FMod-I2C5LedDriver SLP 58/0.5
Datasheet

Very small control device for LEDs lightings. Through its I^{2}C bus, the driver receives consigns to regulate different currents in its 5 LEDs outputs. The user specifies a speed, independent for the 5 outputs, at which the driver will get to the goal current sent by the master. This allows the user to have a full control of a lighting system, easily configurable and with an automatic ultra-low power mode when all the LEDs are switched-off.

Up to 112 devices can be connected to the same I^{2}C bus in daisychain configuration.

This daughter board can easily be soldered directly to a motherboard without any cables through its 32 + 2 plated holes on board edge (1.27mm spacing). In addition to that, 1.27 mm spacing male connector can be soldered to the board, making it plugable, horizontally or vertically, to a dedicated motherboard.

Dimensions

51 x 36 x 6.1 mm (LxBxH), without 1.27mm spacing connector

Electronic interface

Hardware: I2C interface: SDA, SCL (up to 400kHz)

Software: Standard I2C register access, 7+1bit address & multibyte data.

Power interface

LEDs power connector DC [9-58V], max current : Σ channels current + 100mA (max 2.6A)

Logic power connector DC [5V], max 50mA, must be delivered to the device (no regulator included).

Consumption in ultra-low power mode: **logic 5V typ. 10nA, power 58V typ. 80nA at 25°C**, both less than 1uA for each at 85°C.

I2C wake up the device from ultra-low power mode in less 10us.

LED driver

Number of channel: 5

LEDs output voltage: max (supply voltage – 2V)

Number of LEDs: (supply voltage – 2V) / LED voltage

LEDs output current: (each) 0mA, linear 10-500mA ± 5mA, very low current ripple

Switching frequency: 600kHz output-filtered with 100uH + 10uF (cutoff frequency 5kHz)

General IOs: 5 IOs, 5V, A/D inputs, general purpose.

Where to find more information

Please download the user's manual from the following address: http://www.fiveco.ch/leds-drivers-products.html

Developed and made in Switzerland