OCP TAIWAN DAY
Road to 5G · AI · Edge Computing
IT Gears for Modern Data Center Efficiency

Dr. Sunlai Chang, Senior VP and CTO of Wiwynn
OCP COMMUNITY HAS BEEN GROWING

- Hundreds Member Companies

- Thousands of Engineers Working Together on 10 OCP Projects
OCP TENETS – Contributions & Workshops are attested with

All the design contributions and workshops are attested to satisfy the 4 OCP tenets.

EFFICIENCY
OPENNESS
SCALABILITY
IMPACT

ALL PRODUCTS

Accepted & Presented

Design Contribution & Workshops
Bring OCP Benefits to New Applications - 5G

- OCP is collaborating with other technical groups such as Linux Foundation & Open Network Foundation to extend its impact.

- Telco is embracing Openness to allow Commercialized Off the Shelf Equipment.

- OCP can benefit the 3 required features eMBB, mMTC, URLLC of 5G.

**eMBB**
Enhanced Mobile Broadband

**mMTC**
Massive Machine Type Communication

**URLLC**
Ultra-reliable Low-Latency Communication

**Efficiency & Impact**

**Throughput**

**Latency**
WIWYNN EP100 Platform

The Platform Is Based on the OpenEDGE Project with OCP Ingredients

- Open Hardware for COTS & Open Software
- Expedite the Eco System of Openness
- Enjoy OCP Products & Benefit
WIWYNENN EP100 Platform

The Platform Is Based on the OpenEDGE Project with OCP Ingredients

- 3U Short-depth Chassis with Flexible Nodes for Far Edge Environment
- OpenRMC Development Platform for System Management
- Host COTS Sleds for Various 5G Applications
- Pooled Power Supply for Energy Efficiency & Utilization

**SPEC**

<table>
<thead>
<tr>
<th>Flexible Node</th>
<th>1U Half-width, 2U Half-width, 1U Full-width for Various Computing Power, New Features Added-on, such as Switch, Storage, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front I/O Interface</td>
<td>Power, Storage Bay, OCP Mezz 3.0 NIC, PCIe Card, USB, Debug</td>
</tr>
<tr>
<td>Power Supply</td>
<td>Fit 48V DC, -48V DC and 220 AC PSUs</td>
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<tr>
<td>Dimension</td>
<td>3U 19&quot; Rack Mount System; 448 x 430 x 130.6 (mm)</td>
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</table>

- Will be Available with Software Development Kits
Wiwynn Extends Product Portfolio from DC to MEC

High Throughput & Low Latency

5G

High Power Consumption

Radio Unit (RU) → Distributed Unit (DU) → Central Unit (CU) → Central Office (CO)

Far Edge → Aggregated Edge → Regional Data Center → Data Center

IoT

OCP TAIWAN DAY
Road to 5G · AI · Edge Computing
Configure EP100 sleds for DU, CU, and CO to meet Power Consumption, Latency, and Throughput requirements.
Wiwynn Extends Product Portfolio from DC to MEC

High Throughput & Low Latency

Edge Platform

Rack-mount Server / Storage

19”/21” Racks

High Power Consumption

EDGE

CLOUD

OCP TAIWAN DAY
Road to 5G · AI · Edge Computing
Enjoy Easy Maintenance and Reduce Down Time

OCP Product Feature
Achieve Low Latency with Compute Accelerators

From DC to MEC, Wiwynn Offers Comprehensive portfolio for your AI Training and Inference.
Efficiency, Wiwynn Delivers!

- Improve Data Center Energy Efficiency
- Improve Edge Data Center Efficiency
- Innovate Liquid Cooling
- Advanced Immersion Cooling
EFFICIENCY - Wiwynn Delivers!

- Improve Data Center Energy Efficiency

**Edge Computing**

**Rack Level Liquid Cooling**

**Immersion Cooling**

Two Phase Liquid Cooling Whitepaper

Data Center Energy Saving

Wiwynn Rack Level Validation Room

48V Immersion Cooling Solution with 3M™ Fluorinert™ Electronic Liquids
EFFICIENCY - Wiwynn Delivers!

- Improve Edge Data Center Energy Efficiency

Urban Data Center in Asia Pacific

Edge Computing

34 Racks

Wiwynn Rack Level Validation Room

Data Center Energy Saving

Rack Room

Hot Air Recycle

Fresh Air

Hot Air

Free Air Cooling

Average PUE < 1.2

Wiwynn Delivers!

Urban Data Center in Asia Pacific

Edge Computing

34 Racks

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Data Center Energy Saving

Rack Room

Hot Air Recycle

Fresh Air

Hot Air

Free Air Cooling

Average PUE < 1.2

Wiwynn Delivers!
EFFICIENCY - Wiwynn Delivers!

- Innovative Liquid Cooling

Two Phase Liquid Cooling

Rack Level Liquid Cooling Optimization
Major DC Customer Recognized

Two Phase Liquid Cooling Whitepaper

Data Center Energy Saving

Dielectric Liquid Cooling
No Facility Change

Rack
Rear Door Heat Exchanger

Fresh Air
Hot Air

Rack
Cold Plate On ASIC
Liquid Inlet
Vapor Outlet
EFFICIENCY - Wiwynn Delivers!

Advanced Immersion Cooling

Solution for High Power ASICs

- Management & UI Development
- 48V for High Power Efficiency
- Optimization for OCP Server

Data Center Energy Saving

100 OCP Servers in One Tank

Wiwynn Booth, TICC 1F

48V Immersion Cooling Solution with 3M™ Fluorinert™ Electronic Liquids
WELCOME TO Wiwynn BOOTH @ TICC 1st Floor

We are HERE!