



## **A6285**

- A 16-channel constant-current LED driver
- Featuring individual channel current adjustment via a 7-bit dot correction register
- Each channel of the A6285 can sink a constant current up to 80 mA

## **Constant-current LED driver features 16 channels and 7-bit dot correction**

New from Allegro MicroSystems Europe, the A6285 is a 16-channel constant-current LED driver featuring individual channel current adjustment via a 7-bit dot correction register.

Each channel of the A6285 can sink a constant current up to 80 mA, and a single external resistor sets the maximum LED drive current for all channels. Each channel's drive current can be individually adjusted from 0 to 100% of the maximum value via the dot correction register, and the brightness of all the channels may be adjusted simultaneously by pulse-width modulation of the output enable (OE) input.

The A6285's serial interface can interface directly with microprocessor or FPGA-based systems at up to 30 MHz. A serial data output permits cascading of multiple devices in applications requiring more than 16 channels.

Open LED connections can be detected and reported to the host controller through the same serial data output. The 'fault' output flags an LED open-circuit condition or an over-temperature (thermal shutdown) condition.

The drive outputs have active pull-ups for high-speed refresh of video and graphic displays. Staggered delays on the drive outputs during 'on/off' transitions help to reduce noise on the ground line.

The A6285's CMOS logic runs on a 3.3-5 V supply. LED supply voltage can range up to 12 V, accommodating a series string of several LEDs on each channel.

Applications for the A6285 include large-scale displays and signs in the industrial, communication and office automation markets.

The device is available in a 5-mm, 32-lead QFN package with an exposed thermal pad. It is lead (Pb) free with 100% matt tin lead-frame plating.