



Bridge Everything with Connectivity

March 2020

COMPANY OVERVIEW

SHANGHAI
SHENZHEN
SEONGNAM
TAIPEI
CHUPEI

SAN JOSE



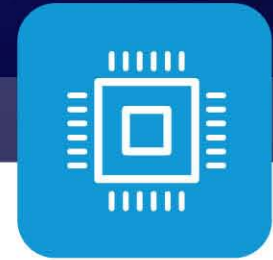
Founded
Jan. 2004



Listed in TSE
Nov. 2015



Customers
350+



Products
270+

Business Operation

Growing position in WiFi- WiFi 6 and Beyond

+

Diversified offering in IoT ad Mobile applications

+

Excellent technical depth in multiple aspects

+

Best partner and Excellent Customer Service

Long term value with technology and market Strategy

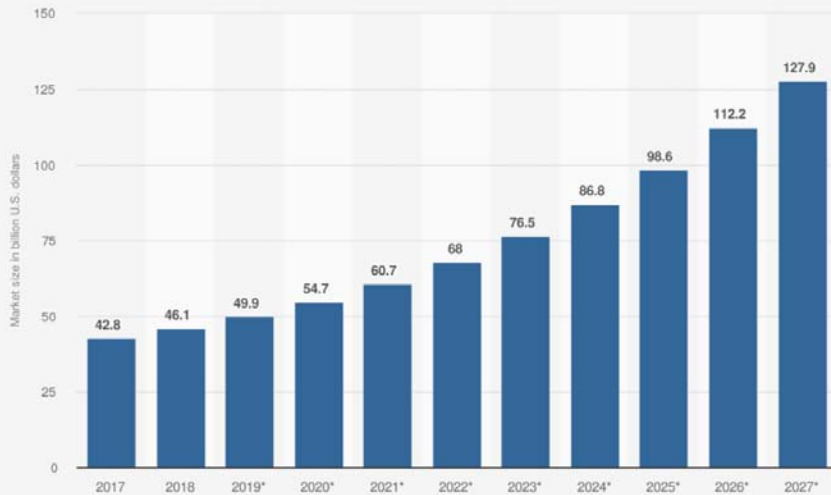
In Fast Growing Market -Bridges Everyone



WiFi Growth

IoT Growth

Wireless connectivity market revenue worldwide from 2017 to 2027 (in billion U.S. dollars)

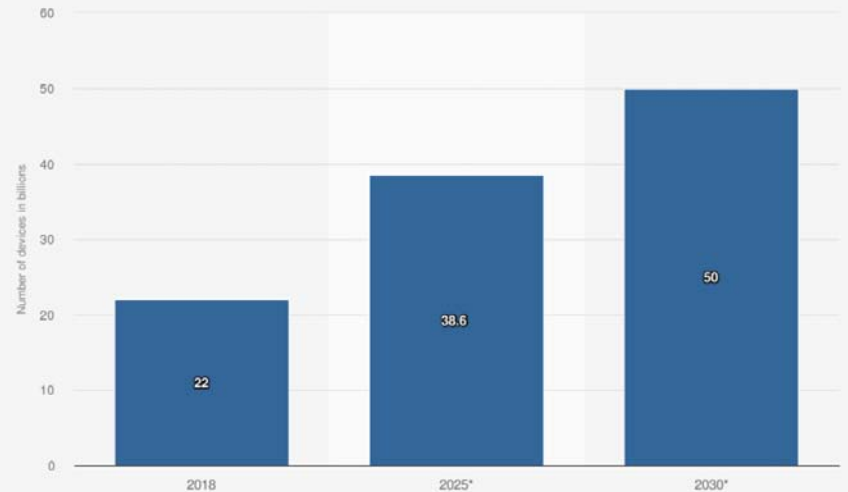


Source
The Insight Partners
© Statista 2019

Additional Information:
Worldwide; 2017 to 2018

statista

Number of internet of things (IoT) connected devices worldwide in 2018, 2025 and 2030 (in billions)



Source
Strategy Analytics
© Statista 2020

Additional Information:
Worldwide; 2018

statista

With Dramatic Market Opportunity



WiFi- Networking

\$1,000 TAM

AP Router, Cable
Modem, Gateway,
PON/ GPON



WiFi- Consumer

\$100 TAM

Mesh cam., Gaming,
Smart Speaker, Stereo,
STB/ OTT



Mobile

\$1,000 TAM

Smart Phone,
Feature Phone



Sensor/ IoT

\$50 TAM

Smart Lighting, Smart
Home, Industrial,
Security, Meters

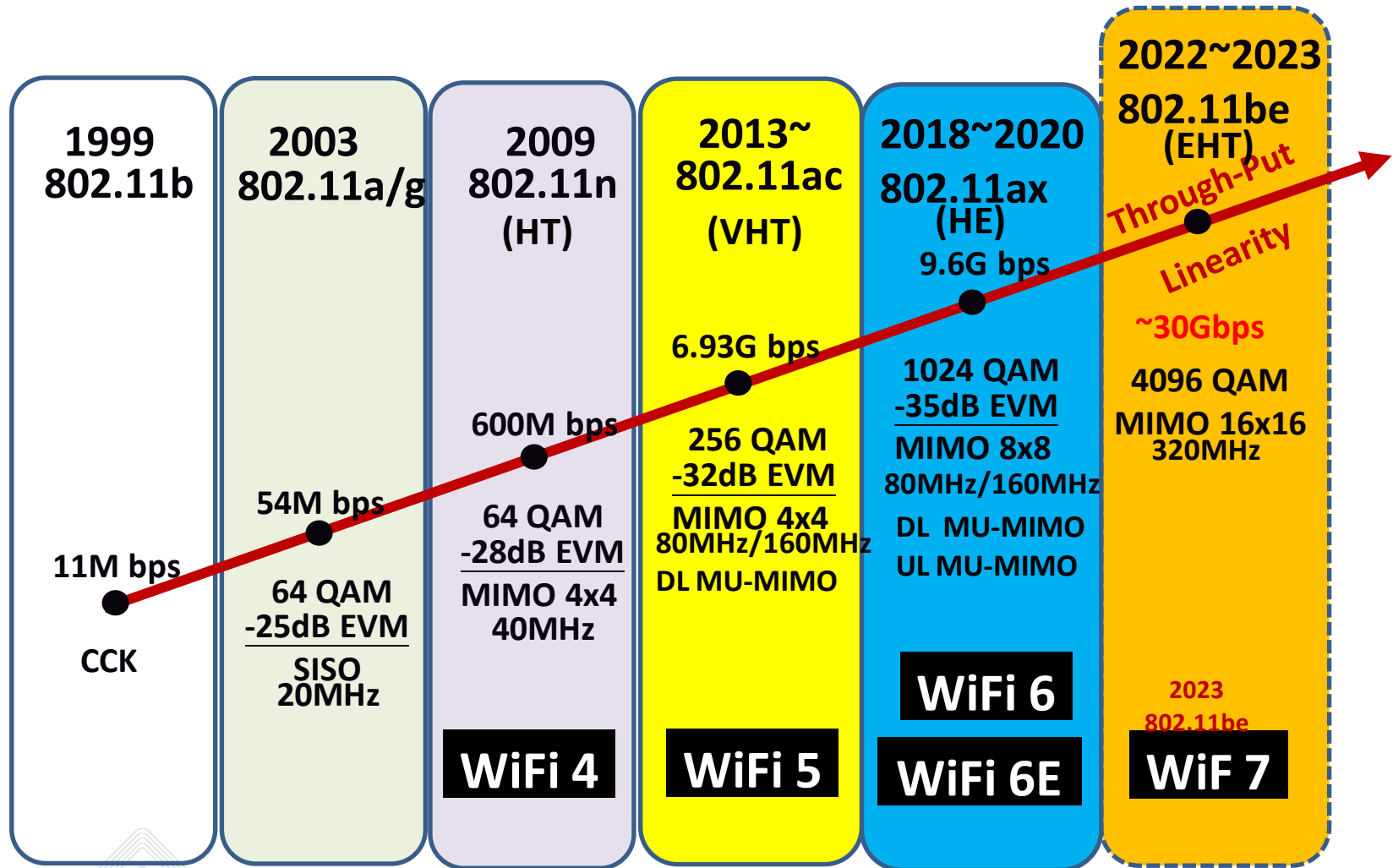
Unit: US\$ Million

We Developed Broad Customers Portfolio

Europe/ US/ Korea/ Japan/ China/ Taiwan/ Asia.....

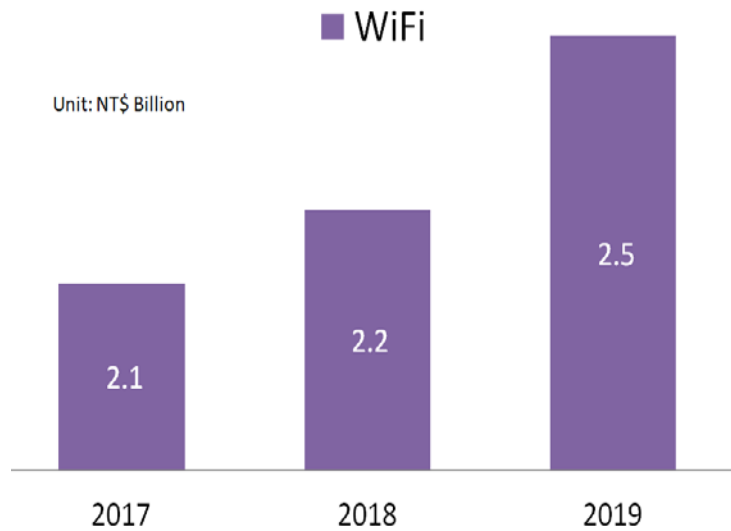







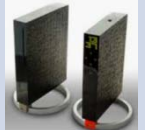
WiFi Evolutions



Our WiFi RFFE Continue Grow in

- WiFi5 and WiFi6
- Networking and Consumer Market

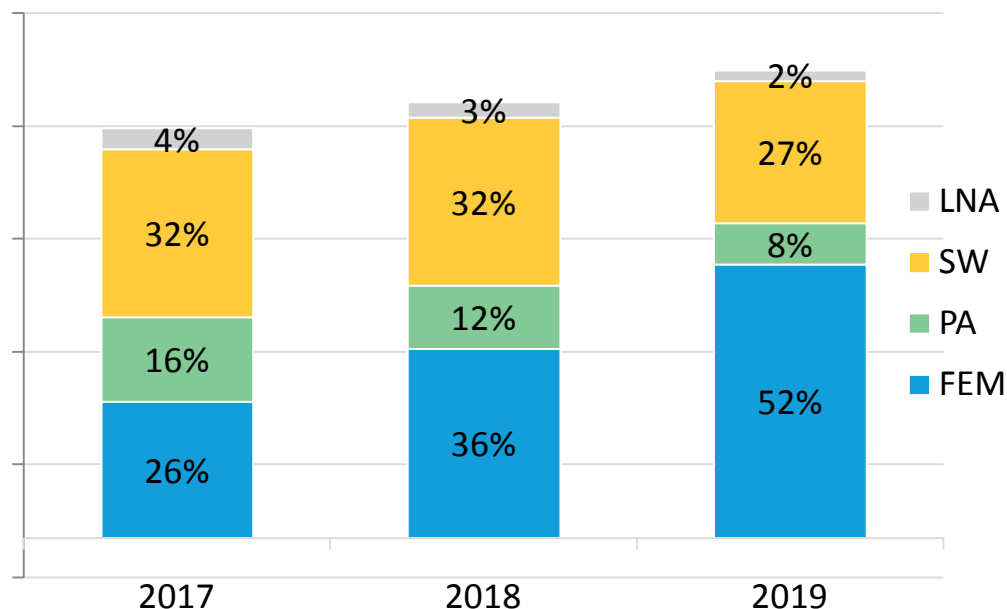


WiFi FEM				
DSL	PON	AP	Cable	STB
20%	30%	40%	5%	5%
				 

Win in High Performance FEM and 3rd Parties' Platform

High Performance FEM Win more Markets

Win Reference/AVL in WiFi Platforms



 **BROADCOM**

 **Qualcomm**

 **REALTEK**

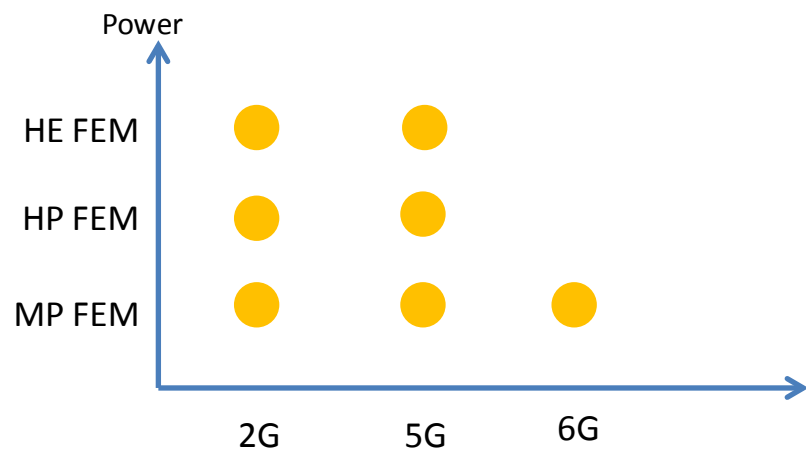
 **MEDIATEK**

 **Quantenna**

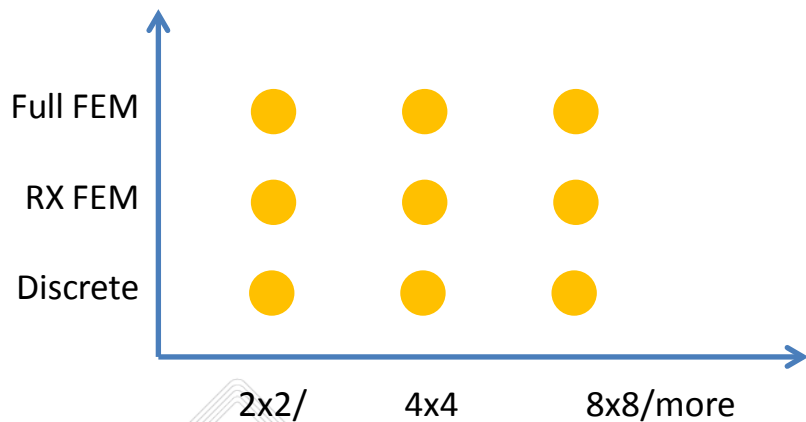
 **Celeno**

Complete WiFi 6 Offering for 802.11ax

– Up to 160Mhz-BW/MCS11



5G Tri-band MIMO Portfolio



	2Ghz/5Ghz	Feature	Charac.
11ac NC	V		High linearity
11ax NC	V	Coupler PD	High linearity
Mobile/Battery-op WiFi	V	Coupler PD	Minimum Standby power and Form factor
UHE FEM	V	PD	Ultra efficiency
Discrete	V		PA, LNA, Switch, Diplexer
Filter	V (2Ghz)		WiFi Filter

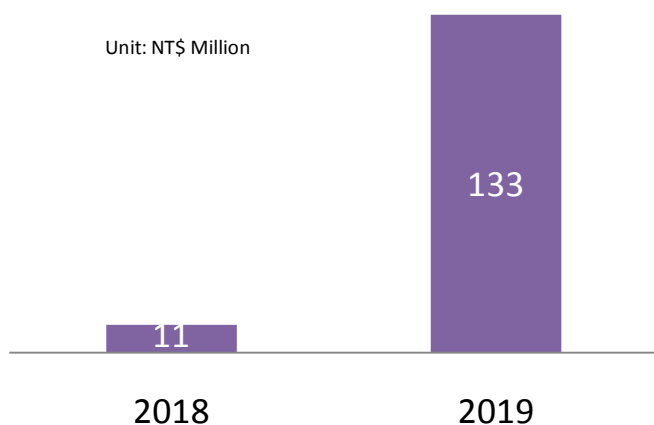
Mobile

- FM Tuner continue win S11, Note11, S20...with TypeC concept
- LNA ramp up in Brand phone



Mobile WiFi

Unit: NT\$ Million

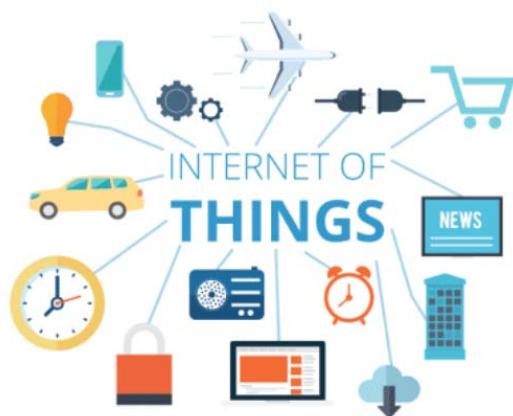


Mobile

Mobile		
WiFi	FM	RFFE Component
Rx-FEM Full-FEM Switch	Broadcasting FM Tuner	LNA, Switch, Antenna Tuner, Filter, DPX

IoT Moving Up

- Automotive RFFE start MP
- WiFi/BT RFFE shipping and design-win
- Sensor design-win smart lighting in 5Ghz and 10G



Source: Web



IoT		
Sensor	Component	Automotive-Consumer

Business Wins

■ WiFi5/WiFi6 – Connectivity

- Continue to get approved on WiFi6 reference designs in Broadcom AP, DSL and STB platforms.
- Get approved on WiFi6 reference design in Quantenna platforms.
- Win WiFi6 projects in branding customers – Netgear, Telefortica, ZyXel, Humax, Turkish Telecom
- Win WiFi6 projects in Huawei

■ WiFi5 – Mobile

- Continue to win WiFi5 projects in Qualcomm and MTK mobile platforms in Lenovo, Samsung, LG smart phones

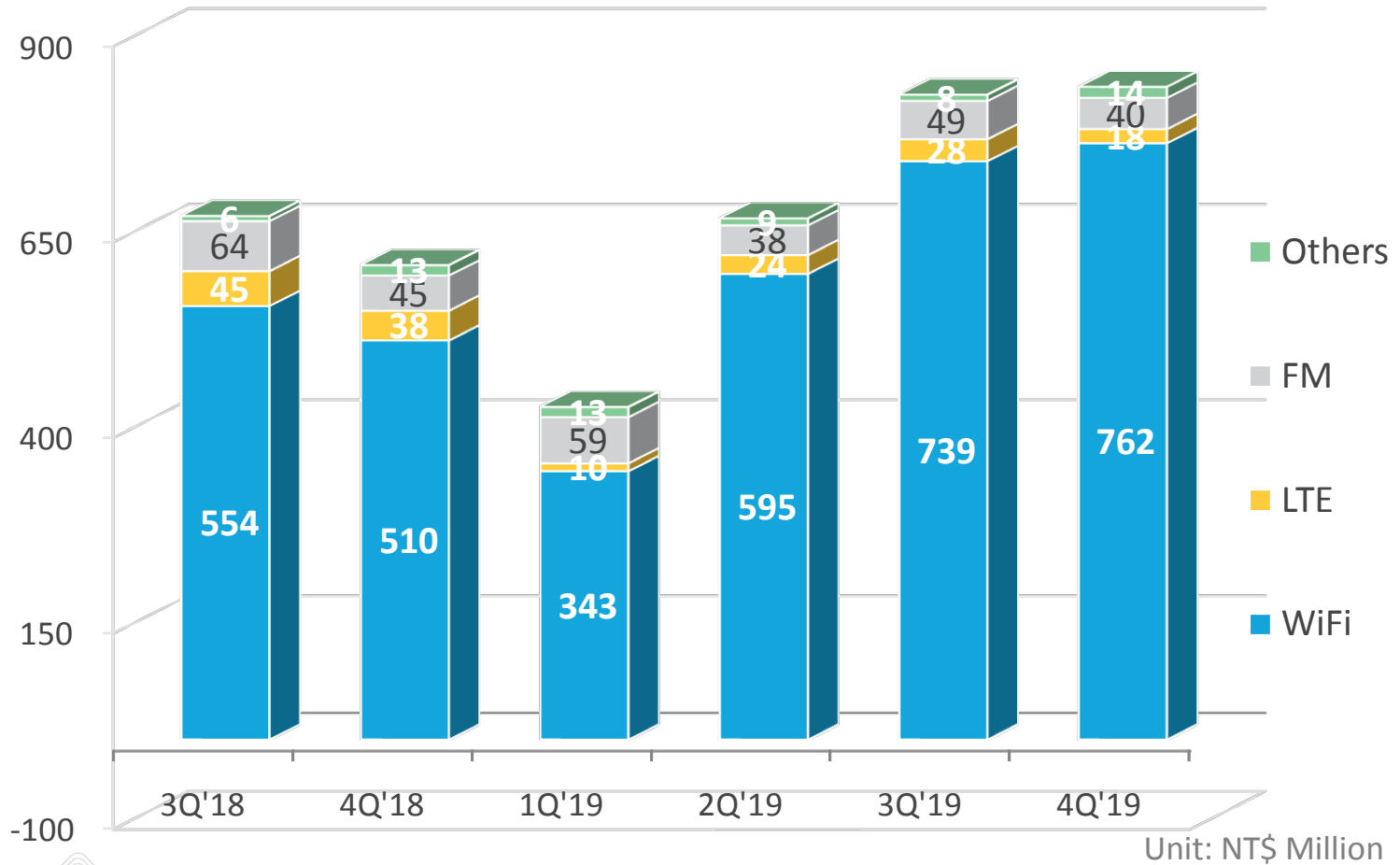
■ Cable/DOCSIS Switch

- Win cable/DOCSIS switch projects in Commscope, Sagemcom, Technicolor for cable modems applications

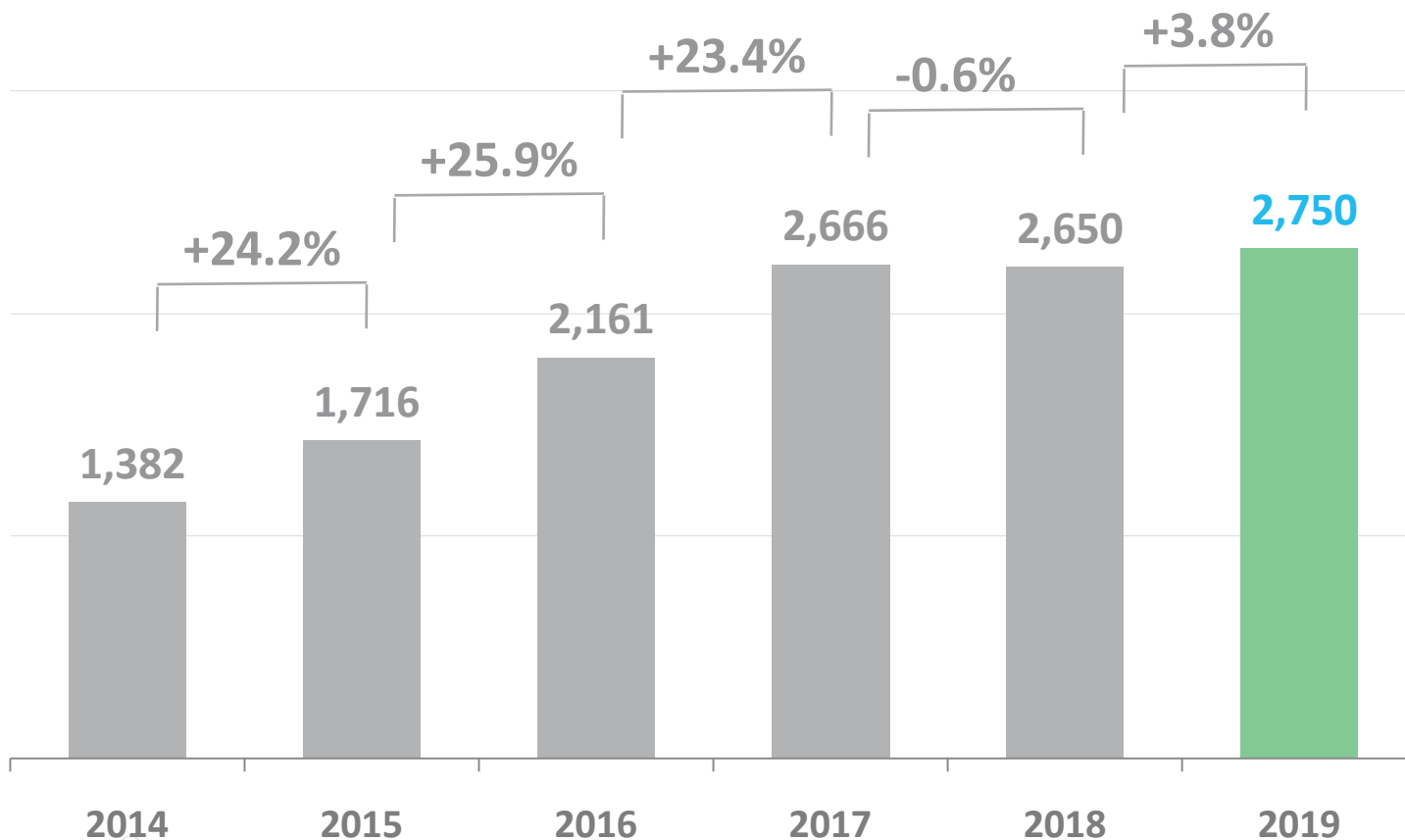
■ Mobile SW/LNA

- Continue to win new models in Samsung, Lenovo and LG smart phones

Overall Revenue – Market Segments



Net Sales 2014-2019

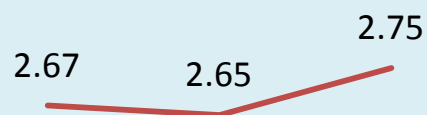


Unit: NT\$ million

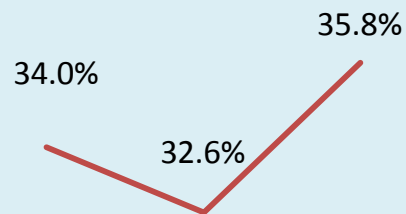
Financial Momentum and Growth

Revenue

NT\$ Billion

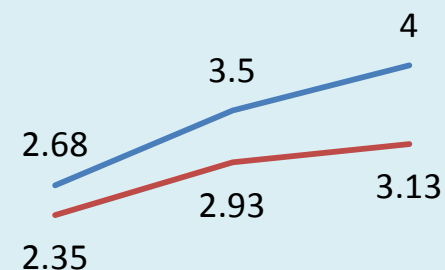
**Accelerating Revenue Growth**

Gross Margin

**Expanding Gross Margin**

EPS

— Before Tax — After Tax

**Growing Profitability**

2019 Q4 P&L

Amount:NT\$ MN	2019 Q4		2019 Q3		QoQ	2018 Q4		YoY
	Amount	%	Amount	%	%	Amount	%	%
Net Sales	834	100.0%	824	100.0%	1.2%	606	100.0%	37.6%
Gross Margin	258	30.9%	309	37.5%	-16.5%	210	34.6%	22.9%
Operating Expense	200	24.0%	189	22.9%	5.8%	164	27.1%	22.0%
Operating Profit	58	7.0%	120	14.6%	-51.7%	46	7.5%	26.1%
Non-Op. Profits(Loss)	-1	-0.1%	0	0.0%		1	0.2%	-200.0%
Net Income before Tax	57	6.8%	120	14.6%	-52.5%	47	7.7%	21.3%
Net Income after Tax	44	5.3%	96	11.7%	-54.2%	40	6.6%	10.0%
EPS	0.73		1.57			0.65		



RichWave