Serially Interfaced, 8-Digit LED Driver AS1100

PRODUCT BRIEF

Key Features

- 10MHz Serial Interface
- Individual LED Segment Control
- Decode/No-Decode Digit Selection
- 20µA Low-Power Shutdown (Data Retained)
- Extremely low Operating Current 0.5mA in open loop
- Digital and Analog Brightness Control
- Display Blanked on Power-Up
- Drive Common-Cathode LED Display
- Software Reset¹
- Optional External clock
- 24-Pin DIP and SO Packages
- Fully compatible to MAX7219

General Description

The AS1100 is an LED driver for 7 segment numeric displays of up to 8 digits. The AS1100 can be programmed via a conventional 4 wire serial interface. It includes a BCD code-B decoder, a multiplex scan circuitry, segment and display drivers and a 64 Bit memory. The memory is used to store the LED settings, so that continuous reprogramming is not necessary.

TOP DIN DOUT DIG0 2 SEG D 3 DIG4 SEG DP 4 21 SEGE GND 5 20 SEG C DIG6 DIG2 6 19 VDD AS1100 18 ISET 7 DIG3 8 17 SEG G DIG7 9 GND 16 SEG B DIG5 10 SEG F DIG1 11 14 SEGA LOAD 12 CLK DIP/SO 24

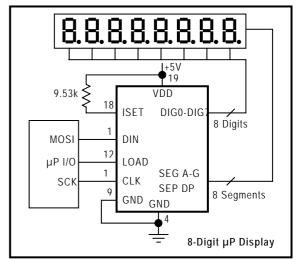
Pin Configuration

Every individual segment can be addressed and updated separately. Only one external resistor is required to set the current through the LED display. Brightness can be controlled either in an analog or digital way. The user can choose the internal code-B decoder to display numeric digits or to address each segment directly. The AS1100 features an extremely low shutdown current of only 20 μ A. and an operational current of less than 500 μ A. The number of visible digits can be programmed as well. The AS1100 can be reset by software and an external clock can be used. Several test modes support easy debugging.

The AS1100 is fully compatible to the MAX 7219. AS1100 is offered in a 24 pins PDIP and SOIC package.

Applications

- Bar-Graph Displays
- Industrial Controllers
- Panel Meters
- LED Matrix Displays
- White Goods



Typical Application Circuit

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¹ Software Reset and external clock are not supported by MAX7219

Product Brief

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