



TSMC Details Impact of Fab 14B Photoresist Material Incident, Updates 1Q'19 Guidance

Hsinchu, Taiwan, R.O.C., February 15, 2019 -- TSMC (TWSE: 2330, NYSE: TSM) today updates its first quarter 2019 guidance following the completion of the assessment of all the wafers affected by a batch of problematic photoresist material.

TSMC discovered that a batch of photoresist from a chemical supplier contained a specific component which was abnormally treated, creating a foreign polymer in the photoresist. The foreign polymer created an undesirable effect on 12/16-nanometer wafers at Fab 14B. This effect was detected later on when the wafers deviated from normal yield.

To ensure the quality of our wafers delivered to customers, we have decided to scrap a higher number of wafers than our earlier estimate.

TSMC expects the financial impact from the photoresist incident to be as follows:

- This incident is expected to reduce Q1 revenue by about US\$550 million, gross margin by 2.6 percentage points, operating margin by 3.2 percentage points, and EPS by NT\$0.42.
- The wafers scrapped in Q1 will be made up in Q2. This will contribute about US\$550 million to Q2 revenue, increase gross margin by 1.5 percentage points, operating margin by 2.1 percentage points, and EPS by NT\$0.34.
- For full year 2019, this incident is forecast to reduce gross margin by 0.2 percentage point, operating margin by 0.2 percentage point, and EPS by NT\$0.08.

At the same time, TSMC has taken action to pull in certain production from Q2 and has seen some increases in demand. These will result in about US\$230 million of additional revenue in Q1.

Including the above factors, the company now expects Q1 revenue to be between US\$7 billion to US\$7.1 billion, Q1 gross profit margin to be between 41% and 43%, and Q1 operating profit margin to be between 29% and 31%.

Since TSMC discovered the yield issues caused by the problematic material, it has maintained constant communication with affected customers and has worked out replacement and delivery schedules with each of them. TSMC has taken action to strengthen inline wafer inspection and tighten control of incoming material to deal with the increasing complexity of leading-edge technologies.



TSMC 1Q'19 Guidance		
	Revised Guidance (02/15/2019)	Original Guidance (01/17/2019)
Net Revenue (US\$ billion)	7.0-7.1	7.3-7.4
Gross Margin	41%-43%	43%-45%
Operating Margin	29%-31%	31%-33%

About TSMC

TSMC is the world's largest dedicated semiconductor foundry, providing the industry's leading process technology and foundry's largest portfolio of process-proven libraries, IPs, design tools and reference flows. The Company's owned capacity in 2019 is expected to exceed 12 million (12-inch equivalent) wafers, including capacity from three advanced 12-inch GIGAFAB® facilities, four eight-inch fabs, and one six-inch fab, in Taiwan, as well as TSMC's wholly owned subsidiaries, WaferTech, TSMC China, and TSMC Nanjing. TSMC is the first foundry to provide 7-nanometer production capabilities. Its corporate headquarters are in Hsinchu, Taiwan. For more information about TSMC please visit <http://www.tsmc.com>.

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