

Product Overview

NCP5623B: LED Driver, Triple Output, RGB, I2C Controlled

For complete documentation, see the data sheet.

The NCP5623B mixed analog circuit is a triple output LED driver dedicated to the RGB illumination or backlight LCD display. The built in DC to DC converter is based on a high efficient charge pump structure with operating mode 1x and 2x. It provides a 94 percent peak efficiency. The tiny package makes the device suitable for room limited portable applications.

Features

- 2.7 to 5.5 V Input voltage range
- RGB function fully supported
- Programmable Integrated Gradual Dimming
- 90 mA Output Current Capability
- 94% Peak efficiency
- Built-in Short Circuit Protection
- Provides three independent LED drives
- Support full I2C protocol
- Embedded OVP / Open Load protection

Applications

- Multicolor Illuminations
- Portable Back Light
- Digital Cellular Phone Camera Photo Flash
- LCD and Key Board simultaneously drive

Benefits

- Operates over the full Li-Ion battery voltage range.
- Supports multiple illumination functions.
- Embedded digital function save I/O and extra software at MCU level
- Drive any RGB LED.
- High efficiency save battery life.
- Protect the system against output current to ground short circuit.
- Makes light combination easy with simple software commands.
- The registered I2C address avoids conflict when running in a bus system.
- Prevents the circuit from damage when the system operates in a no load condition.

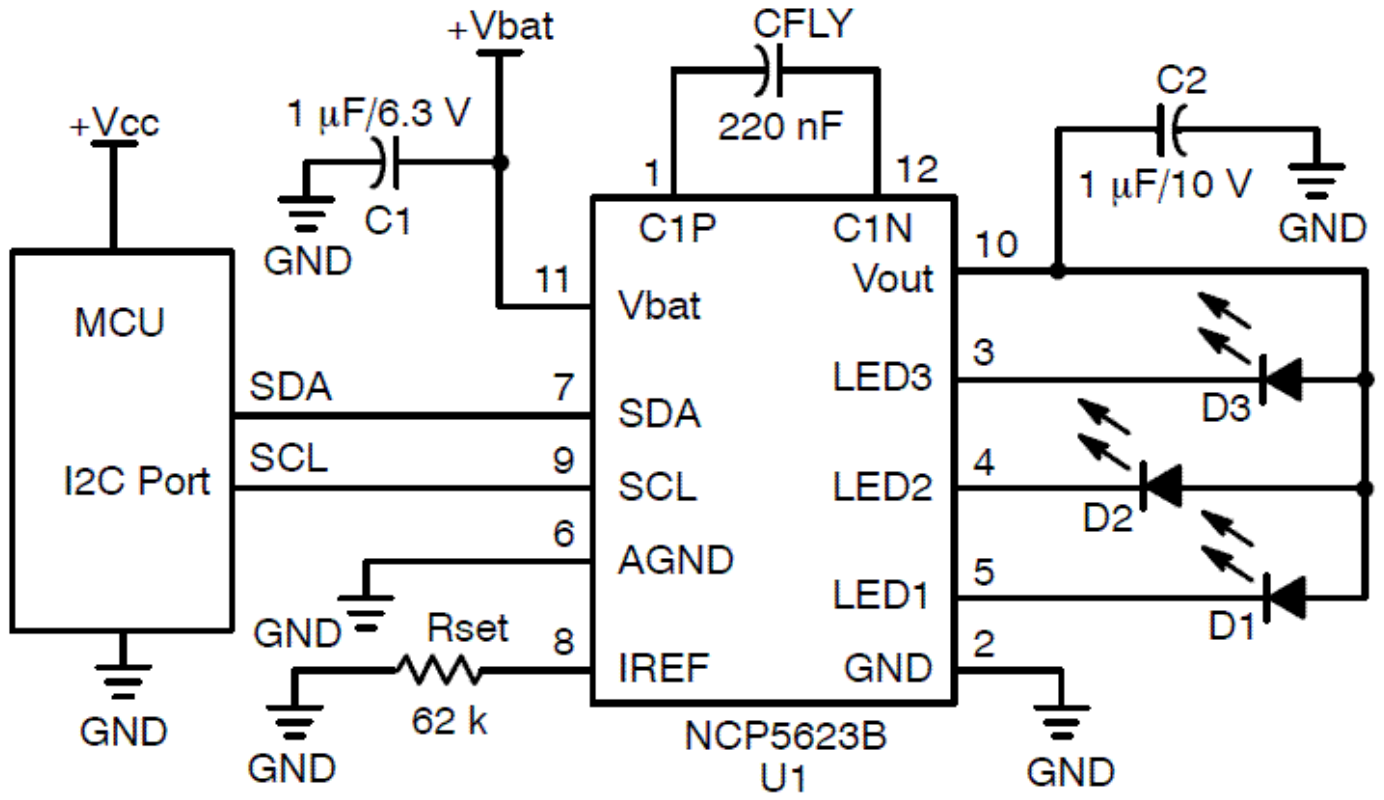
End Products

- Cellular phone
- Car radio
- Mobile MP3 player

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Topology	V _{IN} Min (V)	V _{IN} Max (V)	V _O Max (V)	I _O Max (mA)	f _{SW} Typ (kHz)	Package Type
NCP5623BMUTBG	0.6	Pb-free Halide free	Active	Charge Pump	2.7	5.5	5.5	80	1000	LLGA-12

Application Diagram



For more information please contact your local sales support at www.onsemi.com.

Created on: 8/11/2020