Programmable Color Sequence RGB LED Driver for IoT applications

Self-running with RGB patterns saves power with no processor interaction

MILPITAS, Calif., August 7, 2017 -- Integrated Silicon Solution, Inc., a leader in advanced memory and analog IC solutions, today introduced the IS31FL3194, the latest addition to the innovative line of FxLED RGB drivers. The IS31FL3194 is a fully programmable 3 channel LED driver supporting a wide range of color rendering capabilities for consumer and industrial IoT applications.

The IS31FL3194 can be programmed through a 400 kHz I2C bus to perform LED light timing sequences and color patterns with gamma correction. Each of the 3 LED channels can be independently adjusted to 8-bit current levels (40mA max), 8-bit PWM (RGB color mixing), gamma correction, and timing sequences. These wide range of programmable sequences will continue operating even when the system microcontroller is in standby mode thereby conserving system power.

"As a leading provider of innovative LED driver solutions for the consumer and automotive markets we recognize one of the challenges faced by our customers has been lowering the system power budget," said Ven Shan, VP of Analog Marketing at ISSI. "We developed the IS31FL3194 with programmable RGB pattern sequences so it can continue driving the LEDs even when the micro is placed in a low power sleep mode. Because the IS31FL3194 takes responsibility of driving the LEDs, this not only saves system power but also frees up the micro to focus on system critical functions."

The IS31FL3194 is available in a tiny 1mmx1.6mm WCSP-8 package, making it one of the smallest and most highly programmable LED driver solutions in the market today. The flexible programmability enables one to configure the RGB LEDs to operate either as one RGB group or RG+W group or 3 single color LED in a pre-established pattern. In addition a low 150mV dropout voltage at 20mA, 0.8mA quiescent current and a 1uA shutdown current makes this an ideal solution for low-power battery applications.

The IS31FL3194 LED Driver can generate pre-programmed colors with patterns that can be used as signals to gain attention or to provide notification or status in wearables, portable medical devices, smart home, smart retail and other emerging IoT applications.

Packaging and Pricing

The IS31FL3194 is available in a small 1.0mm x 1.5mm x 0.4mm WCSP-8 package and is rated for operation over the -40C to +85C temperature range. Pricing for these devices is $0.33 per unit in 10,000 unit quantities. Samples and volume production quantities can be ordered today, through ISSI's global sales team and worldwide distribution partners.

About Integrated Silicon Solution, Inc.

ISSI is 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 military, and (iv) digital consumer. The Company's primary products are high speed and low power SRAM and low, medium, and high density DRAM. The Company also designs and markets NOR flash products and high performance analog and mixed signal integrated circuits. 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/

Integrated Silicon Solution, Inc.

Ven Shan
P: 408-969-4622
vshan@issi.com

Aaron Reynoso
P: 408-969-5141
Areynoso@issi.com

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**Long-term Support
World Class Quality**

IS31FL3194

Fully programmable 3-Channel RGB LED Driver

- Automated sequencing without Micro
- Tiny WCSP-8 package
- Ideal Color Light Source for IOT Applications

RED PWM   GRN PWM   BLU PWM

ISSI
IS31FL3194