



TSLC Launches its MiniLED Series Targeting Fine-Pitch Display Markets

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Modularization of MiniLEDs for Faster Market Adaptation

CHUNAN, Taiwan, Dec. 21, 2018 (GLOBE NEWSWIRE) -- TSLC Corporation, a vertically integrated LED system manufacturer, announced sampling of its tri-color MiniLED series, targeted to provide LED display manufacturers with surface-mounting (SMT) compatible devices. The company will launch its first product in the tri-color multi pixel series, a 16-pixel RGB array component, to reduce total production costs through increased SMT throughput.

TSLC's 16-pixel tri-color MiniLED array component "4x4RGBminiArray" aims to replace the market mainstream single pixel components through the advantage of reducing production costs. The 4x4RGBminiArray will simplify the SMT process as there are fewer components to handle, thus significantly increasing throughput over 15 times. The commercial markets strive to deliver top quality images resulting in the exponential increase of pixel count per display. By launching the 4x4RGBminiArray, TSLC provides a highly dense RGB pixel count in a single component.

"By choosing TSLC's 4x4RGBminiArray, the user will be able to complete the SMT process of an 8K display in the same amount of time as a FHD display," explained TH Lin, the Vice President of Sales and Marketing Department of TSLC Corporation. "The component is no longer in the sub-millimeter level and will open up options for SMT subcontractors of a wider range of placement precisions."

As the market continues to strive for finer pixel pitch, the solder pad on the single pixel packages shrinks. For a market available 550 by 550 micrometer (μm) tri-color package, the solder pad size is less than $200\mu\text{m}$ by $200\mu\text{m}$ with pad to pad spacing also less than $200\mu\text{m}$. The smaller the pad size and pitch, resulting in yield loss during SMT on a high cost fine pitch PCB, is a large factor in higher costs for fine-pitch LED display. However, TSLC's 16-pixel tri-color MiniLED array component "4x4RGBminiArray", having 0.5mm pixel with 0.78mm pixel pitch, provides a better solution through its large solder pad size $320\mu\text{m}$ by $320\mu\text{m}$ with minimum pad to pad spacing $\sim 300\mu\text{m}$ area. Besides the throughput improvement, TSLC's "4x4RGBminiArray" also improves SMT process yields and quality by greatly increasing the shear force after the LEDs are mounted onto designated circuit board. Because shear force is directly related to the size of the LED solder pad, TSLC's "4x4RGBminiArray" has much stronger shear force than currently available products.

"By launching this product, we overcome two of the most critical technical hurdles, aiming to enable display modules makers to enter the fine-pitch display markets" TH Lin further explained.

Following the "4x4RGBminiArray", TSLC intends to launch 8x8RGBminiarray with variable pixel pitches of 0.7, 0.8, 0.95mm by partnering with MiniLED display manufactures. Besides the standard products, TSLC will also be opening up options for customization of pixel pitch, pixel count, package aspect ratio and other specifications. Please contact our Sales Team at sales@tslc.com.tw.

About TSLC Corporation

TSLC Corporation is a leading LED manufacturer and technology developer located in Hsinchu Science Park, Chu-Nan site, Taiwan. TSLC has more than 10 years of experience in the LED industry, specializing in LEDs in the visible, infrared and ultraviolet spectrum. The company focuses on specialized industrial applications such as UV curing, medical/cosmetic devices, counterfeit detection, horticulture, aquarium, security and surveillance systems.

Forward Looking Statements

This press release contains statements that may constitute "forward-looking" statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, and as defined in the U.S. Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact could be deemed forward-looking, including, but not limited to, any projections of future revenues, income, margins or other financial information; any statements about historical results that may suggest trends for TSLC's business; any statements of the plans, strategies and objectives of management for future operations; any statements of expectation or belief regarding recovery of the LED industry, market opportunities and other future events or technology developments; any statements regarding TSLC's position to capitalize on any market opportunities; and any statements of assumptions underlying any of the foregoing. These forward-looking statements are based on current expectations, estimates, forecasts and projections of future TSLC's or industry performance based on management's judgment, beliefs, current trends and market conditions and involve risks and uncertainties that may cause actual results to differ materially from those contained in the forward-looking statements. TSLC undertakes no intent or obligation to publicly update or revise any of these forward looking statements, whether as a result of new information, future events or otherwise, except as required by law.

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