

# Lumissil introduces a Family of Industry-Leading Capacitive-Touch Sense Controllers

***IS31SE5117 & IS31SE5118 provide State-of-the-art Sigma Delta Cap-Touch Technology with Shield Drive Moisture Control and very low Power Consumption***

**MILPITAS, CA: Nov 17, 2020** – LUMISSIL MICROSYSTEMS, a Division of ISSI, today announced a new family of capacitive touch sensor controllers consisting of IS31SE5117 & IS31SE5118 which simplify the replacement of mechanical buttons in a variety of applications such as home appliances, IoT devices, instrumentation and control panels and liquid level measurement devices. To enable easy prototyping and rapid implementation into any product the software package comes complete with a standard code and calibration GUI.

“The new family of touch sensor controllers integrate a proprietary sigma delta enhanced dual-slope charge sharing capacitance touch technology with up to 24 bit precision to provide high sensitivity and low noise performance “ said Ven Shan, VP of Marketing at Lumissil Microsystems. “Such performance is necessary where users wear gloves or surfaces have thick glass or air gaps as in home appliances. In addition, they consume very low average power and include an auto calibration feature that compensates for temperature and humidity changes and any false touch activation providing a superior value point for our customers”.

Both products are supplied as a turn-key product with a standard code. Applicable for variety of cap-touch sensors interfaces (button, wheel, slider and proximity) and materials (glass, plastics, wood etc.).

The development packages include documentation, evaluation boards and calibration GUIs that include a configuration tool. The calibration GUI enables simple device configuration in one flow for calibrating capacitive touch sensors, configuring GPIO ports and saving configuration directly to a file or target device’s flash, with no programming required. A GPIO can also be configured to output melody using on-chip melody/tone generator. Product debugging support is also available from ISSI’s application engineers.

## **Key features and benefits**

- Capacitive touch sensors: IS31SE5117 –15 sensors; IS31SE5118 – 11 sensors.
- Differential Dual-slope charge sharing – up to 24 bit precision count.
- Best in class Liquid Tolerance - Shield Driver available for all device Cap-touch sensors.
- Individual sensors calibration & sensitivity thresholds; Auto-calibration included.
- Available multiple-button-press and press-and-hold functionality.
- Low Average power consumption – 5µA Quiescent current with Wake-on-touch feature.
- 400kHz fast-mode I<sup>2</sup>C interface to host controller.
- Invert or Toggle GPIO outputs by touch-sensors by configuration.
- Melody/Tone output options.
- Easy to use GUI required to calibrate and configure device for production.

## Packaging and Availability

IS31SE5117 is available in 24 pin QFN-24 package and IS31SE5118 in 16 pin TSSOP-16 package. They operate from 2.7V to 5.5V over a temperature range of -40°C to +105°C. Samples can be ordered through Lumissil's global sales team and worldwide distribution partners.

The IS31SE5117-QFLS3-TR is available and priced at \$0.43 in quantities of 10,000.

The IS31SE5118-SALS3-TR is available and priced at \$0.42 in quantities of 10,000

## About Lumissil

Lumissil is the analog/mixed-signal product division of ISSI, a fabless semiconductor company that designs and markets high performance integrated circuits for the following key markets: (i) automotive, (ii) communications, (iii) industrial/medical, and (iv) digital consumer. Lumissil's primary products are LED drivers for low to mid-power RGB color mixing and high power lighting applications. Other products include audio, sensor, high speed wired communications, optical networking ICs and Application-specific microcontrollers. ISSI/Lumissil is headquartered in Silicon Valley with worldwide offices in Taiwan, Japan, Singapore, China, Europe, Hong Kong, India, and Korea. Visit our web site at <http://www.lumissil.com/>

## About Integrated Silicon Solution, Inc. (ISSI)

ISSI is a fabless semiconductor company that designs, develops and markets high performance SRAM, DRAM, Flash memory (including NOR flash, NAND flash and managed NAND solutions (eMMC)), and Analog/Mixed-signal integrated circuits. ISSI provides high-quality semiconductor products and has been a committed long-term supplier to its customers. ISSI is headquartered in Silicon Valley with worldwide offices in Taiwan, Japan, Singapore, China, Europe, Hong Kong, India, and Korea. Visit our web site at <http://www.issi.com/>

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