



ICN2037

(16-Channel Constant Current LED Sink Driver with Dual Latch)

Description

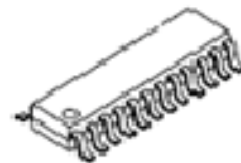
The ICN2037 is a 16-channel constant current sink output LED driver. All 16-channels constant current can be set by a single external resistor, which provides users flexibility in controlling the light intensity of LEDs.

The ICN2037 exploits current precision controlling technology, which makes error between ICs less than $\pm 2.5\%$, and error between channels less than $\pm 3.0\%$. At ICN2037 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.

ICN2037 contains two 16-bit shift registers and latches which convert serial input data into parallel output format. For integrated dual latch, ICN2037 could get higher refresh rate.

Package

Shrink SOP



AP/BP: SSOP24-P-150-0.635

ICN2037

Features

- ✧ Output current setting range :
3~45mA×16@V_{DD}=5V constant current output
3~30mA×16@V_{DD}=3.3V constant current output
- ✧ Current accuracy
Between channel :< $\pm 3.0\%$
Between ICs :< $\pm 2.5\%$
- ✧ Fast response of output current,
 \overline{OE} (min):40ns@V_{DD}=5V
- ✧ ESD HBM PASS 8KV
- ✧ I/O: Schmitt trigger input
- ✧ Data transfer frequency:f_{MAX}=30MHz(Max)
- ✧ Power supply voltage: V_{DD}=3.3 ~ 5V
- ✧ Operating Temperature: -40°C to +85°C
- ✧ Pre-Charge for Ghosting Reduction
- ✧ LED Protection
- ✧ Enhanced Circuit for Caterpillar Cancelling
- ✧ Low-Gray Scale Enhancement
- ✧ Integrated Dual Latch for higher refresh rate