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# **RT5956**

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**Built-in Swift Register 4-channel 5A PMOS with Anti-ghosting Control**

2020/02

Version: 0.6

## Description

RT5956 is an integrated 4-channel PMOS outputs for high refresh rate LED display applications to eliminate the LED ghosting phenomena. By controlling the BK signal timeslot (LED discharge), the RT5956 is not only to prevent LED cascading blink which caused by an LED open or short damage, but also to avoid the over reverse voltage to damage LEDs on display performance. The RT5956 gives a very simple control model to let controller determined the turn-on, discharge, and row blank timing. Built in the 8-bit shift register, RT5956 make the data transfer by serial connection without decode components on board, this also do the help on fine pitch LED display PCB layout.

The RT5956 support 5A current output for each channel.

## Features

- 5A large current output for outdoor display
- Built-in anti-ghosting function
- Eliminate the LED cascading blink by LED short.
- Eliminate the LED cross blink by LED open (alternative)
- Serial Data connection transfer for easy and simplified PCB layout
- Wipe off 138 decoder

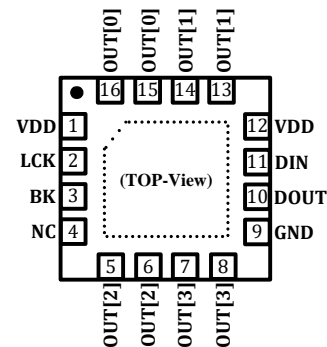
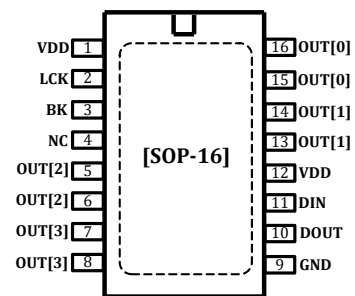
## Application

Indoor and Outdoor large current LED display

## Order Information

No.	Part No.	Package
1	RT5956SP	SOP16-150 mil-1.27 mm
2	RT5956QN	QFN16 – 4mm*4mm

## Pin Assignment



Pin No.	Pin Name	Description
1, 12	VDD	Power supply
2	LCK	Serial data strobe input
3	BK	Discharge enable control
4	NC	No connection
5, 6, 7, 8, 13, 14, 15, 16,	OUT[0:3]	Current output[0:3]
9	GND	Ground Terminal
10	DOUT	Serial data output
11	DIN	Serial data input



## Note

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