



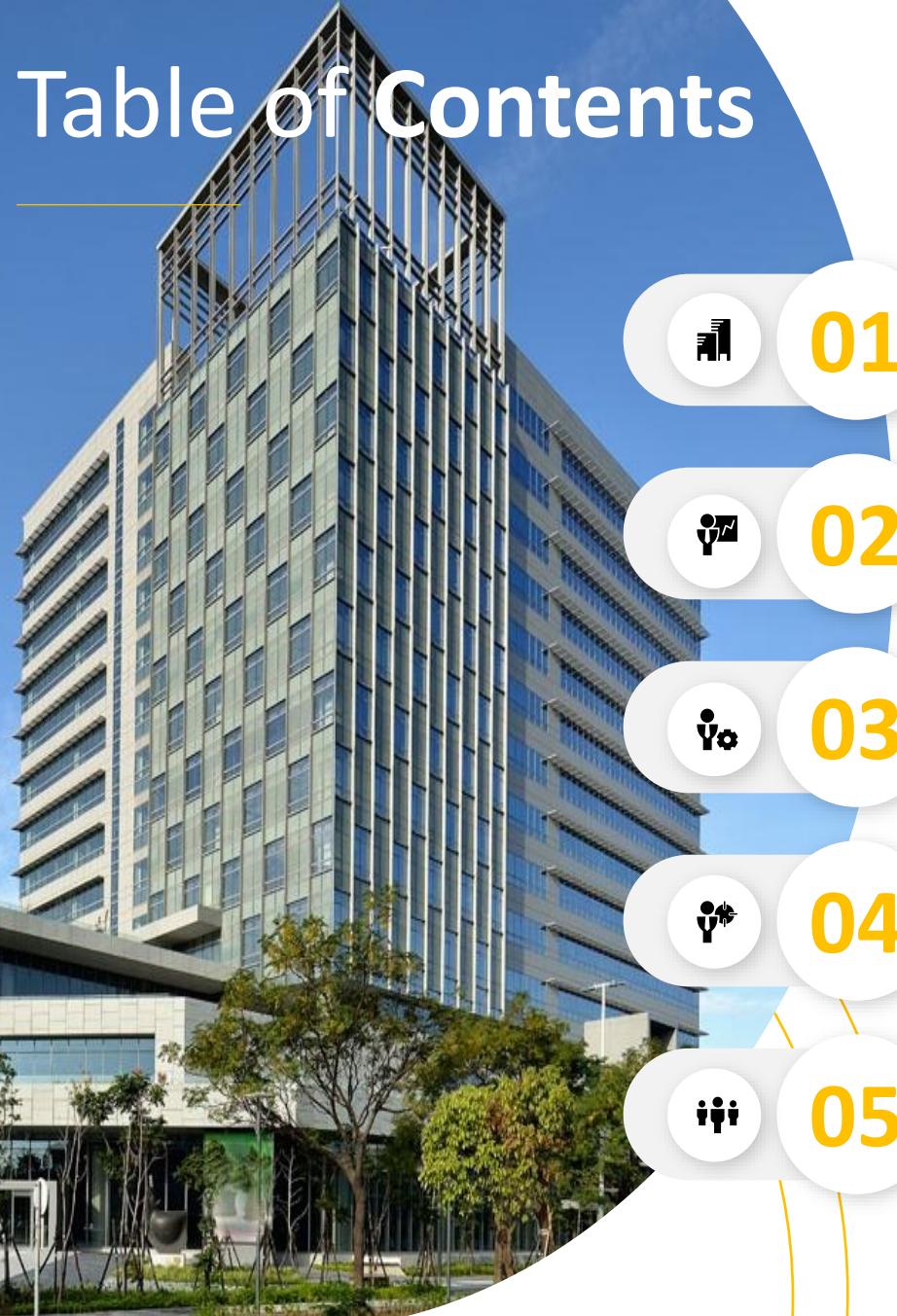
Andes Technology Corp. Investor Conference Report

Safe Harbor Notice

Except for the historical information contained herein, the matters addressed in this presentation are forward-looking statements that involve certain risks and uncertainties that could cause actual results to differ materially, including but not limited to weather, impact of competitive products and pricing, industry-wide shifts in the supply and demand for semiconductor products, rapid technology change, semiconductor industry cycle, and general economic conditions.

Except as required by law, Andes undertake no obligation to update any forward-looking statement, whether as a result of new information, future events or otherwise.

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Company Overview

<http://www.andestech.com>





Andes Highlights

- Founded in March 2005 in Hsinchu Science Park, Taiwan, ROC.
- Well-established high technology IPO company
- **Over 340 people;** 80% are engineers.
- TSMC OIP Award “Partner of the Year” for New IP (2015)
- Founding Premier membership in the RISC-V International Association (RISC-V Foundation) (2020)
- AI Global Media Award “Most Outstanding Embedded Processor IP Supplier” (2020)
- Hsinchu Science Park Innovation Award - AndesCore™ NX27V (2020)
- EE Awards - “Taiwan-Product Award” & “Asia-Company Award” (2021)

Andes Mission

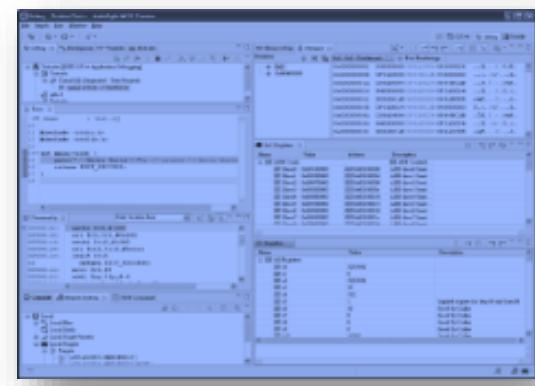
- Innovate performance-efficient processor solution for low-power SoC

Emerging Opportunities

- Smart and Green electronic devices
- Cloud Computing and Internet of Things and Machine Learning

Business Status Overview

- ❖ **300+** commercial licensees
 - Geographically distributed in Taiwan, China, Korea, Japan, Europe, and USA
 - **600+** license agreements signed
- ❖ AndeSight™ IDE:
 - ~**24,000** installations
- ❖ Eco-system:
 - **500+** partners
- ❖ **11B+** Accumulative SoC Shipped



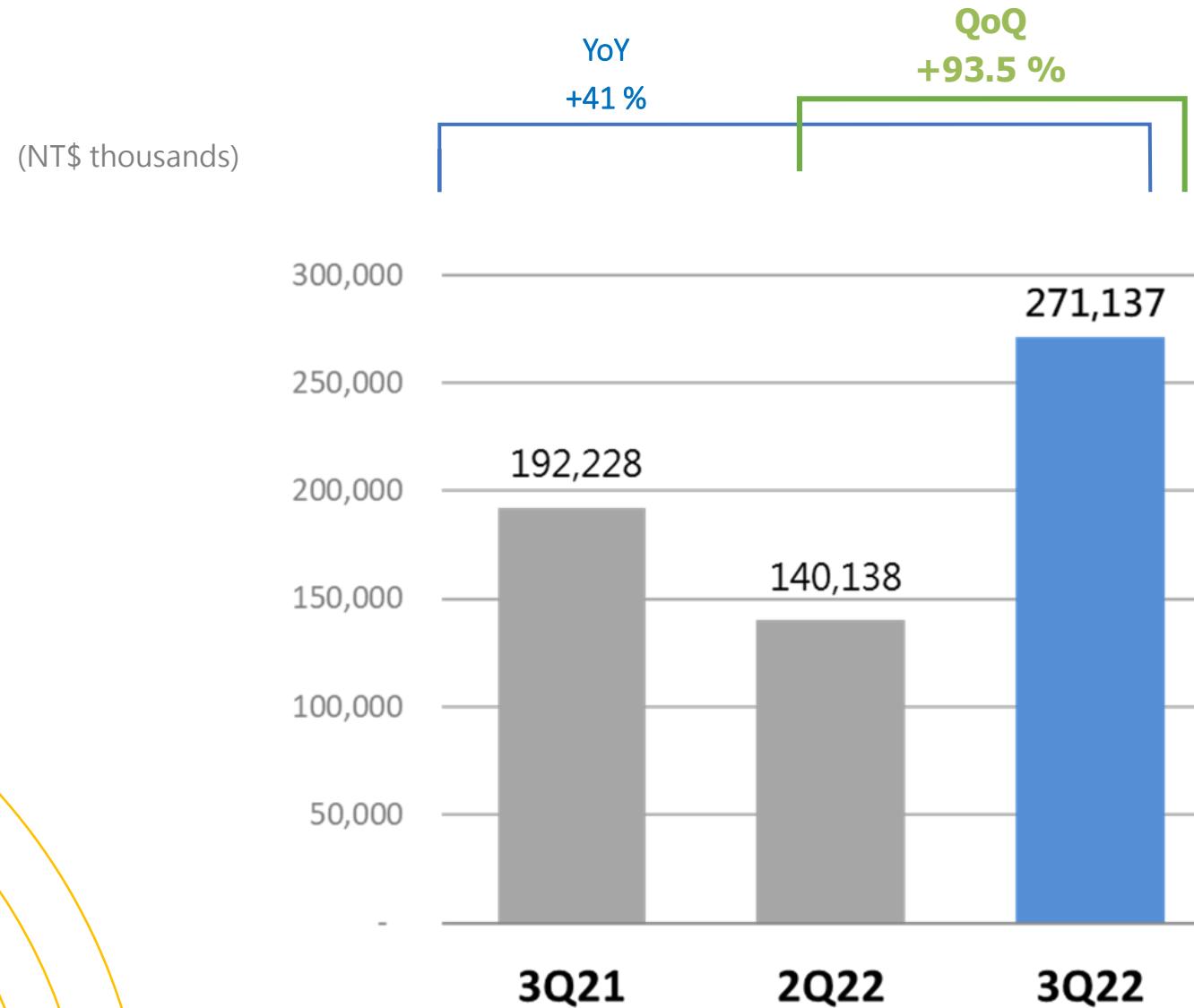


Operation Results

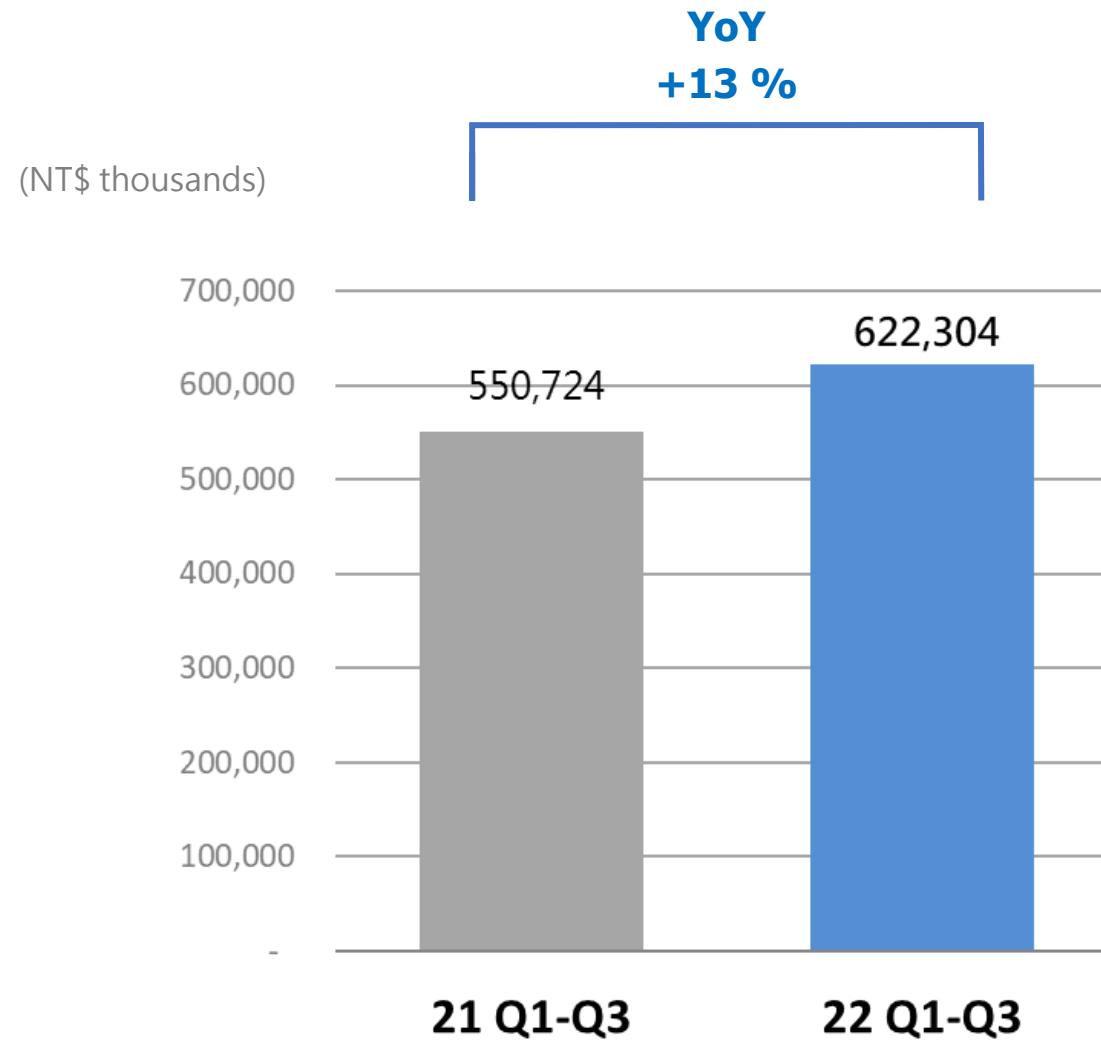
<http://www.andestech.com>



3Q22 Revenue Analysis



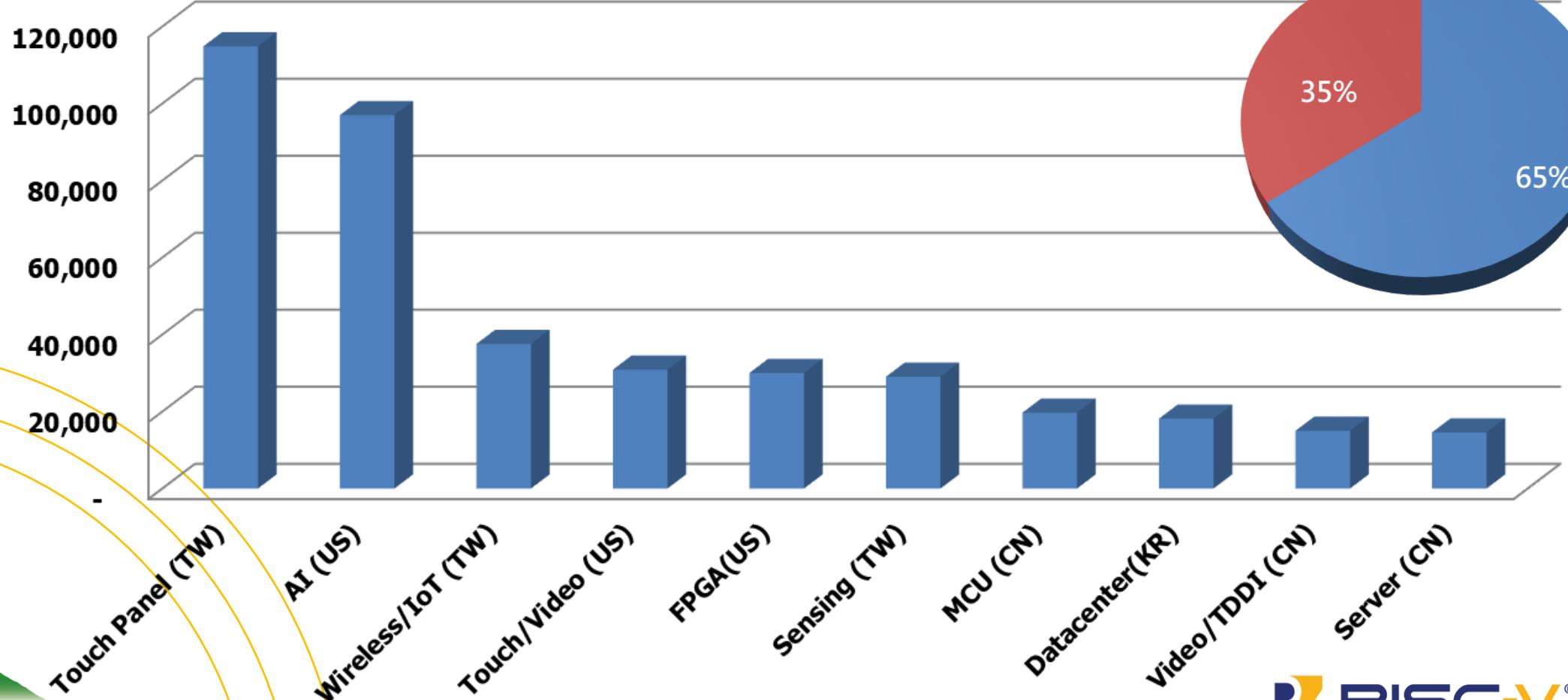
22 Q1-Q3 Revenue Analysis



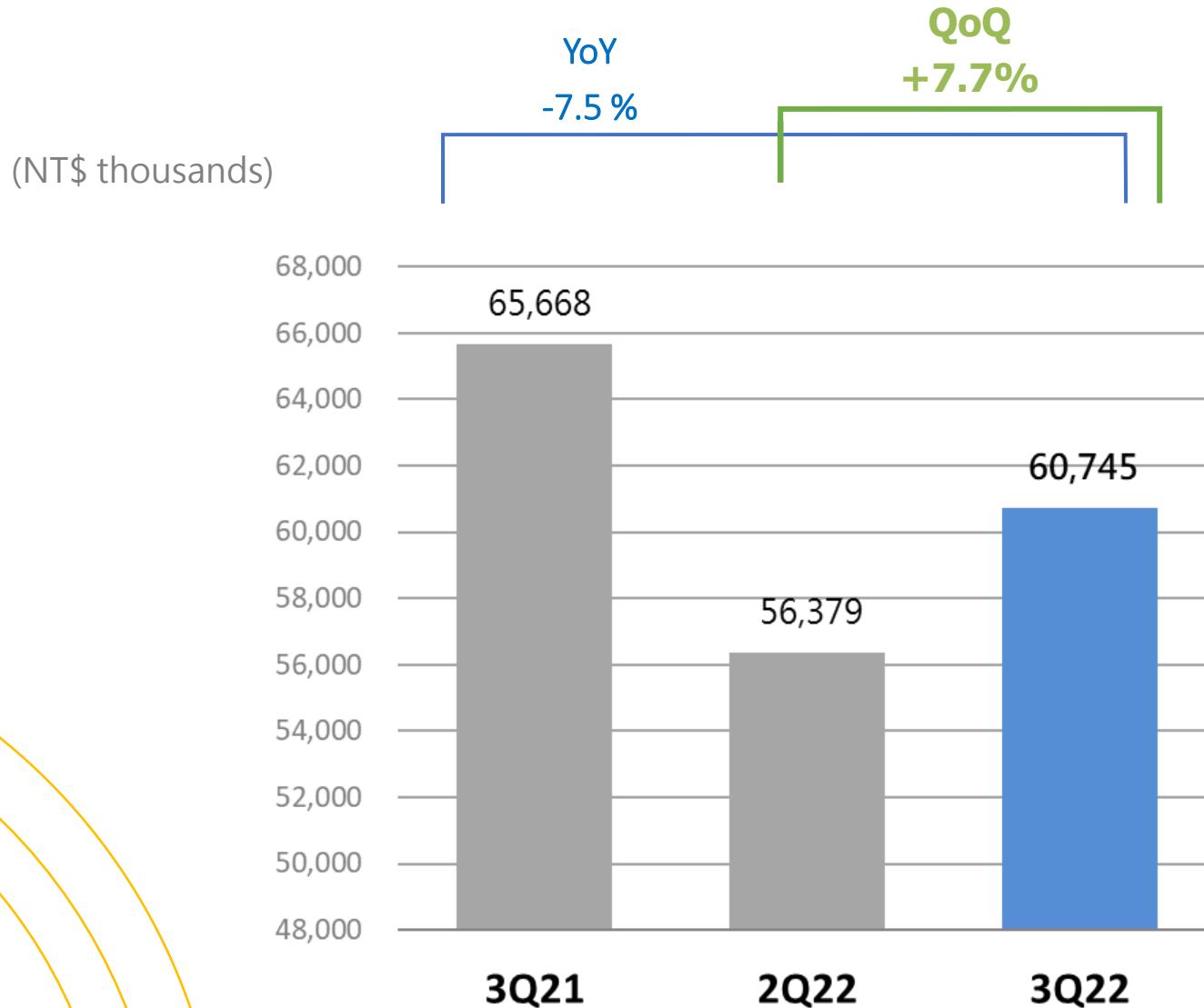
22 Q1-Q3 Top 10 Customers Analysis by Revenue

(NT\$ thousands)

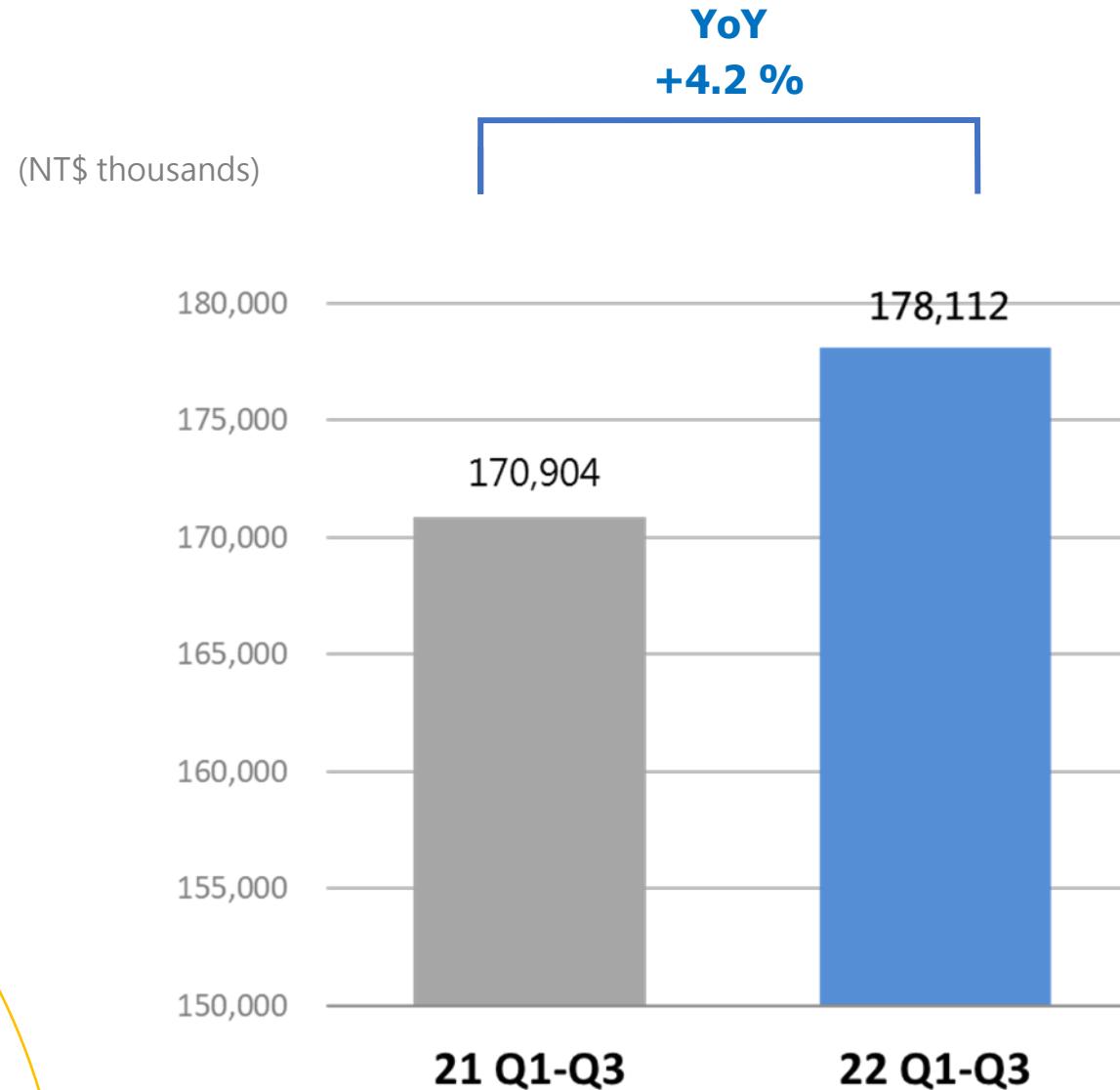
Top 10 Customer Contributed 65% Revenue



3Q22 Royalty Analysis



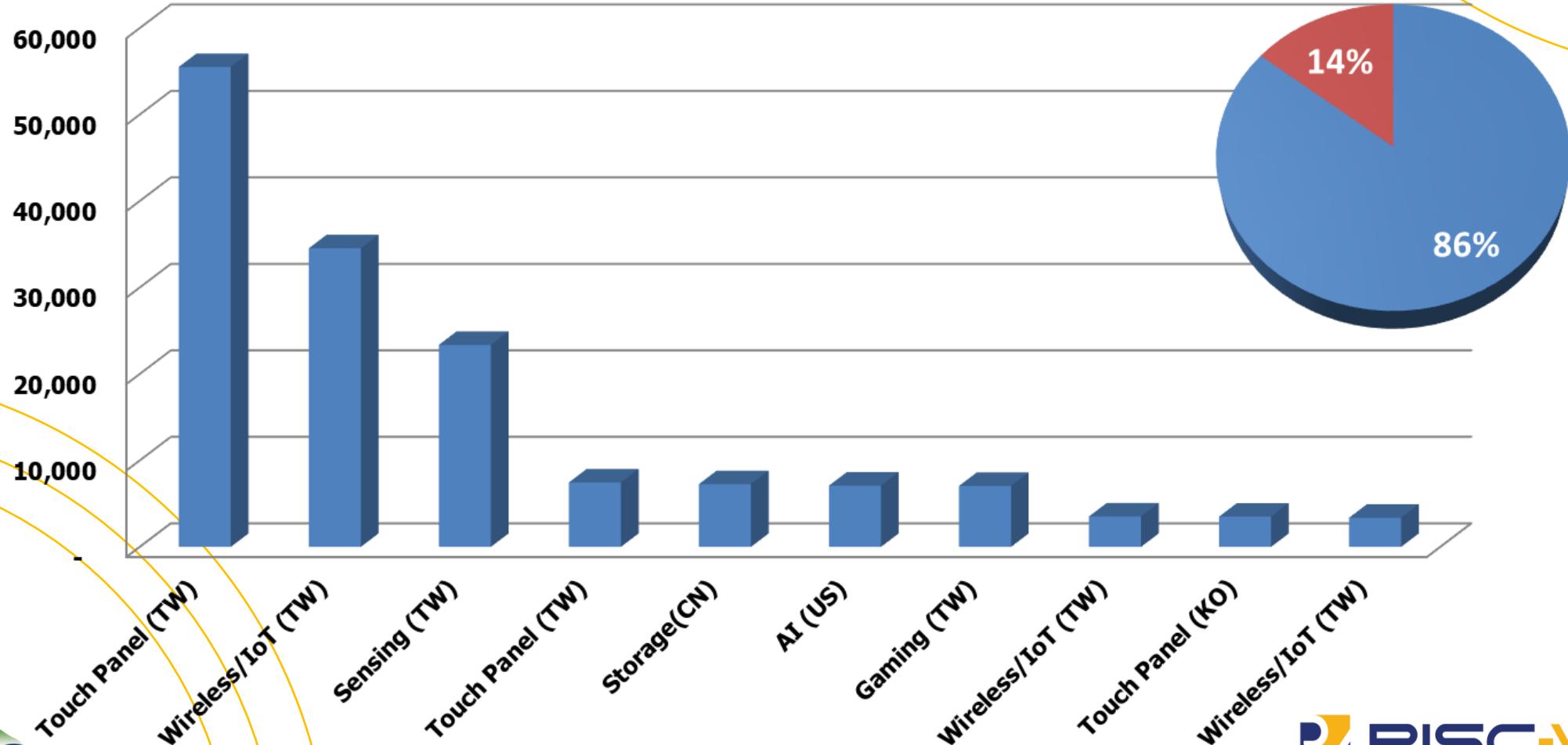
22 Q1-Q3 Royalty Analysis



22 Q1-Q3 Top 10 Royalty Contributors Analysis by Application

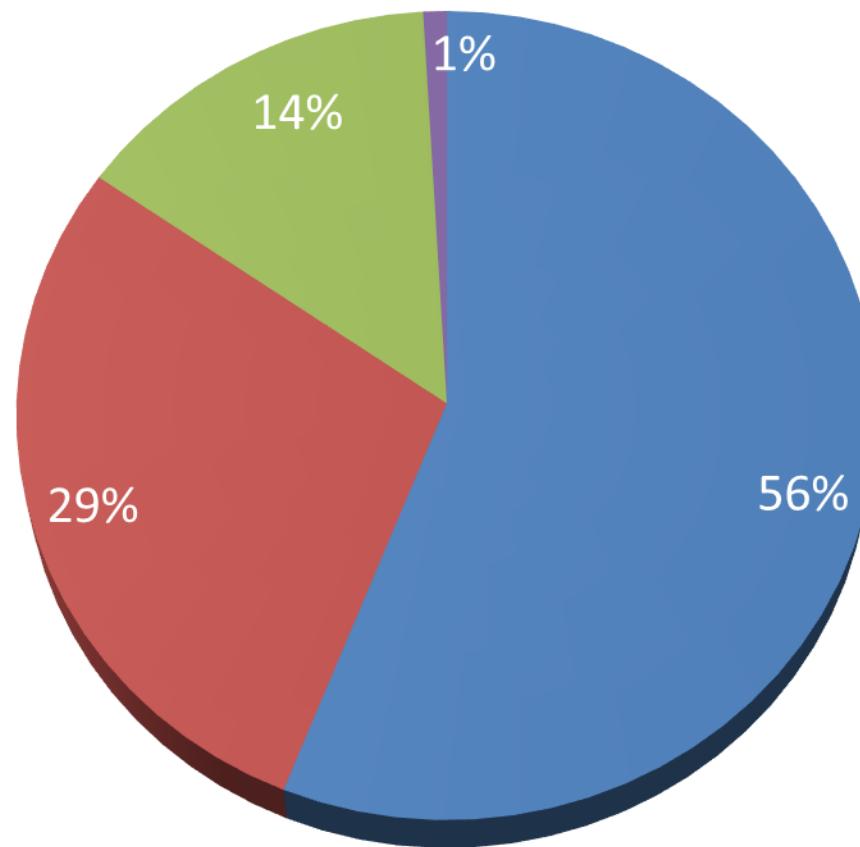
(NT\$ thousands)

Top 10 Royalty Customers
Contribution Analysis: 86%



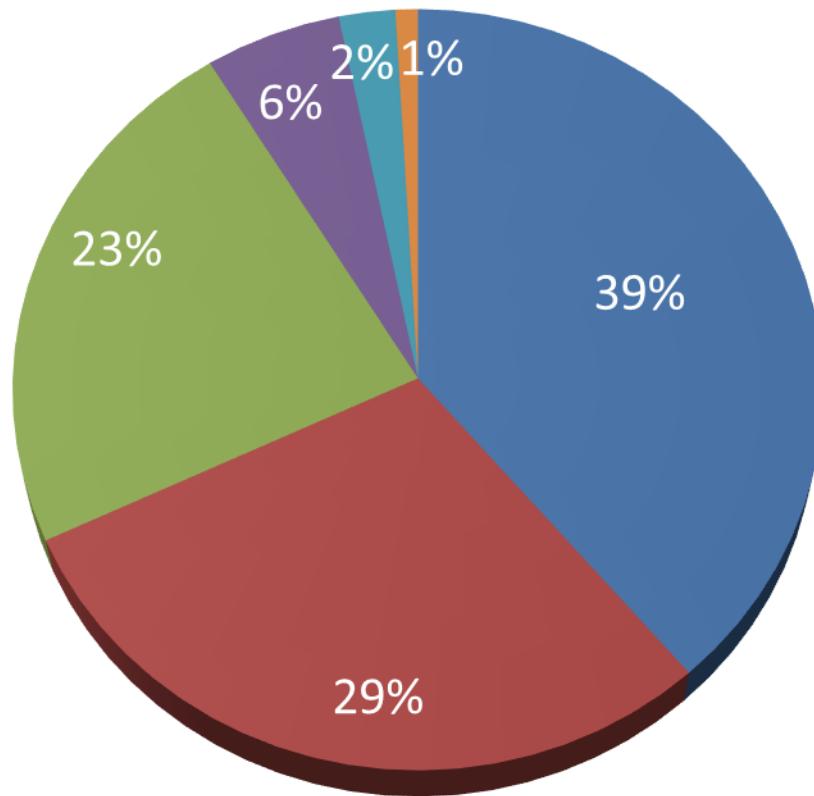
22 Q1-Q3 Revenue Analysis by Payment Model

■ License Fee ■ Running Royalty ■ Maintenance ■ Others

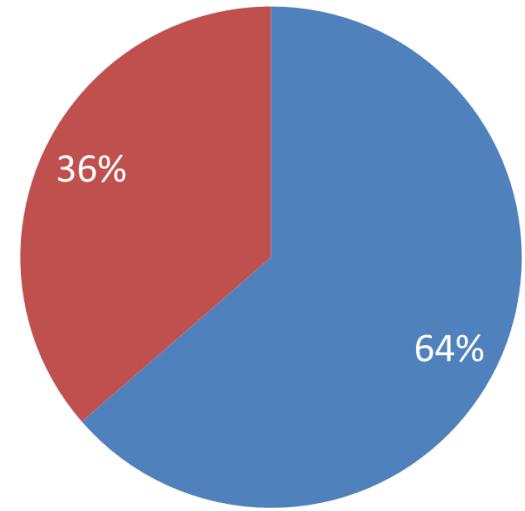


22 Q1-Q3 Revenue Analysis by Region

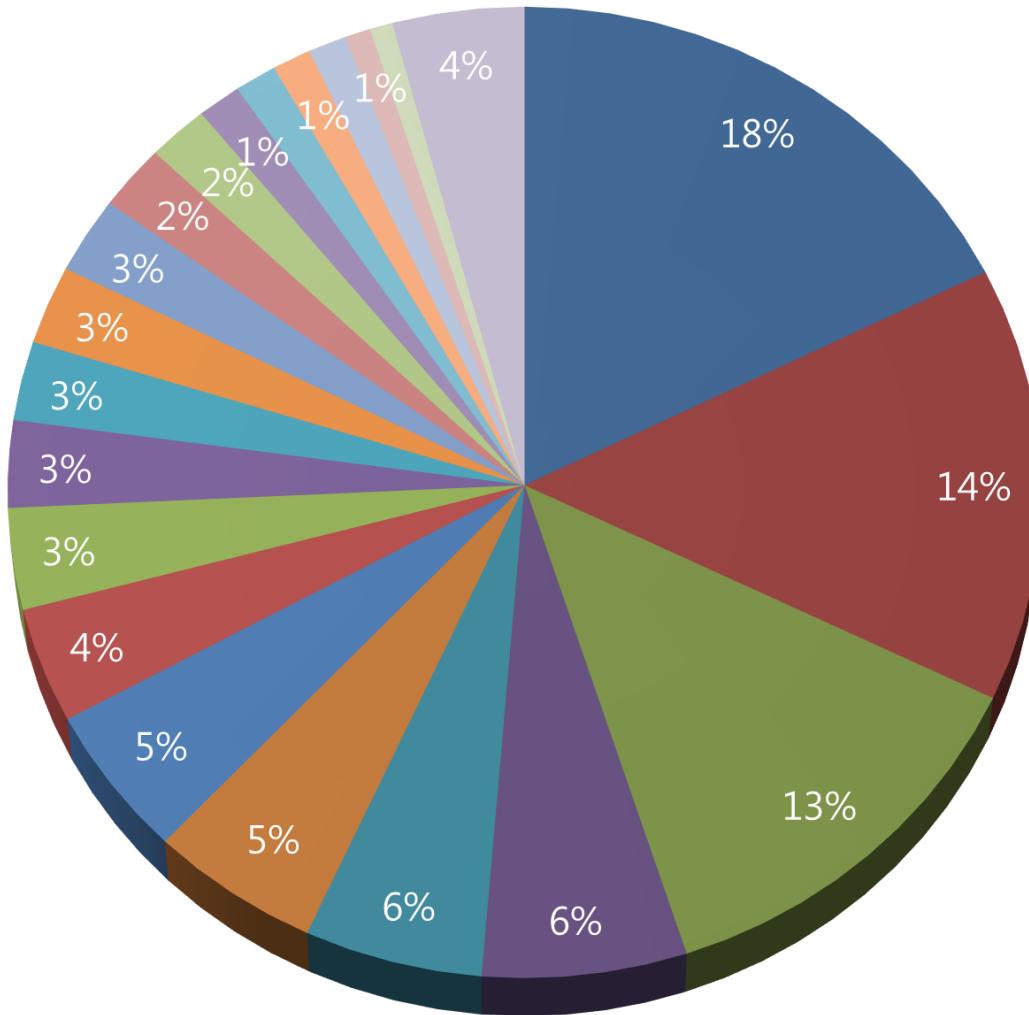
■ Taiwan ■ USA ■ China ■ Korea ■ Europe ■ Japan



22 Q1-Q3 Revenue Analysis by Product



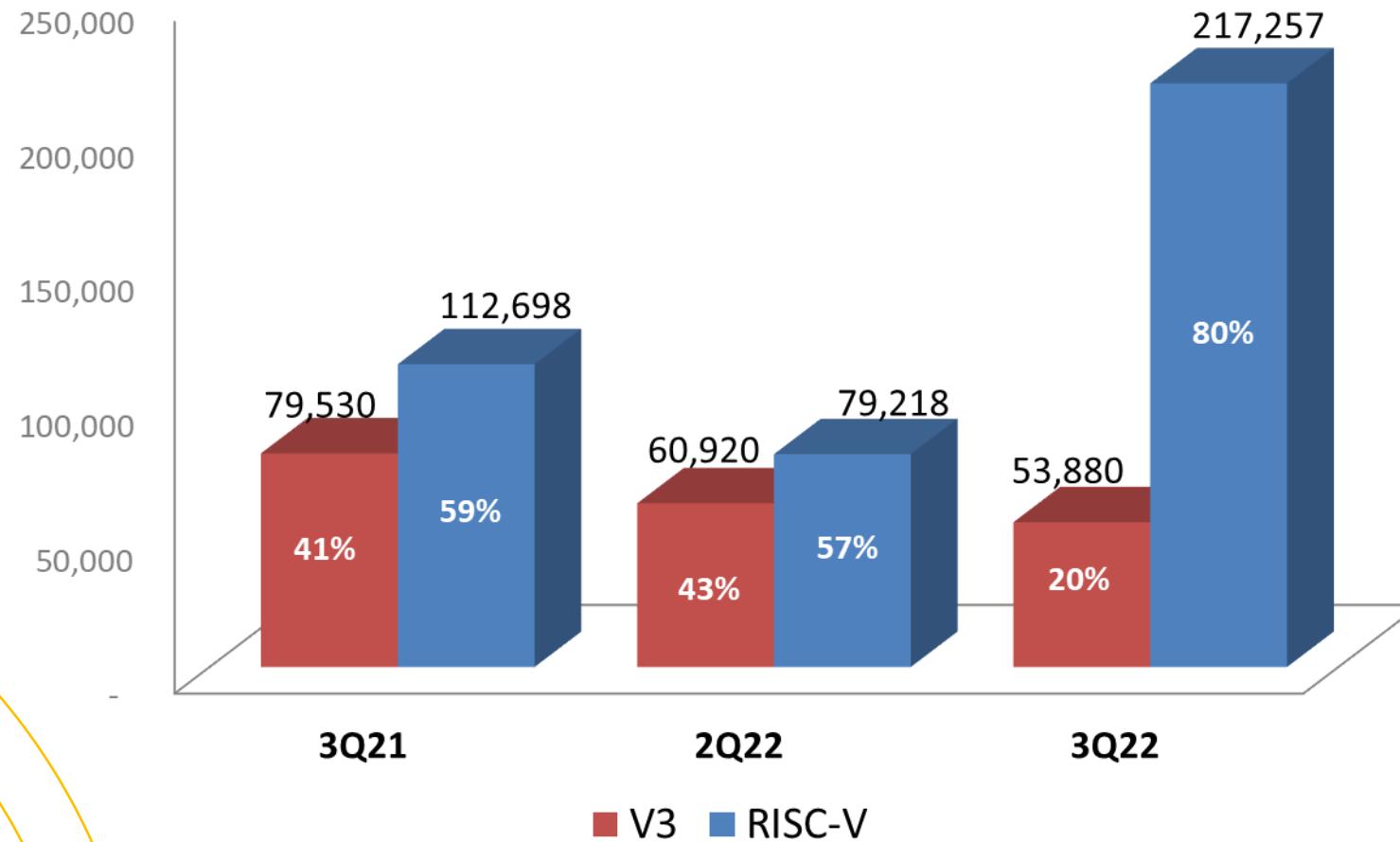
■ RISC-V
■ V3



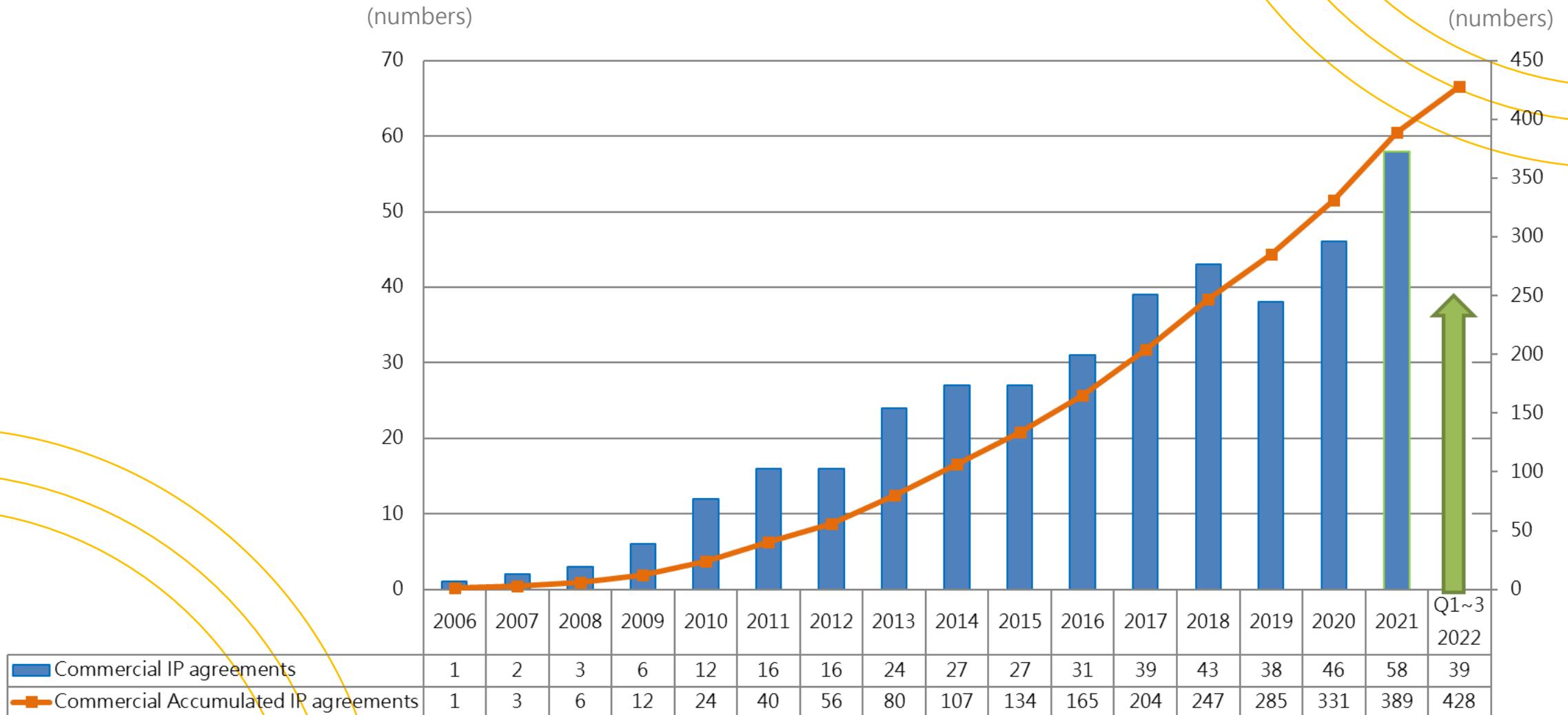
- N25
- N9
- N8
- AX45
- Customized IP
- A45
- NX27
- N13
- D45
- AX25
- N45
- NX25
- ACE
- N10
- D25
- E8
- LLVM
- N22
- AE250
- N7
- IAR
- OTHERS

3Q22 Revenue Analysis - RISC-V

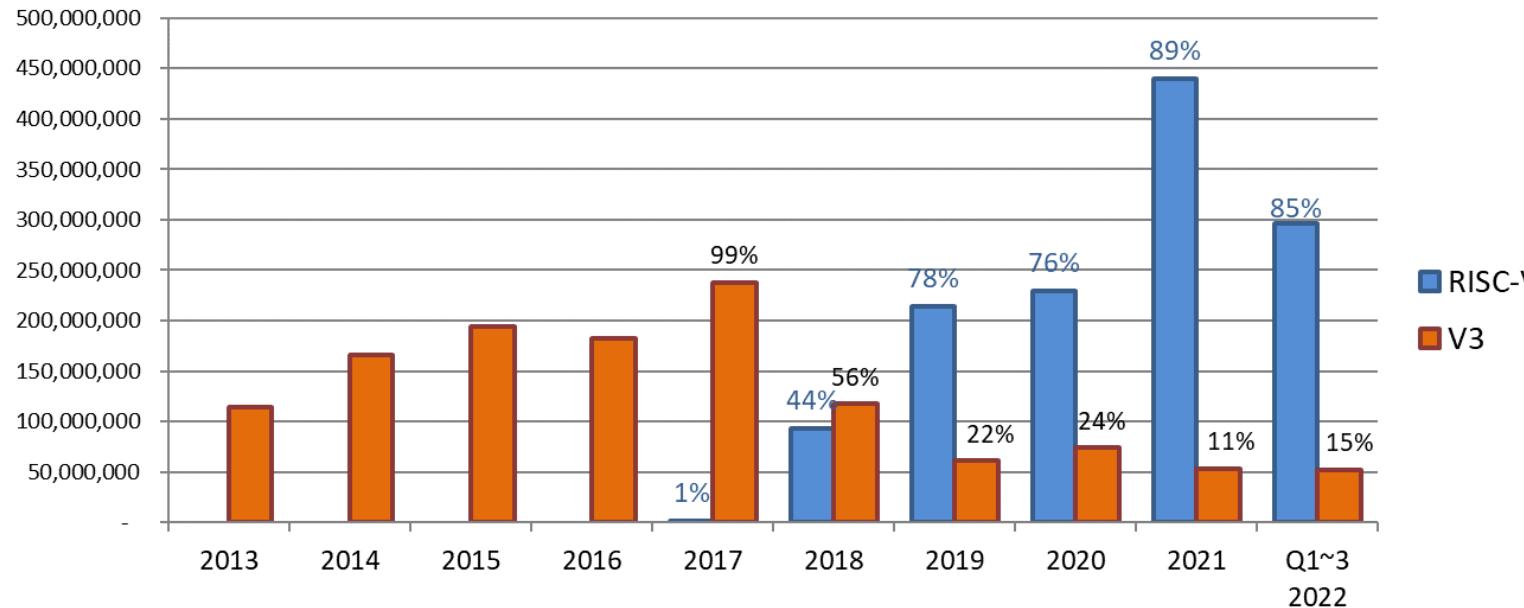
(NT\$ thousands)



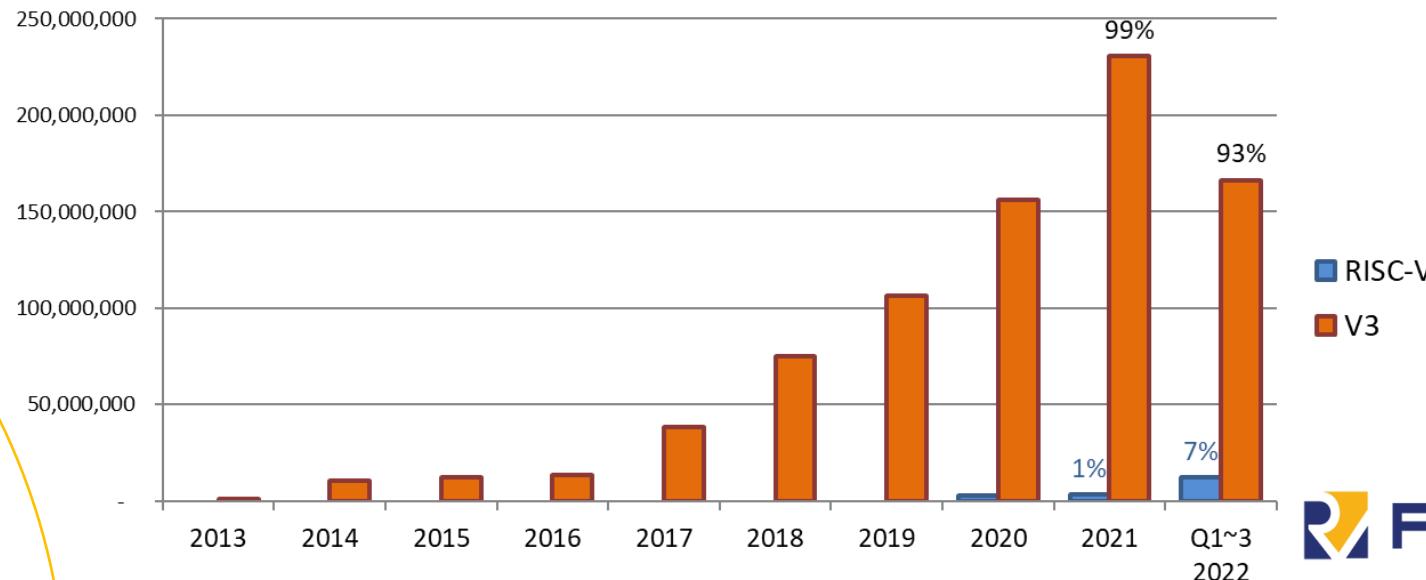
Historical Commercial Agreements



Historical Revenue Analysis

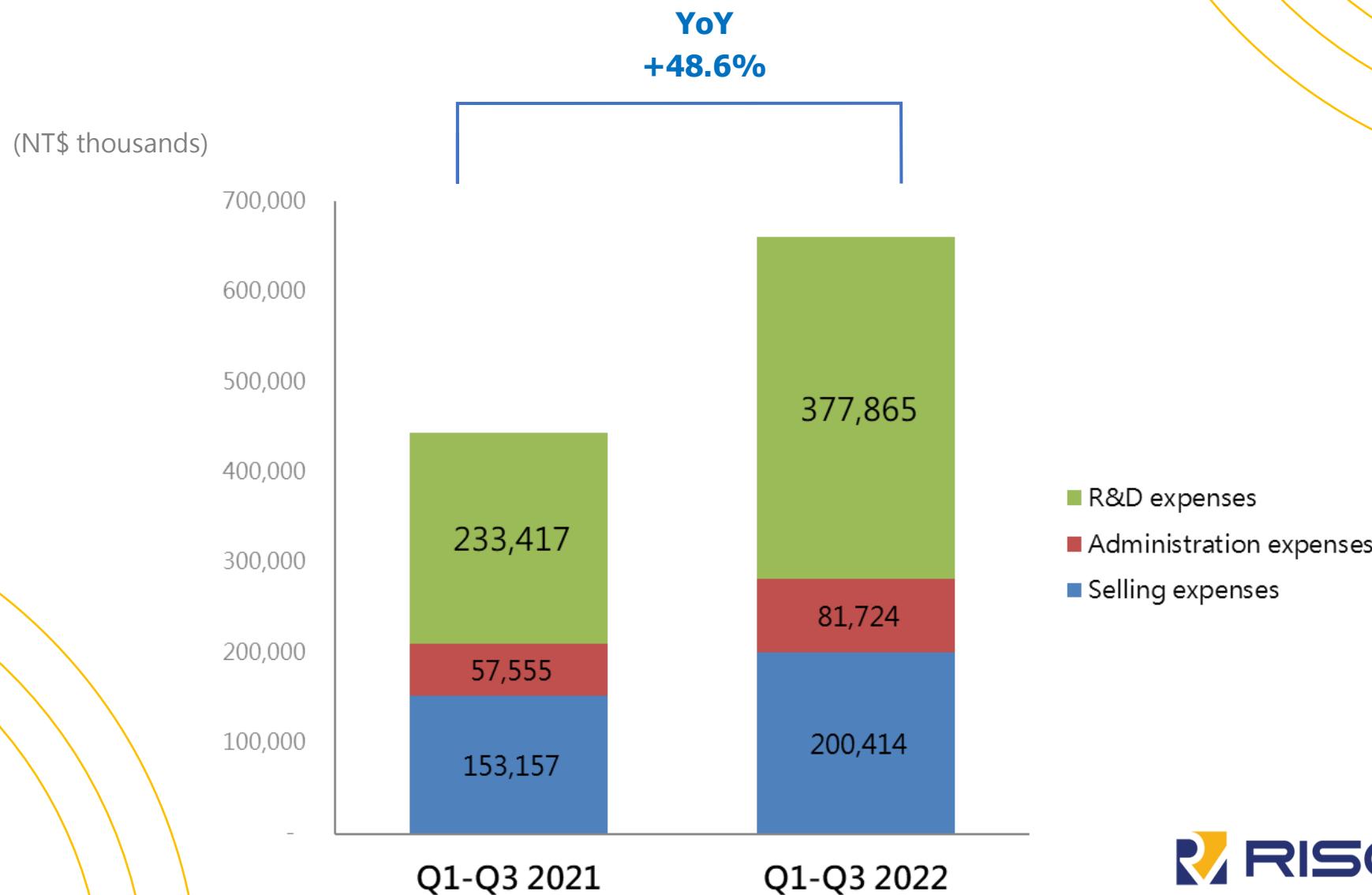


License

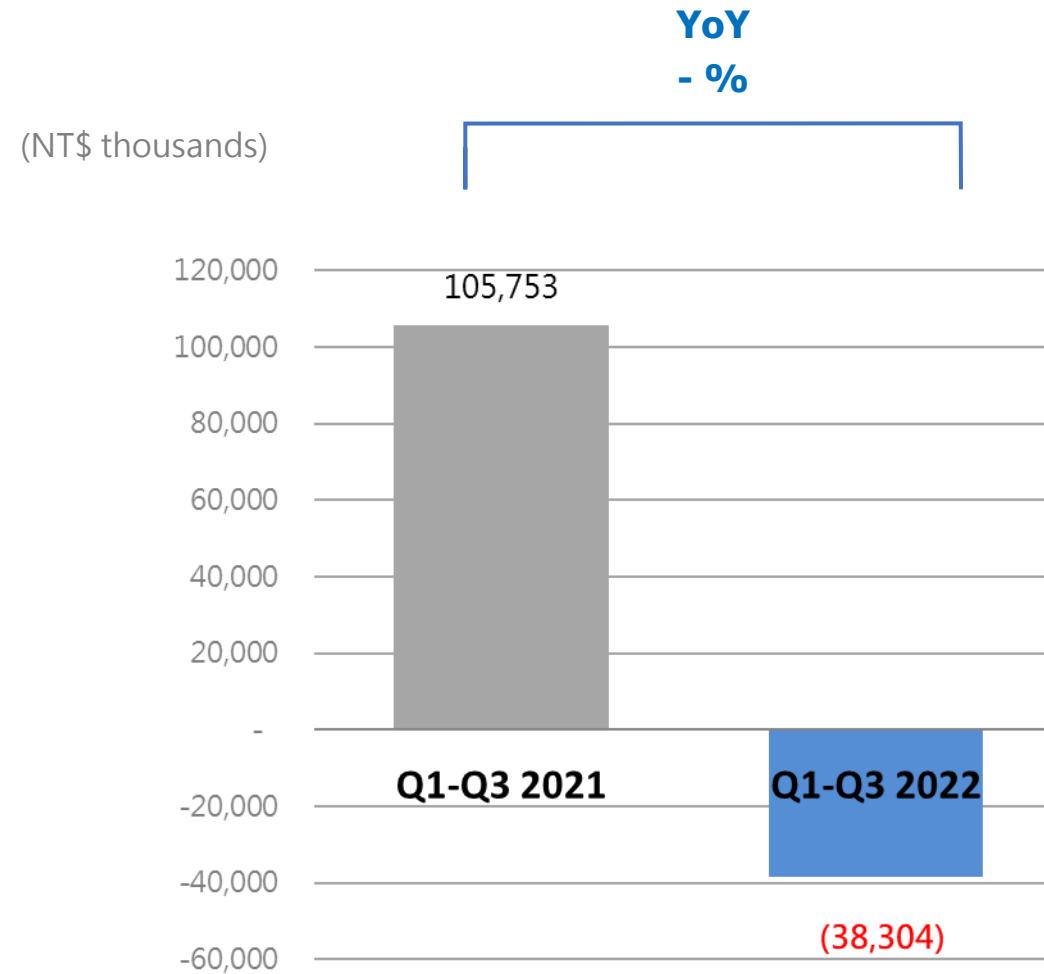


Royalty

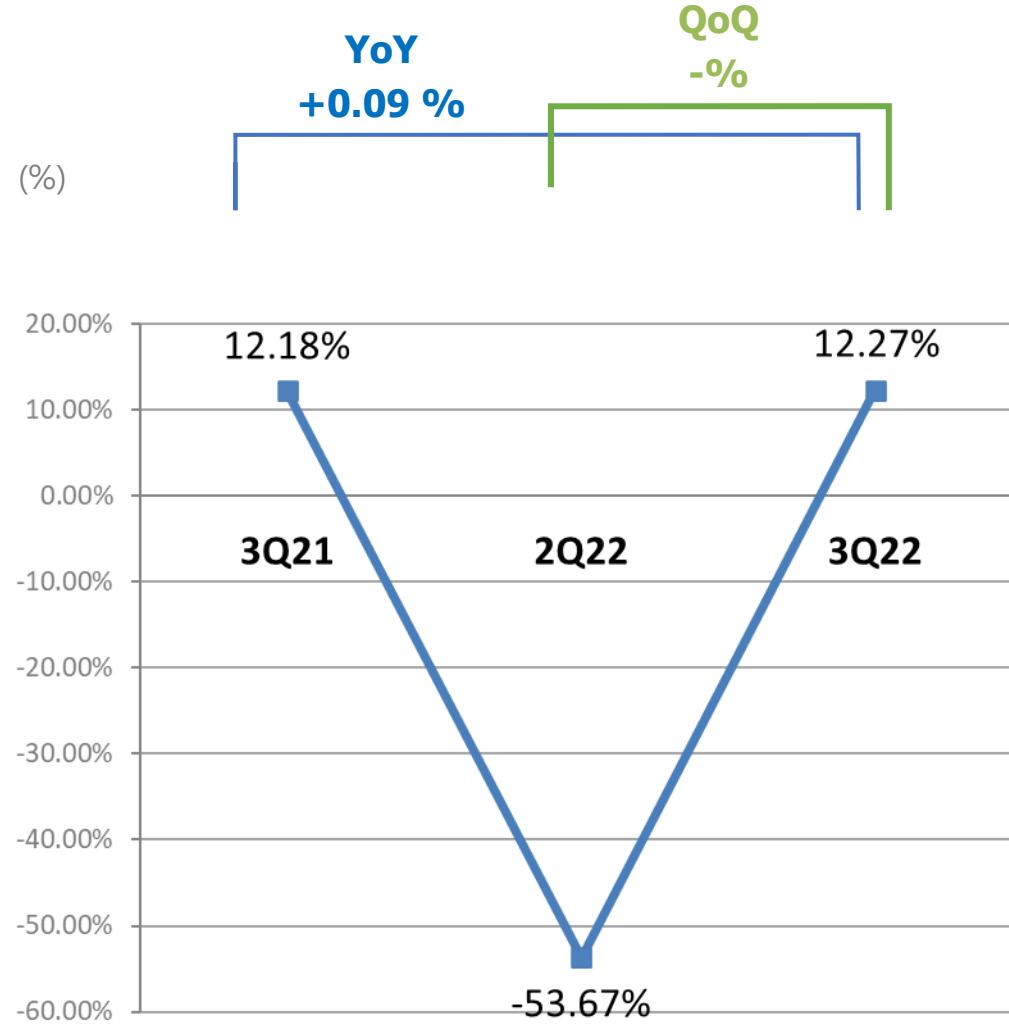
22 Q1-Q3 Consolidated Operating Expenses



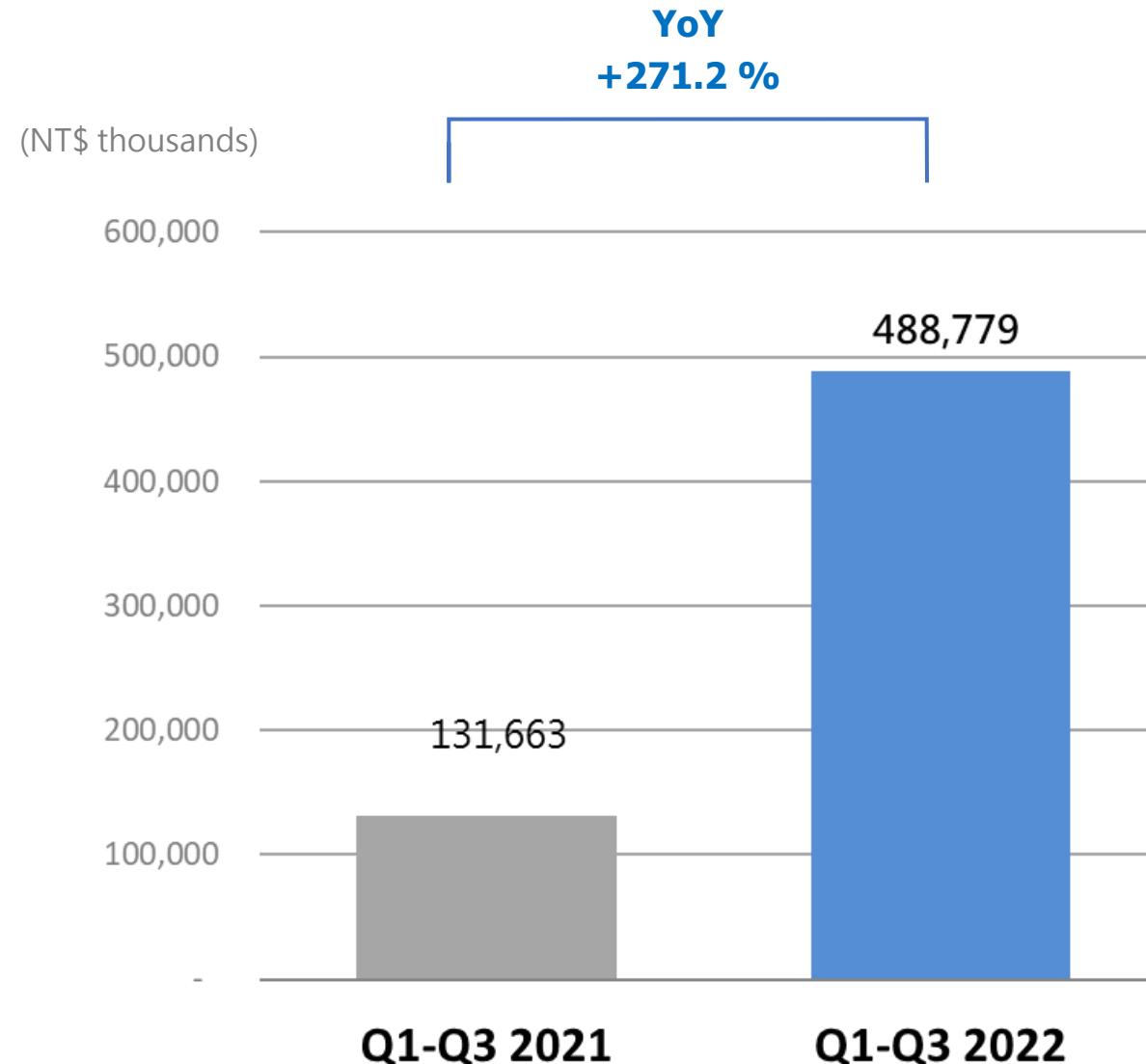
22 Q1-Q3 Consolidated Operating Income



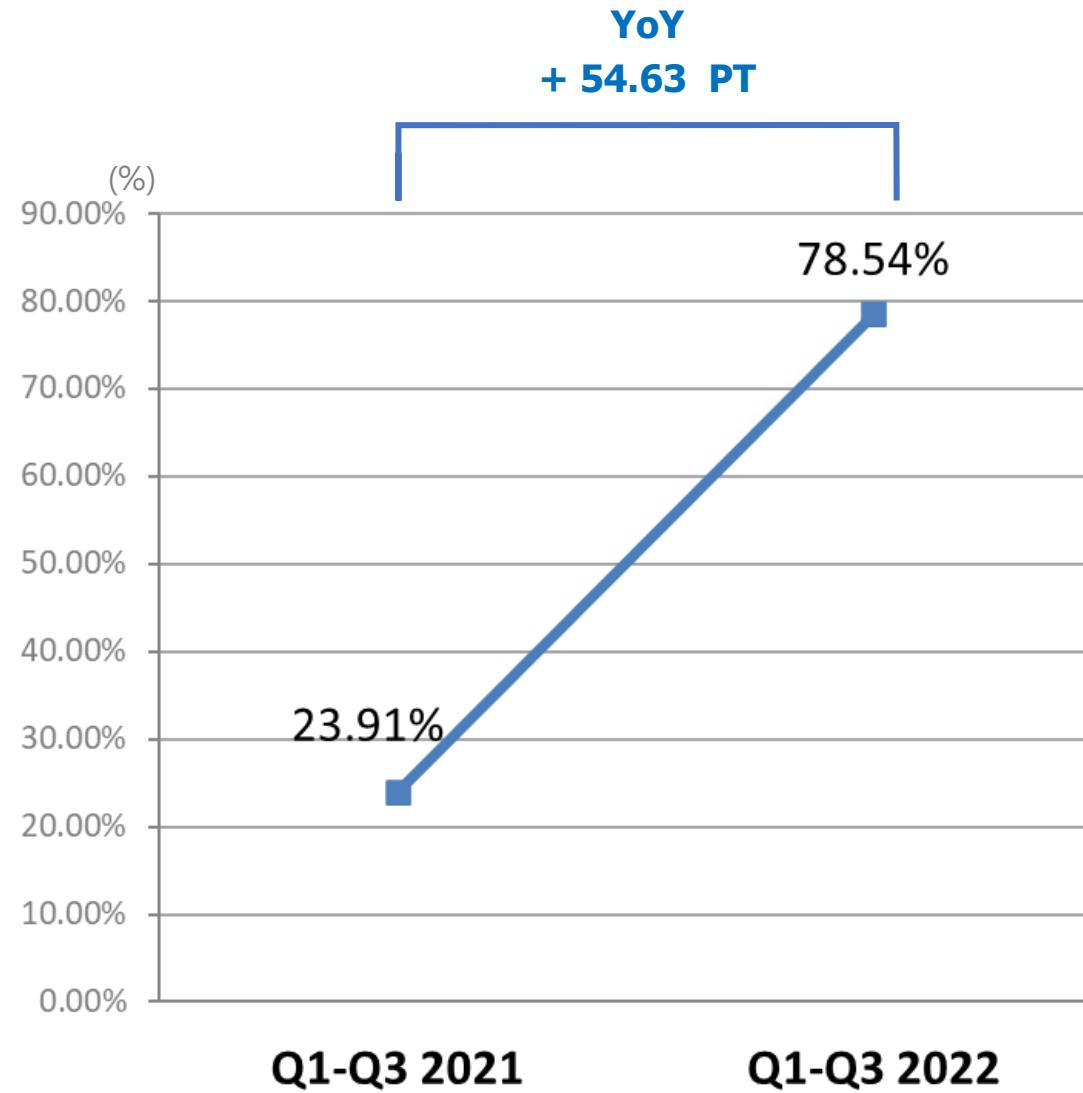
Q3 22 Consolidated Operating Margin



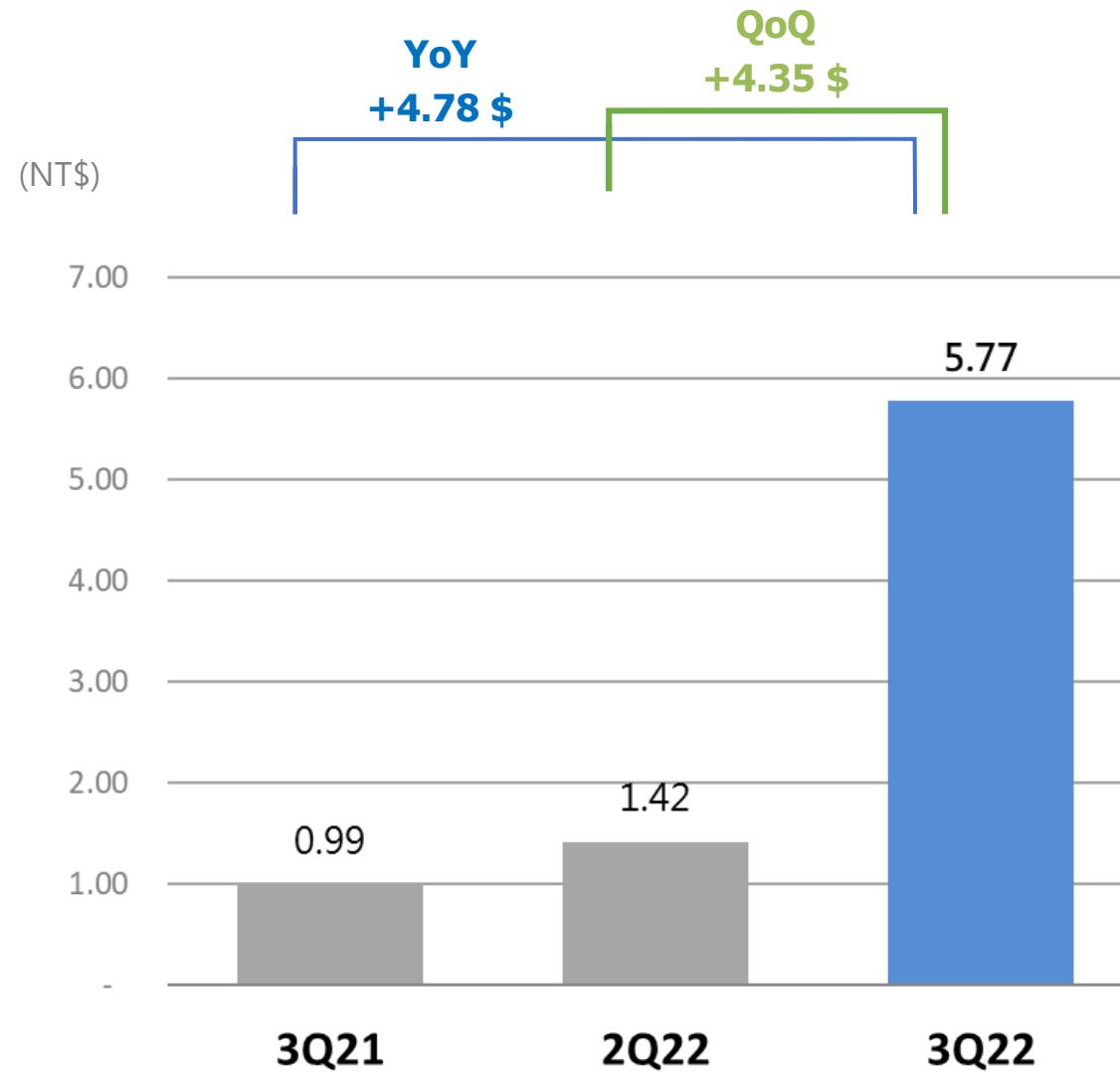
22 Q1-Q3 Consolidated Net Income



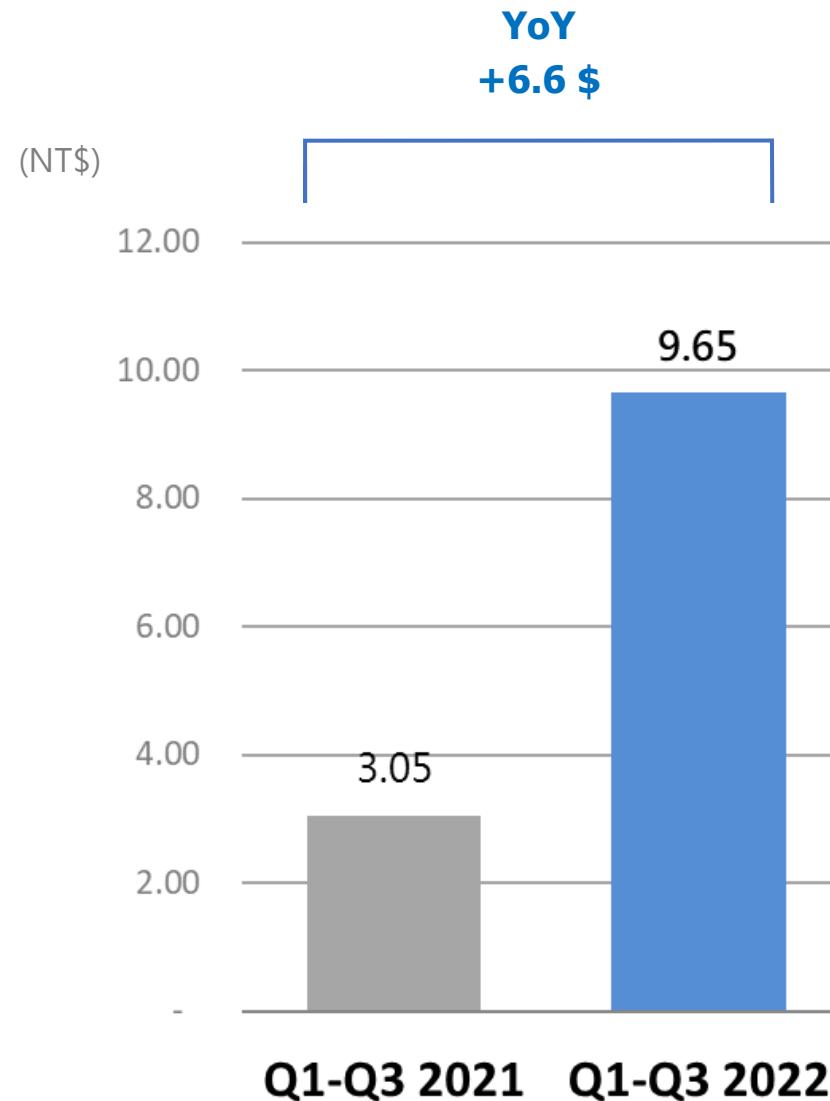
22 Q1-Q3 Consolidated Net Profit Margin



3Q22 Consolidated EPS



22 Q1-Q3 Consolidated EPS





Product Applications

<http://www.andestech.com>



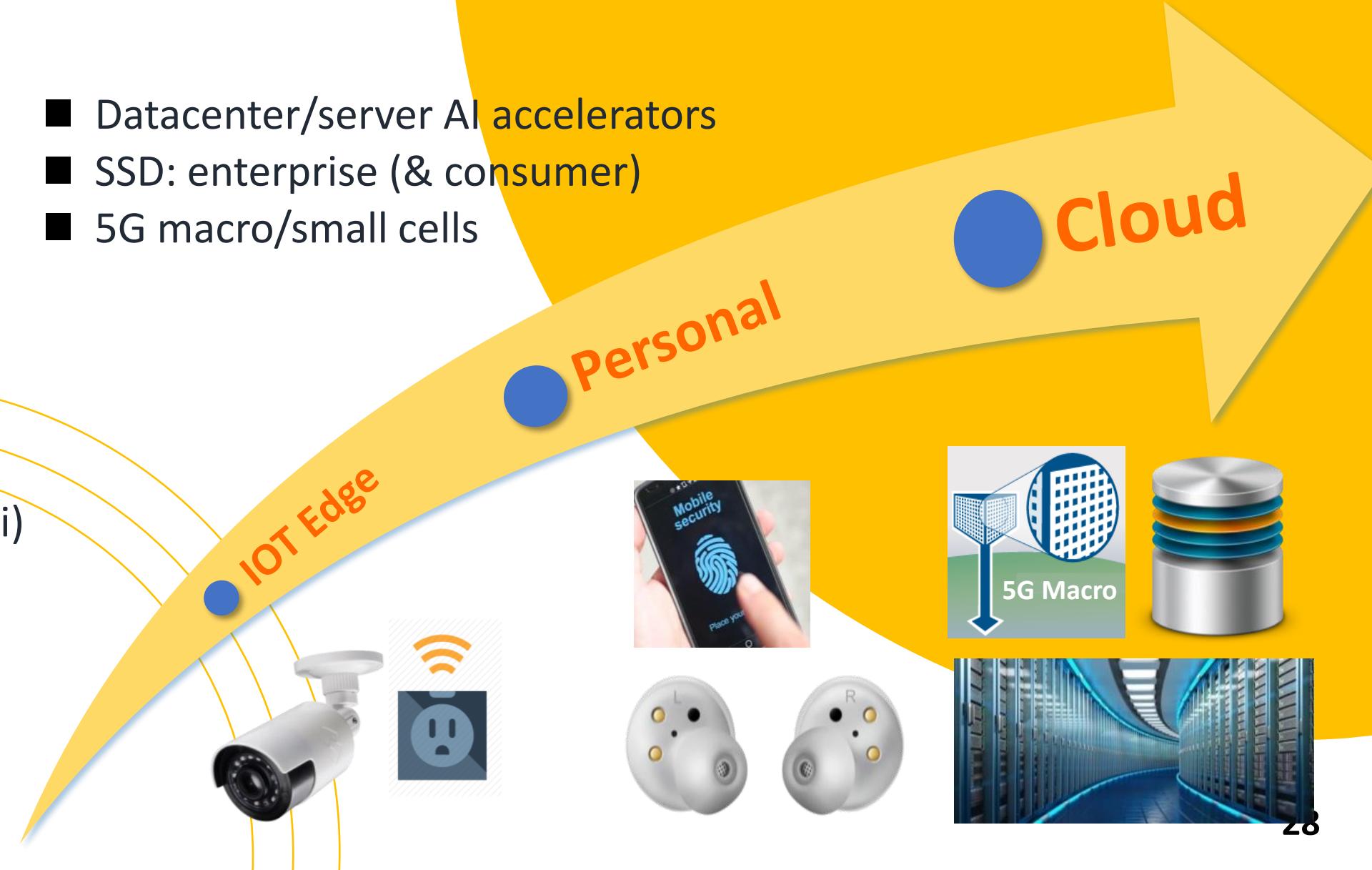
V5 Adoptions: From MCU to Datacenters

❖ Edge to Cloud

- ADAS
- AIoT
- Blockchain
- FPGA
- MCU
- Multimedia
- Security
- Wireless (BT/WiFi)
- Datacenter/server AI accelerators
- SSD: enterprise (& consumer)
- 5G macro/small cells

❖ 40nm to 5nm

❖ Many in AI



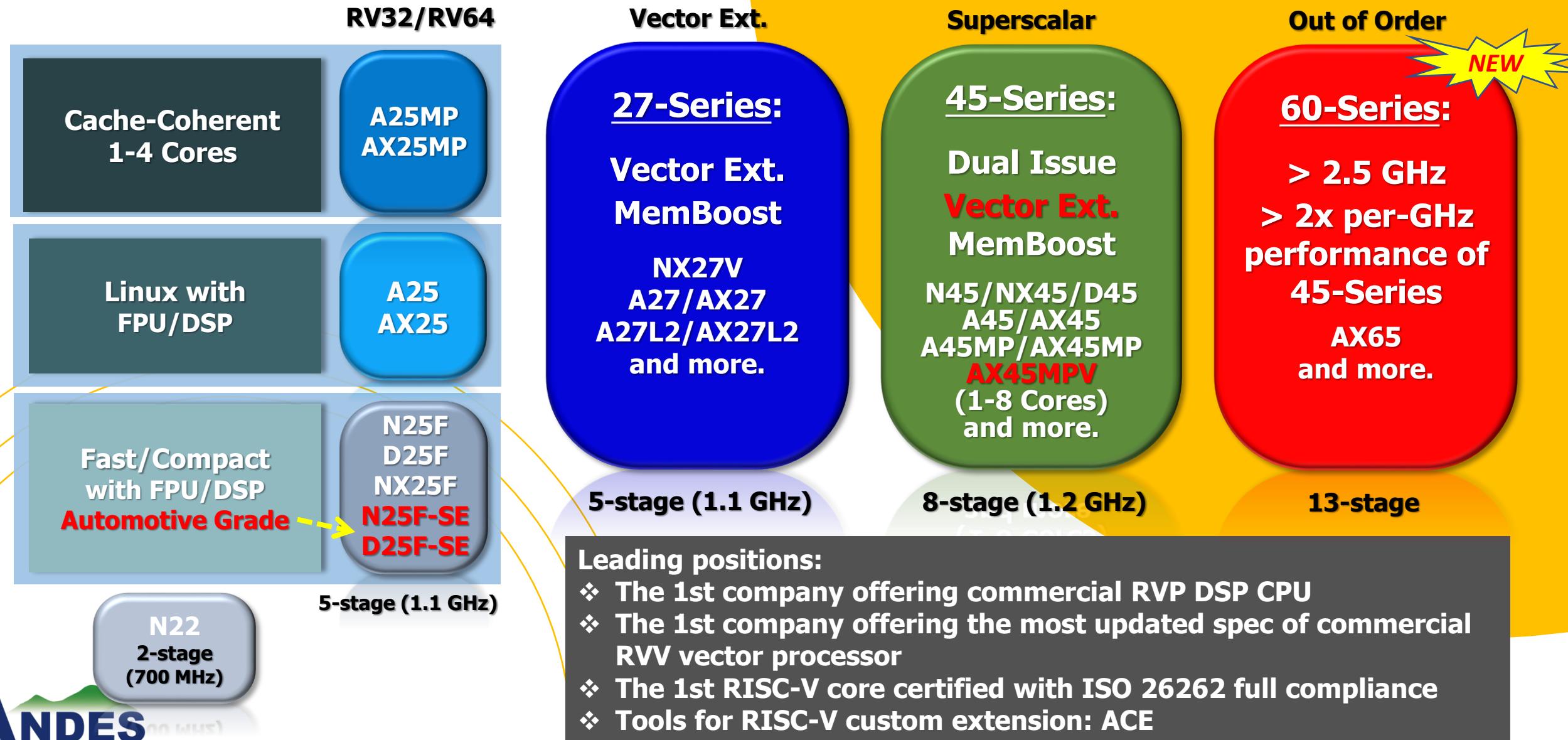


New Products and Ecosystems

<http://www.andestech.com>



Andes RISC-V Product Roadmap



AX45 Can Do More (vs. 64bit A-series)

Coremark/MHz



Dhrystone/MHz



■ A53

- 8-stage In-Order Dual Issue
- **Widely adopted by industries in many applications**

■ AX45

- 8-stage In-Order Dual Issue
- **Performance is better!**
 - Coremark/MHz: 1.35x
 - Dhrystone/MHz: 1.42x

Target Applications for 27 & 45-Series

- AI/Deep Learning
- AR/VR
- 5G



- Networking



- Storage



- Video Surveillance



- ADAS

- V2X (Vehicle to Everything)



- IVI (In-Vehicle-Infotainment)



Metaverse and more...

AX60-Series OOO Application Processors



■ Architecture:

- RV64 GCBK
- Vector Extension
- SV39/48 (and other VM extensions)
- Cache Management Operations
- ePMP/PMA
- Andes Custom Extension™ (ACE)
- Hypervisor
- Interrupt controller: PLIC and AIA
- Debug and Trace

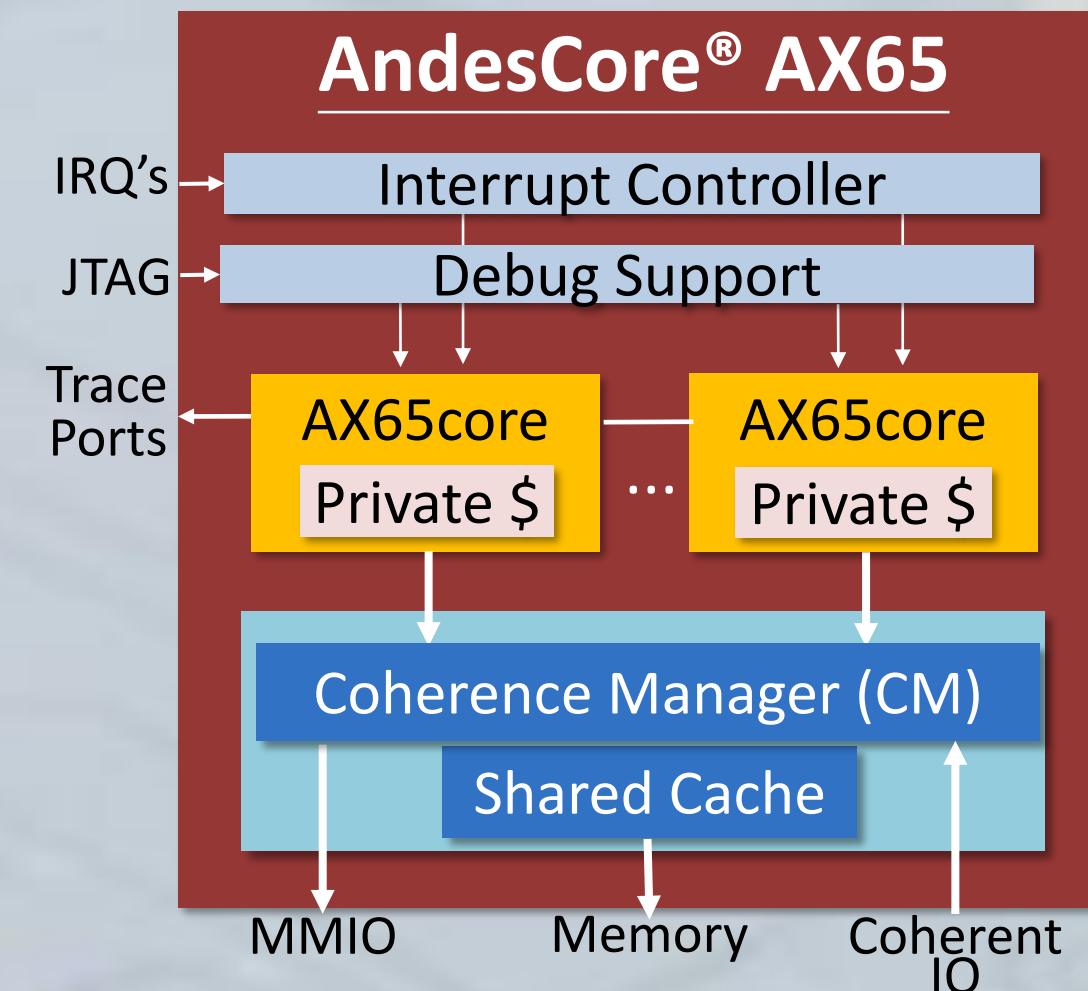
■ Microarchitecture

- Out-of-order superscalar
- Advanced memory subsystem
- Multicore cluster
- CHI-based scale-out:
 - Single-core as the building block
 - Cluster as the building block
- Error protection
- Power management (retention and PowerBrake)

AX65: 1st Member of AX60-Series



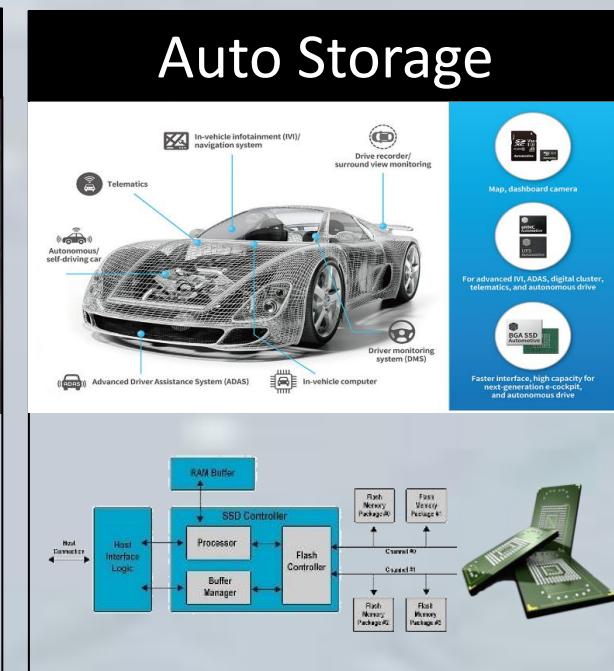
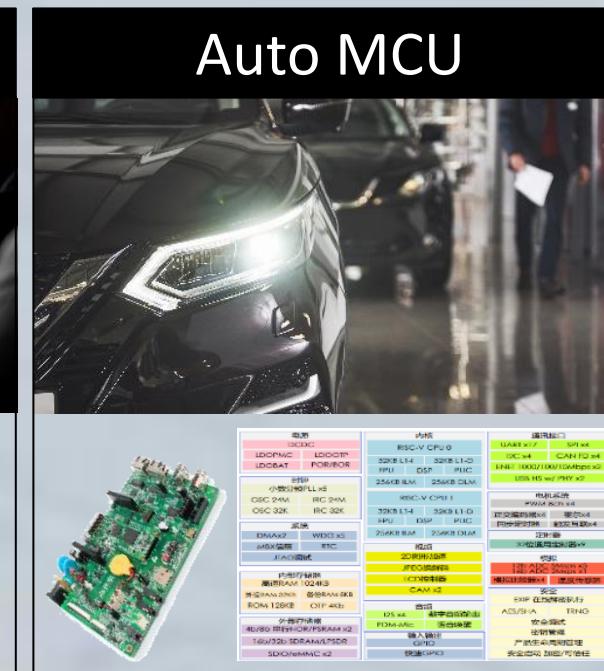
- 4-way 13-stage superscalar
- Multicore cluster: 1~8 cores
- Private caches:
 - 64KB, multi-banked
 - Alias handling in HW
- Shared cache: up to 8MB
- CPU and CM: async clocks
- Bus Ports (Memory, MMIO, Coherent IO): 256 bits



Certificate Granted

■ N25F-SE:

- Andes 1st Safety Enhanced core with ISO 26262 Full Compliance



Thank You

<http://www.andestech.com>

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