

Evaluation Board / Kit Disclaimer

The evaluation board/kit (research and development board/kit) (hereinafter the "board") is not a finished product and is as such not available for sale to consumers. The board is only intended for research, development, demonstration and evaluation purposes and should as such only be used in laboratory/development areas by persons with an engineering/technical training and familiar with the risks associated with handling electrical/mechanical components, systems and sub-systems. This person assumes full responsibility/liability for proper and safe handling. Any other use, resale or redistribution for any other purpose is strictly prohibited.

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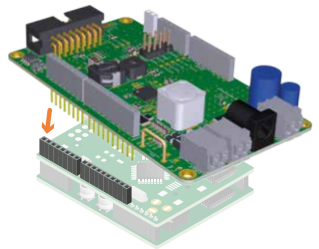
The logo for onsemi, featuring the word "onsemi" in a dark blue, lowercase, sans-serif font. The "i" has a small vertical bar above it.

NCL31000ASGEVB QUICK START GUIDE

onsemi.com

A decorative graphic in the bottom right corner consisting of two overlapping shapes: a large orange arrow pointing up and to the right, and a blue arrow pointing up and to the right, partially overlapping the orange one. The blue arrow has a white grid pattern on it.

1 Arduino Option

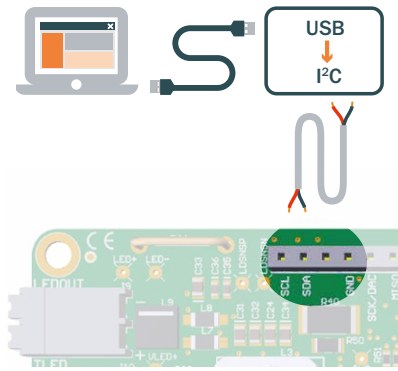


Plug the Shield into the MCU board



Refer to the User Manual

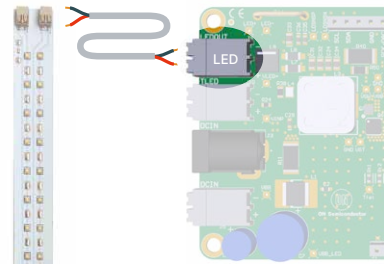
2 I²C Option



Connect the I²C pins on J6 to an adapter interface

Connect the adapter to the PC

3 Connect LED String

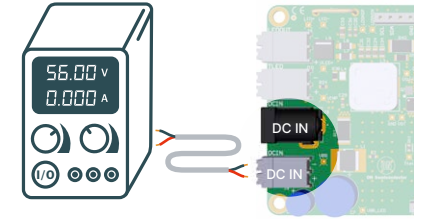


Verify the anode and cathode connections

Connect the LED string to the NCL31000ASGEVB

For LED strings rated 16 to 38V / 2.8A / 100W

4 Power Supply



Connect a power supply to the NCL31000 shield at DC IN

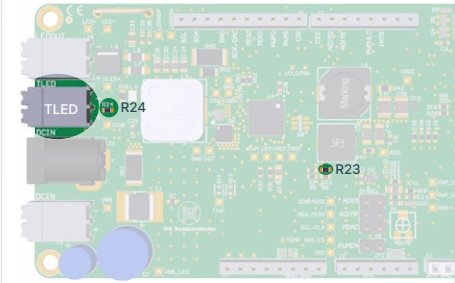
Set an appropriate current limit

Supply between 24 to 57V

Green 3V3 LED indicates correct operation



5 NTC Options



By default the NTC on the EVB is measuring the LED driver top FET (Q6) temperature

To measure the LED board temperature:

- remove R24 and short R23
- connect the NTC on the LED board to the TLED connector (J9)