

12-CHANNEL LED ANIMATION CONTROLLER FOR AUTOMOTIVE LIGHTING APPLICATIONS

IS32LT3134 stores multiple animation patterns for playback to drive animated Tail, DRL, Emergency and Welcome lights for next generation Auto Lighting

MILPITAS, CA: March 16, 2021 – LUMISSIL MICROSYSTEMS, a Division of ISSI, today announced the IS32LT3134 – A 12-channel animation controller for automotive and industrial applications. Up to 4 animation can be stored on device Flash, and multiple devices connected in series can play patterns simultaneously or cascaded. System configurations determine clock source, Fault response modes, Global or local LED dimming, LED channel skew to prevent large current transients etc. 12-channel push-pull outputs driver offer common anode, common cathode, or multiplexed LED drive options. Beside direct LED drive, the LED control output can drive a LED Driver device or FETs.

“Major Auto manufacturers are adopting animated lighting functions in car design as a brand differentiator as well as to address aesthetics, functionality and safety” said Ven Shan, VP of Marketing at Lumissil Microsystems. “IS32LT3134 is a unique LED Controller that enables animation lighting for a variety of interior and exterior lighting applications such as animated tail light, DRL, welcome light, emergency light to name a few. The device is simple to use and integrates fault protection features and is fully AEC Q100 Automotive qualified.”

IS32LT3134 is supplied as a turn-key product with a standard code. A simple device configuration PC-GUI control devices through UART interface, and is used to load and organize animation patterns to specific devices, select pattern playback parameters (Synchronized or cascaded playback, global or local dimming, clock division etc.), and configure system parameters (Clock source, debounce, fault configuration). A complete configuration can be uploaded, downloaded and executed from the GUI. No programming is required. A complete development package for IS32LT3134 is available on Lumissil’s website including documentation, evaluation boards and configuration GUI. Product design and debugging support is available from Lumissil’s application team.

Key features and benefits

- 4 pin-selectable patterns stored on Flash, 16KB space. Animation Duration from 0.1s up to 15s
- Cascade multiple devices for large LED Animations. Multi-device for Cascade or simultaneous playback
- 19.2K UART for dynamic addressing of devices
- WDT monitors valid clock signals and animation end
- 2 fault modes : “one fail, all fail” or “one fail, others continue”
- User programable clock divider derived from 16Mhz Osc. ($\pm 2\%$ Spread spectrum), External clock option
- 12-channel push-pull outputs driver for common anode, common cathode, or multiplexed modes
- Support programmable duty cycle for Global and Local-LED dimming
- Support programmable LED channel skew to avoid simultaneous switching large transient on power rail
- Windows-based GUI for configuration and playback of patterns
- Automotive - AECQ100 qualified

Packaging and Availability

IS31LT3134 is available in a 24 pin QFN package. It operates from 3.0V to 5.5V over a temperature range of -40°C to +125°C. Samples can be ordered through Lumissil's global sales team and worldwide distribution partners.

The IS32LT3134-QFLS3-TR is available and priced at \$0.85 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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LUMISSIL Microsystems
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