



Raffar
Technology Corp.

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RT7905

3-channel RGB LED driver

2019/05

Version: 1.6

Description

RT7905 is a 3-channel LED driver with 8 bit PWM linear control. The RT7905 uses a single communication wire to identify LED PWM signal and in total 24bits RGB display. This is a very simple and cost effective for any LED system design.

The LED PWM output controlled by duty ratio which depends on the 24bits data each for RGB outputs. All chips will latch new data when DIN port received the latch signal (> 50us low-level signal)

Features

- Operating supply voltage: 4.2 V ~ 5.5 V
- Constant current output: 5 mA (max.)
- Max. output voltage: 17 V
- 8 bits PWM control with 256 grayscales for each RGB output
- Clock frequency: 800kbps
- Single wire signal control
- Operating temperature: 0 °C ~ +85 °C

Application

Indoor/ Outdoor LED video display

Full color LED light strip

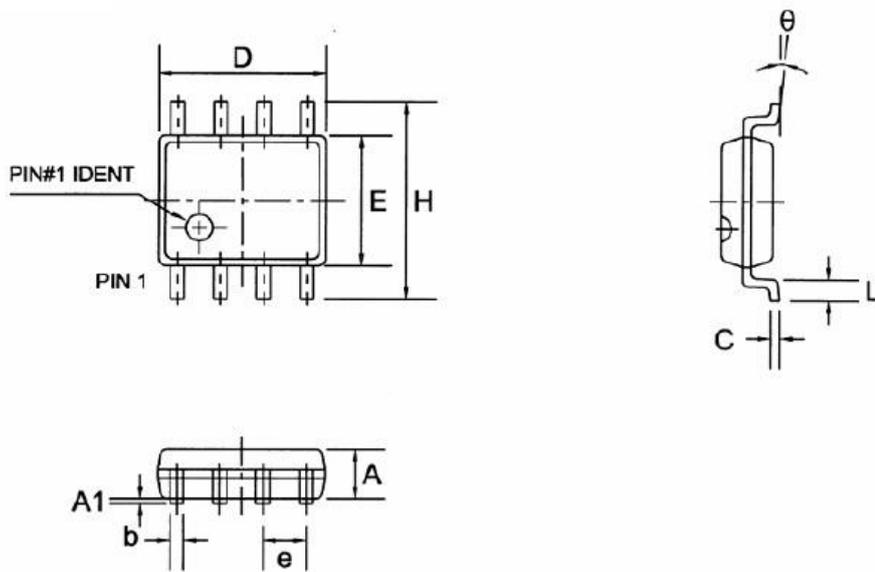
LED decorative lighting

Purchase Information

No.	Part No.	Package
1	RT7905SP	SOP8
2	RT7905LD	5050 SMD LED
3	RT7905BD	Bare Die
4	RT7905DN	DFN8

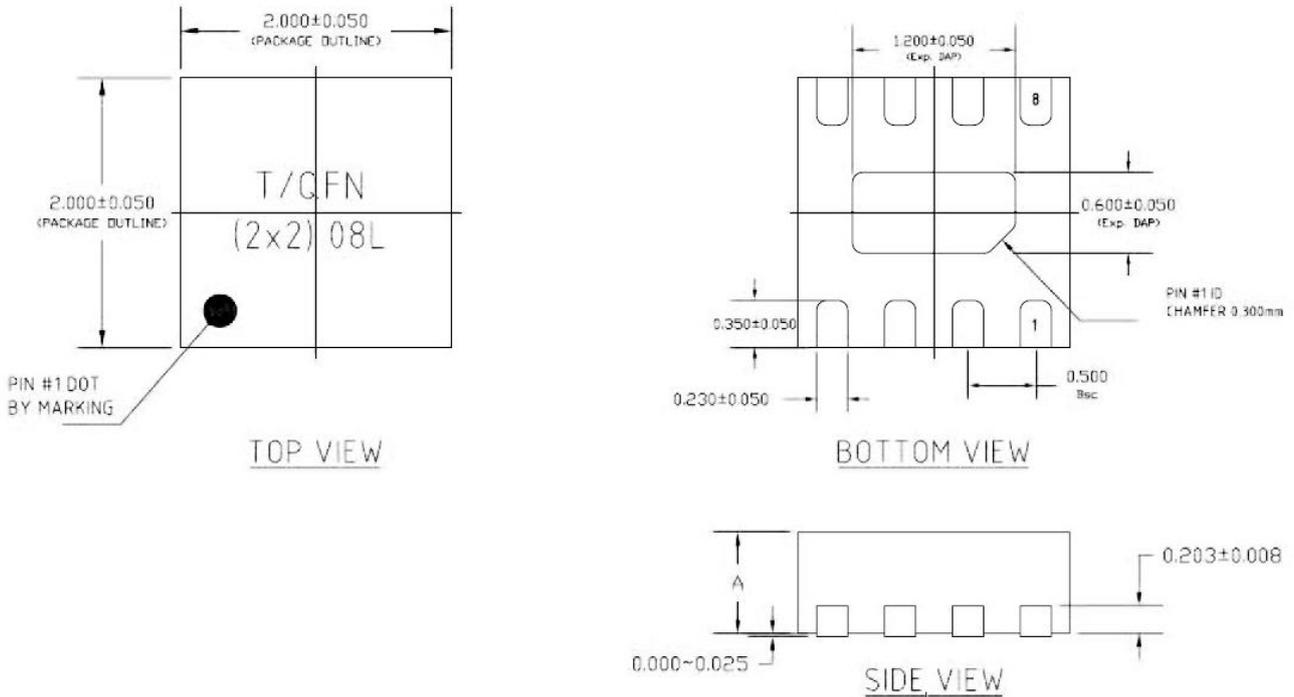
Package Outline Dimension

SOP8 Dimension



Symbol	Millimeters (mm)		Inches (in)	
	Min.	Max.	Min.	Max.
A	1.3	1.7	0.051	0.067
A1	0.06	0.26	0.002	0.010
b	0.300	0.55	0.012	0.022
c	0.15	0.35	0.006	0.014
D	4.72	5.12	0.186	0.202
E	3.75	4.15	0.148	0.163
e	1.27		0.05	
H	5.7	6.3	0.224	0.248
L	0.45	0.85	0.026	0.033
θ	0°	8°	0°	8°

DFN8 Dimension



Symbol	Millimeters (mm)		
	Min.	Nom.	Max.
A	0.7	0.75	0.8

Note

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