LUMISSIL Microsystems
A Division of ISSI

LIN and CAN FD System Basis Chips for Automotive and Industrial Applications

The IS32IO1028 and IS32IO1163 offer robust and reliable communication solutions for in-vehicle networks

MILPITAS, Calif., October 23, 2023 -- Lumissil Microsystems, the analog/mixed-signal division of Integrated Silicon Solution, Inc. (ISSI), today announced the launch of two new System Basis Chip (SBC) ICs for automotive and industrial applications: the IS32IO1028 and the IS32IO1163. These ICs integrate a voltage regulator and a LIN and CAN transceiver respectively into a single package, providing a compact and cost-effective solution for in-vehicle networks.

The IS32IO1028 is a LIN SBC IC that supports LIN 2.0/2.1/2.2/2.2A/J2602 specifications and operates from 5V to 40V supply voltage. It features a low-dropout regulator with output voltage of either 3.3V or 5V and up to 100mA current capability, and a LIN transceiver with high ESD protection and low electromagnetic emission. Other key features include data rate support up to 20kBaud, very low sleep and standby currents of 22µA and 70µA respectively. Remote wakeup time is best in the class – 80µsec typical. In addition, the device comes with a safety feature such as an automatic over temperature shutdown capability. The IS32IO1028 is designed to meet automotive operating temperature range from -40C to +105C.

The IS32IO1163 is a CAN FD SBC IC that supports CAN 2.0 A/B/FD/ISO 11898-2/5/6 specifications and operates from 6.3V to 32V supply voltage. It features a low-dropout regulator with a fixed 5V output voltage and up to 100mA current capability, and a CAN transceiver with high ESD protection and low electromagnetic emission. It supports the low power mode specified in ISO 11898-6 with local/remote wakeup capability. It's built-in LDO is 5V and can supply up to 100mA external loads such as MCU, sensors, or actuators. IS32IO1163A is 5V I/O compatible and IS32IO1163B can be 3.3V IO compatible. The CAN FD allows up to 5Mbps data rate. The IS32IO1163 is designed to meet demanding automotive operating temperature range from -40C to +105C.

These new, cost-effective LIN and CAN SBCs, are drop-in replacements for similar ICs from industry leading suppliers.

"We are excited to introduce our first LIN and CAN FD system basis ICs for robust and reliable communication solutions for in-vehicle networks" said Ven Shan, Vice President of Marketing at Lumissil Microsystems. With the increasing complexity of automotive electronics and the growing demand for intelligent vehicle systems, our new LIN and CAN FD SBC are poised to play a pivotal role in fostering seamless communication between various electronic control units (ECUs) and subsystems."

Both SBCs - IS32IO1028 and IS32IO1163 are AEC-Q100 grade 2 qualified and available in mass production quantities.

The IS32IO1028 is available in an SOP-8 4.9 x 6.0 mm or DFN-8 3 x 3 mm package.

The IS32IO1163 is available in a TSSOP-14 5.0 x 6.4 mm or DFN-14 4.5 x 3 mm package.

Please contact Lumissil's sales representative for samples, competitive pricing and evaluation kits. For more information about our LIN and CAN Transceivers and to explore the full range of Lumissil product portfolio solutions, please visit www.lumissil.com

About Lumissil Microsystems

Lumissil Microsystems is a division of ISSI specializing in analog/mixed-signal products for automotive, communications, industrial, and consumer markets. Lumissil's primary products are LED drivers for low to mid-power RGB color mixing and high-power lighting applications. Other products include audio, sensors, high-speed wire communications, optical networking and application-specific microcontrollers. ISSI and Lumissil Microsystems have worldwide offices in the US, Taiwan, Japan, Singapore, mainland China, Europe, Hong Kong, India, and Korea. Website: 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 has worldwide offices in the US, Taiwan, Japan, Singapore, mainland China, Europe, Hong Kong, India, and Korea. Visit our website at http://www.issi.com

Ven Shan
408-969-4622

Inayat Khajasha
408-969-5128