Release No. CEL167

CEL and THine introduce high performance HD video interface for industrial, machine vision, surveillance, and automotive applications

*Designers can create vision systems with fewer cables and greater distances between camera head and other system elements*

*Combined with Slip Rings, this interface technology enables OEMs to produce 360 degree HD Video Pan/Tilt/Zoom (PTZ) cameras at substantially reduced cost*

Santa Clara, CA — December 12, 2016 — THine Electronics, Inc. (Tokyo Stock Exchange/JASDAQ: 6769), a semiconductor company focusing on high speed serial interfaces, today announced an AEC-Q100 (Grade 2) compliant single chip solution (THCV241-Q) that integrates the MIPI CSI-2 interface with THine’s well established V-by-One® HS product family.

The new THCV241-Q is optimized for advanced camera requirements including:

- High definition support (e.g., 1080p60, 4K2K)
- Uncompressed real-time, zero latency video transmission
- 50x increase in maximum transmission distance – from 30cm to 15m
- 360 degree rotation at an affordable price point
- Lower BOM cost
- Smaller circuit boards for more compact designs, new product form factors and higher reliability
Because today's high resolution CMOS camera modules mainly use the MIPI CSI-2 protocol output for its high data rate, transmission distance is limited to about 30 cm. However, MIPI CSI-2 integrated in the THCV241-Q processor chip extends cable length to 15 meters for uncompressed 1080p60 video data via a shielded twisted pair or a single coaxial line. In cars, for example, a clear rear view image is available to any point inside the vehicle without compression-induced latency. High Dynamic Range image displays in vehicles achieve unparalleled clarity.

THine also offers various receiver chips that support 150MHz parallel output and Open LDI (LVDS) output for 2 Mega-Pixel images or 1080p60 and plans to develop more line-ups. In addition, because the THCV241-Q processor supports transmission through a Slip-ring, PTZ cameras do not need close proximity to the Application Processor. The THCV241-Q's outstanding video transmission performance also reduces costs and camera system size restrictions. For example, compared with Open LDI (LVDS) transmission, THCV241-Q transmission requires only one-fourth as many expensive slip ring cores, for a 75% cost reduction in the internal interfaces of PTZ cameras.

“We are excited to release our MIPI interface products worldwide,” said Kazutaka Nogami, CEO of THine. “By working with hundreds of real world designs, we have refined our video processing and networking technologies. Combining MIPI and V-by-One® HS enables design engineers create affordable, high performance next generation camera and industrial vision designs.”

“Ease of design is critical for fast time to market.” added Paul Minton, President and CEO of CEL. “CEL's decades of supporting leading edge designs matched to THine's advanced technology will enable designers to execute camera designs faster than before at lower cost, smaller size and higher performance.”

Samples are scheduled for release in December 2016. To speed time to market and reduce design expense, THCV241-Q design support will include Evaluation Boards, application notes, datasheets, etc. CEL and THine have established design support in North America as well as Japan and the rest of Asia.

About CEL

CEL offers a broad selection of wireless and networking components including RF/microwave transistors and ICs, opto-couplers, laser diodes, photo diodes and high-speed interface ICs. CEL also designs and produces Cortet™ and MeshConnect® wireless solutions and platforms for IoT applications. CEL has technical centers in Santa Clara, California (Silicon Valley), Buffalo Grove, Illinois (Chicago area) and Lafayette, Colorado (Boulder/Denver area). CEL supports customers through direct sales offices, sales representatives and distributors worldwide, with offices in Hong Kong and Tokyo that support the Asia Pacific region.

For more information, visit cel.com

About THine Electronics

THine Electronics Incorporated is a fabless maker that provides innovative mixed signal LSI and analog technologies such as V-by-One® HS, LVDS, other high-speed data signaling, timing controller, analog-to-digital converter, ISP, power management and drivers for LEDs and motors in growing niche markets for our customers’ solutions, targeting its strategic markets in flat screen TVs, smart phones, document processing, amusement, industrial application, and automotive markets. THine is headquartered in Tokyo, and has subsidiaries in Taipei, Seoul, Hong Kong, Shenzhen, and Shanghai. THine Electronics is listed on JASDAQ of Tokyo Stock Exchange under the security code of 6769.

For more information, visit http://www.thine.co.jp/en/