

LED constant current drive

GR6408

Product Introduction

GR6408 is a dual-channel LED constant current driver chip, which integrates LED drive circuit, enabling control circuit, light sensing control circuit, etc.

The two-way LED drive circuit can control the switch separately and set the required constant current independently to achieve differentiated applications. Its peripheral circuit is simple.

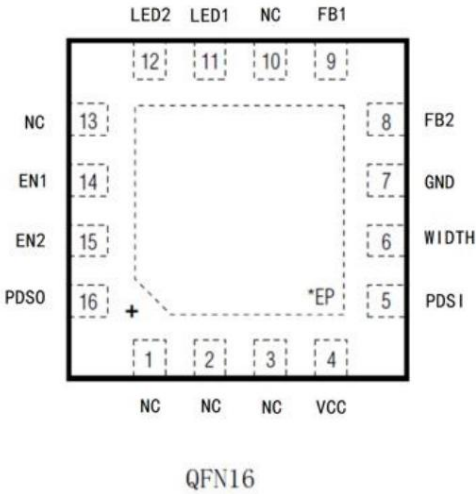
Convenient for the design of single-sided and aluminum-based PCBs.

Product Features

- Power supply voltage: 4.5~5.5V
- High output current accuracy: ±10%
- Constant current adjustable: 10mA~350mA
- Over temperature protection
- The light control on and off can be set separately, which can effectively avoid the problem of light critical jitter
- Package type: QFN16

Package form and pin function definition

Pin Number	Pin	definition	Pin Function Description	Pin Number	Pin Definition	Pin Function Description
	QFN16					
11	LED1-		1 channel LED negative terminal	4	VCC	Power positive
12	LED2-		2-channel LED negative terminal	5	PDSI	light sensing signal input terminal
14	EN1		1 Channel enable terminal, high effective	6	WIDTH	Light-controlled hysteresis adjustment terminal
15	EN2		2 Channel enable terminal, high effective	8	FB2	2 channel current setting terminal
16	PDSO		Light control output	9	FB1	1 Channel current setting terminal
7	GND		Negative power supply	1/2/3/10/13	NC	Empty feet



symbol	Project	Test conditions	Min Typ Max	Unit		
VCC	Power supply		4.5		5.5	V
ICC	voltage Operating current	VCC= 5 V;		290		ȳA
WILL	EN input low level	VCC = 5 V	GND		0.5	V
HIV	EN input high level	VCC = 5 V	1.5V		VCC	V
IIH	EN High Input Current VCC = 5 V, EN = 5 V		10		20	ȳA
IIL	EN High Input Current VCC = 5 V, EN = 0 V				1	ȳA
IOUT Output current		VCC = 5 V	10		350	AND
EVERYONE	PDSI Light detection voltage	VCC = 5 V		0.9VCC		
CHAPTER	PDSI Input Current	VCC = 5VȳPDSI=0~ VCC			2	uA
VOH	PDSO Output high voltage	VCC = 5.0 VȳIOUT = -1uA VCC = 5.0 Vȳ	3.1		3.4	V
		IOUT = - 100uA		2.5	3.4	V
VOL	PDSO Output low voltage	VCC = 5.0 VȳPDSI=5V; IOUT =100uA	GND		0.4	V
	WIDTH Output low voltage	VCC = 5.0 VȳPDSI=0V; IOUT =1mA	GND		0.4	V
John	WIDTH Open drain current	VCC = 5.0 VȳPDSI=5V; WIDTH=5V			1	ȳA

FB1 channel R3 resistor	1R,1%	1.5R ,1%	3R,1%
FB2 channel R4 resistor			
LED1-, LED2- channel current (mA) 280ý340		200ý240	108ý132

Rev.A2.1/2023.6



Order Information

Order Model	Package	Number of pins	Packaging	PCS/disk
GR6408QB16ARDQ	QFN	16	Disk	4000

ü Packaging Information

Unit: mm/inch

QFN16

