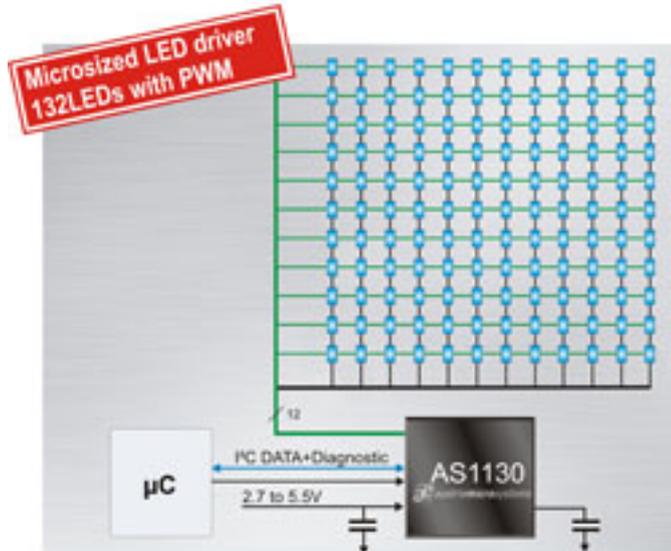


LED driver features industry's highest efficiency



austriamicrosystems has announced the AS1130, the most advanced and smallest dot-matrix LED driver (channels vs. PCB space) available. The AS1130 drives 132 LEDs but requires only 5 mm² PCB space. It also reduces external component count, allows use of cheap connectors and requires fewer PCB (printed circuit board) layers. Benefits for end users include up to 80% longer battery lifetime, more colorful effects and smoother running animations.

Using a 12x11 cross-plexed technique, austriamicrosystems' AS1130 LED driver is targeted for dot-matrix displays in mobile phones, toys, and small LED displays in personal electronics. It is also designed for non-battery powered household goods, indoor public information displays, and industrial applications such as power meters. The AS1130 drives 132 LEDs, each with an 8-bit dimming control and no external resistor required. Additionally, an 8-bit analog current control allows fine tuning of each current source to compensate for different brightness of different colors, or to adjust the white balance on RGB LEDs. austriamicrosystems' AS1130 incorporates 36 frames of memory for small animations or for use as a buffer to reduce host processor load, saving energy and processing time. The AS1130 LED driver can also extend battery life by controlling an external power supply (e.g. charge pump) which is required when LEDs need a higher voltage than the battery can supply. This allows continuous operation even under low battery voltage conditions.

"The AS1130 dot-matrix LED driver is designed to make driving LEDs an easier task," commented Rene Wutte, austriamicrosystems' Marketing Manager for Lighting. "It enables driving a large number of RGB LEDs from one IC for creative light designs while providing the highest efficiency available, an important feature for both battery-powered and AC-powered applications. The AS1130's features

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simplify design and programming, optimize total cost, and allow developers to provide the lighting features required to stay ahead in this market.”

In addition to the ultra-small sized WL-WLP-20, the AS1130 LED driver is also available in a gull winged SSOP-28 package, allowing easier handling in applications that are not so space sensitive. This makes the AS1130 a perfect replacement for indoor high pixel density video walls, easily replacing up to eight 16-channel PWM LED drivers, or reducing the complexity of externally (user designed) multiplexed systems.

Only 12 lines are required to drive all 132 LEDs. This is accomplished with austriamicrosystems' multiplexing technique called cross-plexing. It reduces line count on the PCB as well as pins on the connectors, saving space & costs. Other features include control via a 1 MHz I²C compatible interface, open and shorted LED error detection, and low-power shutdown current.

The AS1130 LED driver operates over a temperature range of -40 to +85°C and a wide 2.7 to 5.5 V power supply range. For more information on the AS1130 dot-matrix LED driver, visit www.austriamicrosystems.com/LED-driver/AS1130

Price & Availability

Available now, the AS1130 is priced at \$2.99 for the 20-pin CS-WLP and \$3.99 for the SSOP-28 in 1000 piece quantities.

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