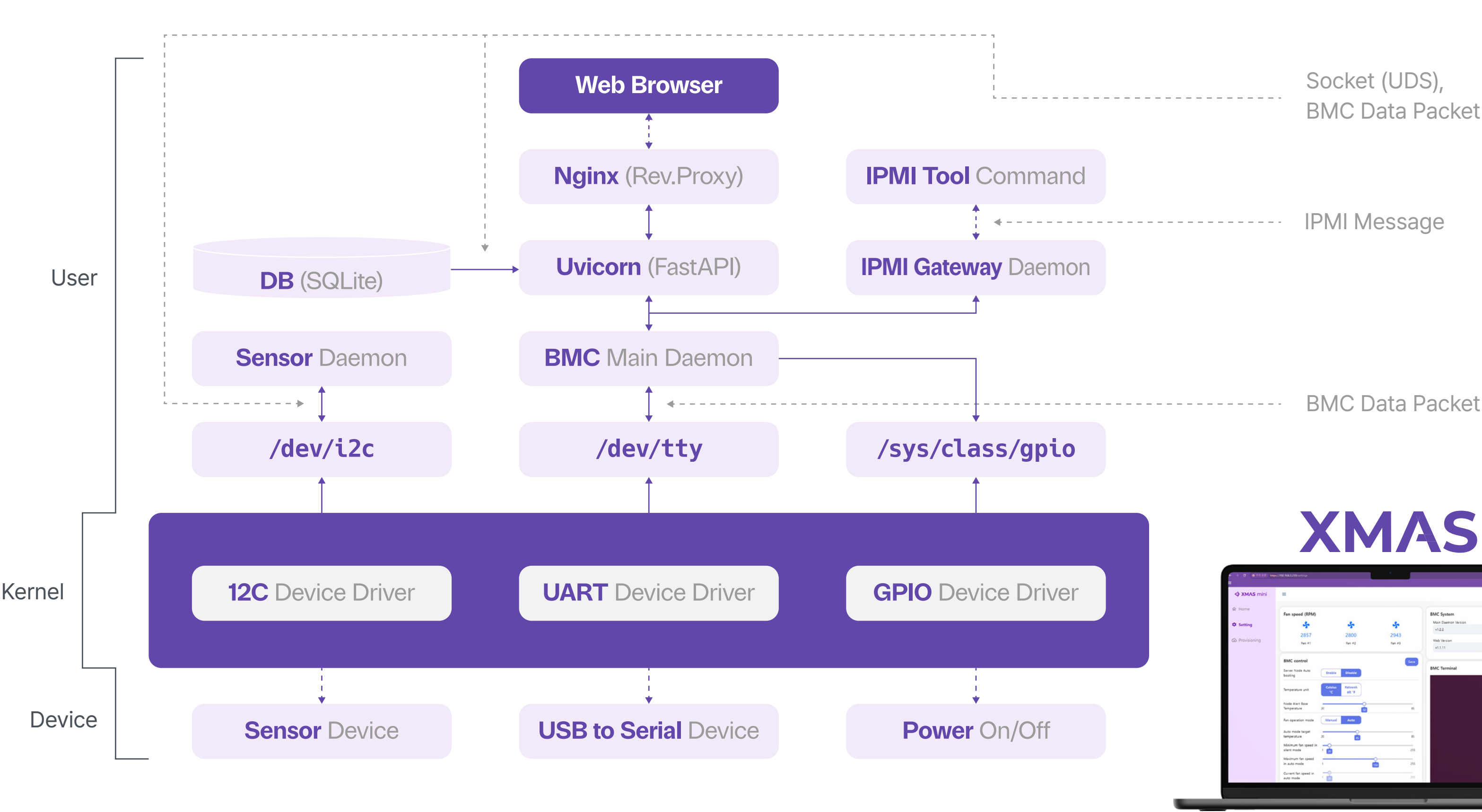
Smart Farm System PCB







# Patented Own BMC for Remote Management



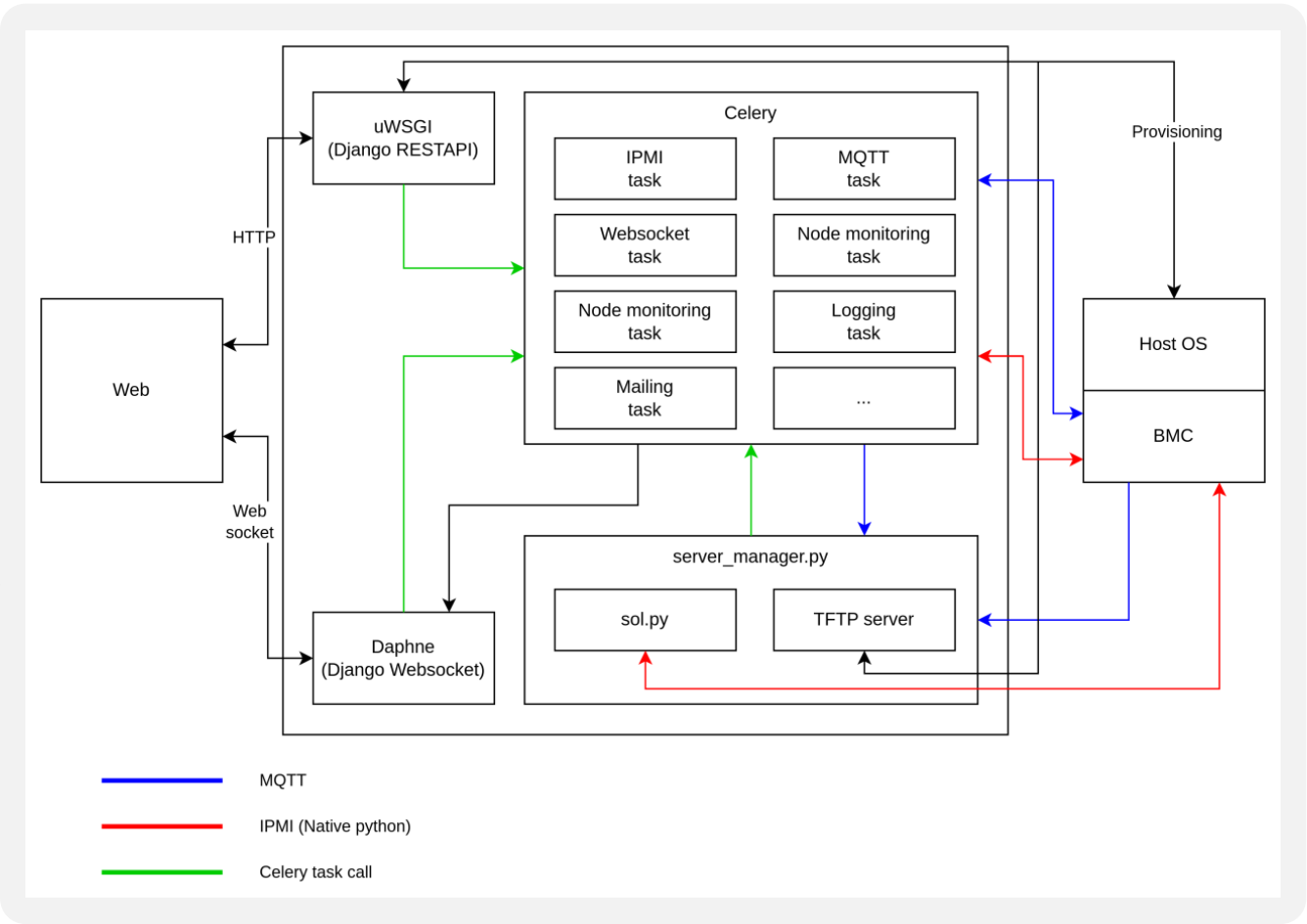
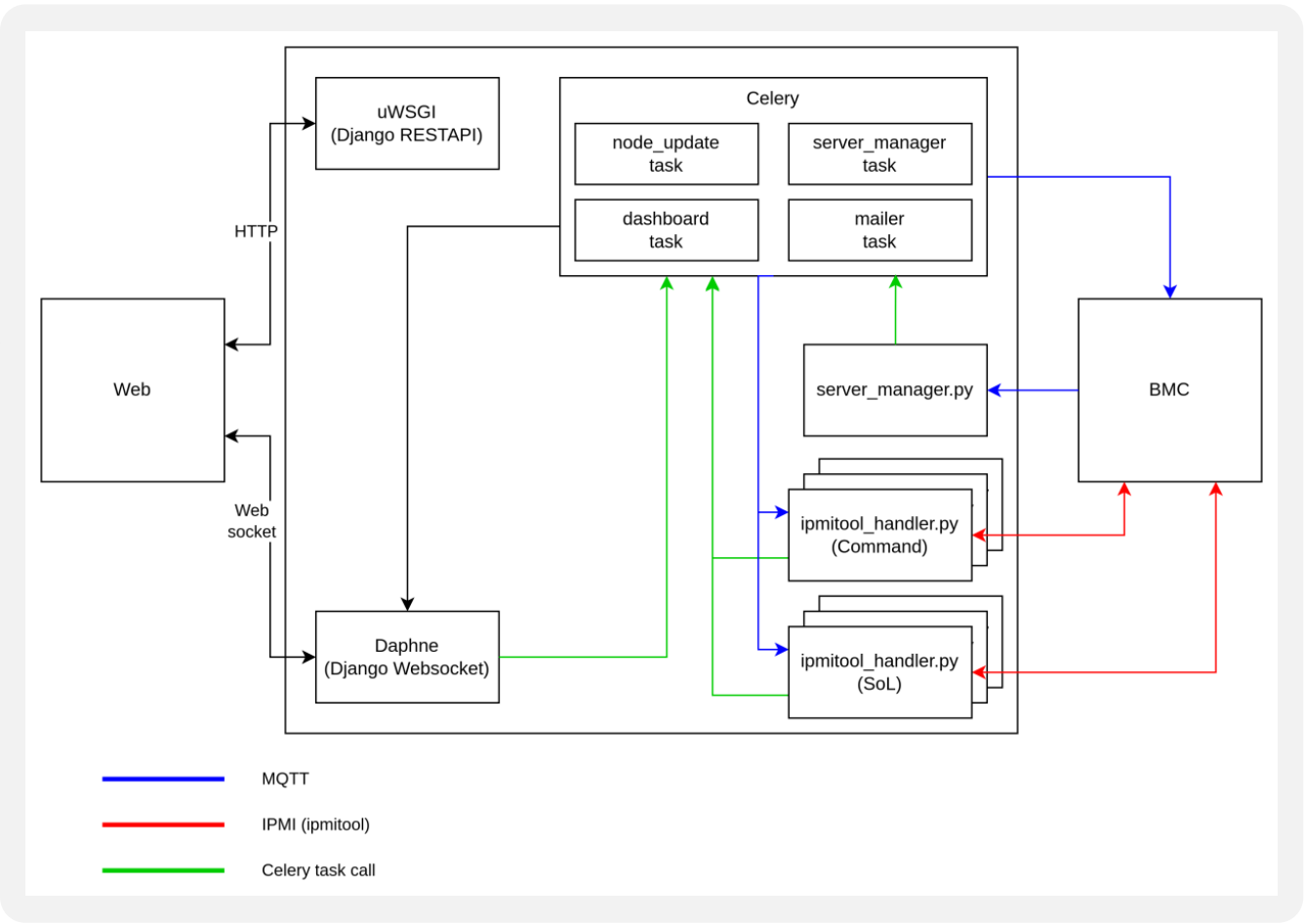


# Heterogeneous Supercomputer Cluster Remote Management Software

Heterogeneous Server  
HW Status Monitoring & Management



Heterogeneous Server  
Cluster Configuration & OS Deployment



## Grouping Heterogeneous into Clusters

Collaboration with KISTI, has localised an overseas solution tailored to Korean standards. This solution monitors the HW status of the numerous heterogeneous servers that make up a supercomputer in real time and applies it to cloud.



“Reference

사업  
사례

”



## HS Hyosung Information System Distributor Contract

- Supply Arm servers under distribution agreement
- Sold under the HS Hyosung GreenCore brand

#Firm

#Dom.

#Dist.

## University of Hawai'i Arm Server Supply

- Delivered V-Raptor SQ to the University of Hawaii in 2019
- Additional maintenance scheduled for 2022

#Edu.

#Int'l

#Manycore

## Kakao Arm Server Supply

- Delivered V-Raptor SQ to Kakao Mobile Cloud in 2021
- Arm server registered with Kakao Cloud infrastructure

#Firm

#Dom.

#Manycore

## Sama Aluminum Arm Server Supply

- Delivered Sama Aluminum Pyeongtaek plant in 2023
- Private cloud for extracting, storing,& sharing sensor

#Firm

#Dom.

#Factory

## KATECH Arm Server Supply

- Delivered V-Raptor LX to KATECH
- Ceph configuration, used for data backup

#Lab

#Dom.

#Storage

## Samsung Electronics Arm Server Supply

- Delivered V-Raptor SQ to Samsung Electronics
- Used for monitoring, fire prediction and analysis.

#Firm

#Dom.

#Factory





SK Broadband  
VDI Thin Client Supply

- Delivered Arm-based VDI thin client to SKB
- Sold under the SKB CloudX brand

#Firm #Dom. #VDI

KR South-East Power Co., Ltd  
VDI Thin Client Supply

- Delivered Arm-based VDI thin client to KOEN via SKB
- Sold under the SKB CloudX brand

#SOE #Dom. #VDI

Baewha Women’s University  
Arm Server Supply

- Delivered V-Raptor SQ, LX to Baewha W. Univ.
- Low-noise configuration for use in classrooms

#Edu. #Dom. #Manycore

Dankook University  
Arm Server Supply

- Delivered V-Raptor SQ to Dankook University

#Edu. #Dom. #Manycore

Yeonmu Tech  
Arm Server Supply

- Made Arm server experience space in Yeonmu Tech
- Signed MOU for Arm server sales

#Firm #Dom. #Factory

Korea Expressway Corporation  
Arm Server Supply

- Delivered V-Raptor SQ mini to Korea Expressway Corporation

#SOE #Dom. #Edge



R 1701-02, Daeryung Post Tower 8th, 43, Digital-ro 26-gil, Guro-gu, Seoul,  
Republic of Korea. (08389) **+82-2-6952-9974** **sales@xslab.co.kr**

Publication date : Aug 2025  
엑세스랩 사업부

Find more information on the website  
**www.xslab.co.kr**

