16bit Gray Level
1 for 12 RGB LED Driver IC

FEATURE

- **VDD = 3V ~ 5V**
- **Matrix Structure**

  -Current Channel : 9

  -MUX : 4
- **Sink Current Capability**

  -Max. 12mA per channel

  -Global Brightness Control (GBC): 4-Bit Control

  -Local Brightness Control (LBC): 8-Bit Control for each zone

  -Individual Zone PWM & DC Control
- **PWM Grayscale Depth**

  -Max. 16-Bit

  -Fixed PWM Clock = 32MHz
- **I2C-Wire Interface**

  -Up to 1MHz Speed
- **Single Fault Protection**

  -LED Open

  -LED Short

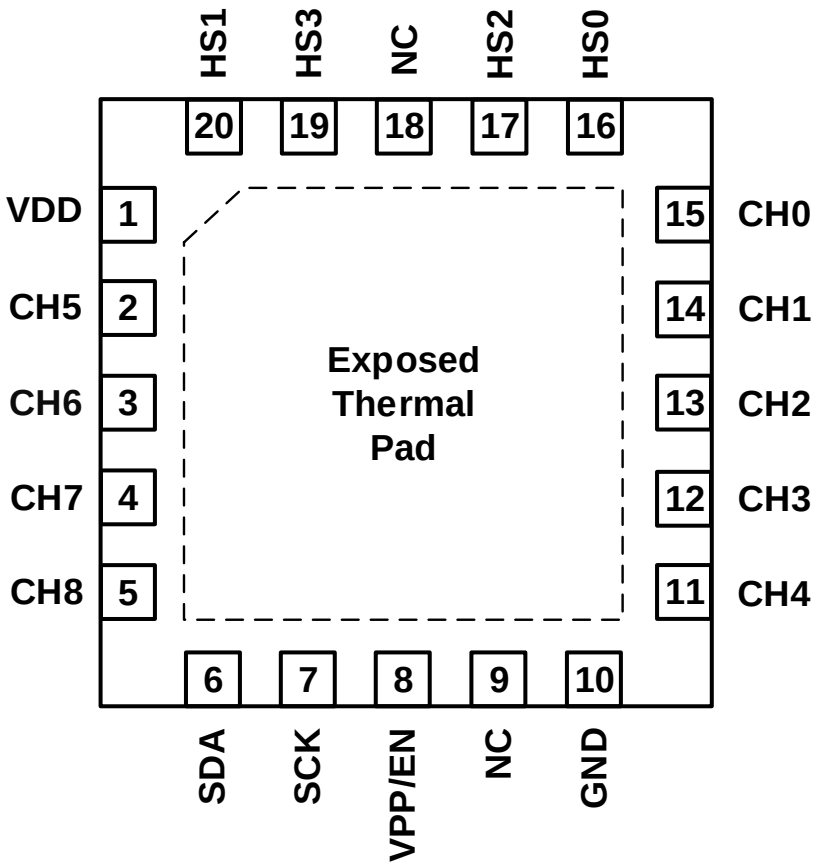
  -Thermal Shutdown w/ 40℃ hysteresis

  -UVLO
- **Anti-Ghosting**
- **PWM Output Alignment**

  -Head & Centre alignment

PACKAGE CONFIGURATION

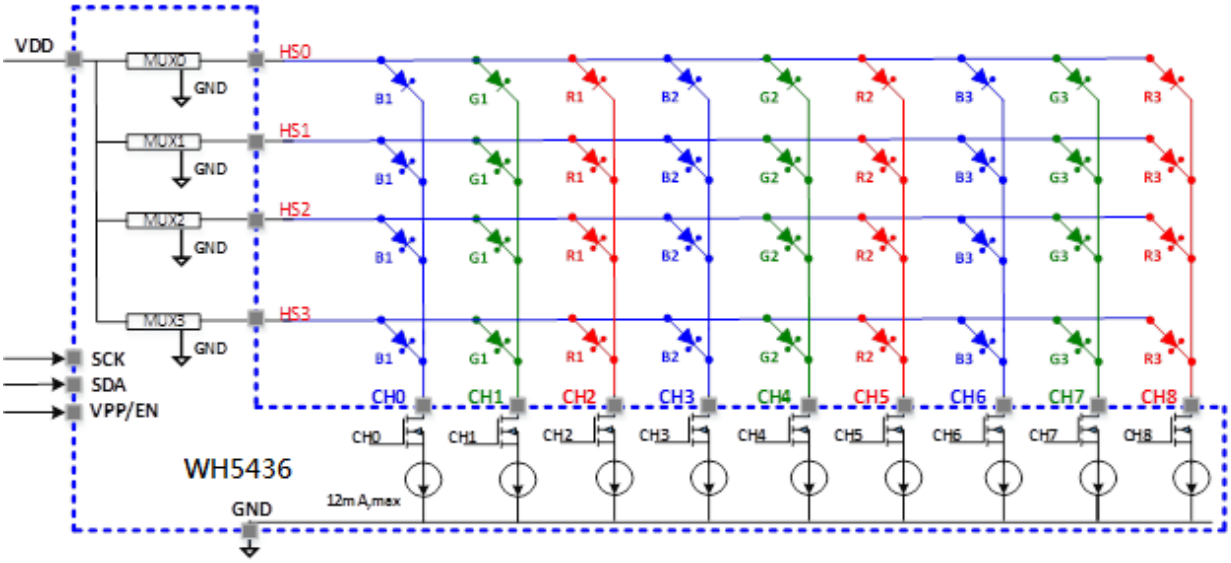
QFN-20L-3.5MMX3.5MM



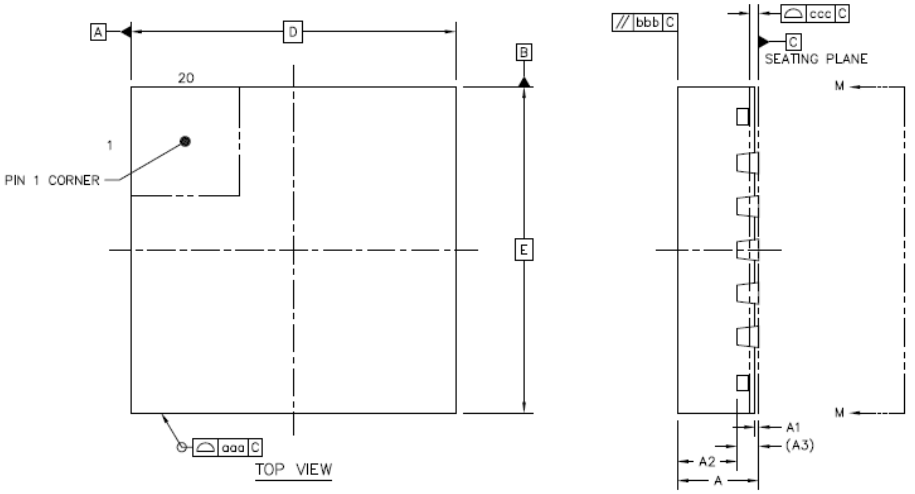
PIN DESCRIPTION

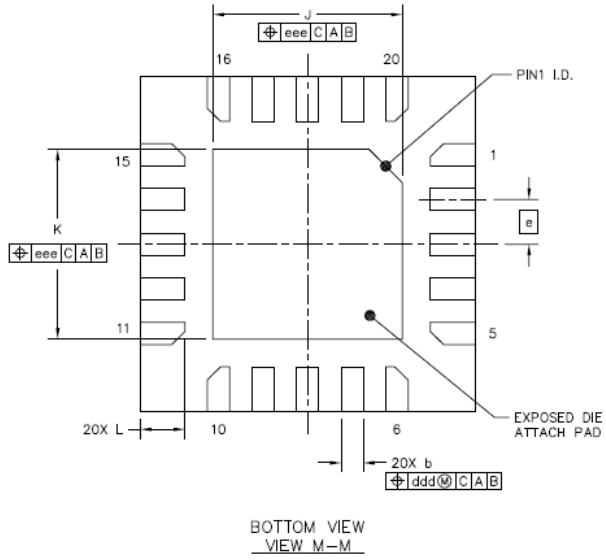
Pin Number	Pin Name	Type	Description
15	CH0	Analog	Current sink channel 0
14	CH1	Analog	Current sink channel 1
13	CH2	Analog	Current sink channel 2
12	CH3	Analog	Current sink channel 3
11	CH4	Analog	Current sink channel 4
2	CH5	Analog	Current sink channel 5
3	CH6	Analog	Current sink channel 6
4	CH7	Analog	Current sink channel 7
5	CH8	Analog	Current sink channel 8
16	HS0	Analog	MUX 0 high-side switch enable
20	HS1	Analog	MUX 1 high-side switch enable
17	HS2	Analog	MUX 2 high-side switch enable
19	HS3	Analog	MUX 3 high-side switch enable
1	VDD	Power	3.3V ~ 5V Supply voltage
9	NC	Ground	Don’t connect / Floating
10	GND	Ground	Ground
7	SCK	Input	Two wires serial interface clock
6	SDA	In/Out	Two wires serial interface data
8	VPP/EN	Input	Device enable control

TYPICAL APPLICATION



PACKAGE OUTLINE DRAWING (QFN-20L)





		SYMBOL	MIN	NOM	MAX
TOTAL THICKNESS		A	0.7	0.75	0.8
STAND OFF		A1	0	0.035	0.05
MOLD THICKNESS		A2	---	0.55	0.57
L/F THICKNESS		A3		0.203 REF	
LEAD WIDTH		b	0.15	0.2	0.25
BODY SIZE	X	D		3 BSC	
	Y	E		3 BSC	
LEAD PITCH		e		0.4 BSC	
EP SIZE	X	J	1.6	1.7	1.8
	Y	K	1.6	1.7	1.8
LEAD LENGTH		L	0.35	0.4	0.45
PACKAGE EDGE TOLERANCE		aaa		0.1	
MOLD FLATNESS		bbb		0.1	
COPLANARITY		ccc		0.08	
LEAD OFFSET		ddd		0.1	
EXPOSED PAD OFFSET		eee		0.1	