

PRESS RELEASE – April 28, 2015

TSMC Solar Commercial-size Modules (1.09m²) Set CIGS 16.5% Efficiency Record

TAICHUNG, TAIWAN, April 28, 2015 /PRNEWSWIRE/ -- TSMC Solar Ltd. today announced confirmation by TUV SUD that its latest commercial-sized (1.09 m²) CIGS champion C2 module has achieved 16.5% module total area efficiency. This improves on TSMC Solar's previous record of 15.7% set in 2013. The module was produced using the current manufacturing equipment and materials at the company's manufacturing facility in Taichung, Taiwan.

"We continue to prove our ability to develop record-setting process improvements in full-size modules. By bringing past innovations to mass production, our current production line efficiency has improved to an average 14.7% module efficiency", said Chia-Hsiang Chen, President of TSMC Solar.

TSMC Solar also announced the introduction of its new TS-CIGS Series Model C2 HV module with nameplate power spanning 150W – 165W. Certified by UL for 1000 volt system operation, the high-reliability modules have a double-glass module design and are produced with 100% electroluminescence (EL) quality screening.

"Our tariff-free Model C2 HV modules are designed for the North America MW-scale market, delivering high energy yield, low system costs and high reliability", said Marc Spaulding, TSMC Solar Worldwide Sales & Marketing VP.

About TSMC Solar

TSMC Solar Ltd. is a wholly-owned subsidiary of Taiwan Semiconductor Manufacturing, Inc. (NYSE: TSM), the acknowledged semiconductor dedicated foundry segment leader with market capitalization exceeding \$110 billion. TSMC's solar business was founded in May 2009 and is headquartered in Taichung, Taiwan with regional sales offices in Hamburg, Germany and San Jose, California.

For more information please go to www.tsmc-solar.com.



TSMC Solar CIGS Production Line in Taichung, Taiwan

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