



## Company Profile

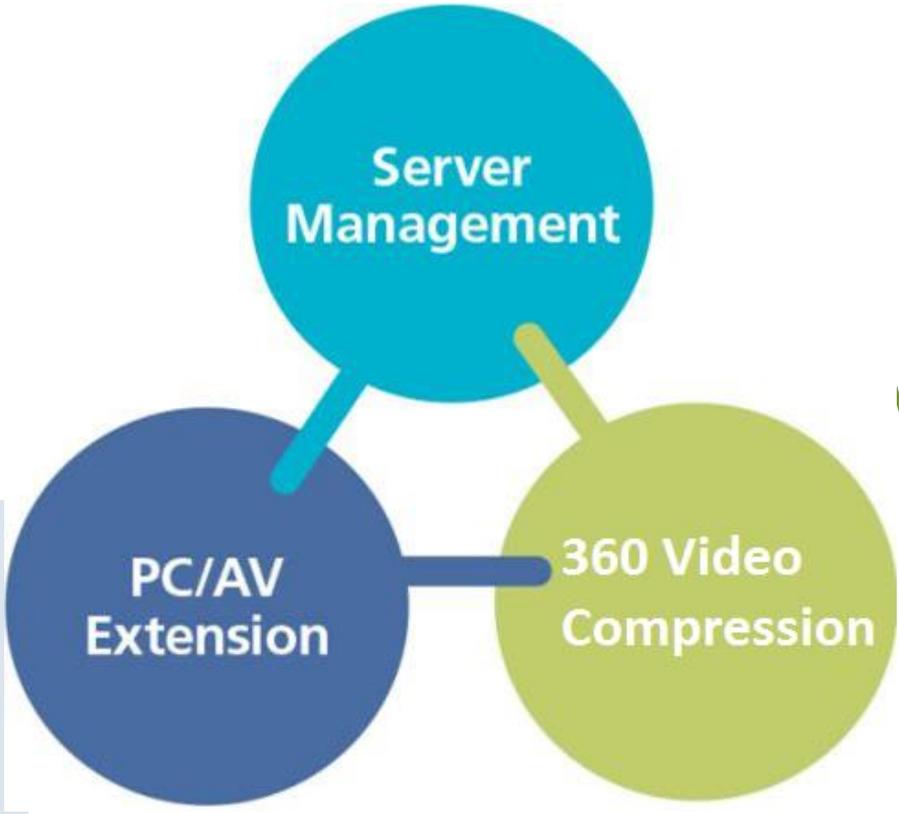
Sept., 2019

- Established in Nov. 15<sup>th</sup> , 2004
- Paid-In Capital: NTD 340M (USD 10.97M)
- Number of Employees: 91
- Location:
  - ASPEED Technology Inc.: Hsinchu Science Park, Taiwan
  - ASPEED Technology (U.S.A) Inc.: San Jose, USA
  - ASPEED Technology (India) PLT.: Bangalore, India



AST1010  
 AST2200 / AST2150  
 AST2300 / AST1300 / AST1050  
 AST2400 / AST1400 / AST1250  
 AST2500 / AST2510 / AST2520 / AST2530  
**AST2600/Pilot5**

28nm LP Process  
 Dual Core 1GHz CPU  
 DDR4 SDRAM  
 Robust Security Architect  
 and Features  
**A0: July/2019**  
**A1: Feb/2020**



AST1500 / AST1510  
 AST1520 / AST1525  
**AST1620/AST1625**

130nm LP Process  
 Support 4Kx2K Resolution  
 <80 us latency  
 1GHz CPU  
 DDR4 SDRAM  
**ES: 2017/Q2**  
**PS: 2017/Q3**

**AST1220**

40nm LP Process  
 1GHz CPU  
 PLDDR3 SDRAM  
 6-Cam Real Time Stitching  
 H.264/265 4k2k Endoding  
 PCIe Gen-II  
**ES: Aug. 2018**  
**PS: Nov. 2018**

# Product Portfolio



Server Management  
SoC Solutions

PC/AV Extension  
SoC Solutions



360 Spherical Image  
Processor SoC

**ASPEED**



# Remote Server Management

## IPMI (Intelligent Platform Management Interface)

Standardized Computer System Interface led by Intel and supported by Dell, HP and NEC

## SNMP (Simple Network Management Protocol)

Internet-Standard Protocol for Management Devices on IP networks

## KVMoIP (Keyboard-Video-Mouse Over Internet Protocol)

Hardware device that allows a user to control multiple computer/servers

## BMC (Baseboard Management Controller)

Remote Management Controller to implement IPMI, SNMP and KVMoIP



## Major Functions

Remote activation and management

Automatic Hardware Detect  
(Voltage, temp, fan, memory )

Server Condition Monitoring  
(Program Condition, System resource allocation, etc.)

Provide Equipment Information  
(Including CPU, memory, HDD)

Remote activate applications

System restore and status management

Receive alerts

Event log

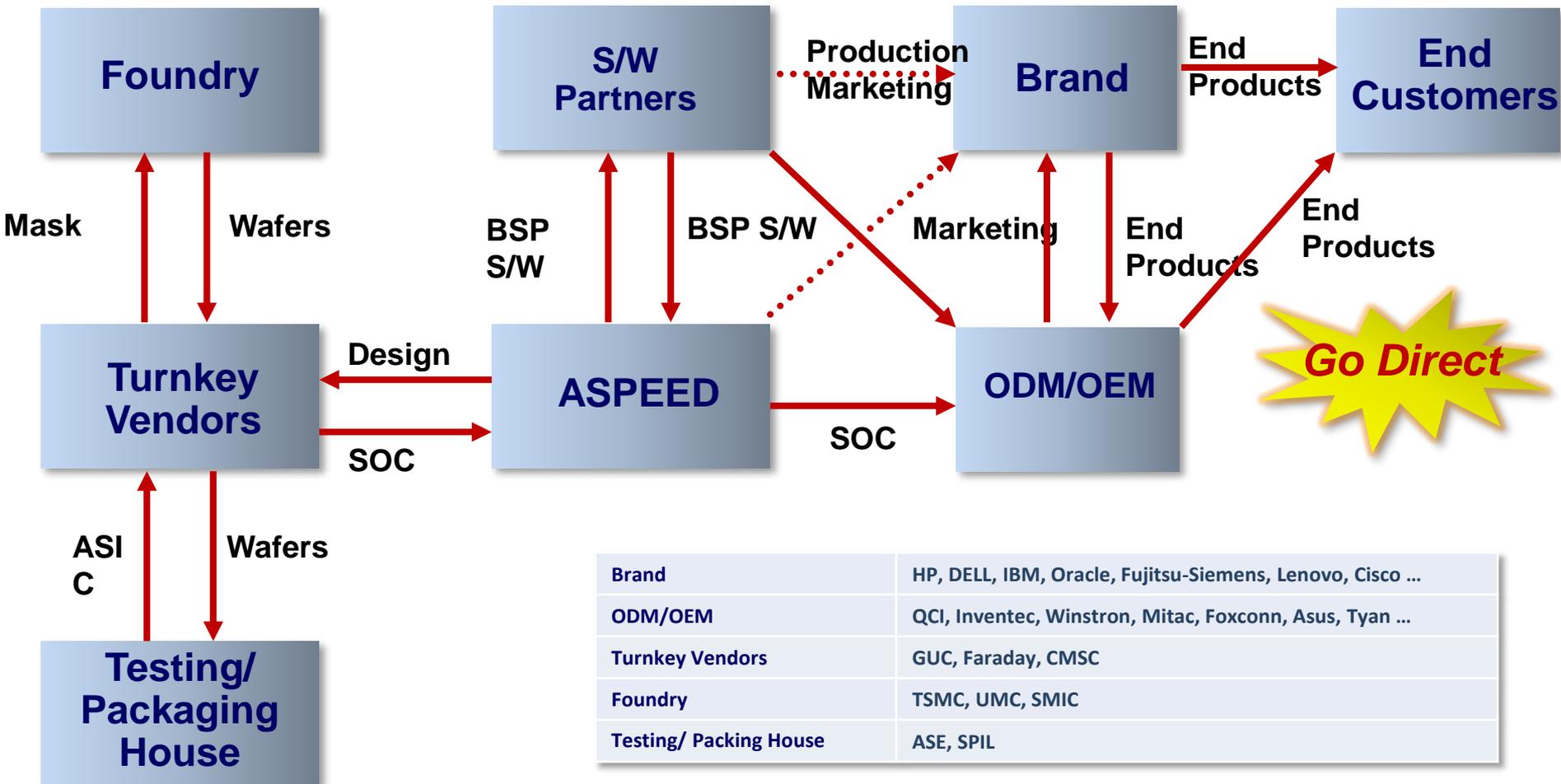
Remote assets inventory

System Health indication

Remote System Configuration

Fault Warning Function

Automatic Alert to Mobile Devices



## 7<sup>th</sup> GEN ASPEED AST2600

Baseboard Management Controller (BMC) chip

Samples **AVAILABLE NOW!** MP in 2020



Optimize Performance

High Computing Power

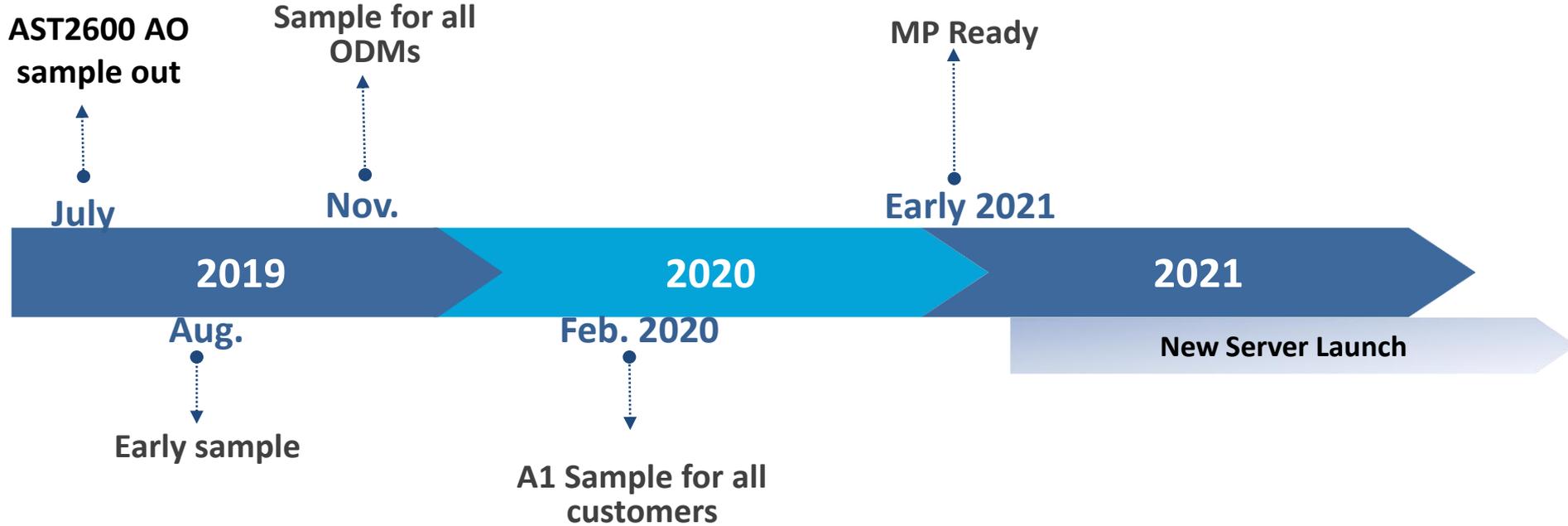
Low Power Consumption

Enhanced System Security

# AST2600 Schedule



**AST2600 is Worldwide first 28nm BMC chip for next generation server!**  
ASPEED launches AST2600 almost a year before competitor to occupy developer's development resource and mind share.



# Product Portfolio



Server Management  
SoC Solutions

PC/AV Extension  
SoC Solutions



360 Spherical Image  
Processor SoC

Go to Market ...



# PoC, Project, Product Management



Cupola360 Ecosystem

Proof of Concept

Bi-Direction  
A/V

Object Tracking

VxD Driver

Video  
Conference

RAW Image  
output

ISP Adv. Setting

UVC

MJPEG

Crop/ROI

URL for RTMP

TCP/IP RAW  
Socket

DoU Power  
Management

Cupola360 F/W, S/W, APP, Social Platform,

AST1220/AST1225



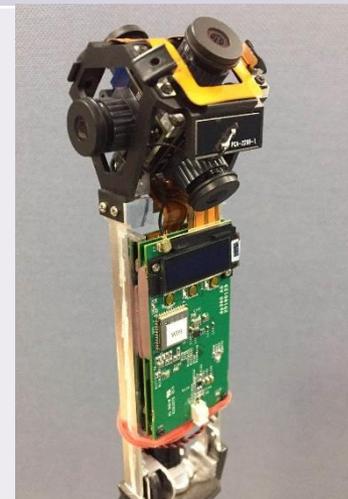
Sensors, Lens, ISP, 3D Stitching, Encoder

# Redefine Cupola360 Product Portfolio



IC	AST1225		AST1220	
Use Case	2-cam		4-cam	6-cam
FoV	180x90		360x60	360x360
Targeting Application	<ul style="list-style-type: none"> <li>• Home Security</li> <li>• Video Conference</li> <li>• Portable Camera</li> <li>• Dashcam</li> </ul>		<ul style="list-style-type: none"> <li>• Video Conference</li> <li>• Security Camera</li> </ul>	<ul style="list-style-type: none"> <li>• Portable Camera</li> <li>• Live broadcasting</li> </ul>

photo



- 1. Multiple camera** for better resolution,
- Best **in-cam Stitching** for live streaming,
- Rich **APP Features** for eco-system

# Goal 2019-Cupola 360

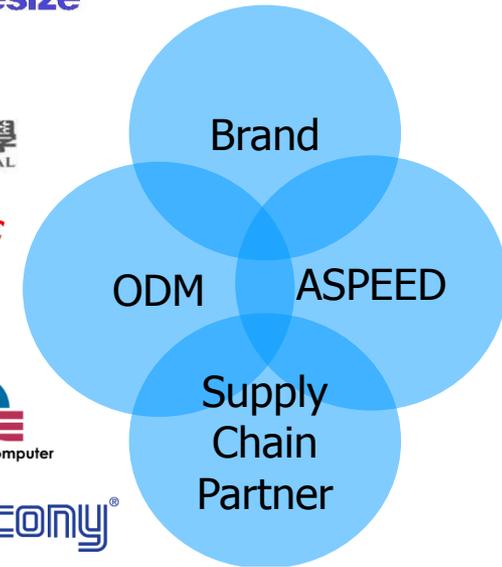
## Keep expanding customer base

- Design-win global brands together with ODM
- Approach Japanese brands



## Enable Supply Chain Partners

- Enable camera module assembly house
- Increase cost competitiveness by introducing more supplier



## Target to ship from Q1/2020

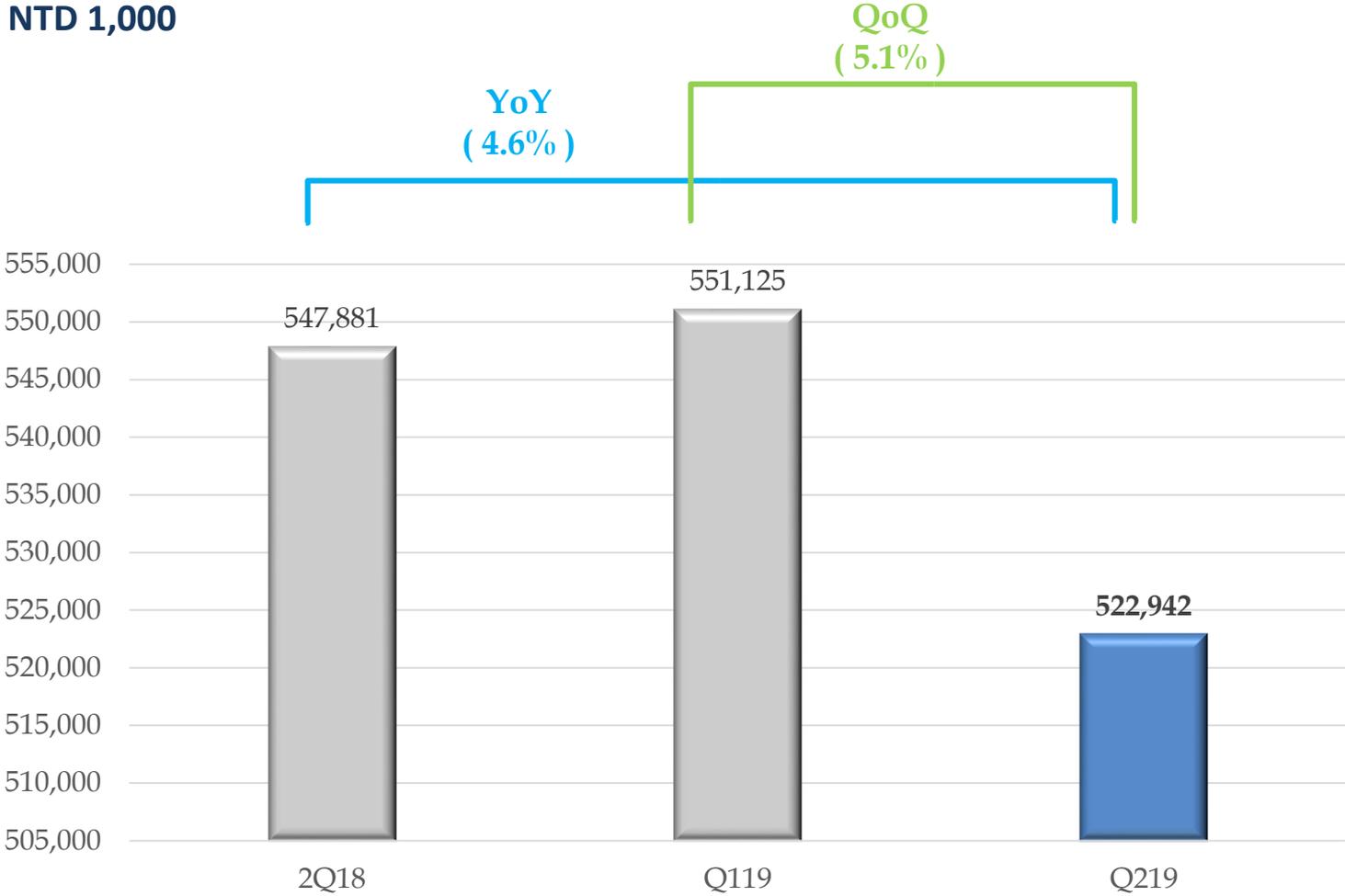
- Customer MP in 2019Q4 and target to ship AST1220/1225 in Q1/2020



# Consolidated Revenue



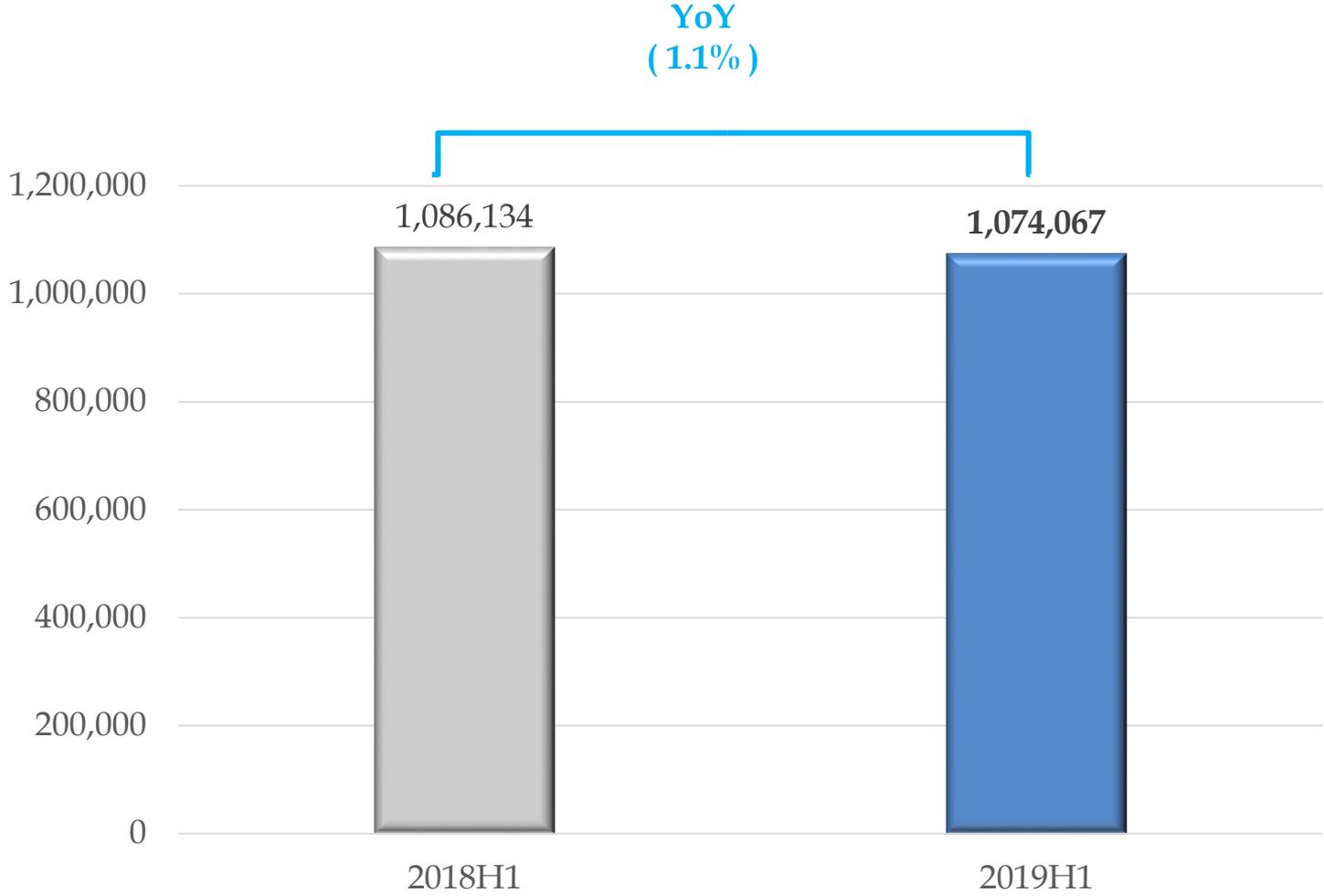
Unit : NTD 1,000



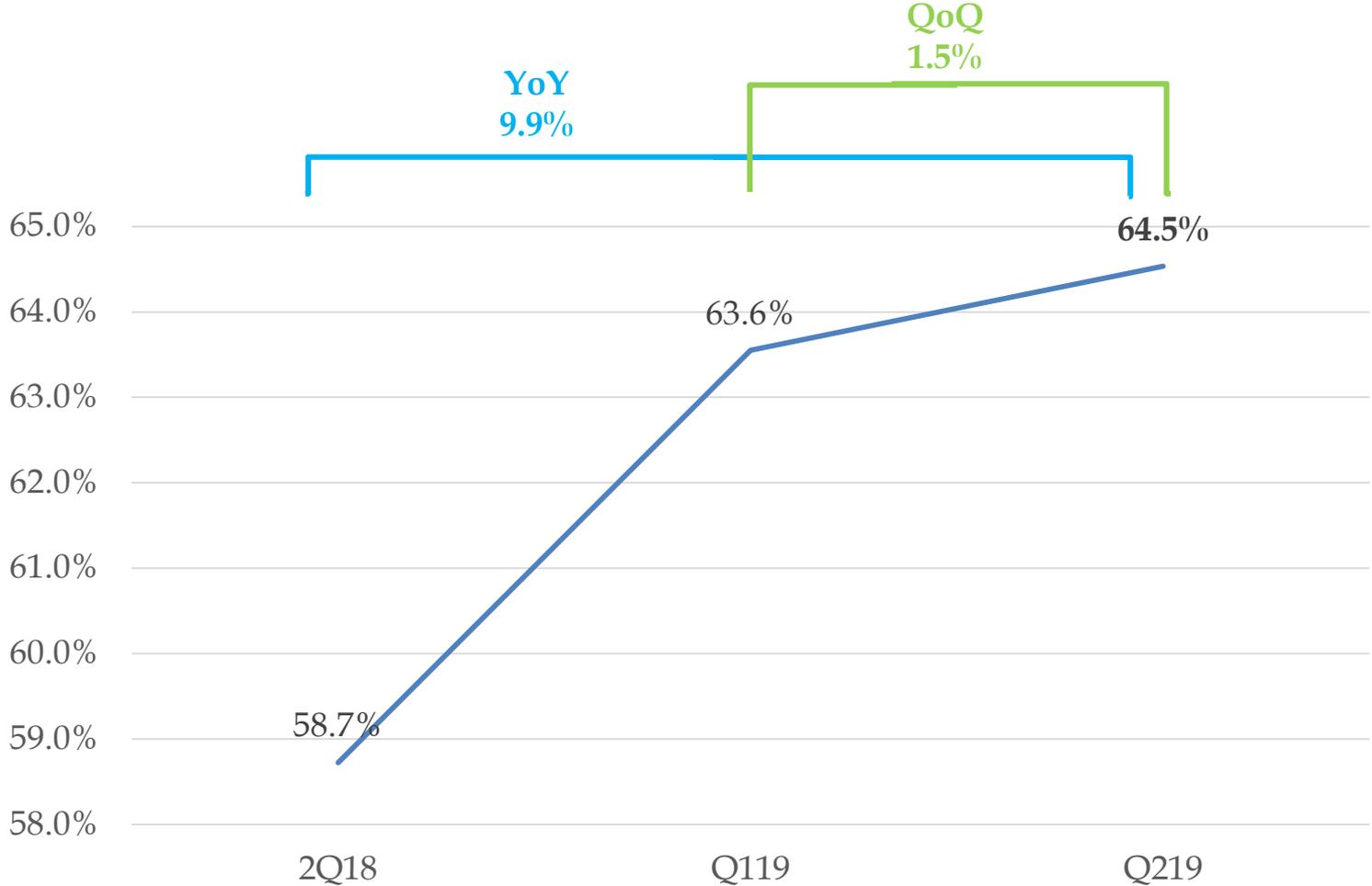
# Consolidated Revenue



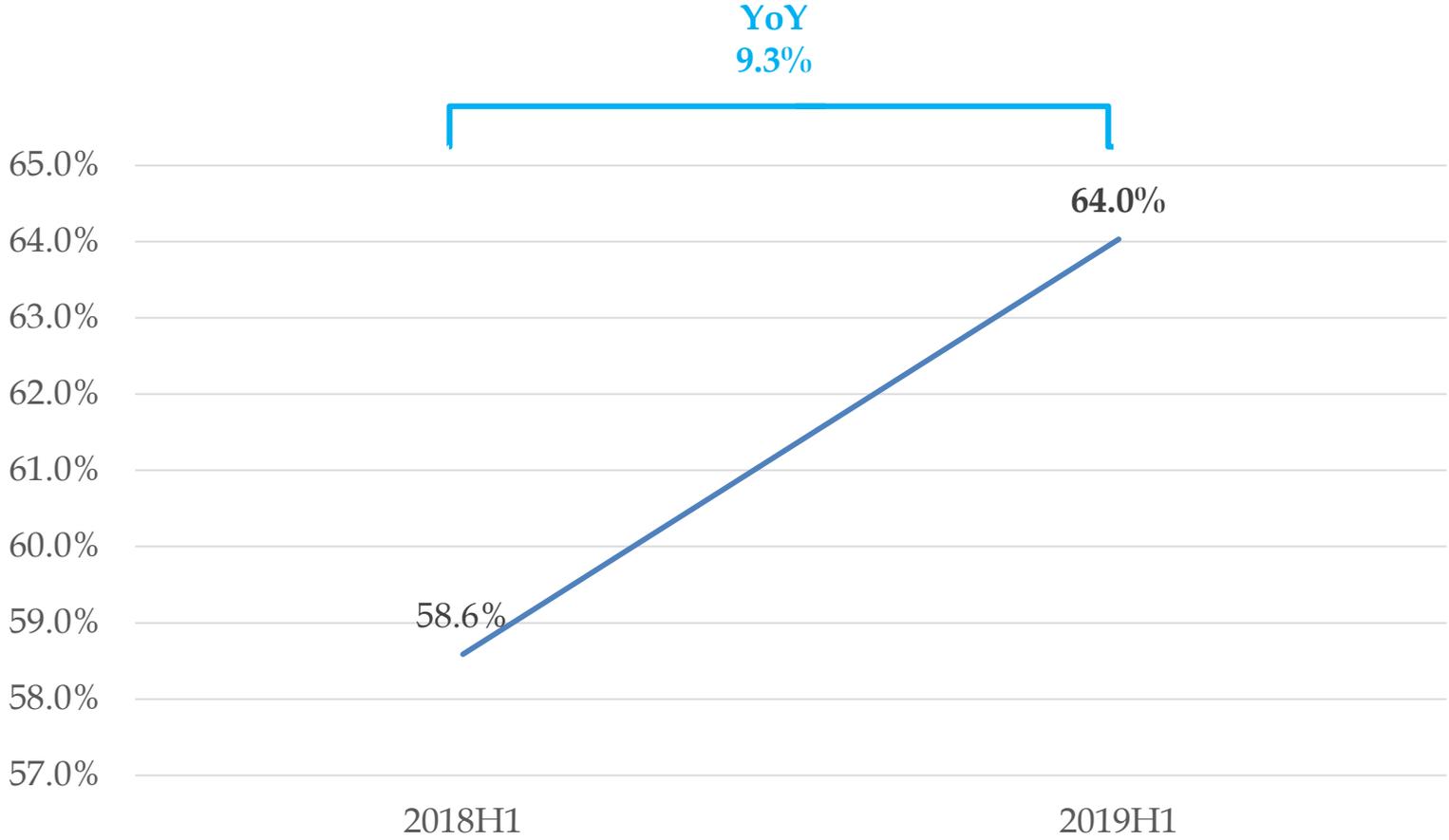
Unit : NTD 1,000



# Consolidated Gross Margin



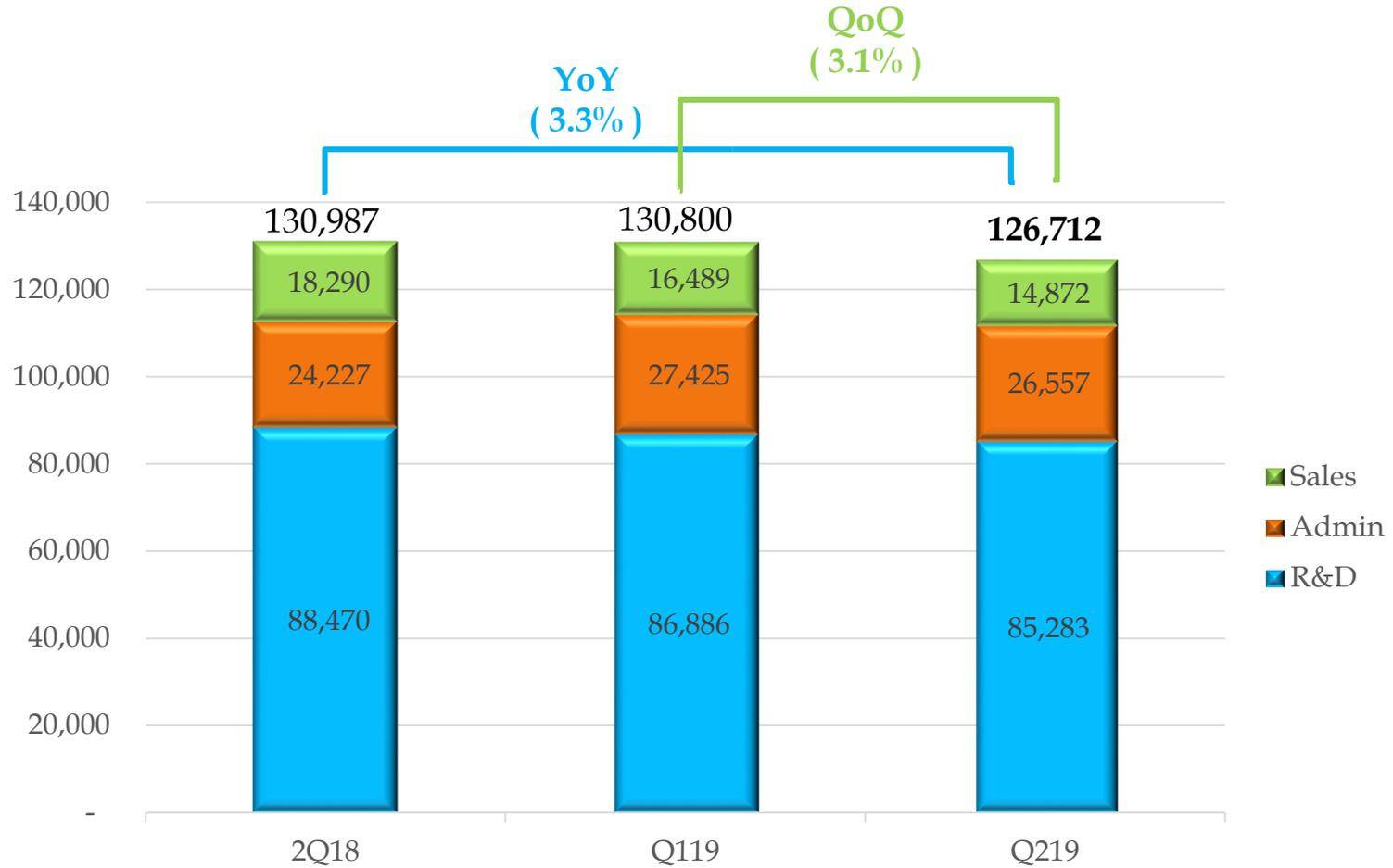
# Consolidated Gross Margin



# Consolidated Operating Expenses



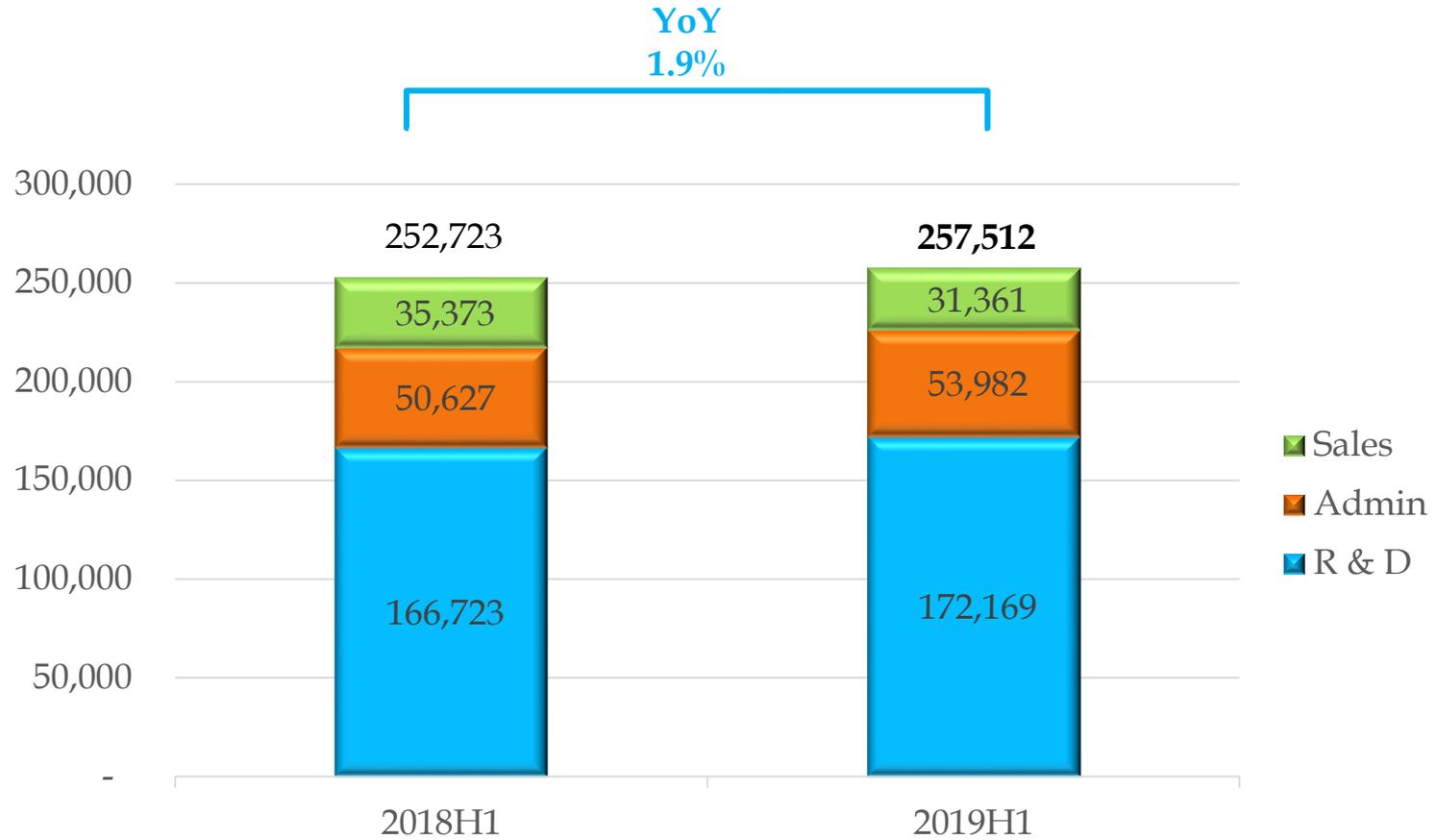
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# Consolidated Operating Expenses



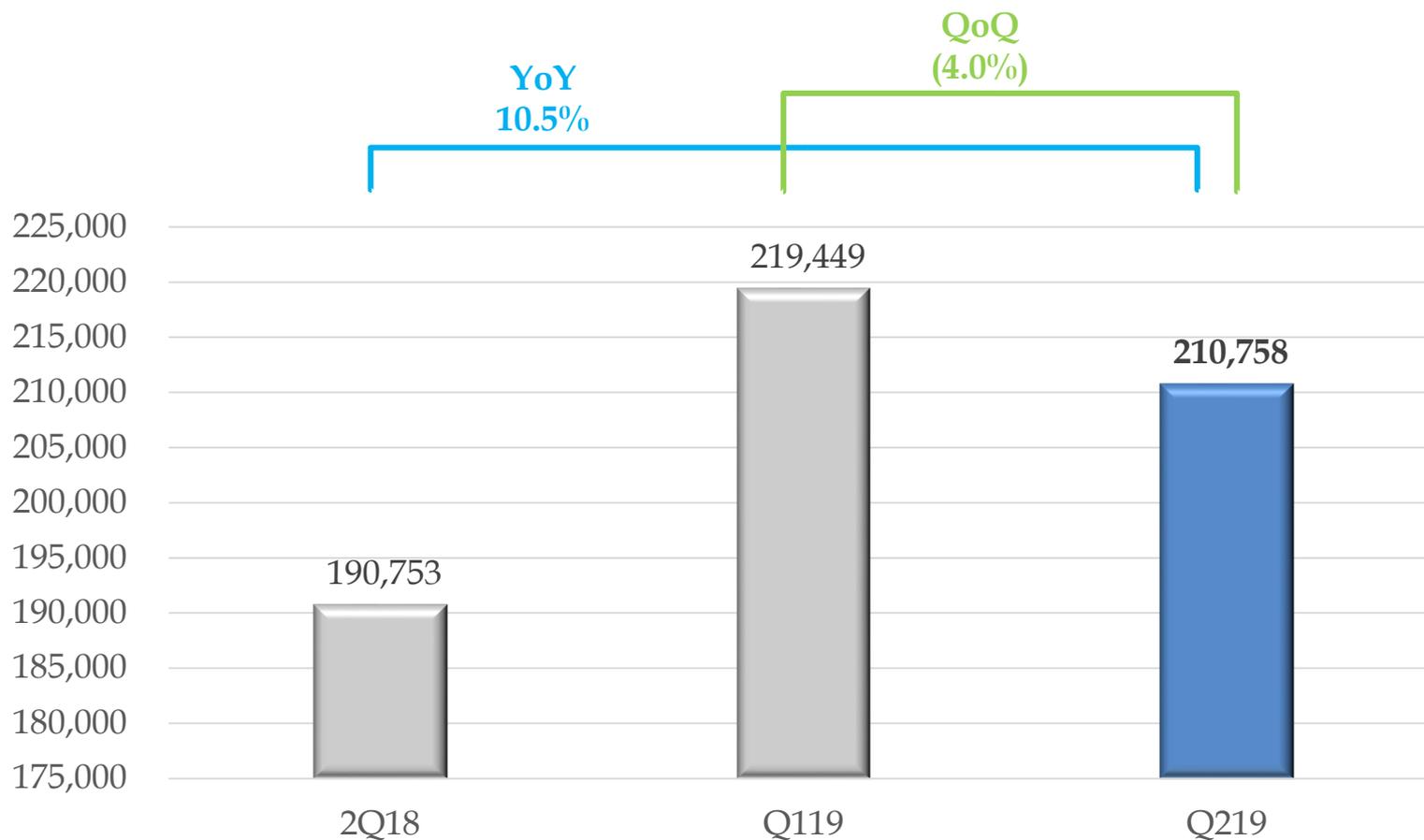
Unit : NTD 1,000



# Consolidated Operating Income



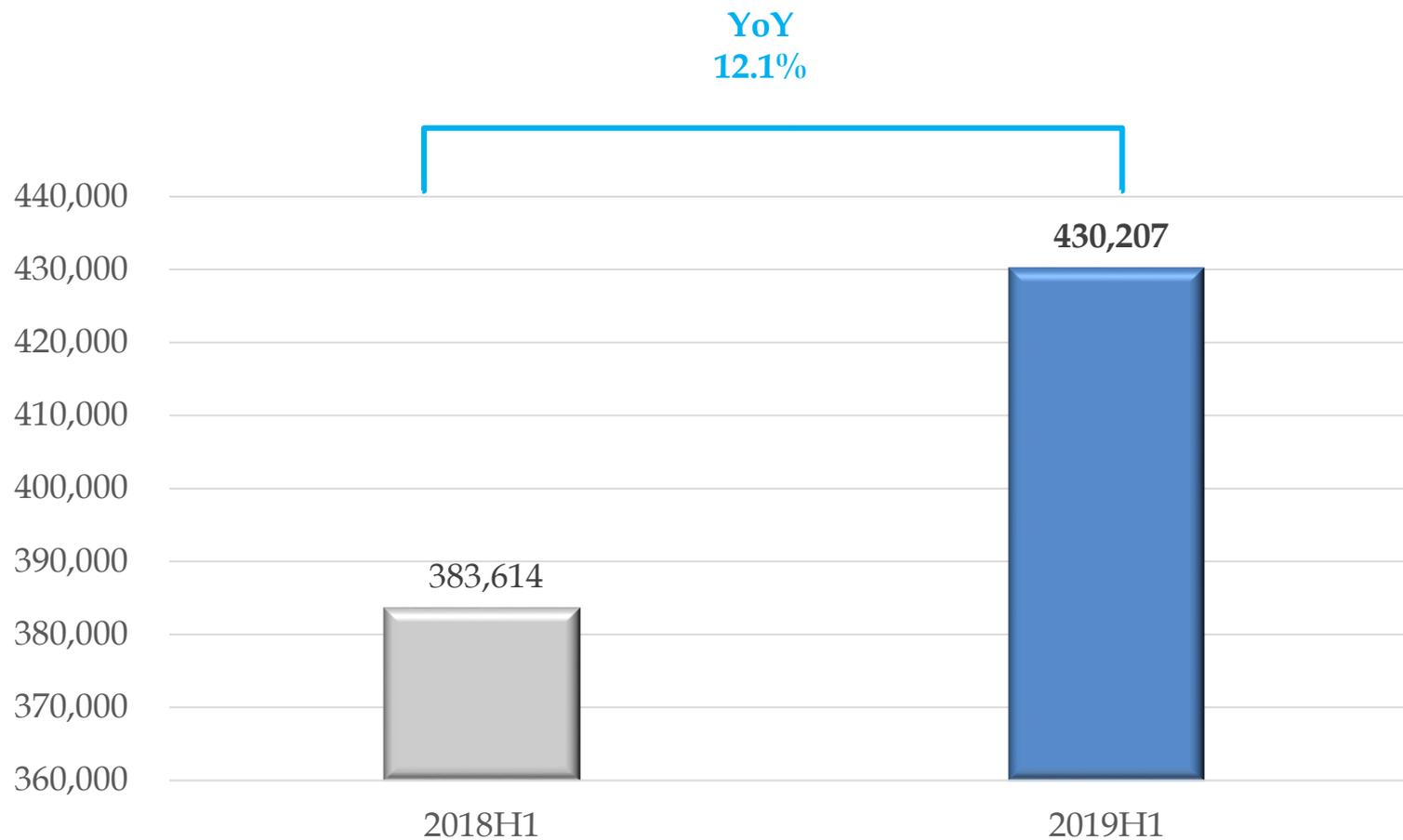
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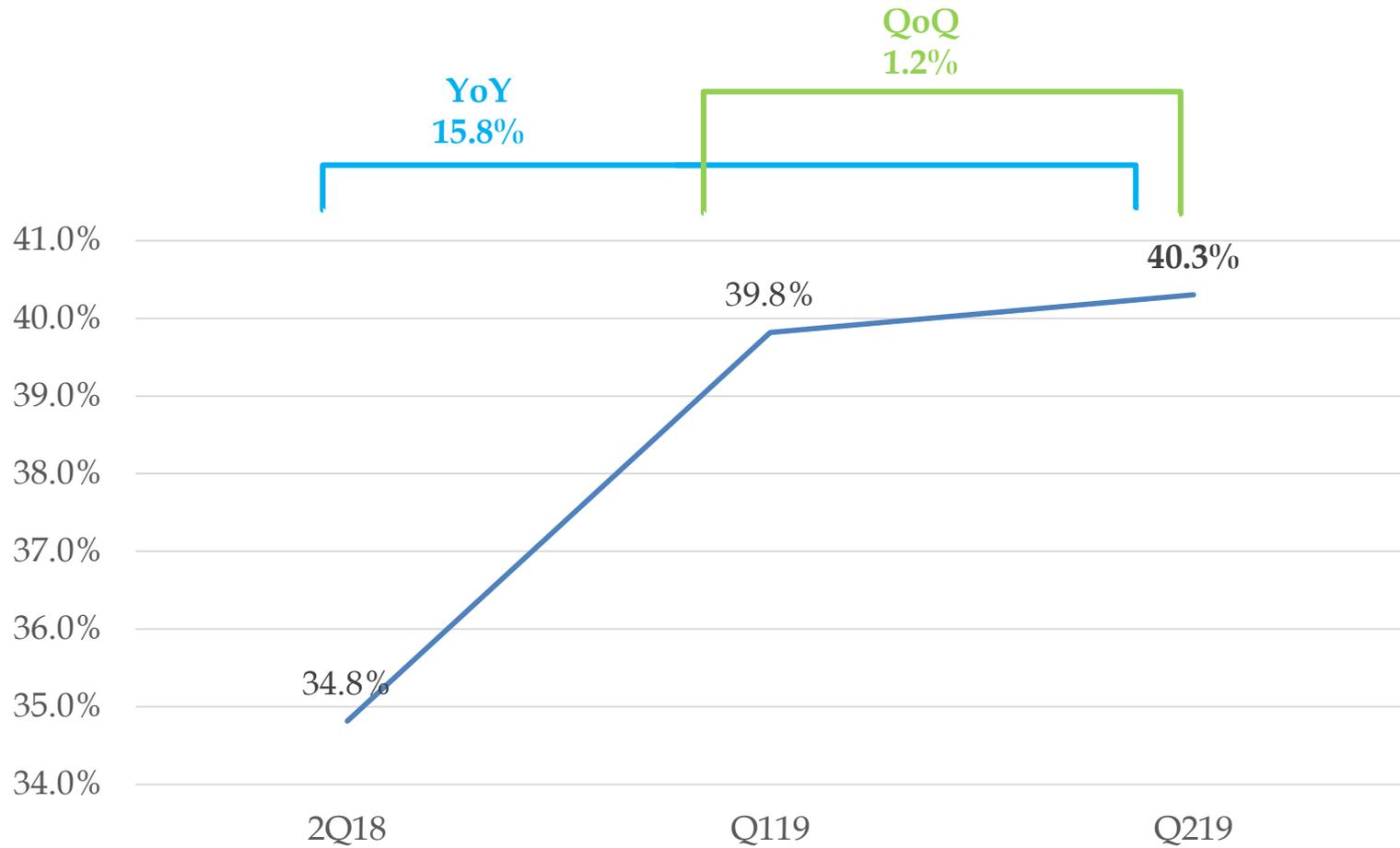
# Consolidated Operating Income



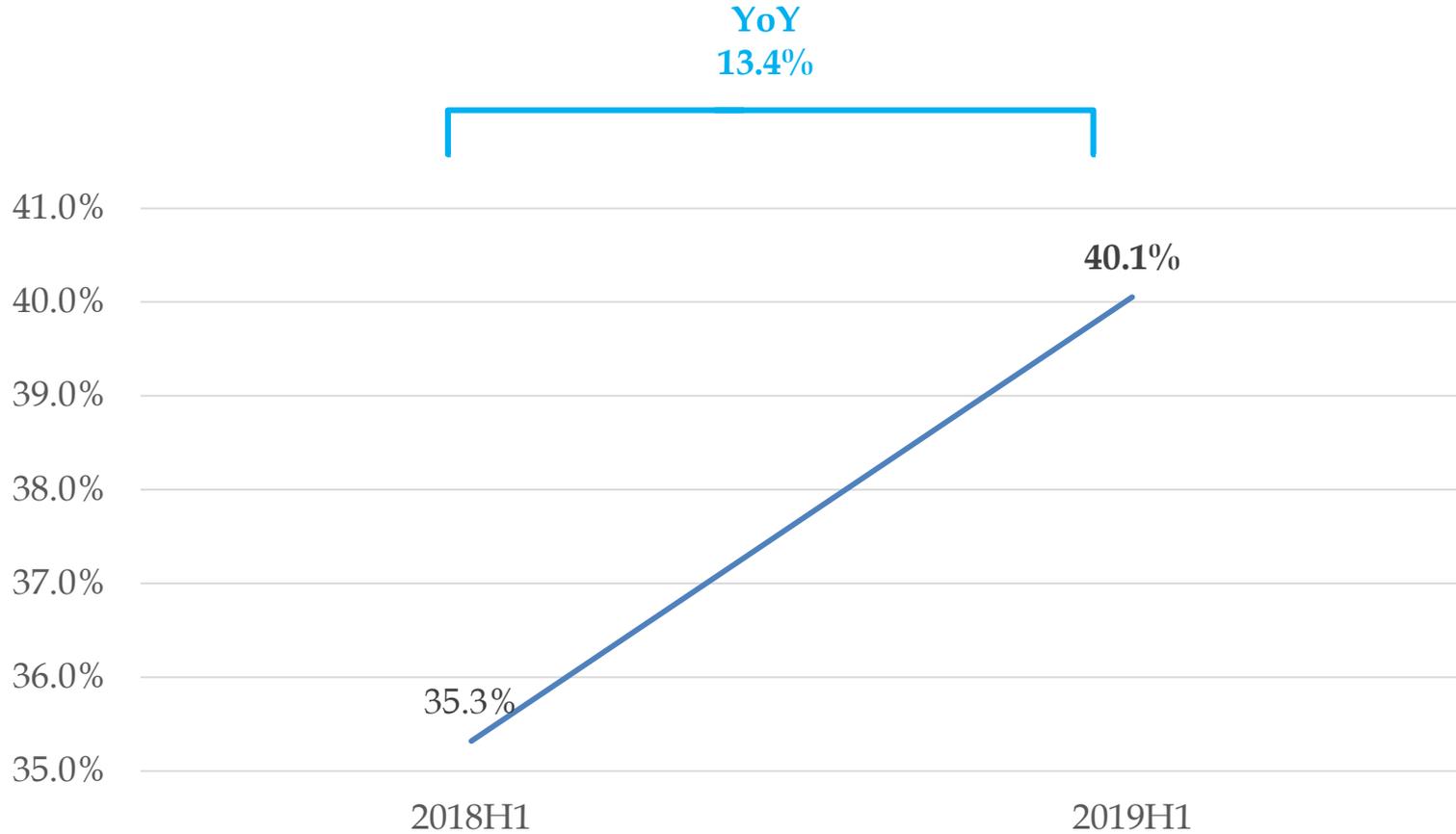
Unit : NTD 1,000



# Consolidated Operating Margin



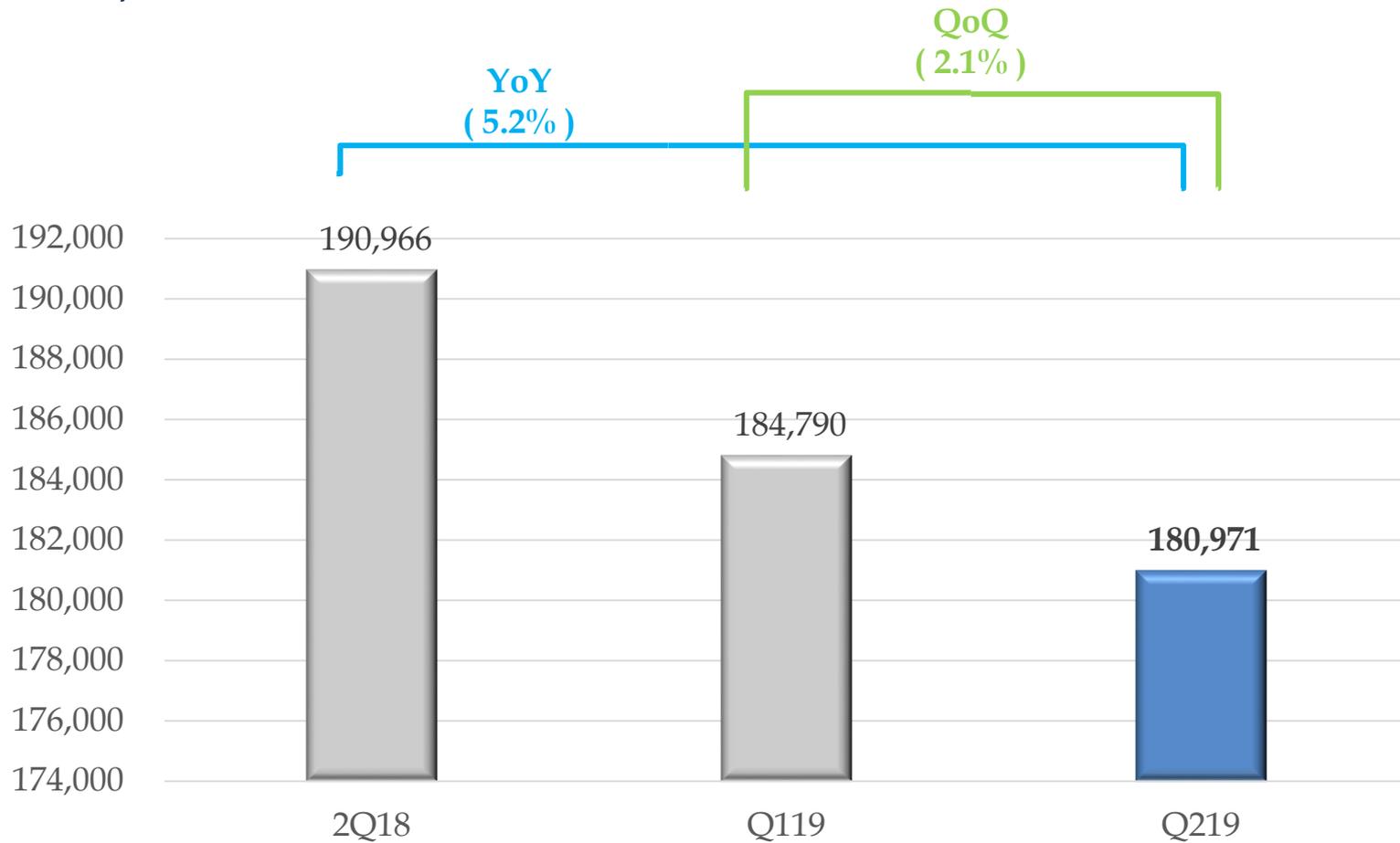
# Consolidated Operating Margin



# Consolidated Net Income



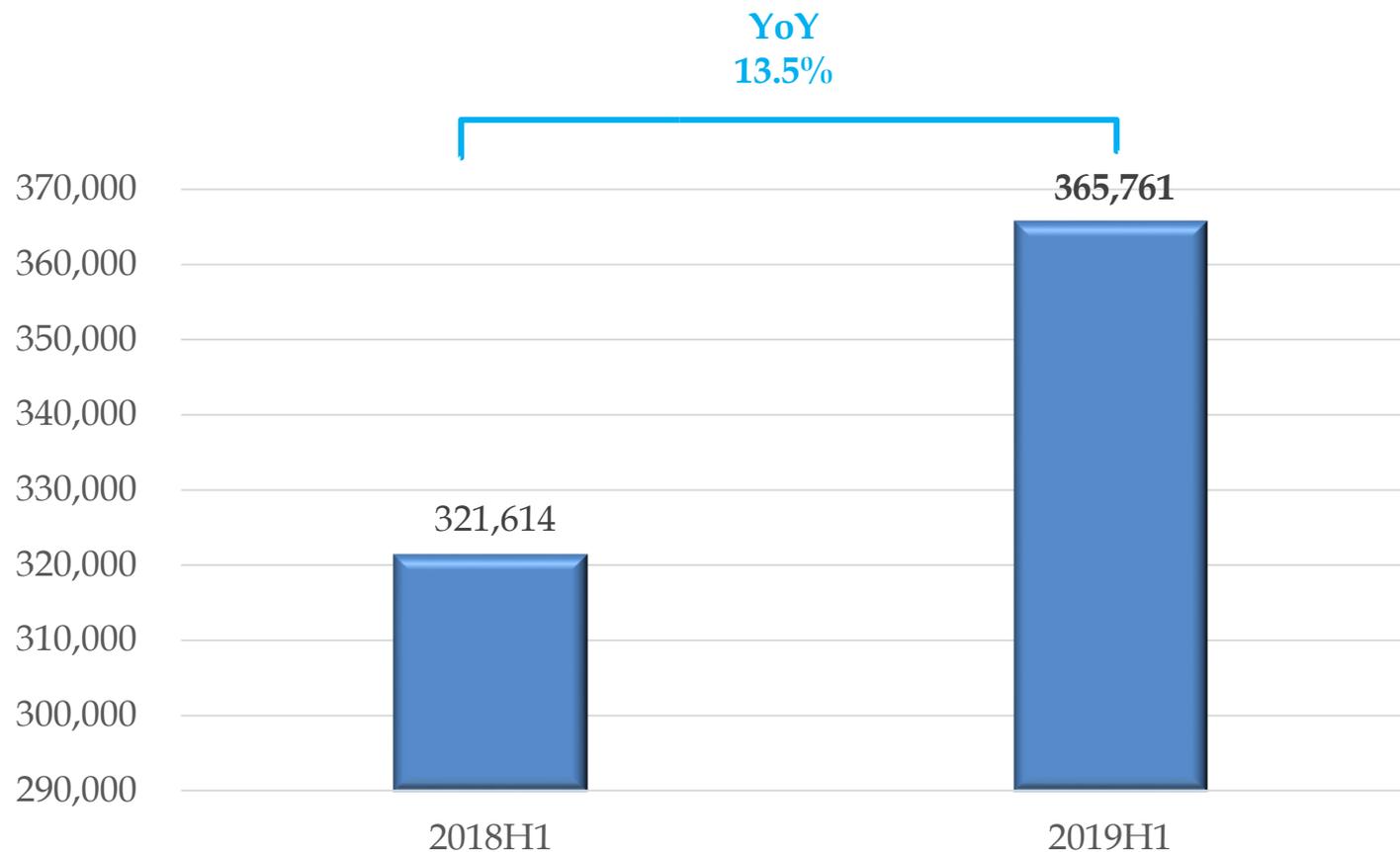
Unit : NTD 1,000



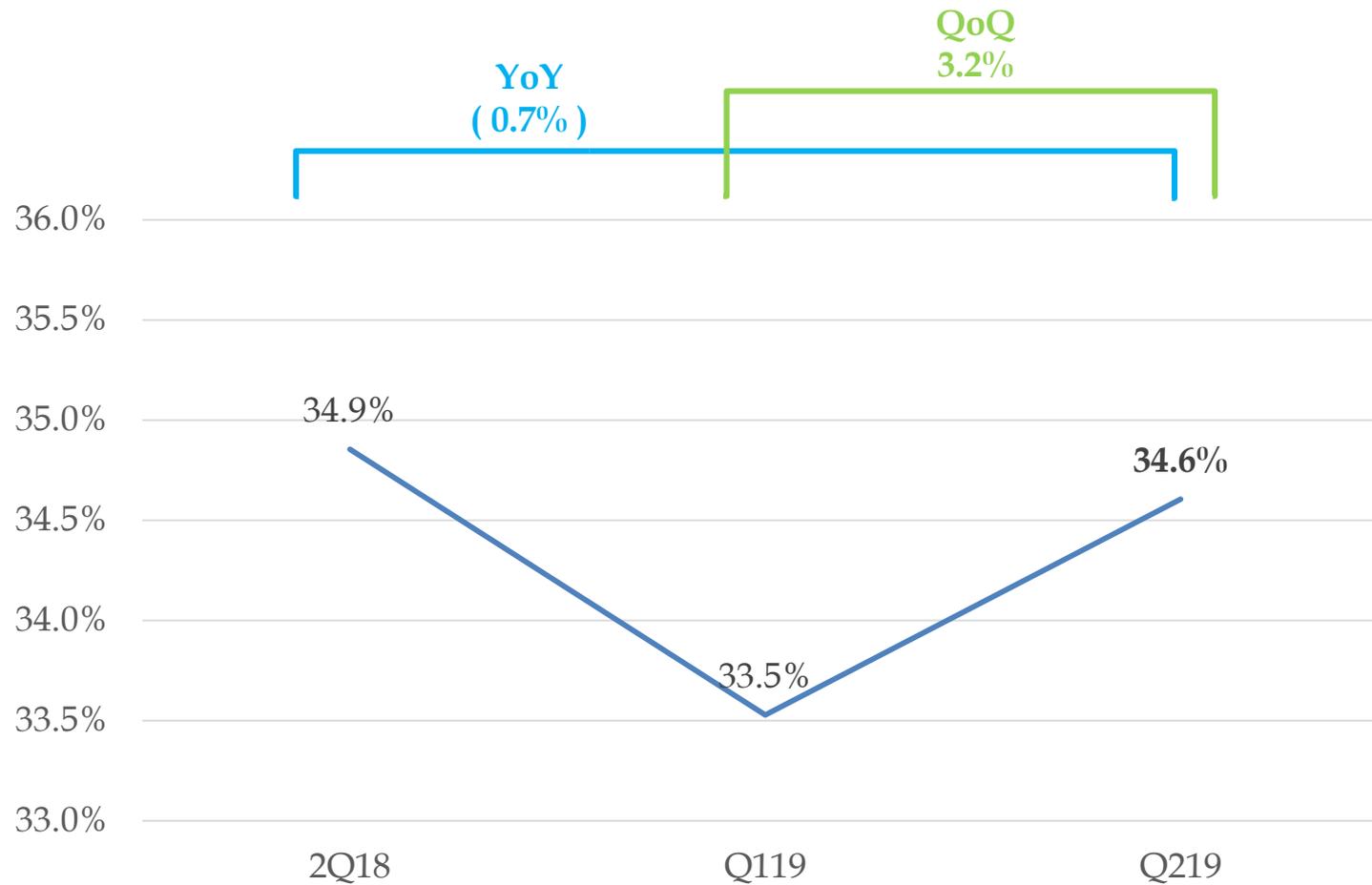
# Consolidated Net Income



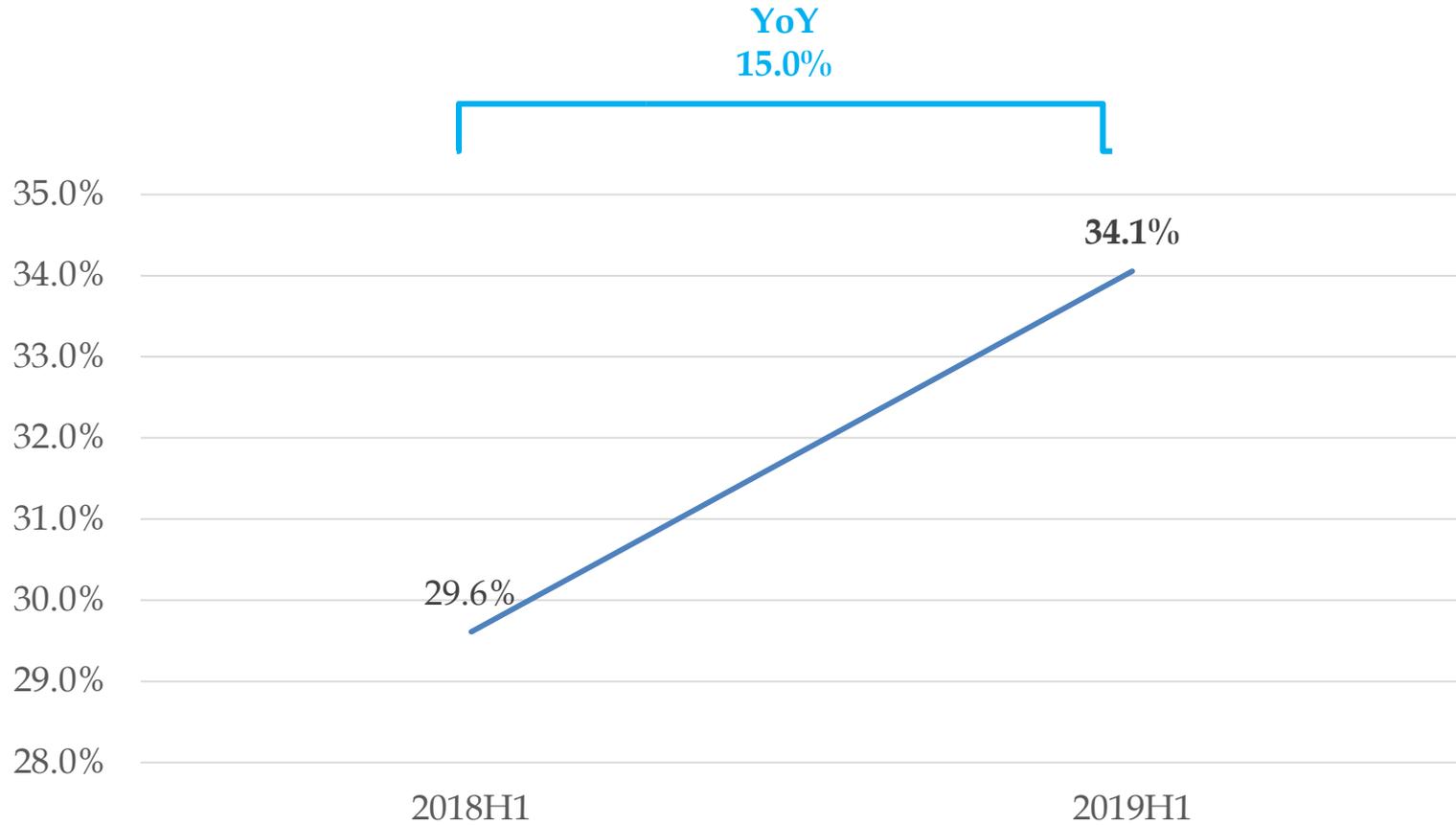
Unit : NTD 1,000



# Consolidated Net Profit Margin



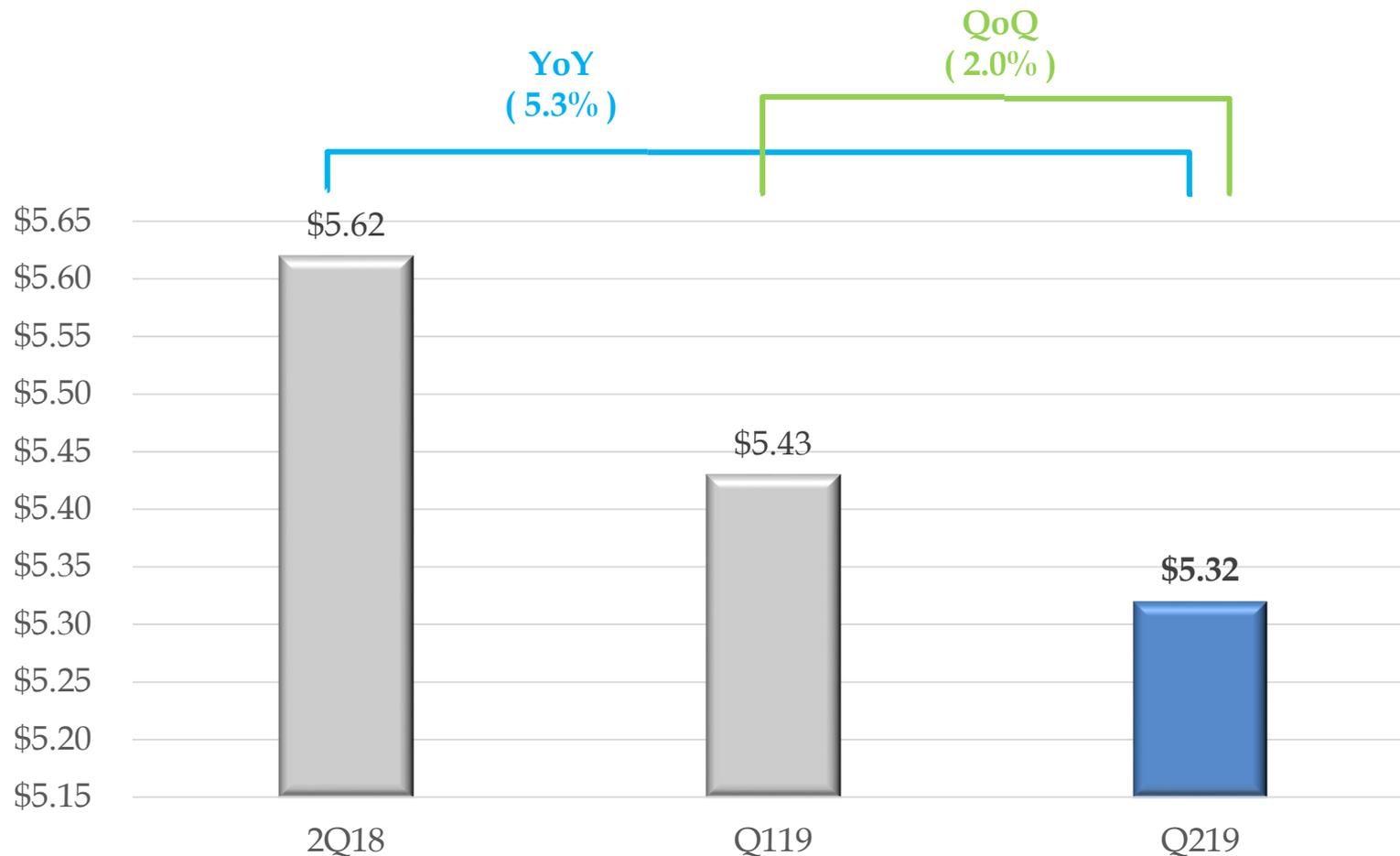
# Consolidated Net Profit Margin



# Consolidated Earning Per Share



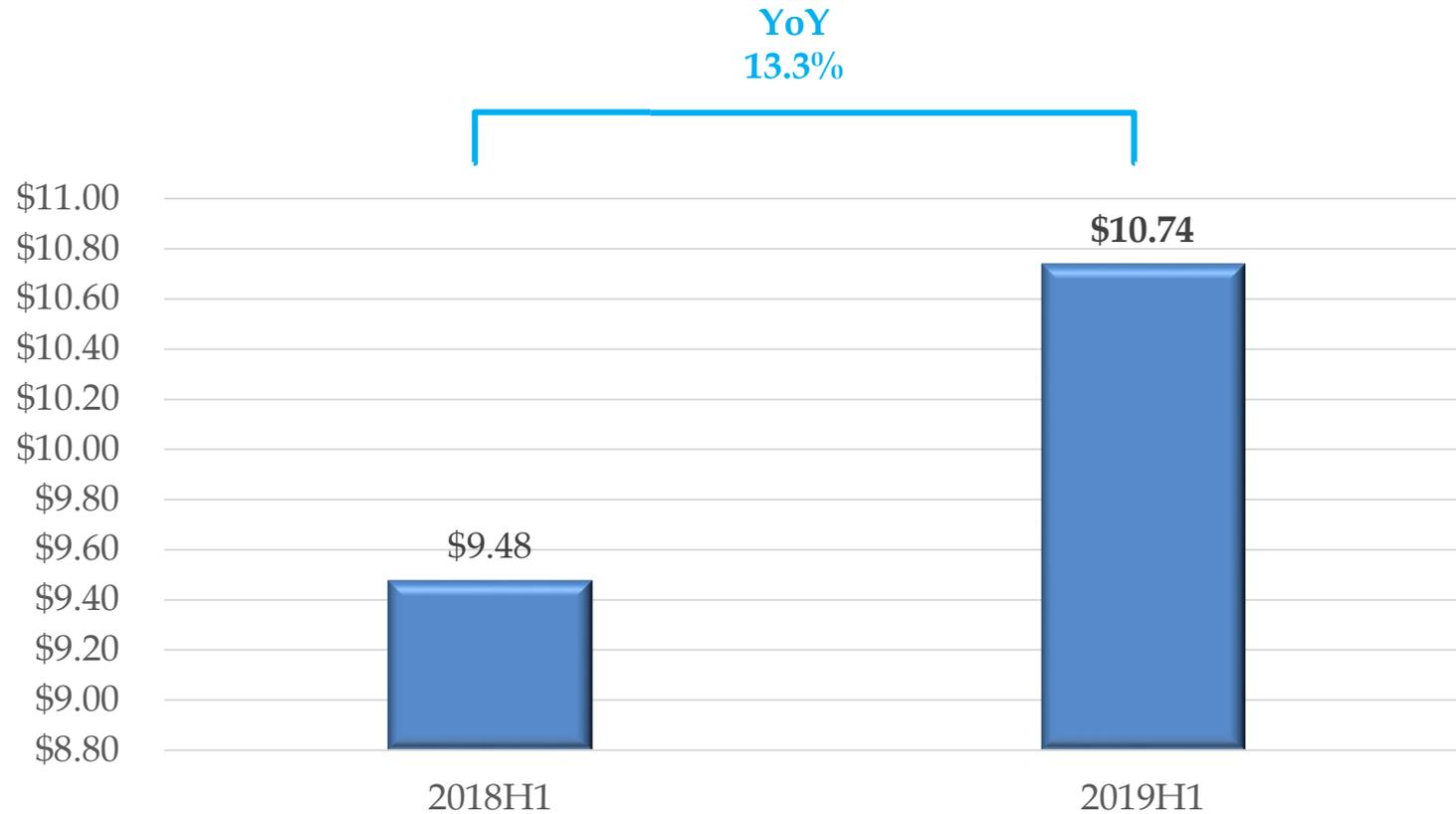
Unit : NT\$



# Consolidated Earning Per Share



Unit : NT\$

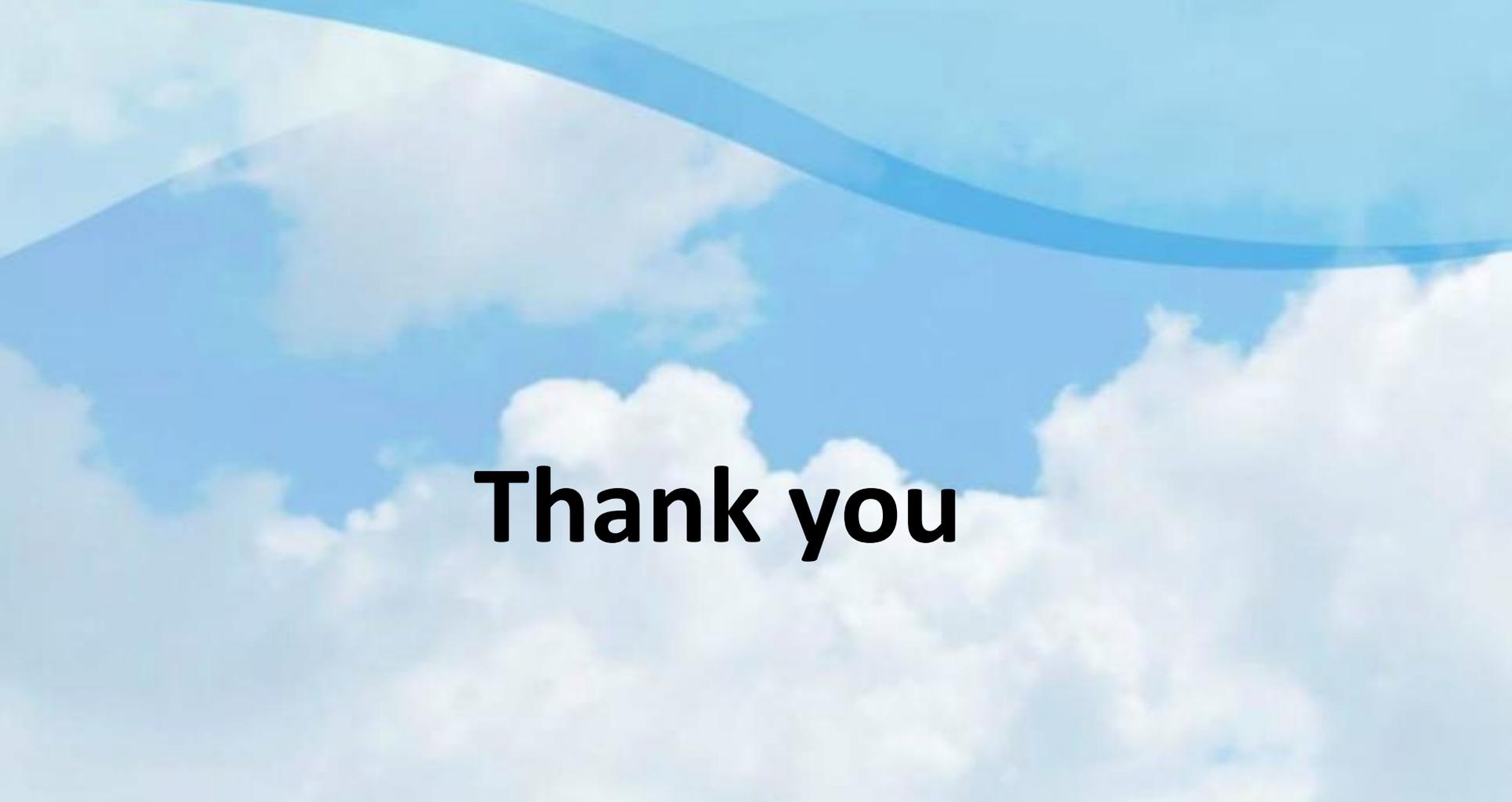


# Dividend Policy

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>Cash dividend (F)</b>	2.29	3.00	4.00	5.00	5.50	7.00	8.00	12.00	15.00	18.00
<b>Stock dividend (F)</b>	2.00	1.42	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00
<b>Dividend form capital reserves (F)</b>	0.30	0.60	0.22	0.20	1.00	0.00	0.00	0.00	0.00	0.00
<b>Total Dividend</b>	4.59	5.02	4.22	5.20	6.50	9.00	8.00	12.00	15.00	18.00
<b>EPS</b>	5.64	5.66	4.77	6.50	7.40	10.72	10.79	14.07	15.70	20.20

## Earning distributions:

- Employee bonus can not be less than 8%
- Directors bonus no higher than 3%
- With respect to the earnings available for distribution plus the previously cumulative undistributed retained earnings, the Board of Directors may present a proposal to distribute to the Shareholders by way of dividends at the annual general meeting for approval. Having considered the operational, financial and tax factors, including the Company being in the growing stage during the business life cycle and the future expansion projects, any remaining profits may be distributed in the form of cash dividends and/or shares, and the cash dividends shall be no less than 10% of such remaining profits to be distributed.



**Thank you**