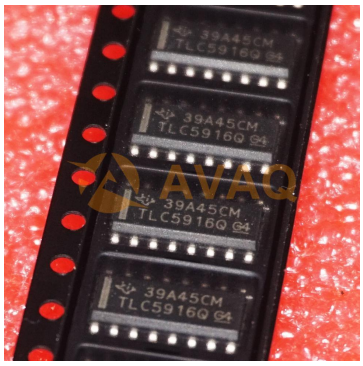
TLC5916QDRQ1

LED Driver 8 Segment 22000uA Supply Current Automotive 16-Pin SOIC T/R

Manufacturer:	Texas Instruments, Inc
Package/Case:	SOP-16
Product Type:	Optoelectronics
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active



Images are for reference only

Inquiry

General Description

The TLC591x-Q1 Constant-Current LED Sink Drivers is designed to work alone or cascaded. Because each output is independently controlled, they can be programmed to be on or off by the user. The high LED voltage (VLED) allows for the use of one LED per output or multiple LEDs on a single string. With independently controlled outputs supplied with constant current, the LEDs can be combined in parallel to create higher currents on a single string. The constant sink current for all channels is set through a single external resistor. This allows different LED drivers in the same application to sink various currents which provides optional implementation of multicolor LEDs. An additional advantage of the independent outputs is the ability to leave unused channels floating. The flexibility of the TLC591x-Q1 LED driver is ideal for applications such as (but not limited to): automotive LED lighting, 7-segment displays, scrolling single-color displays, gaming machines, white goods, video billboards, and video panels.

Key Features

Qualified for Automotive Applications

AEC-Q100 Qualified With the Following Results:
Device Temperature Grade 1: –40°C to 125°C
Ambient Operating Temperature Range

Device HBM ESD Classification Level 1C

Device CDM ESD Classification Level C4

Eight Constant-Current Output Channels

Output Current Adjusted Through External
Resistor

Constant Output Current Range: 5 mA to 120 mA

Constant Output Current Invariant to Load Voltage
Change

Open Load, Short Load, and Overtemperature
Detection

256-Step Programmable Global Current Gain

Excellent Output Current Accuracy:
Between Channels: < ±3% (Maximum)

Between ICs: < ±6% (Maximum)

Fast Response of Output Current

30-MHz Clock Frequency

Schmitt Trigger Input

3.3-V or 5-V Supply Voltage

Thermal Shutdown for Overtemperature
Protection

APPLICATIONS
General LED Lighting Applications

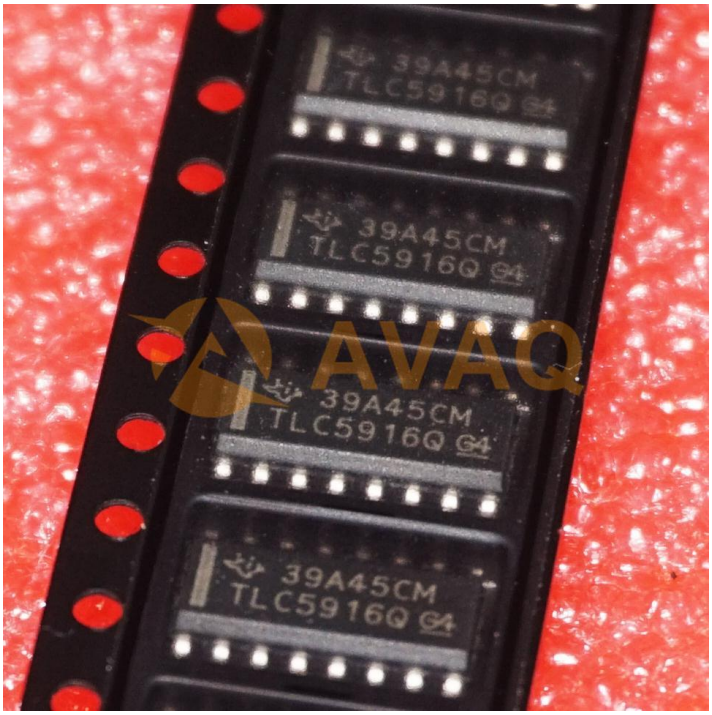
LED Display Systems

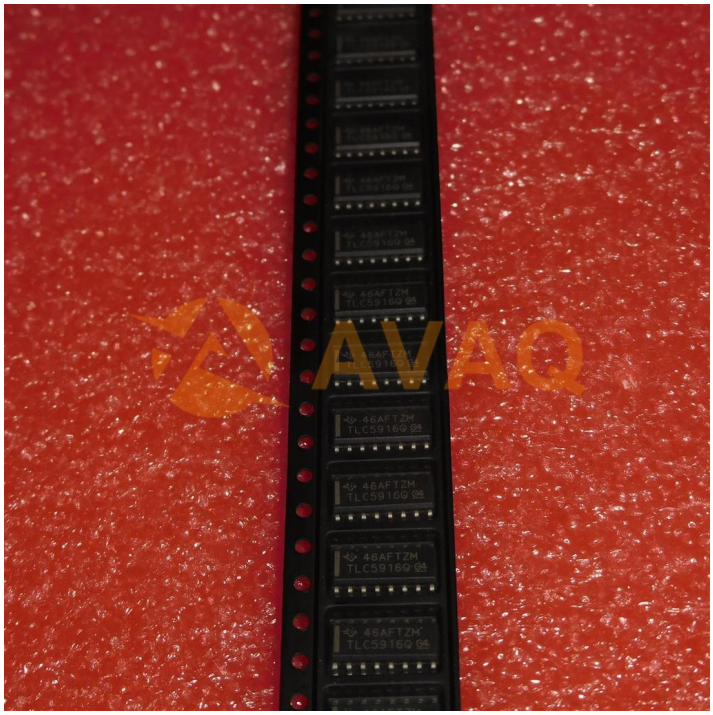
LED Signage

Automotive LED Lighting

White Goods

Gaming Machines and Entertainment





Recommended For You

TLC5955DCAR

Texas Instruments, Inc

HTSSOP56

TLC5917IN

Texas Instruments, Inc

PDIP-16

TLC59116ITPWRQ1

Texas Instruments, Inc

TSSOP28

TLC6C5712QPWPRQ1

Texas Instruments, Inc

HTSSOP-28

TLC6C5748QDCARQ1

Texas Instruments, Inc

HTSSOP-56

TL4242TDRJRQ1

Texas Instruments, Inc

SON8

TLC5916IPW

Texas Instruments, Inc

TSSOP16

TLC5916IDR

Texas Instruments, Inc

SOIC16

TLC5916IPWR

Texas Instruments, Inc

TSSOP16

TLC6C598QPWRQ1

Texas Instruments, Inc

TSSOP16

TLC6C598CQDRQ1

Texas Instruments, Inc

SOP16

TLC5945PWP

Texas Instruments, Inc

HTSSOP

TLC5943PWPR

Texas Instruments, Inc

HTSSOP28

TLC5917IPWR

Texas Instruments, Inc

TSSOP16

TLC5917IPW

Texas Instruments, Inc

TSSOP16