

# PCA9633 Demo Board



## PCA-9633

I<sup>2</sup>C-bus 4-bit LED Driver

Individual and Global

Brightness Control

The PCA9633 Demo Board demonstrates the NXP PCA9633 Fast Mode Plus 4-bit I<sup>2</sup>C LED Driver IC. Four LEDs are connected to the PCA9633 and through individual pulse width modulation (PWM) of each LED show different levels of intensity.

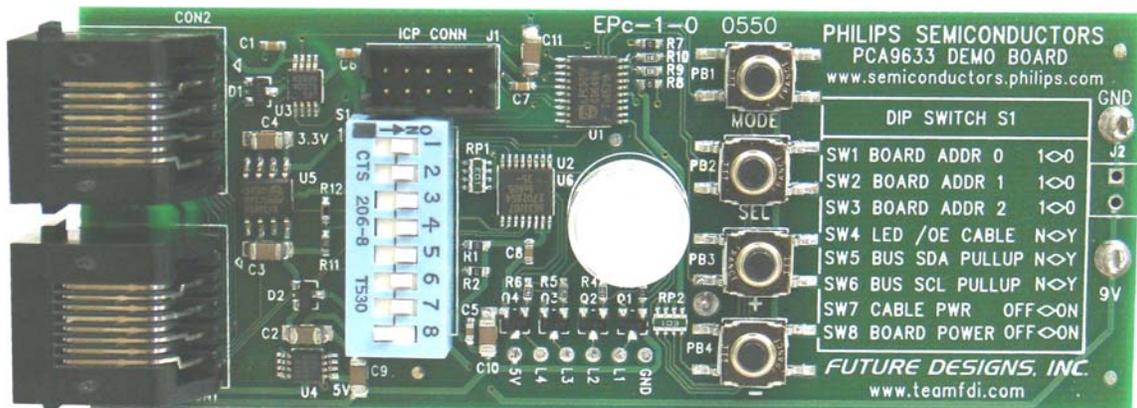
The board supports six different modes of operation including color wash and random color. The on-board Flash microcontroller is also user reprogrammable for endless variations of functionality.

## Highlights

- 1 MHz and 30mA output allows faster data updates and / or more capacitive busses
- 4 Individually controlled 25mA open drain or push-pull outputs OFF, ON, DIM, or DIM with Global Control for LED dimming / blinking
- /OE input pin also allows hardware dimming / blinking
- Up to 7 address pins allows 128 I<sup>2</sup>C addresses
- 4 software programmable I<sup>2</sup>C addresses allows controlling groups of devices with single software command sequence
- If the battery is low, the red LED will flash every 3 seconds as a warning

## Specifications

- 6 Different Modes of Operation:
  - ◆ Auto Demonstration Mode
  - ◆ Color Wash Mode
  - ◆ Random Color Mode
  - ◆ User Color Mode
  - ◆ Multiple Card Chase Mode
  - ◆ Output Enable Control Mode
- Includes high-current FET drivers for off board LED circuitry
- Power can be supplied by either the onboard 9VDC battery or through the external power connector
- Daisy chain boards for synchronous control by a single I<sup>2</sup>C master



## Ordering Information

Part Number: PCA9633DEMO

Order Online Now at:  
[www.digikey.com](http://www.digikey.com)

Warranty: 30-day money back guarantee

Availability: Stock

(256) 883-1241 FAX

[www.teamfdi.com](http://www.teamfdi.com)



All brand names and product names are trademarks or registered trademarks of their respective holders.

**FDI** *Future Designs, Inc.*  
Your Development Partner