

ITEQ

*Your Partner of
Advanced Materials & Mass Lam Service*

ITEQ Corporation

Company Presentation

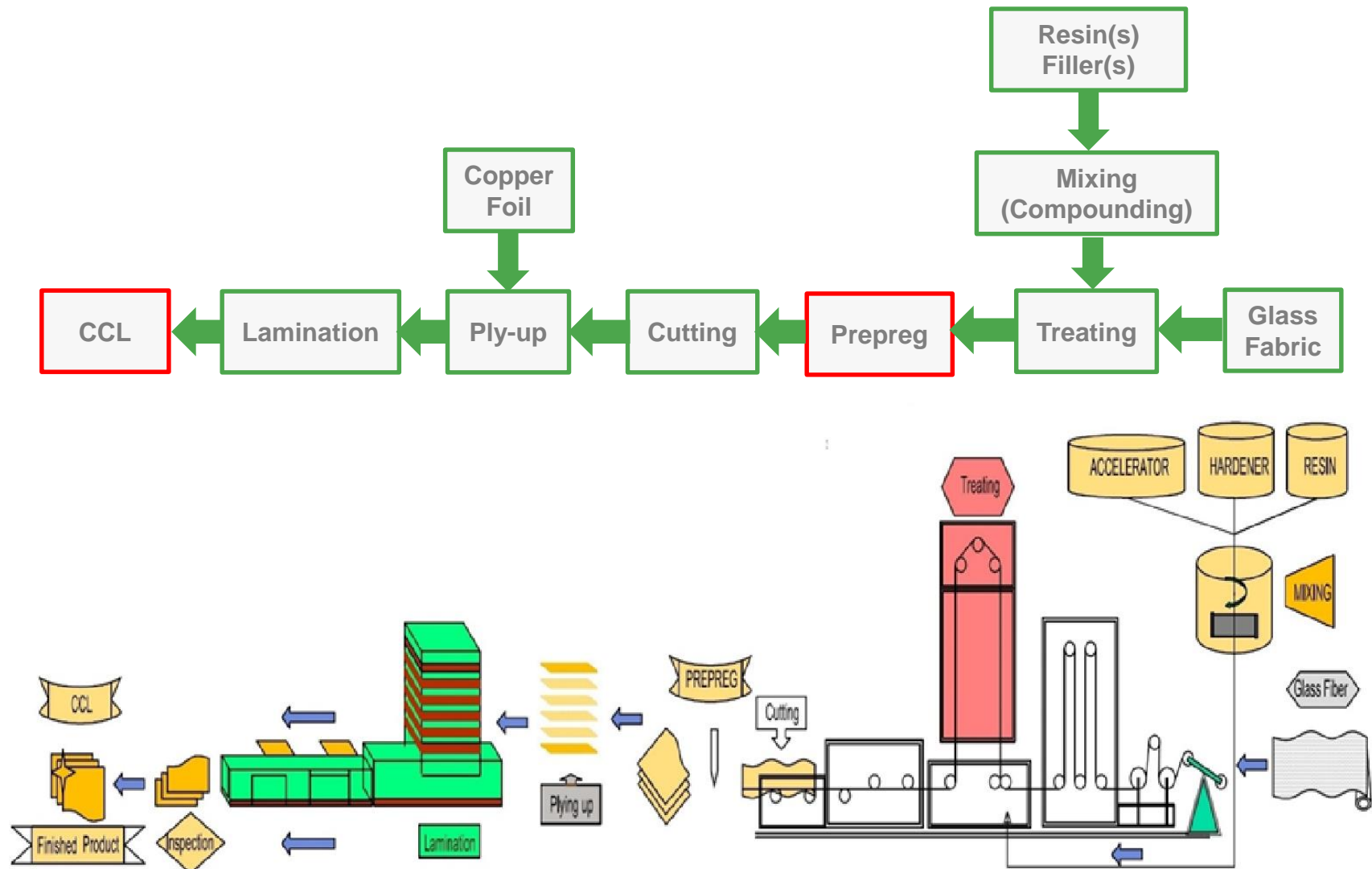
- This presentation and release contain “forward-looking statements” which may include projections of future results of operations, financial condition or business prospects based on our own information and other sources.
- Our actual results of operations, financial condition or business prospects may differ from those expressed or implied in these forward-looking statements for a variety of reasons, including but not limited to market demand, price fluctuations, competition, international economic conditions, supply chain issues, exchange rate fluctuations and other risks and factors beyond our control.
- The forward-looking statements in this release reflect the current belief of ITEQ as of the date of this release. ITEQ undertakes no obligation to update these forward-looking statements for events or circumstances that occur subsequent to such date.

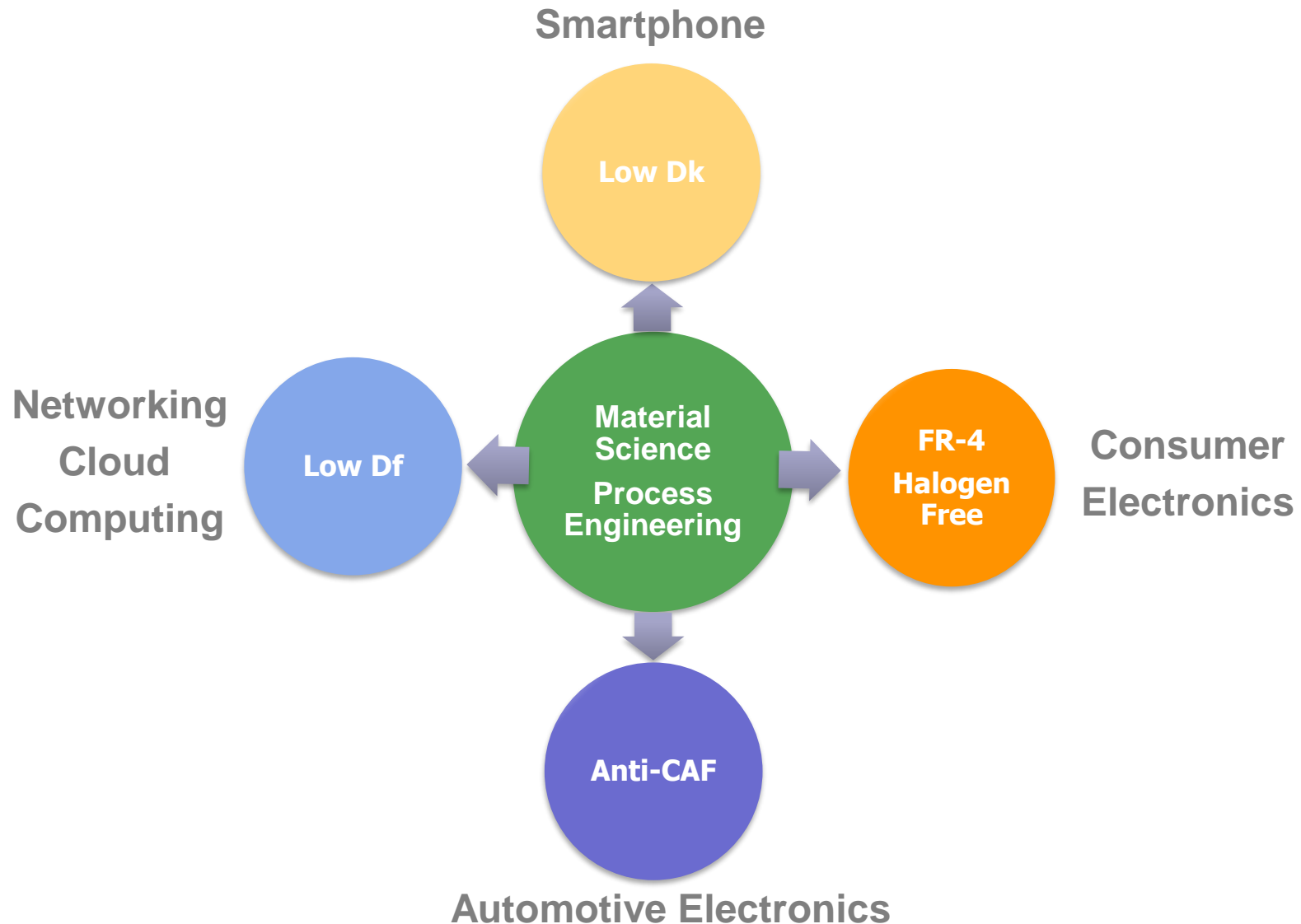
Company Overview

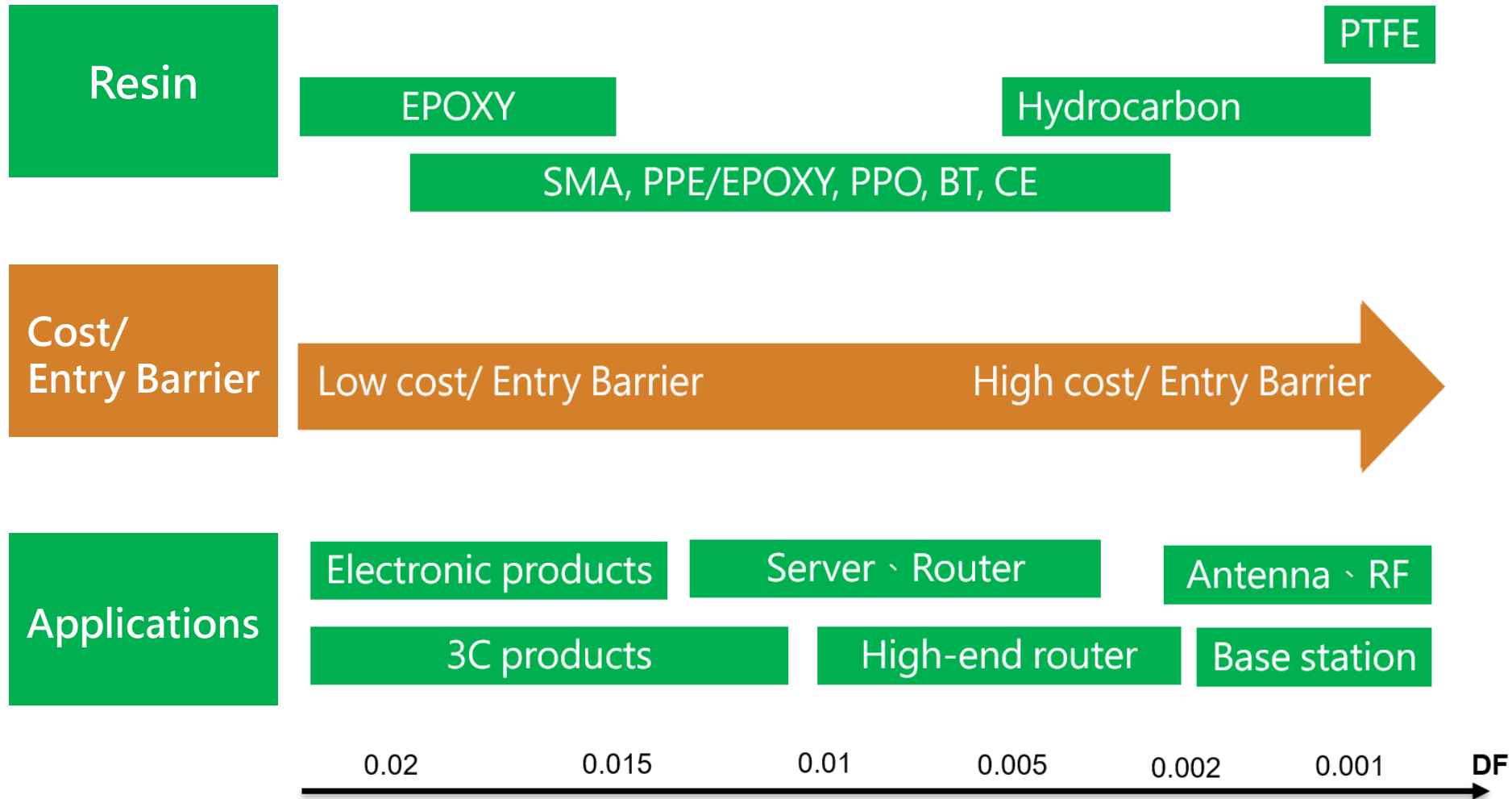
- Establishment : April 10th, 1997
- Headquarter : Hsin Pu, Taiwan
- Capital : US\$ 110 millions
- Employees : 2,906
- Chairman : Mr. John Tsai
- CEO : Mrs. Audrey Tsai
- Products :
 - Copper Clad Laminate & Prepreg
 - Masslam service (4~16L / 2+N+2 HDI)
 - Flexible CCL
 - Metal CCL



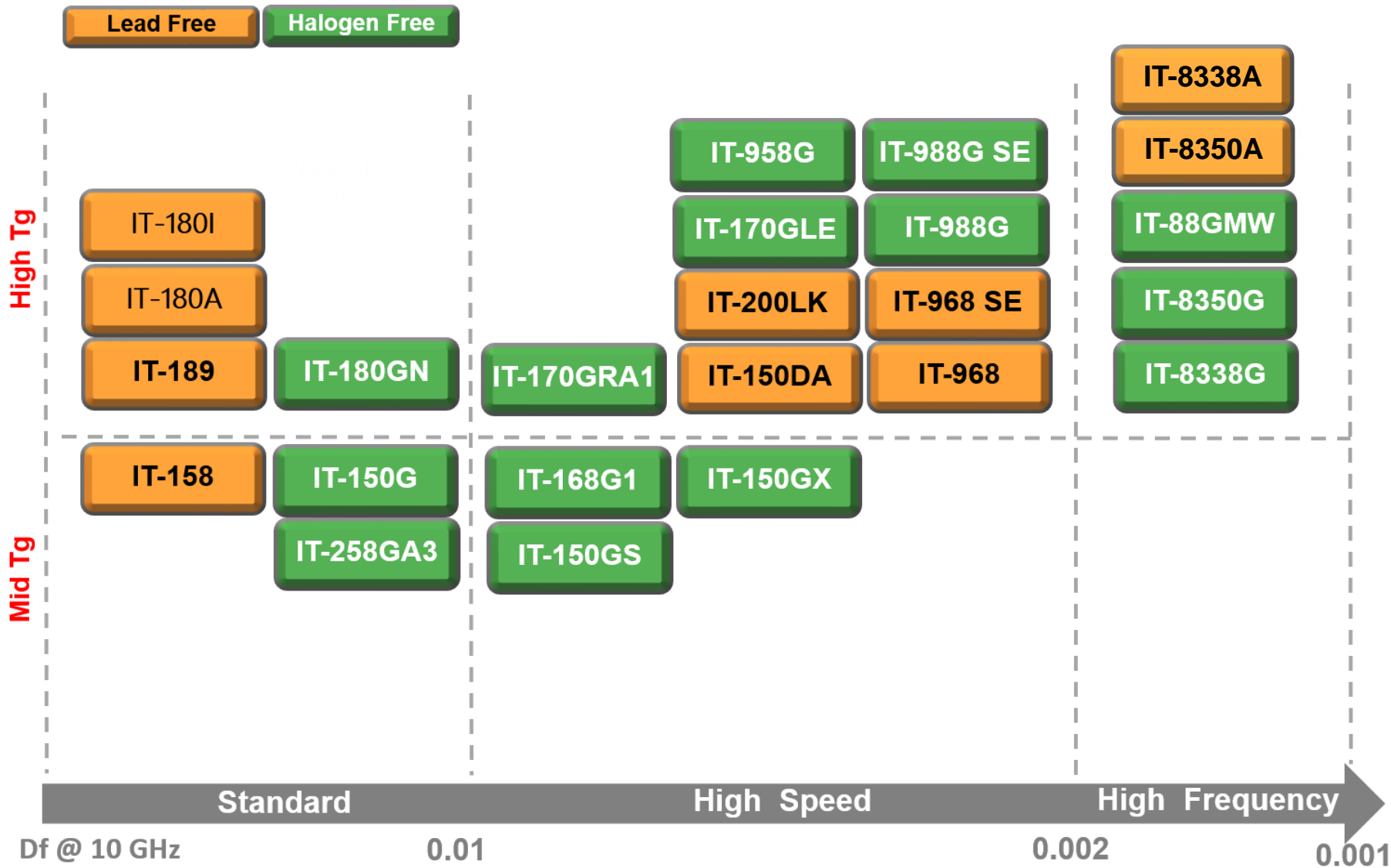
CCL & Prepreg Manufacturing Flow







Product Line



New Production Site - JiangXi



Wuxi

Laminate : 1,800 K sheets
Prepreg : 8,500 K meters



Hsin Pu(Taiwan)

Laminate : 450 K sheets
Prepreg : 1,800 K meters



Dong Guan

Laminate : 1,000 K sheets
Prepreg : 4,500 K meters



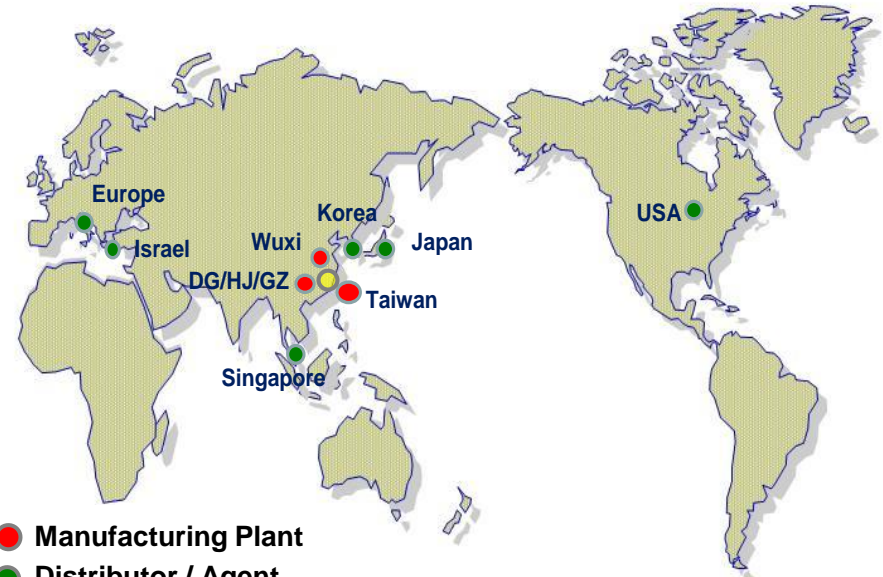
Guang Zhou(Flexible CCL)

3 Layer FCCL : 750 K SQM
2 Layer FCCL : 140 K SQM



Huang Jiang

Mass lam : 500 K SQFT



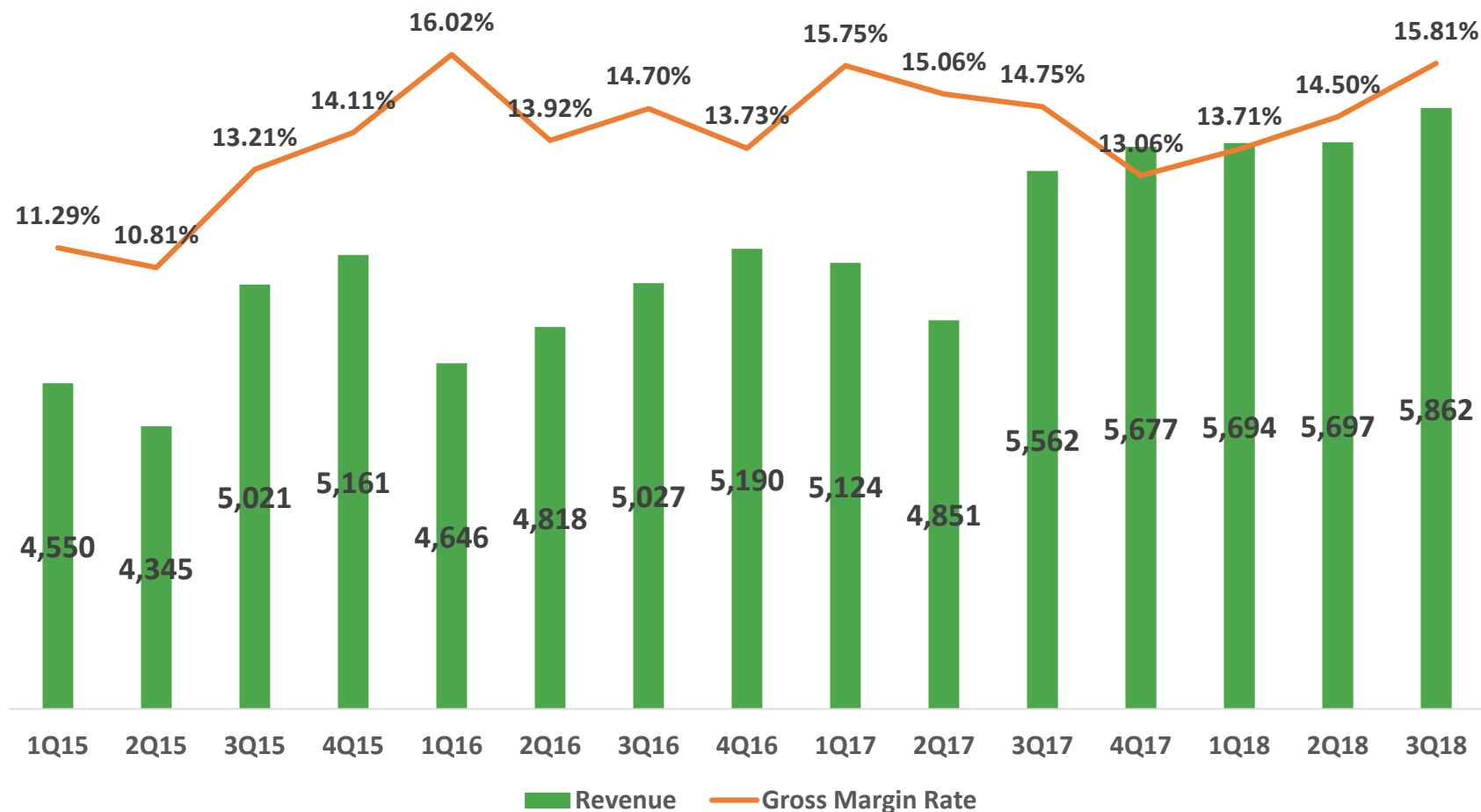
- Manufacturing Plant
- Distributor / Agent
- New Plant

JiangXi (First stage)

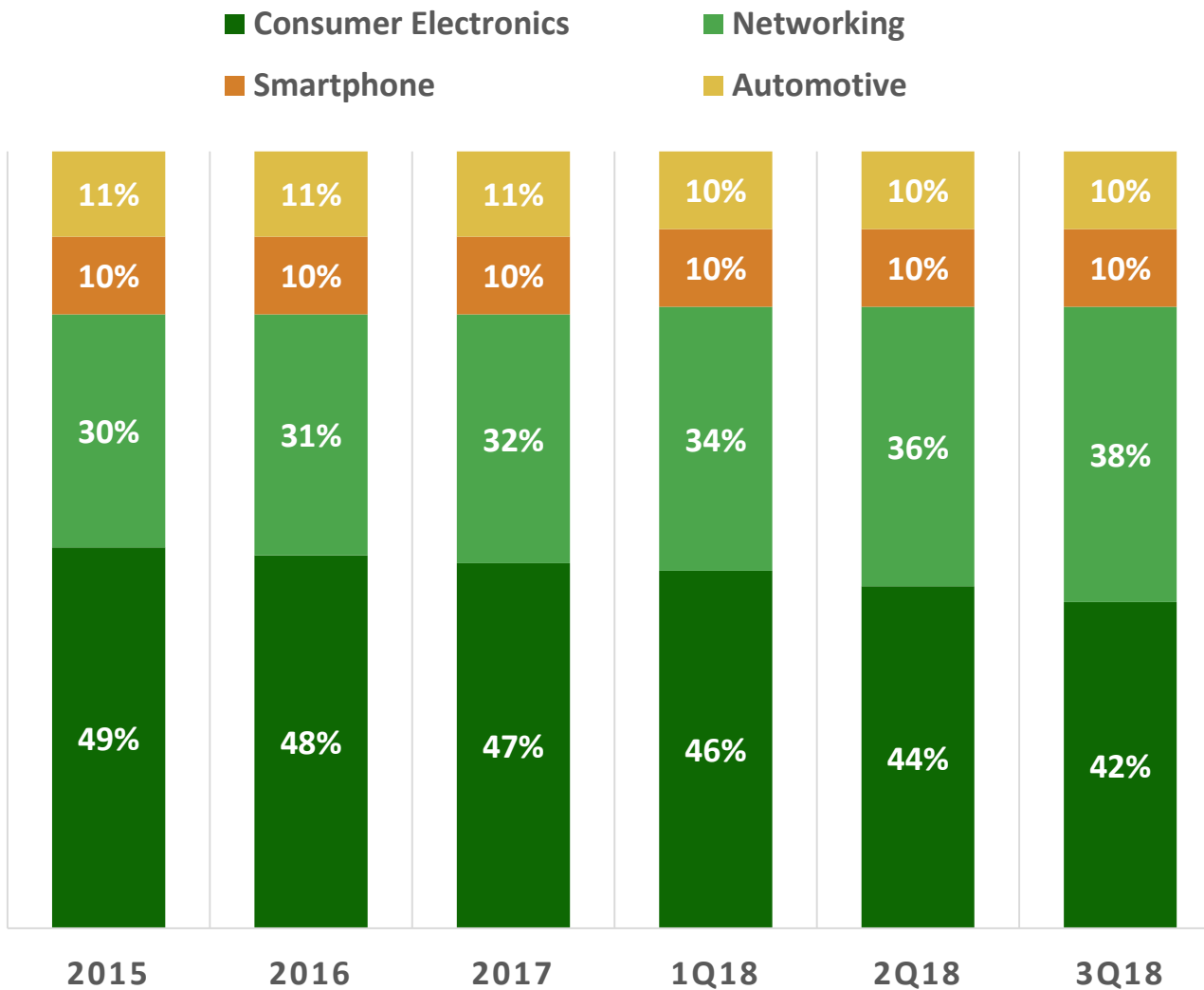
Laminate : 600 K sheets
Prepreg : 4,500 K meters
Investment : 2.1 Billion NTD
Mass Production : 3Q, 2019

Revenue & Gross Margin Rate

(Million NTD)



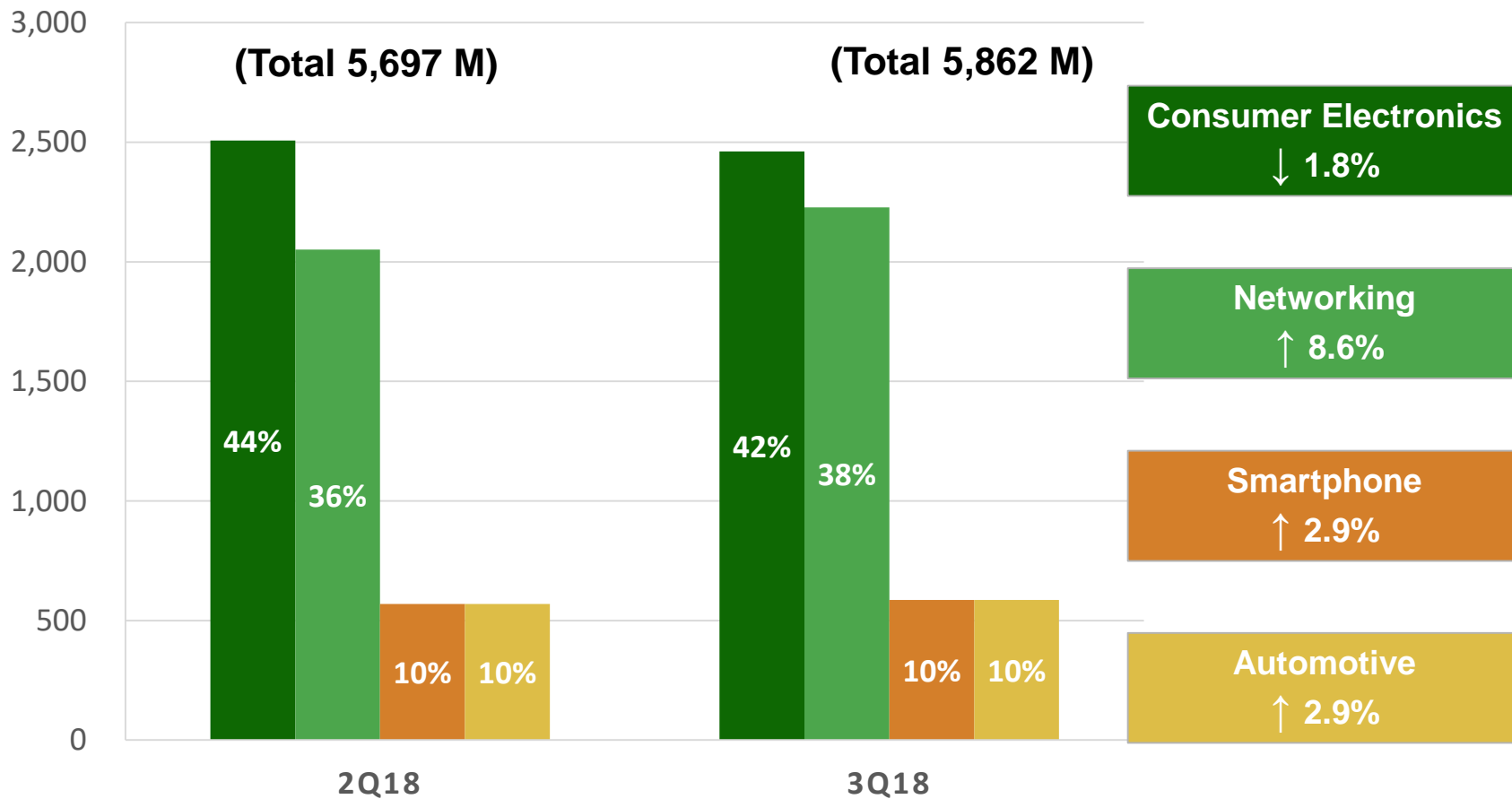
Product Mix



QoQ Change

SALES
(NT\$ MILLION)

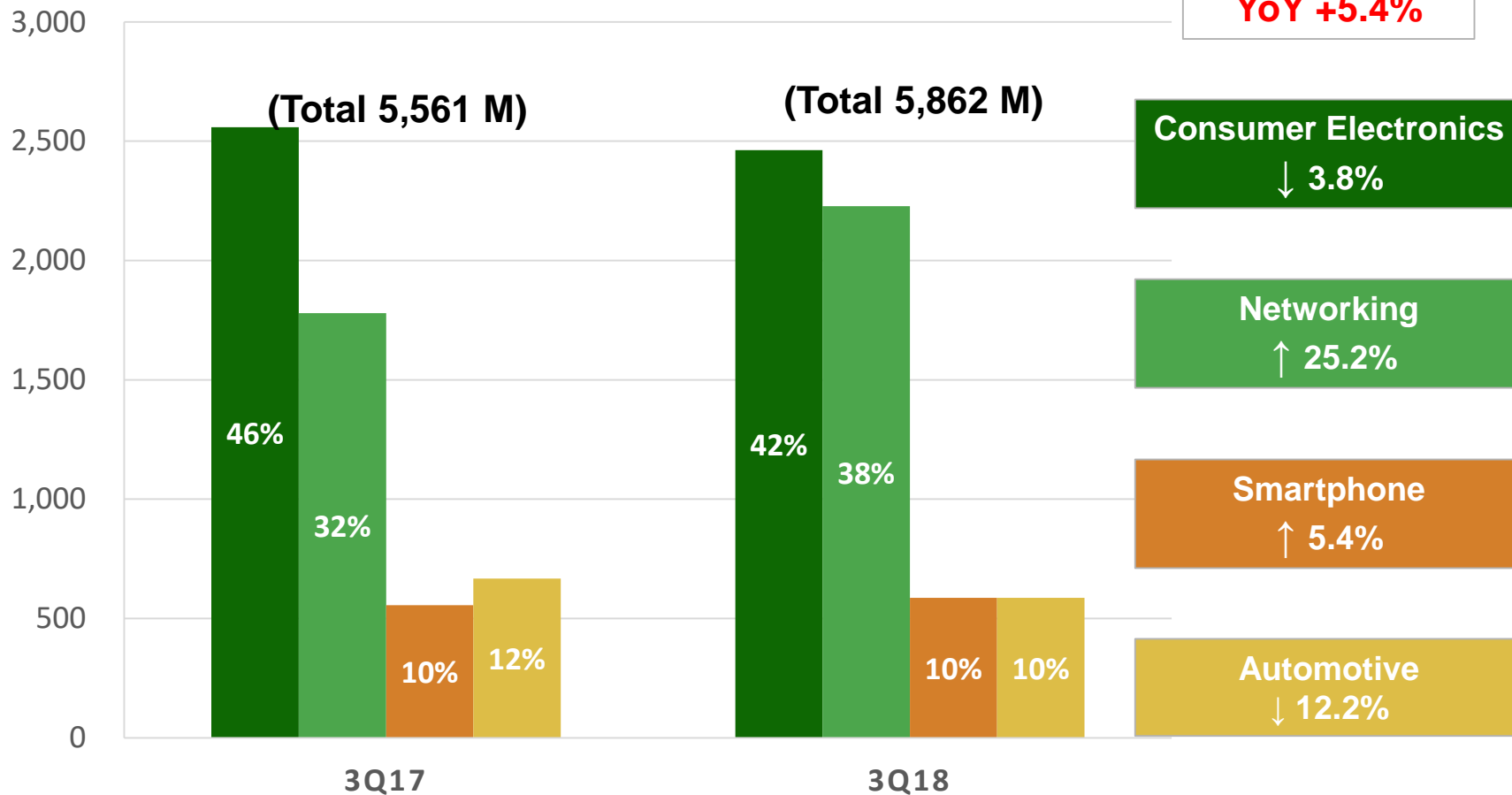
Total Revenue
QoQ +2.9%



YoY Change

SALES
(NT\$ MILLION)

Total Revenue
YoY +5.4%



2017Q3 & 2018Q3 Income Statement

NT\$ Million	2017Q3	2018Q3
Revenue	5,562	5,862
Gross Profit	821	927
Operating Expenses	356	353
Selling	151	137
Administrative	150	136
R&D	55	80
Operating Profit	465	575
Non-Op Income/ Loss	55	(34)
Income Before Tax	519	540
Tax Expenses	157	141
Net Income to Parent	362	399
EPS(NT\$)	1.20	1.31

Key Financial Ratio(%)	2017Q3	2018Q3
Gross Margin	14.75	15.82
Operating Expense Ratio	6.40	6.01
Operating Margin	8.35	9.80
Effective Tax Rate	30.28	26.18
Net Margin	6.51	6.81

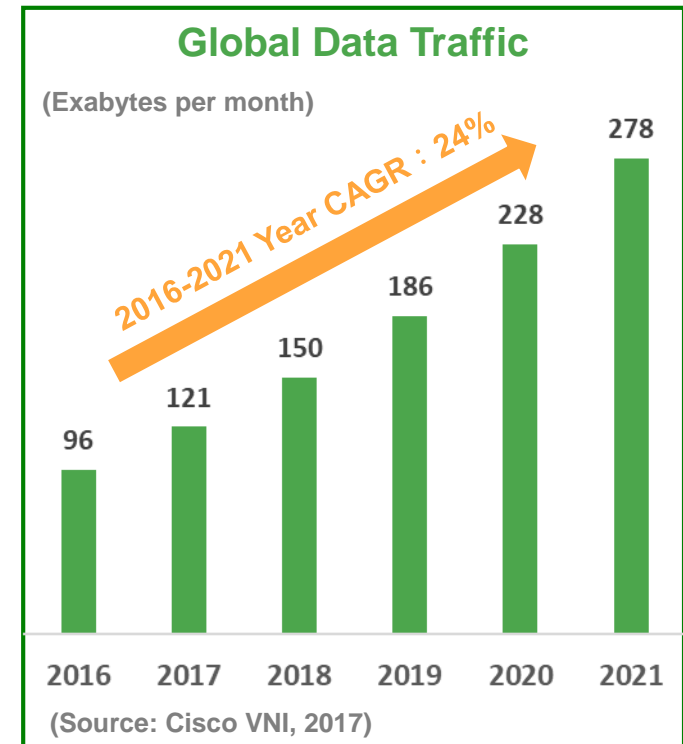
2017Q3 & 2018Q3 Balance Sheet

NT\$ Million	2017Q3	2018Q3
Total Assets	18,334	19,001
Cash	3,624	3,536
Marketable Securities	538	27
NR/AR	7,875	8,941
Inventories	1,662	2,145
Fixed Assets	2,932	2,753
Total Liabilities	11,316	11,600
Short-term Debt	3,457	3,389
NP/ AP	4,600	5,409
Long-Term Debt	1,153	1,035
Total Equities	7,019	7,401

Key Financial Ration(%)	2017Q3	2018Q3
A/R Turnover Days	137	137
Inventory Turnover Days	32	36
A/P Turnover Days	94	96

- Key contributors to data demand include

- Ultra-High-Definition Video streaming
- Connected Home, Work, Health and Car
- Analytics, Big Data, and AI applications
- Cloud computing and Cloud Storage
- Virtual Reality (VR) and Augmented Reality (AR)



The rapid growth of internet traffic will bring the demand to upgrade equipment from operators .

- **The growth of data throughput**

- The interconnect performance bandwidth of PCIe 4.0 is double that of the PCIe 3.0 specification achieving 16Gbps..
- PCIe 5.0 is still in the process, which been estimated will deliver up to 32Gbps, 4x higher data rate than PCIe 3.0.

- **5G networking commercialization**

- Data rate would up to 1-10 Gbps, 10-100 times faster than 4G.
- The high data rate and small coverage of 5G would bring increasing demand of infrastructure.
- Massive MIMO and mmWave - the number of antenna on base station will increase from dozens to hundreds

High Speed Material Application

- **Lower Dielectric constant (Dk) and Dissipation factor (Df)**
- **Higher reliability and consistency over temperature, frequency, and humidity**
- **High Thermal durability and conductivity**

5G Opportunities for ITEQ - Network

Core Network (Telecom Data Center):

- Including **Server, Storage, Switch**

High Speed Material

Building Baseband Unit(BBU)

- Low latency requirements
- Including **Macro Cell, Micro Cell to Small Cell**

High Speed Material

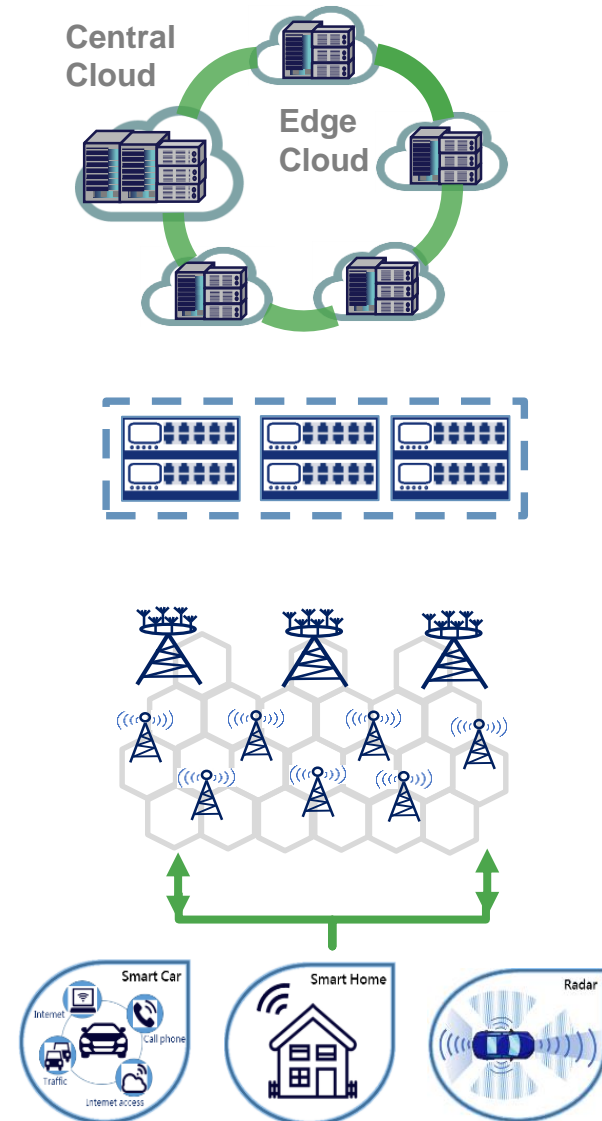
Remote Radio Unit (RRU)+ Antenna

- Including Antenna, LNA, RF Network

High Speed/ Frequency Material

IOT(Internet of Things):

High Speed Material



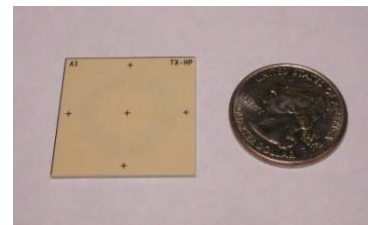
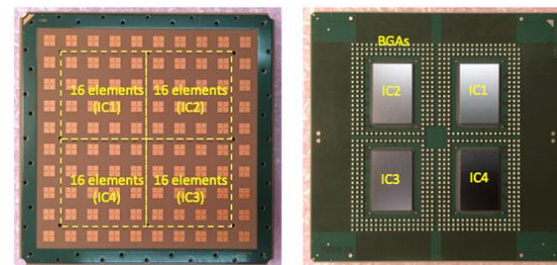
● ITEQ Solution for Networking

- Middle Low Loss: Server 、 Industrial PC
- Low Loss: Whitley Platform 、 AMD Rome
- Ultra Low Loss: 5G base station 、 Optical Module 、 RF Board
- RF Microwave: 5G Antenna 、 PA Module 、 RF Board



● ITEQ solution for smartphone

- Standard : Standard smartphone
- Low Dk Material: Middle to high-end smartphone
- High Tg, Low Dk Material: mSAP Process
- Low Dk Low Loss Material: 5G smartphone



Typical Phased Array Modular Units

5G Opportunities for ITEQ - Automotive

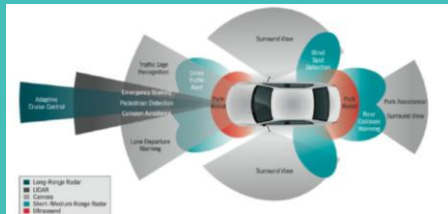
- **Continuous Growing**

- Output value of automotive PCB :

USD 4.9 Billion/2015 ➡ USD 7.5 Billion/2020 (Source: NTI Information)

- **Complete Anti-CAF Product Line**

Automatic Driving



- Safety-Driving
- ADAS

High Frequency Material

- 77~79GHz Radar
- Antenna Module

Connected Mobility



- Infotainment
- Networking

HDI Material

High Speed Material

- Multilayer HDI

Powertrain



- Energy-Saving
- Power Charging

High Tg Material

- Large Current
- High Voltage
- Heavy Copper



Thank You

