

**TSMC Great 4Q, Awful Guidance**

TSM		Taiwan Semiconductor Mfg Corp (TSMC)			
<b>Qtr:</b>	4Q	<b>Grade:</b>	D	<b>Growth(qtr-qtr)</b>	
<b>Rev:</b>	8,253	<b>Rev:</b>	+++	<b>Rev:</b>	+0.7%
<b>GM:</b>	52.3%	<b>EPS:</b>	+++	<b>Fcst:</b>	-11-10%
<b>EPS:</b>	\$0.61	<b>Fcst:</b>	- - -	<b>Div:</b>	\$0.1865*

**Taiwan Semiconductor Manufacturing Corp (TSM, \$29.29 -0.88, Rated Hold in my latest Chip Investment Ideas)**  
**Mixed 4Q:** TSM announced mixed 4Q results very early yesterday. The 4Q was outstanding as both revenue and earnings exceeded the high-end of the range of expectations due to strength from smartphones, computers, advanced 16nm technology and a favorable currency exchange rate. However, 1Q revenue guidance for a sequential decline of -10% due to slack smartphone seasonality and slightly greater-than-seasonal supply chain inventory levels was below the low-end of expectations. Management expects the Board to raise the dividend next month.

By application: Communication sales grew by +11% to account for 66% of total sales, up from 60% on smartphone strength; Computer was up by +7% but remained at 8% of sales; Industrial/Standard declined by 6% to 20% of sales, down from 21%; and Consumer dropped seasonally by -43% to 6% of sales, down from 11%. By geography: North America accounted for 69% of sales, down from 68%; Asia-Pacific 11% down from 15%; China 8% up from 6%; EMEA (Europe, Middle East, Africa) unchanged at 6%; and Japan at 6% up from 5%. By technology node, advanced technologies (28nm and less) grew to 57% of wafer revenue, up from 55%, with 28nm accounting for an unchanged 24% of sales and combined 16nm and 20nm nodes accounting for 33%, up from 31%.

TSMC grew revenue by 11% last year, achieving wafer foundry market share of 56% up from 55% in 2015 primarily due to 16nm and 20nm technology leadership. The wafer foundry sector grew by +8% on strength from 4G smartphones to China, video game upgrades, and the emergence of artificial intelligence as the overall market for semiconductors was flat. Management expects TSMC to grow by +5+10% in 2017 (with the first half at +10% and the second half at +5%) amid semiconductor industry growth of +4% as increasing smartphones and IoT (Internet of Things) more than offset declines from PCs and tablets. Capital expenditures flat at last year's \$10.2B.

Emerging 7nm technology is expected to be qualified by the end of 1Q and already has over 20 customers. EUV is expected to be implemented in the second year of 7nm production and 5nm is still two years out.

TSMC is a great company profitably gaining dominant market share in an expanding sub-sector of the semiconductor industry due to technology leadership that is worth a share price valuation premium. But at 5-times sales and 14-times earnings I'm not sure how much more of a premium it's worth. I remain on the sidelines.

—**Dan K. Scovel**  
*Semiconductor Analyst*

**LEGEND**

		Grade	
+++	exceeded the high-end of the range		
++	above consensus, within the high-end of the range	A	all +++
+	slightly above consensus	B	all +
o	met consensus	C	all o/+
-	slightly below consensus	D	mixed -o/+
--	missed consensus, within the low-end of the range	E	all o/-
---	missed the low-end of the range	F	all -

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