Constant Current Driver ICN2028

Description

The ICN2028 is a 16-channel constant current sink output LED driver. All 16-channels constant current can be set by a single external resistor, which provides users flexibility in controlling the light intensity of LEDs.

The ICN2028 exploits current precision controlling technology，which makes error between ICs less than ±2.5%, and error between channels less than ±3.0%. At ICN2028 output stage，16-regulated output ports are designed to provide uniform and constant current sinks for driving LEDs within a large range of forward voltage(VF) variations.

ICN2028 contains two 16-bit shift registers and latches which convert serial input data into parallel output format. For integrated dual latch, ICN2028 could get higher refresh rate.

Features

- 16-channel constant current output
- Output current setting range：

3~45mA×16@V_{DD}=5V constant current output

3~25mA×16@V_{DD}=3.3Vconstant current output

- Current accuracy
  - Between channel :< ±3.0%
  - Between ICs :< ± 2.5%
- Fast response of output current,
  - $\overline{OE}$ (min):60ns@V_{DD}=5V
- I/O: Schmitt trigger input
- Data transfer frequency:f_{MAX}=25MHz(Max)
- Power supply voltage: V_{DD}=3.3～5V
- Operating Temperature: –40°C to +85°C
- LED Protection
- Low-Gray Scale Enhancement
- Integrated Dual Latch for higher refresh rate