

SONiX LED Driver

SNLED2735 Starter-kit User Guide

V1.0

1. Description

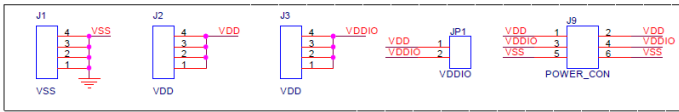
SNLED2735 series has one type of built-in LED matrix. The chip can drive up to 192 LED lights and 64 RGB LED lights. In the LED matrix of SNLED2735 series, each LED has on / off, scan channel adjustment, and the integrated PWM (pulse width modulation) technology in the chip can provide 256 levels of brightness adjustment. In addition, SNLED2735 also supports automatic detection technology and two-stage of temperature detectors.

2. Features

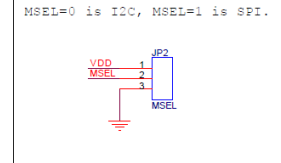
- The Starter -kit supports 2.7V to 5V power supply system.
- The Starter -kit supports I2C and SPI two transmit interfaces.

3. Starter-Kit

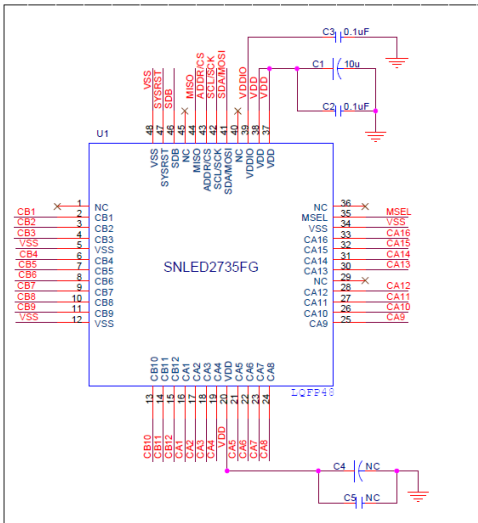
Power Pin



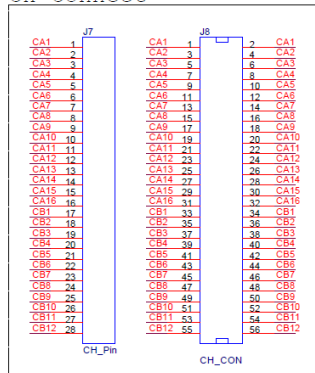
SPI/I2C SEL



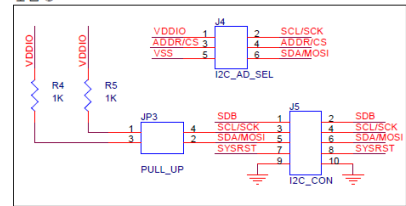
SNLED2735F



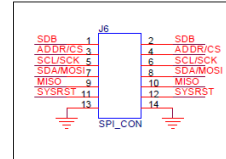
CH Connect



I2C



SPI

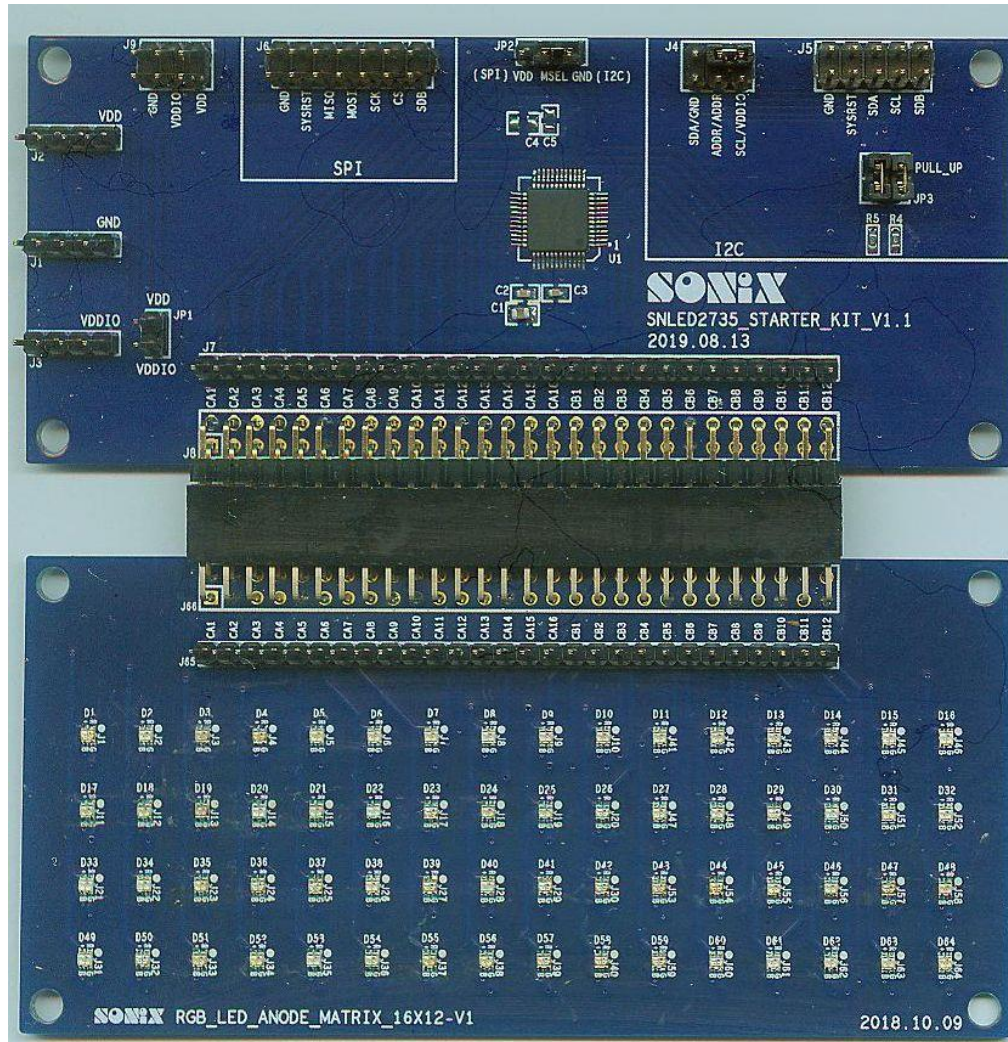


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- J2 : VDD connector.
- J3 : VDDIO connector.
- J1 : GND connector.
- JP1 : VDD & VDDIO connect jumper.
- J4 : I2C address select.
- J5 : I2C interface connector.
- JP3 : I2C pull-up connector.
- JP2 : SPI and I2C mode select. (MSEL = VDD is SPI, and MSEL = GND is I2C.)
- J6 : SPI interface connector
- U1 : SNLED2735JG.
- J7 : LED driver channel connector.
- J8 : LED boards connector.

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4. Recommended Equipment

- 5.0V, 1A power supply.
- ※ Caution: If MCU power is different to SNLED2735 VDD power, JP1 jumper must be floating and MCU power should connect to SNLED2735 VDDIO pin.

5. Absolute Maximum Ratings

- $\leq 5.5V$ power supply.
- ※ Caution: Do not exceed the conditions listed above, otherwise the board will be damaged.

6. Starter-Kit Operation for SPI

- MSEL (JP2) is connected to VDD.
- Use SPI interface (J6) with MCU.

7. Starter-Kit Operation for I2C

- MSEL (JP2) is connected to GND.
- I2C AD pin (J4) is connected to VDD, VSS, SCL, or SDA.
- I2C SCL and SDA pull-up (JP3) is connected.
- Use I2C interface (J5) with MCU.

8. Revised History

Version	Date	Description
1.0	2019/12/27	1.Created

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