OLIMEX DCDC-50-5-12 Open Source Hardware Board User Manual

Contents

OLIMEX DCDC-50-5-12 Open Source Hardware Board

Product Information

Specifications

- **Model:** DCDC-50-5-12
- **Output Voltage:** 5V/1.5A or 12V/1.5A
- **Input Voltage Range:** Up to 50VDC
- **Application:** Suitable for delivering power to OlinuXino Linux computers from automotive 12V-24VDC systems

Product Usage Instructions

1. Connection

Connect the DCDC-50-5-12 as follows:

- Connect the input power source to the Input terminal block or Input barrel jack 5.5mm.
- Connect the device receiving power to the Output terminal block or JST 2.0 mm connector.

2. Output Voltage Selection

To select the output voltage, use the Output voltage jumper selection:

- For 5V output: keep the jumper open.
- For 12V output: close the jumper.

Frequently Asked Questions

Q: What is the suitable application for DCDC-50-5-12?

A: DCDC-50-5-12 is suitable for delivering power to OlinuXino Linux computers from automotive 12V-24VDC systems.

Q: What are the available order codes for DCDC-50-5-12?

A: The available order codes are DCDC-50-5-12, DCDC-50-5-12 BATTERY-CABLE, DCDC-50-5-12 PWR-CABLE, and DCDC-50-5-12 PWR-CABLE-RA.

What is DCDC-50-5-12

DCDC-50-5-12 is high effeciency DC to DC which delivers 5V/1.5A or 12V/1.5A from wide range of input voltage up to 50VDC. It is suitable to deliver 5V for OlinuXino Linux computers from automotive 12V-24VDC power system.

- When the output is 5VDC/1.5A the input power can be in range 8-50VDC.
- When the output is 12VDC/1.5A the input power can be in 17-50VDC.
- Default power output is 5VDC whrn 12V_E1 jumper is opened.
- When 12V-E1 jumer is closed (cap on) the output voltage is 12VDC/1.5A.
- The dimensions are: 50 x 35 x 15 mm.
- The input can be supplied on two connectors:

1. Power barrel jack with 2.2 mm inner positive and outer 5.5 mm which is compatible with **PWR-CABLE** and **PWR-CABLE- RA**
2. Screw terminal connector with 5 mm step for wires 0.2-2.0mm2

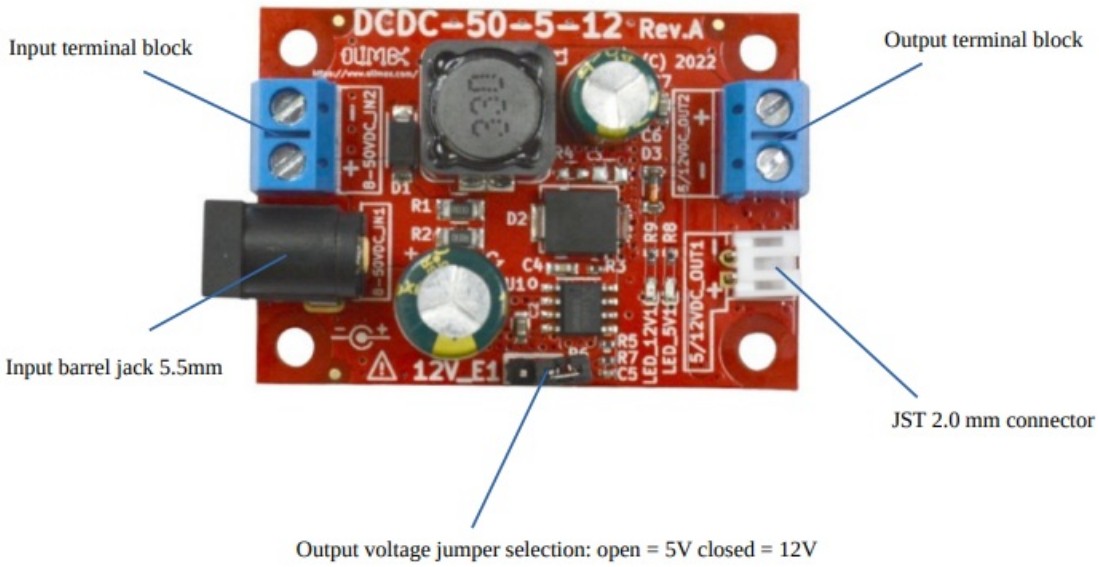
The output can is provided on two connectors:

1. Screw terminal connector with 5 mm step for wires 0.2-2.0mm2
2. 2.0 mm step JST cable connector which can be used with BATTERY-CABLE (note colors are red for – and black for +)

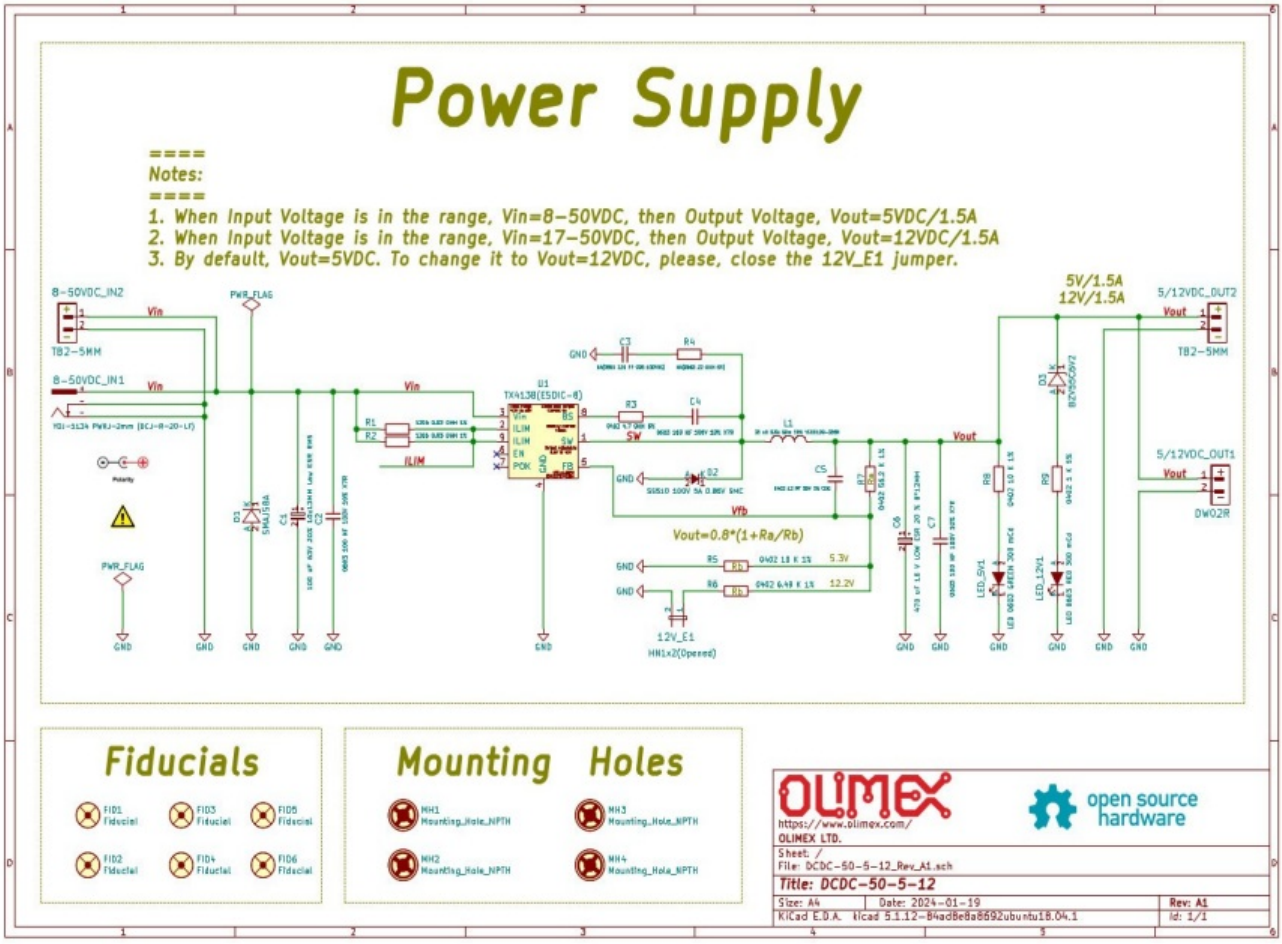
Order codes

- DCDC-50-5-12 industrial grade -40+85C DCDC power supply
- BATTERY-CABLE output power cable
- PWR-CABLE input cable
- PWR-CABLE-RA input cable

layout



schematics



Revision History

- Revision 1.0 February 2024

Documents / Resources

	**OLIMEX DCDC-50-5-12 Open Source Hardware Board** [pdf] User Manual DCDC-50-5-12 Open Source Hardware Board, DCDC-50-5-12, Open Source Hardware Board, Hardware Board, Board

References

- **OLIMEX LTD - OLinuXino Arduino Maple Pinguino ARM Open Source Hardware Development Boards**
- **BATTERY-CABLE**
- **PWR-CABLE-RA**
- **User Manual**