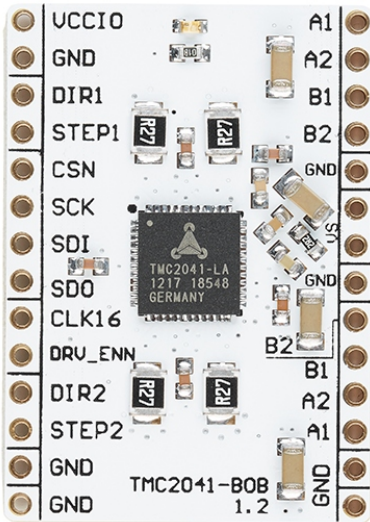


TMC2041-LA BOB Description

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Module Top View



Features and additional Resources

- TMC2041-LA stepper driver
- Supply voltage 5-26V, $I_{phase,RMS}$ up to 2x1.1A
- Config via SPI, control via step/direction
- Use off-board electrolyte cap with your supply
- Optional cooling using bottom side with gap pad
- Board width 1.0", board height 1.4"
- 2x14 pin 0.1" header rows for pins/connectors
- Link to [additional information and IC Datasheet](#)
- Link to [Evaluation Kit](#)

Pin List

Left	Signal	Right	Signal
1	VCCIO (3.3V or 5V)	15	O1A1 (Motor Axis 1)
2	GND	16	O1A2
3	DIR1	17	O1B1
4	STEP1	18	O1B2
5	CSN (active low)	19	GND
6	SCK (up to 6MHz with external CLK)	20	VS (5-26V)
7	SDI (data in)	21	VS (5-26V)
8	SDO (data out)	22	GND
9	CLK16 (pull to GND for internal CLK)	23	O2B2 (Motor Axis 2)
10	DRV_ENN (active low)	24	O2B1
11	DIR2	25	O2A2
12	STEP2	26	O2A1
13	GND	27	GND
14	GND	28	GND

Bill of Materials

Pcs.	MPN	Value	Footprint	Description
1	MC0603B223K500CT	22nF	0603	Cap, Multicomp
5	MC0603F104M500CT	100nF	0603	Cap, Multicomp
1	MC0603X474K160CT	470nF	0603	Cap, Multicomp
1	MC0603X475K100CT	4.7uF	0603	Cap, Multicomp
4	MC1206X106K250CT	10uF	1206	Cap, Multicomp
1	LTST-C191TBKT-5A	20mA,2.8V,465nm	0603	LED, Lite-On
1	TMC2041-LA	TMC2041-LA	QFN48,7x7,0.5	Driver,TRINAMIC
4	RCWE1206R270FKEA	0R27,1%R1206	1206	Res, Vishay
1	MC0063W0603110K	2R2,1%	0603	Res, Multicomp
1	MC0063W060311K	1k	0603	Res, Multicomp



BOB Schematics

