

**Industry Leading Provider of Outsourced
Semiconductor Assembly, Test & Bumping Services**

Aug. 2019

Safe Harbor Notice

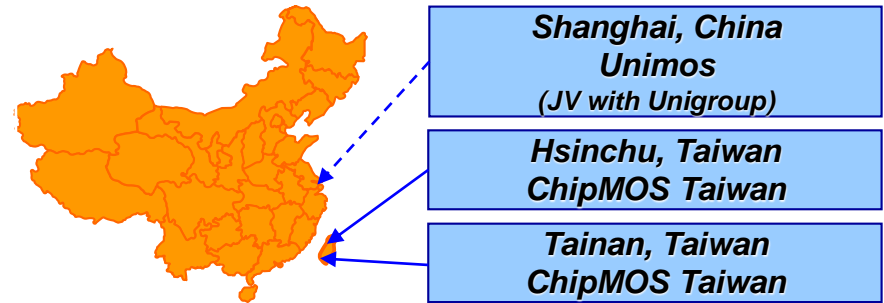
- ❖ This presentation contains certain forward-looking statements. These forward-looking statements may be identified by words such as ‘believes,’ ‘expects,’ ‘anticipates,’ ‘projects,’ ‘intends,’ ‘should,’ ‘seeks,’ ‘estimates,’ ‘future’ or similar expressions or by discussion of, among other things, strategy, goals, plans or intentions. These statements include financial projections and estimates and their underlying assumptions, statements regarding plans, objectives and expectations with respect to future operations, products and services, and statements regarding future performance. Actual results may differ materially in the future from those reflected in forward-looking statements contained in this document, due to various factors. Actual results may differ materially in the future from those reflected in forward-looking statements contained in this document, due to various factors. Further information regarding these risks, uncertainties and other factors are included in the Company’s most recent Annual Report on Form 20-F filed with the U.S. Securities and Exchange commission (the “SEC”) and in the Company’s other filings with the SEC.

Group Snapshot

Overview

- **Founded :** 1997
- **Headquarters :** Hsinchu, Taiwan
- **Ticker Symbol :** TWSE : 8150.TW
NASDAQ : IMOS (ADS)
- **Market Cap.¹:** 569.2MUSD
- **Employee¹:** 5,840

Footprint in Taiwan & China



Hsinchu Tainan



Shanghai

	Hsinchu	Tainan	Shanghai	
Memory	Test	Assembly	Test	Assembly
Mixed-Signal	Test	Assembly		
Display Driver	Gold bump	COG/COF		

Business Focus

Taiwan and Global customers

China domestic market and Unigroup's project

(1) As of June 28, 2019.

(2) The exchange rate was NT\$31.01 against to US\$1.00

ChipMOS Footprints

Headquarter

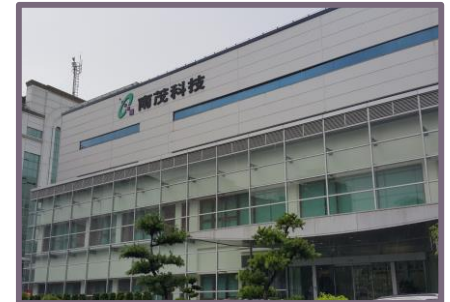
Hsinchu Science Park, Hsinchu City



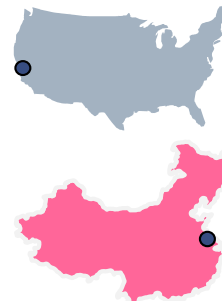
Huko FAB 1 & 2, Hsinchu County



Chupei, Hsinchu County



Southern Science Park, Tainan City

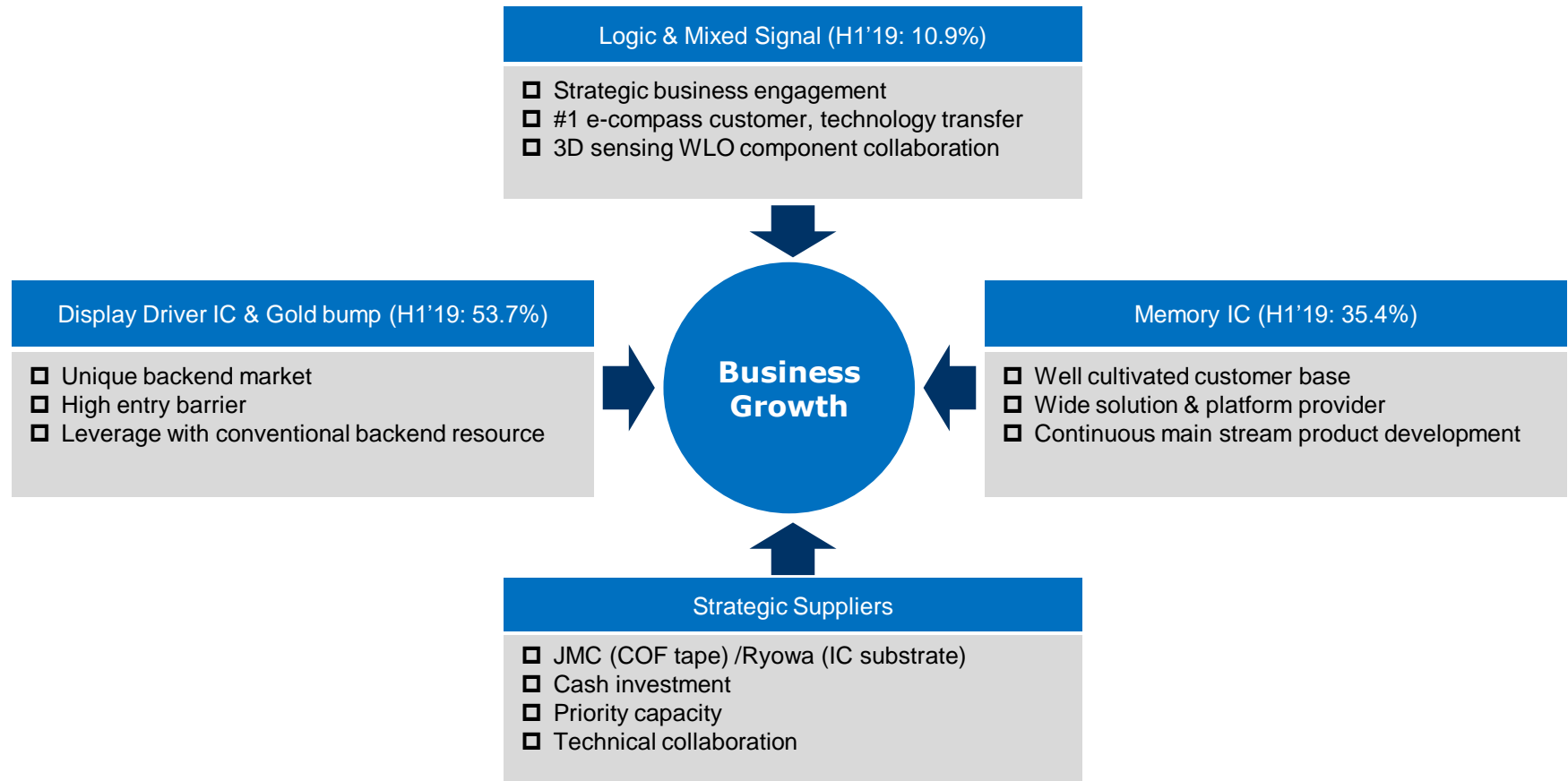


San Jose
ChipMOS U.S.A., Inc.

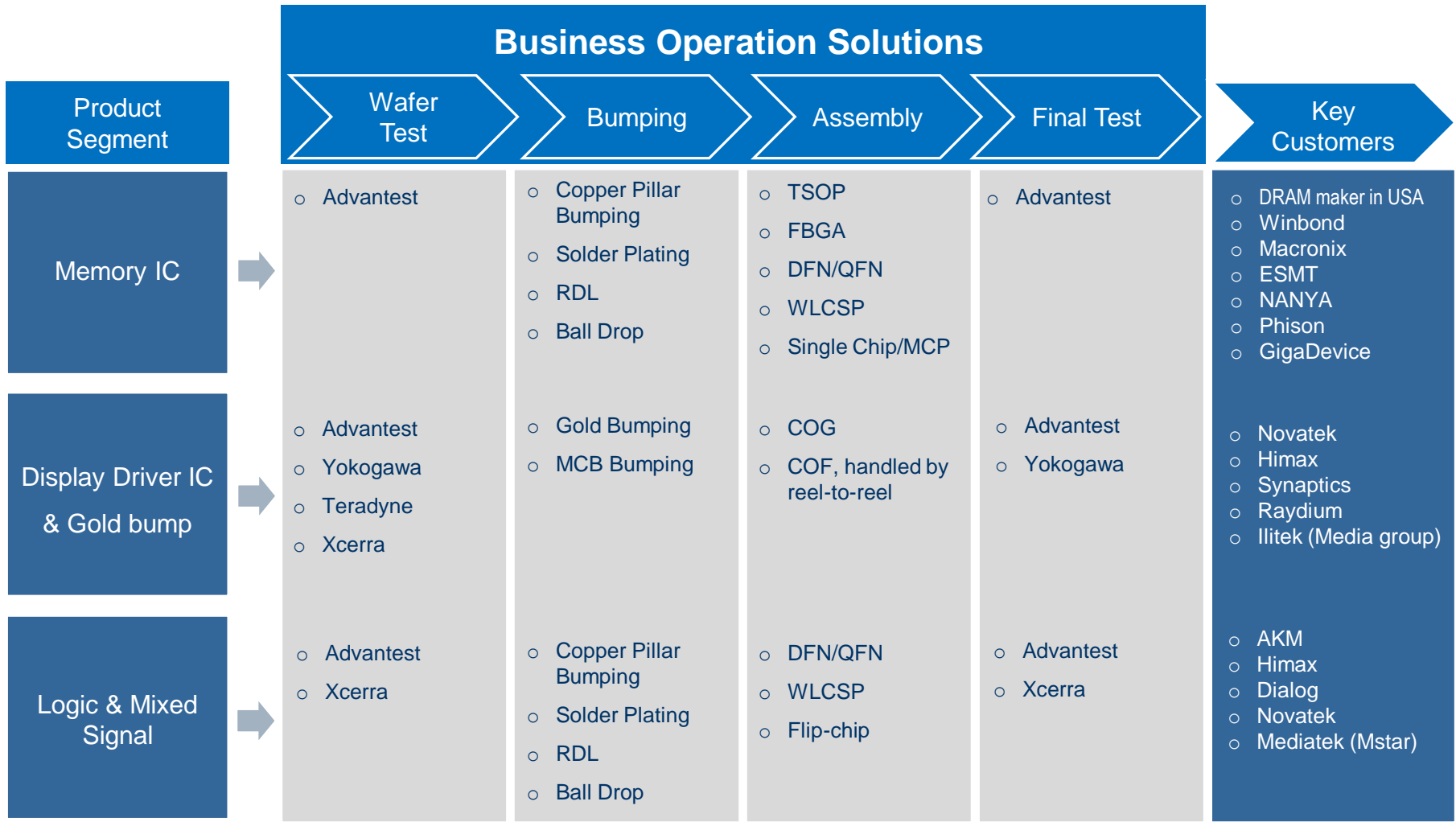
Shanghai
紫光宏茂 UNIMOS
(JV with Tsinghua Unigroup)

Positioned in Specialized OSAT Markets

- ❑ Providing turnkey solutions for niche OSAT markets
- ❑ Owning specialized teams and resources to support customer in the fields
- ❑ Growing with operation performance and strategic alliance including customers and suppliers



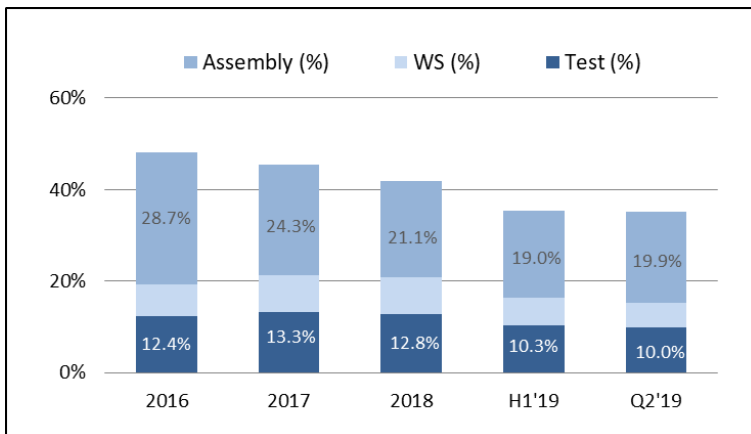
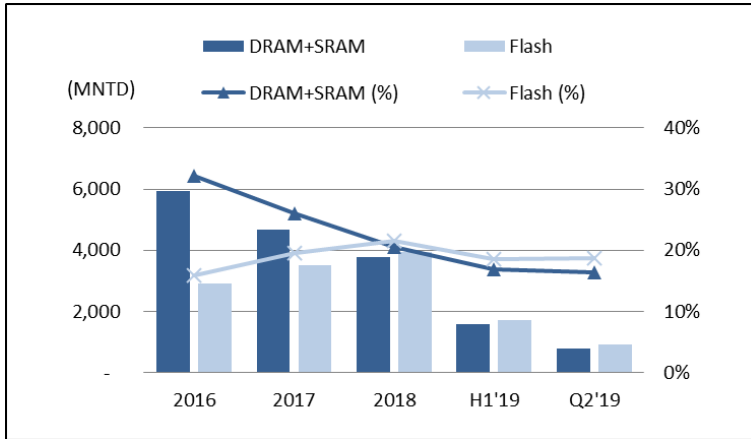
Business Operation Solutions for Customers



Operation Performance

Memory IC

Q2'19: 35.2%



Key Message

□ DRAM: 15.7%

- Customer inventory level improving, especially in niche DRAM. Rush demand appearing since entering H2'19.

□ Flash: 18.8%

■ NOR Flash

- ✓ Customer inventory improving significantly
- ✓ Heavier wafer start at customer sites gives better outlook in H2'19

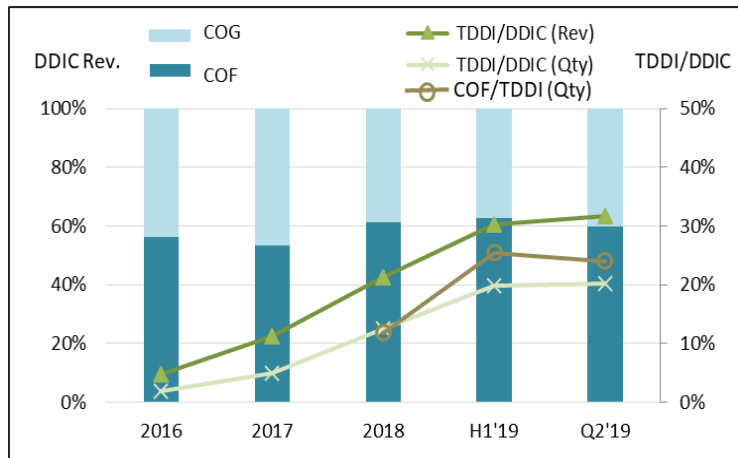
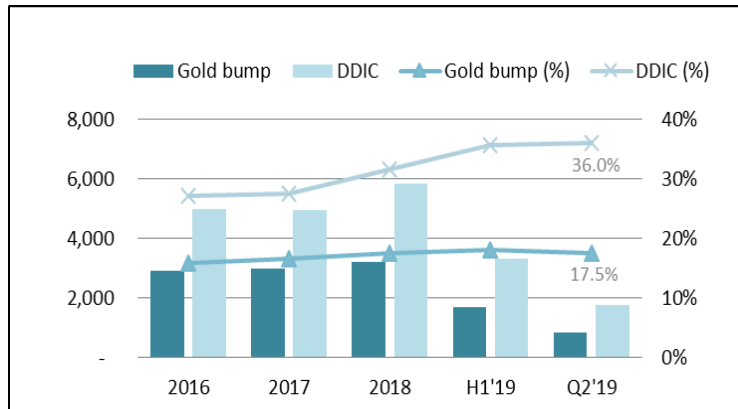
■ NAND Flash

- ✓ IDM customers with lower density demand appearing in entering H2'19
- ✓ Shipment to Module/brand customers for higher density intensifying in entering H2'19

Operation Performance (Cont'd)

DDIC & Gold bump

Q2'19: **53.5%**



Key Message

Large Panel Display (TV)

- High COF capacity running at assembly and test, although slower TV shipment
- COF represented about 60% of DDIC revenue in Q2'19

Small Panel Display (Smart phone)

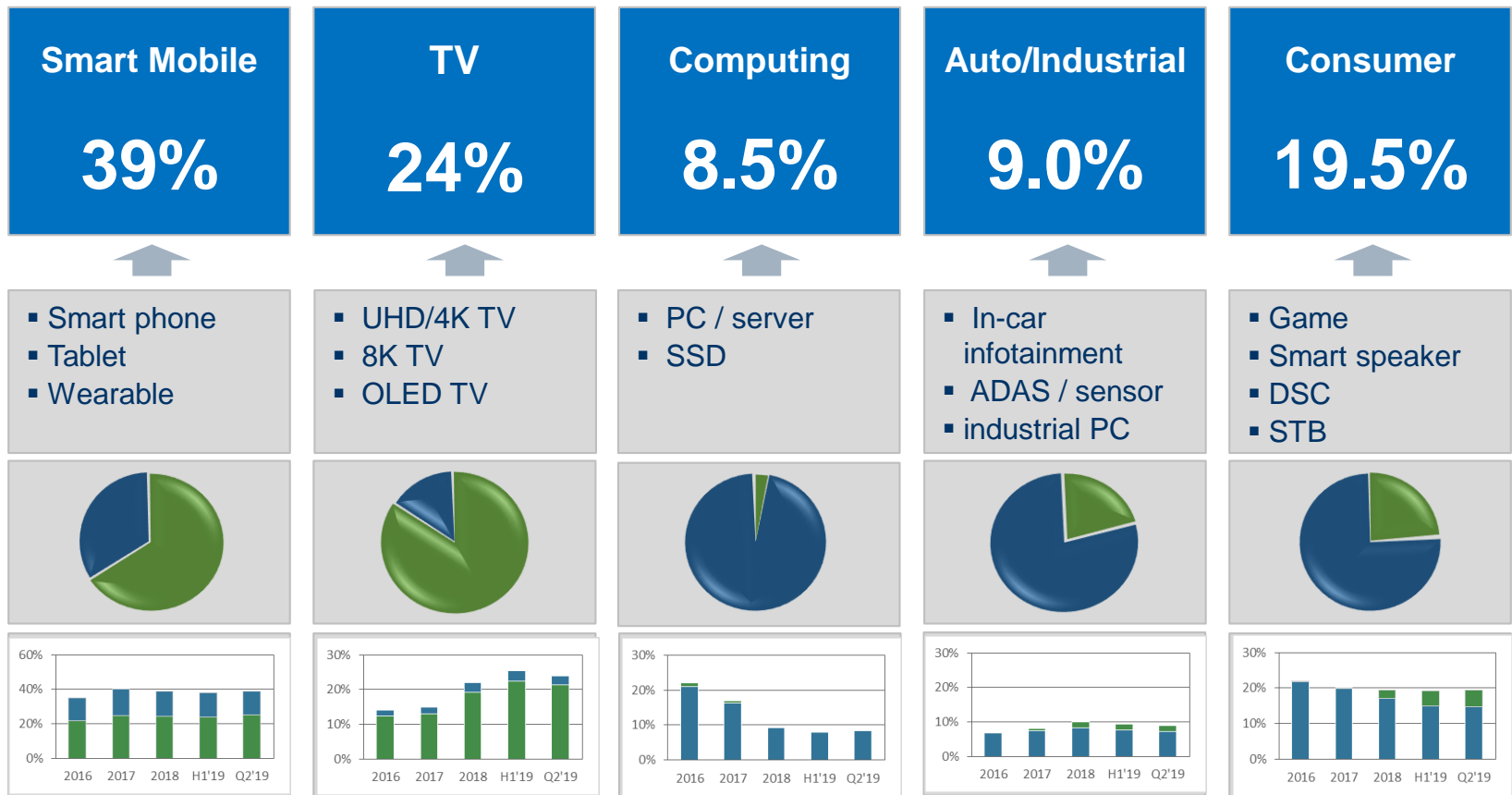
- Still strong TDDI penetration rate triggering revenue growth in H2'19
- Narrow bezel panel smart phone still drives 12" COF adoption in H2'19
- OLED panel driver IC intensifying in entering H2'19

TDDI portion

- TDDI represented about 31.7% of Q2 DDIC revenue, 30.2% in H1 and 28.5% in Q1'19.
- About 20.2% of Q2 DDIC is TDDI, 19.9% in H1'19 and 19.4% in Q1'19
- About 24.0% of Q2 TDDI product is packaged by COF, 25.5% in H1'19 and 27.2% in Q1'19.

Diversified Product Application – Q2'19

Content Performance



DDIC & Gold bump

Memory & Mixed-signal

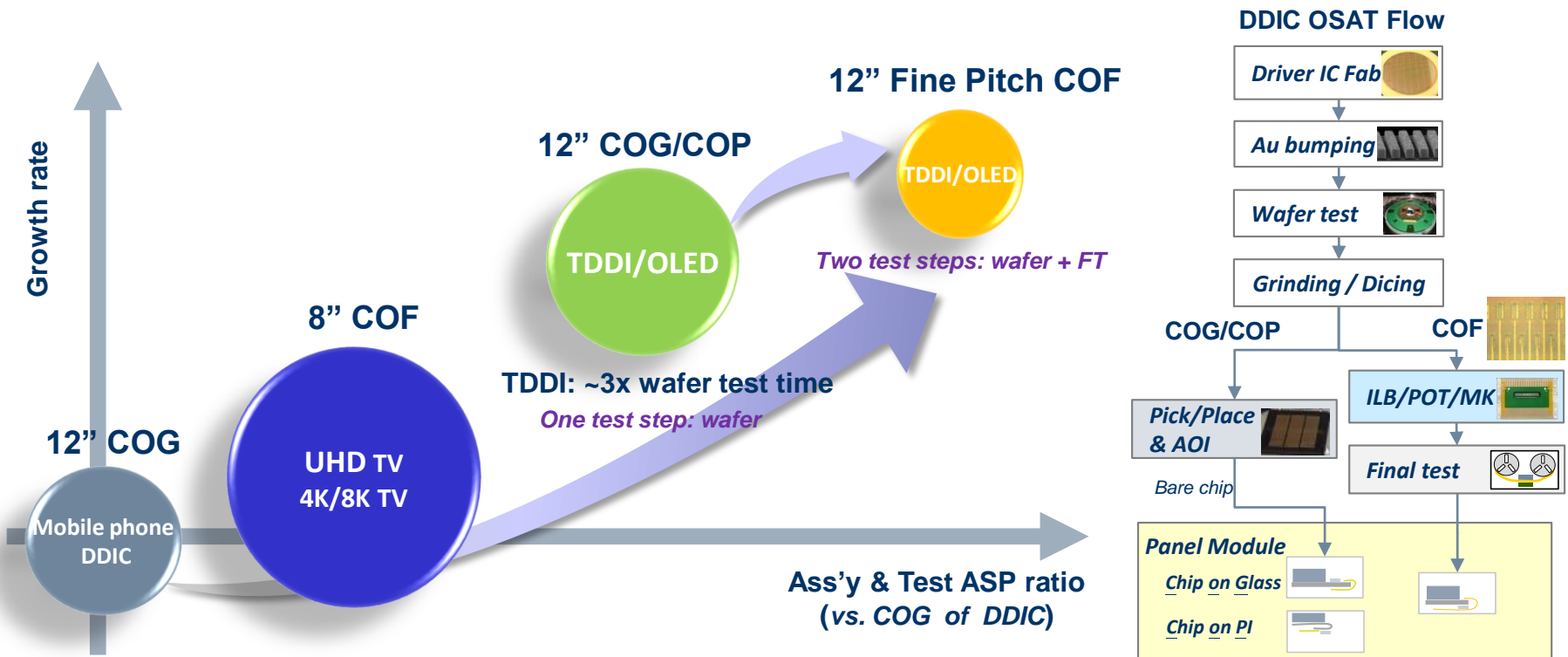
Leverage DDIC Growth by COF & TDDI Penetration

□ COF

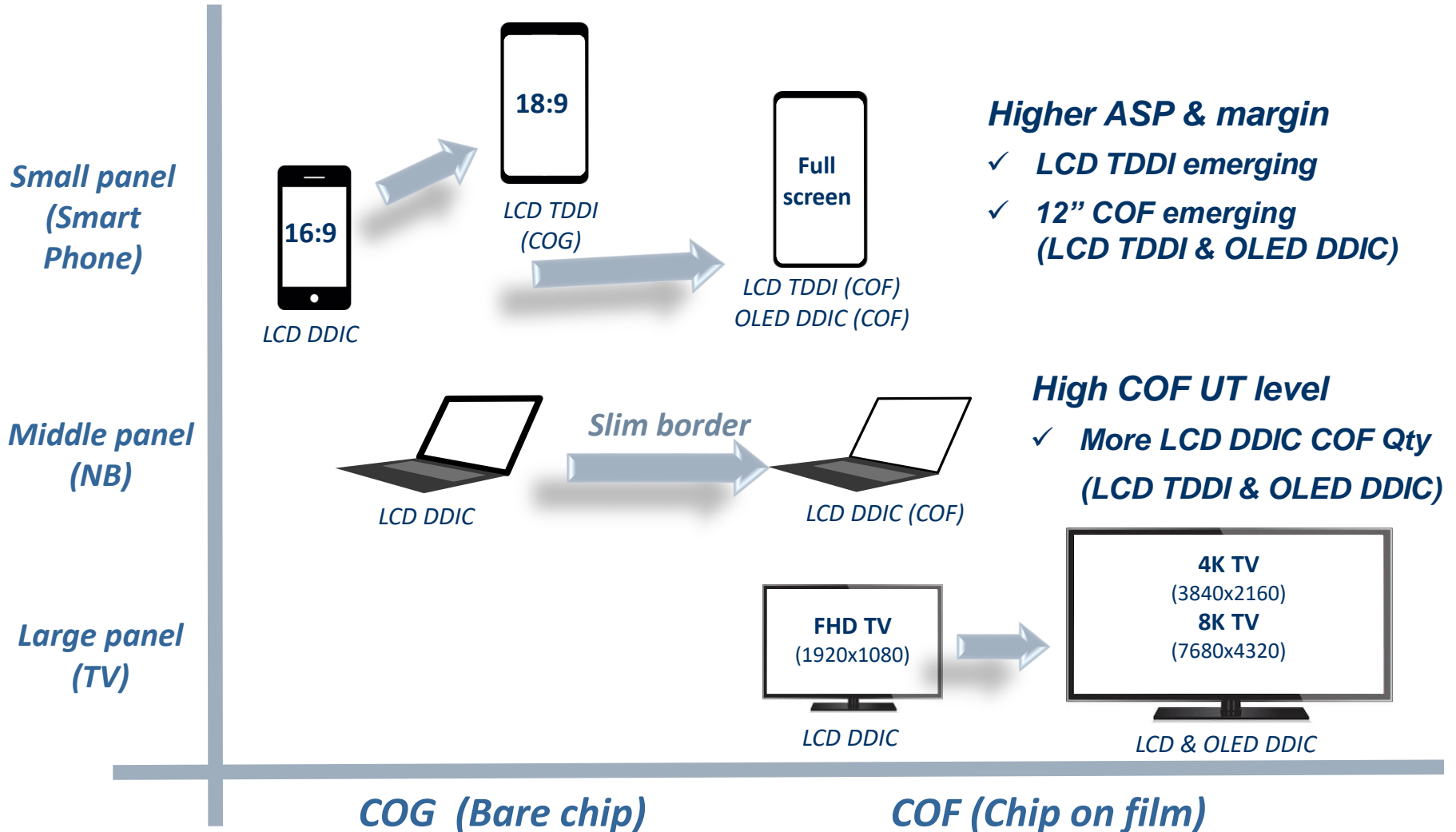
- Stable demand of 4K TV, and 8K TV emerging
- Conversion of 12" fine pitch COF for narrow bezel panel and 18:9 panel

□ COG

- Strong TDDI demand in H2 2018 due to high TDDI penetration ratio

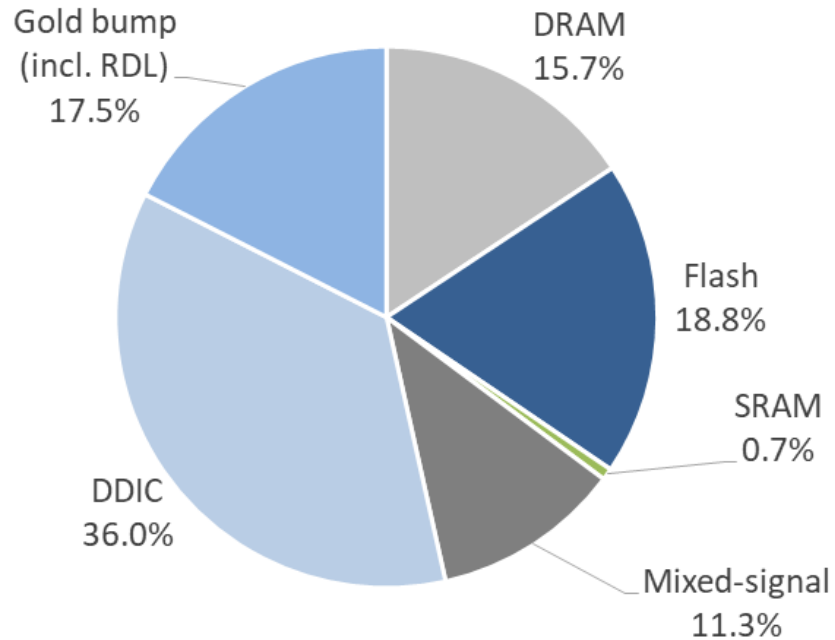


Display Driver IC Form Factor Transition

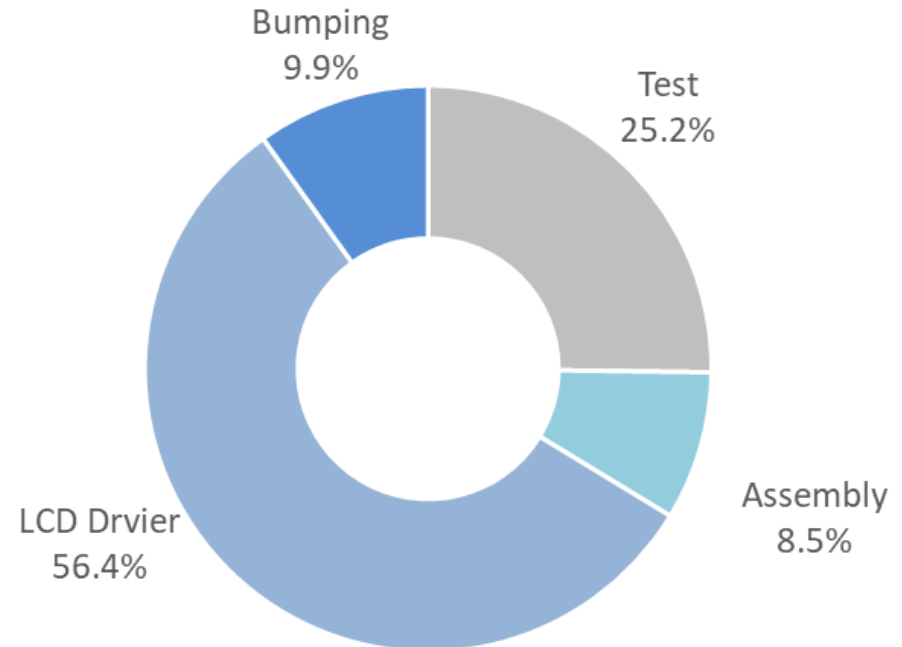


Financial Highlight – Q2'19 Breakdown (unaudited)

Revenue by Product

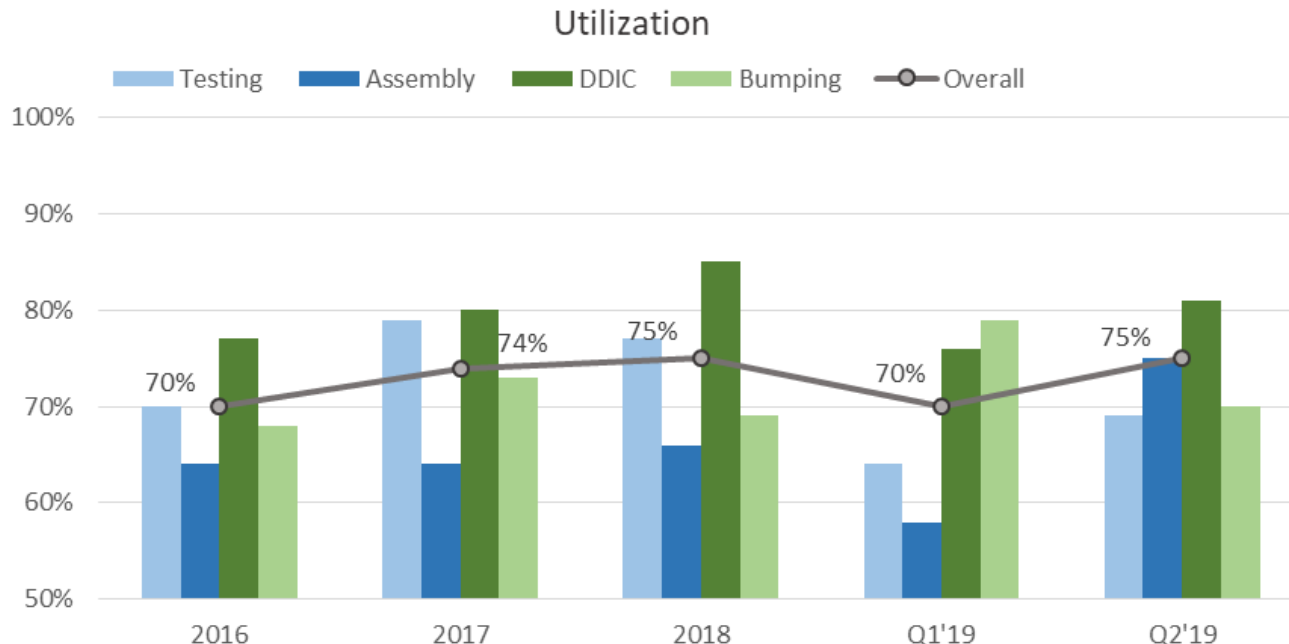


CapEx by Segment



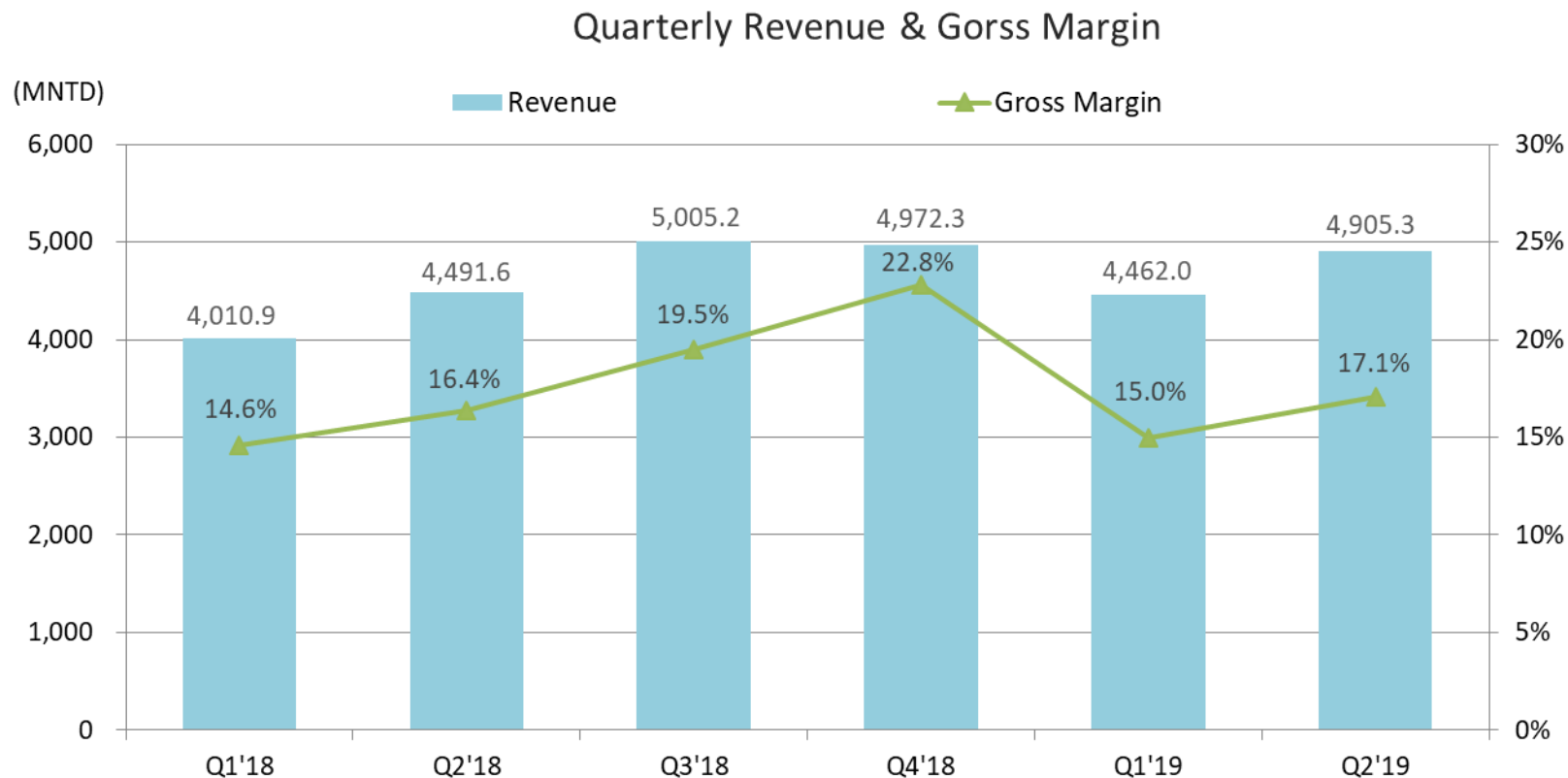
Utilization

- Q2 improved to 75% from 70% of Q1
 - Assembly improved to 75% from 58% of Q1, benefited to NAND Flash business of module house
 - Testing benefited for healthy inventory level and rush demand
 - DDIC improved to 81% due to TDDI penetration rate increased in Q2
 - Bumping declined according to the soft 12" Au bump demand of customer in Q2
Non-driver grows and releases 12" Au bump demand in the beginning of Q3



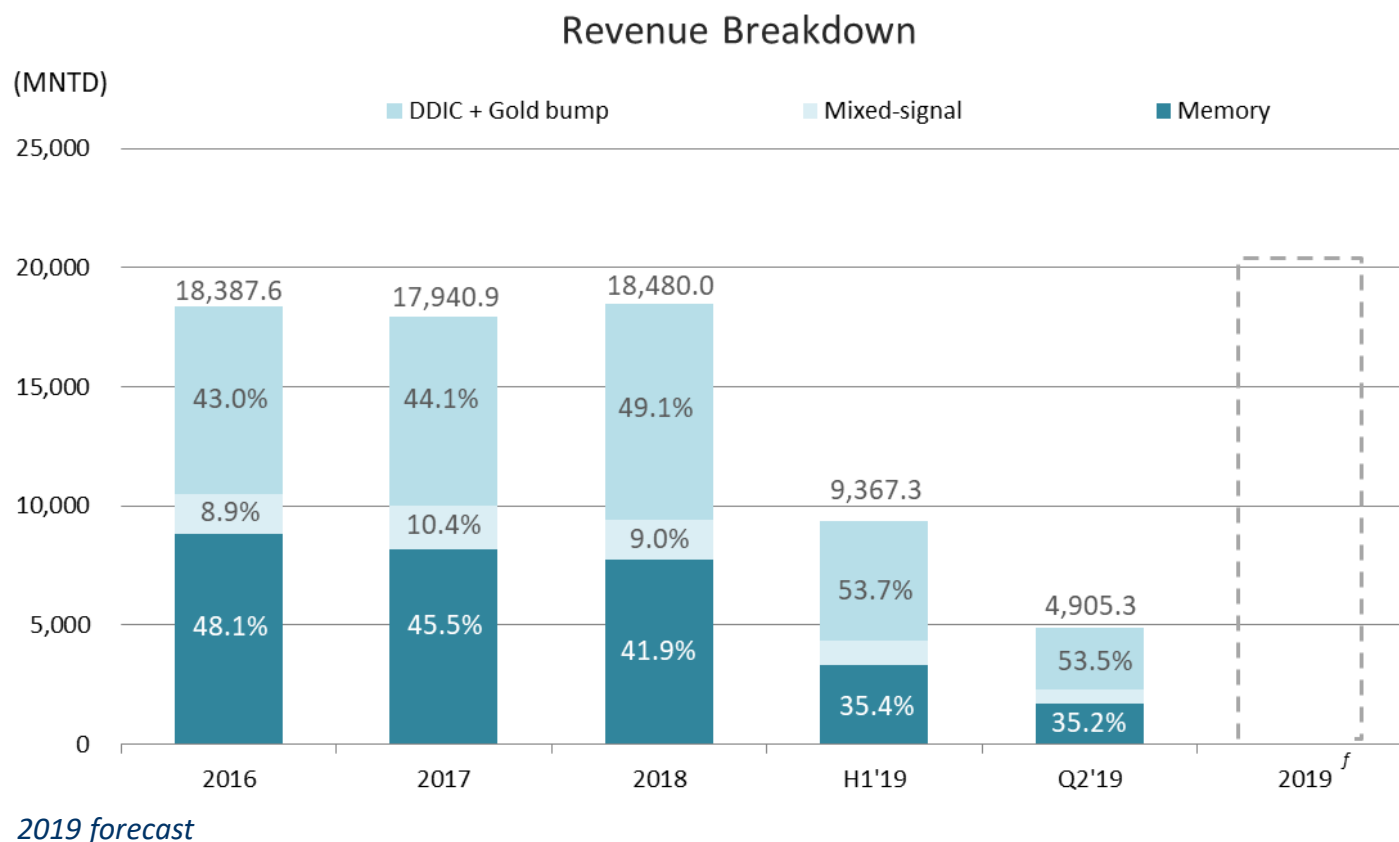
Financial Highlight – Quarterly Revenue & Gross Margin

- 2018 gross margin : 18.6%
- 2019 gross margin level: 16~20%



Financial Highlight – Revenue Breakdown

- 2019 organic revenue growth: high single digits
 - Q2 grew 9.9% (QoQ), and 9.2% (YoY)
 - H1 grew 10.2% (YoY)



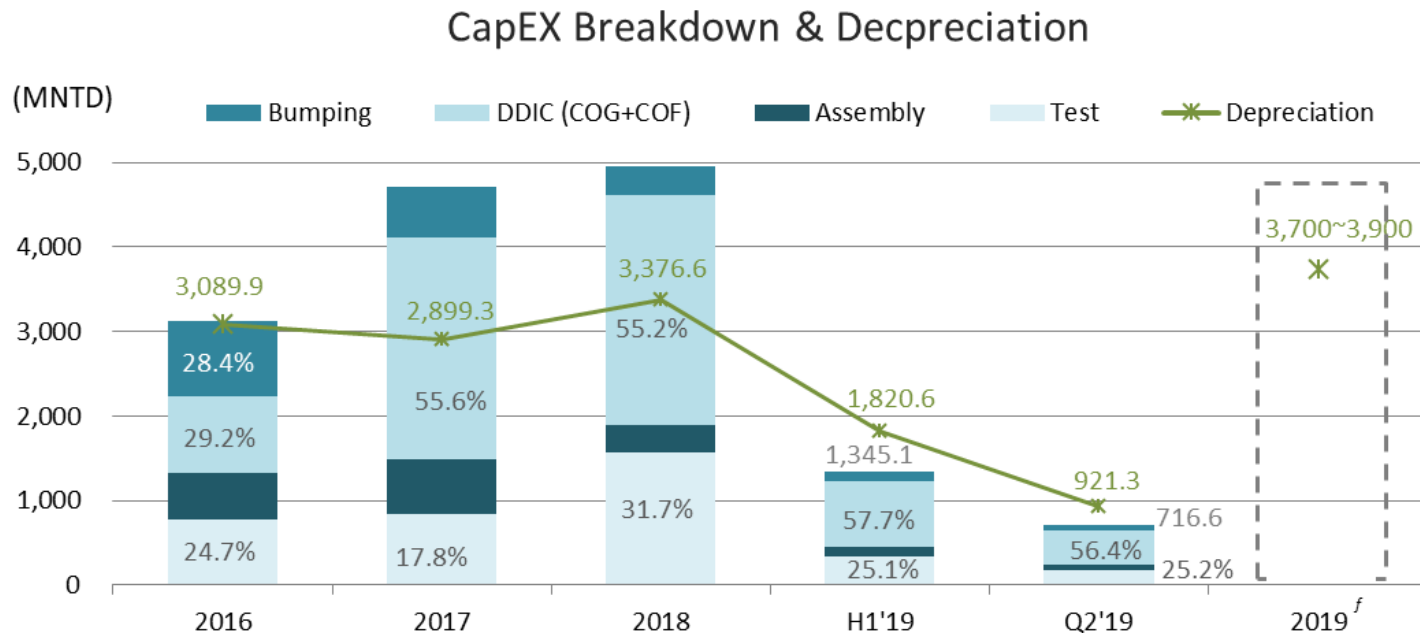
Financial Highlight – Capital Expenditures & Depreciation

□ 2018 CapEX: 4,945.6MNTD

- TDDI wafer test & 12" fine pitch COF assembly (55.2%)
- Memory wafer test (31.7%)

□ 2019 CapEX: 20~25% of annual revenue

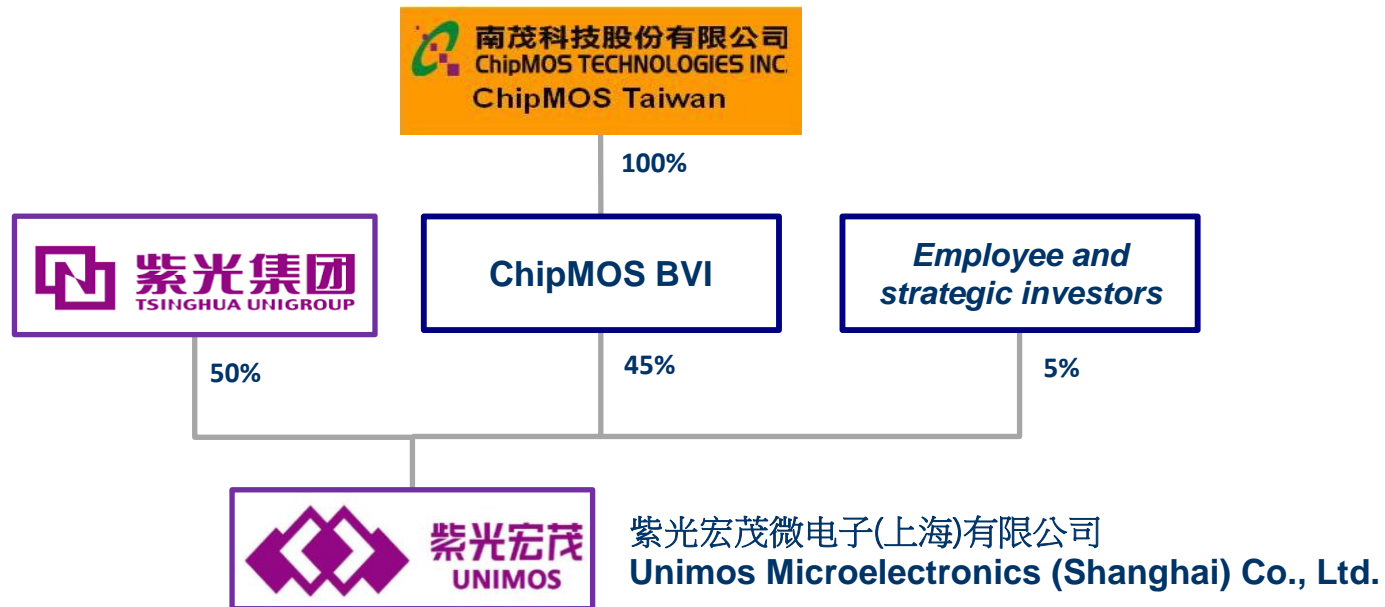
- DDIC test capacity and 12" fine pitch COF assembly capacity (~60%)



2019 forecast

Corporate Holding Structure

- ❑ Except for being the investors of Unimos, there are no other legal relationship between ChipMOS and Tsinghua Unigroup.
- ❑ The technology transfer between ChipMOS and Unimos had been completed. ChipMOS no longer provides any technology to Unimos.
- ❑ Unimos becomes a long-term investment of ChipMOS and recognized profit/loss pro rata. ChipMOS is not responsible for the business performance of Unimos.



Note: ChipMOS Shanghai already changed company name to Unimos on Jul/4'18.

Company Website

■ <https://www.chipmos.com>

