

VCC_IO

TMC262_BOB40
V1.2

GND

DIR

STEP

SDO

SDI

SCK

CSN

GND

DRV_ENN
CLK16

SG_TST

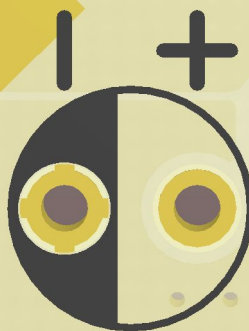
VS
GND

A1
A2
B1
B2

GND

GND

GND



VS

GND

A1

A2

B1

B2

GND

GND

GND

GND

GND

GND

TMC262_BOB40_V1.2

IC name: TMC262-LA

Supply range: VS = 9...40V

Max. current: IRMS = 2.8A

VCC_IO

GND

DIR

STEP

SDO

SDI

SCK

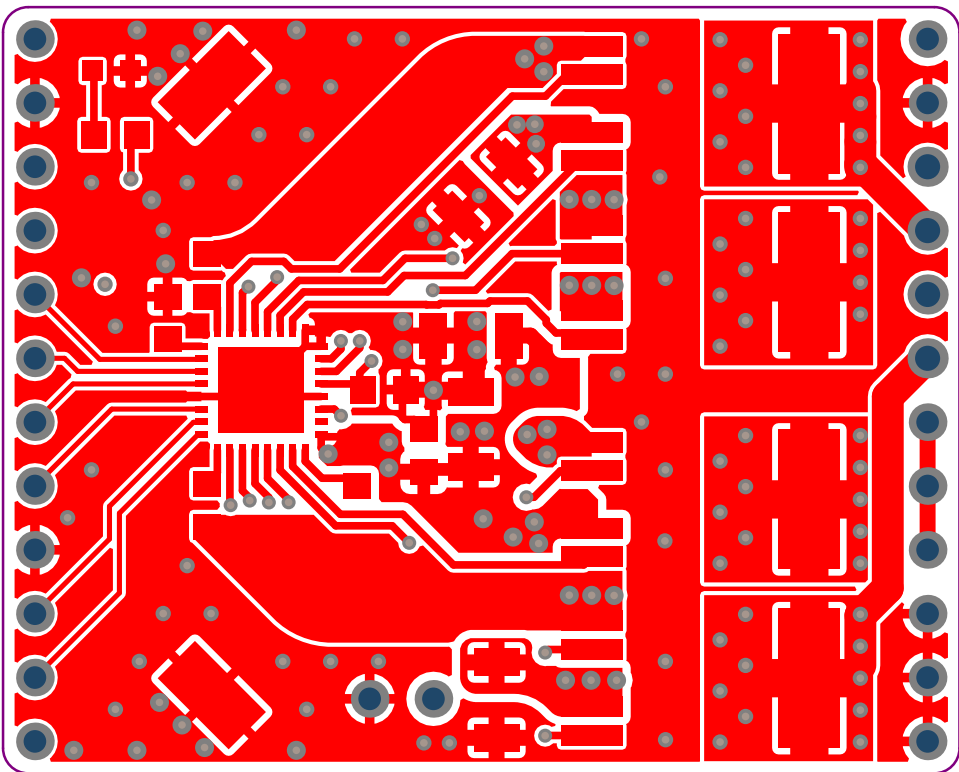
CSN

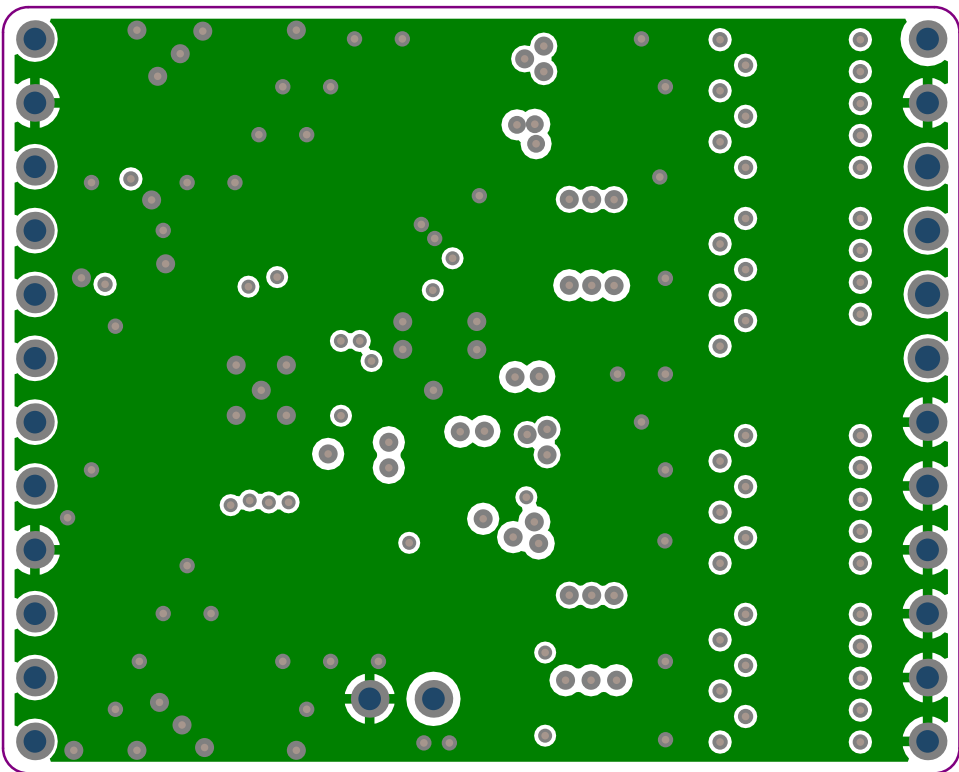
GND

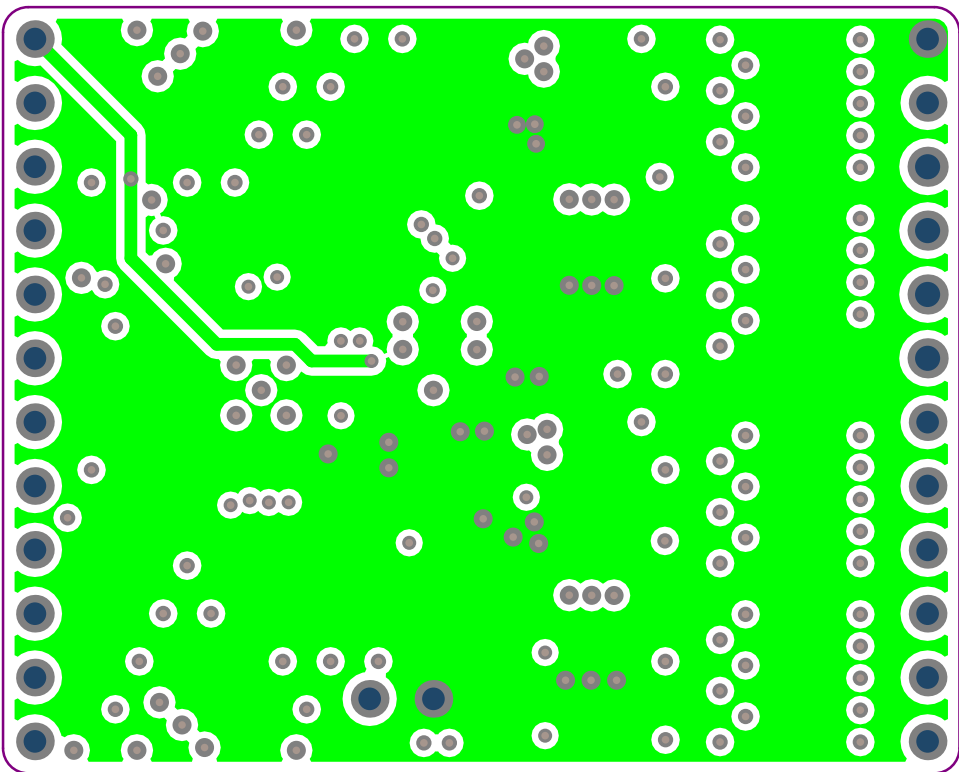
DRV_ENN

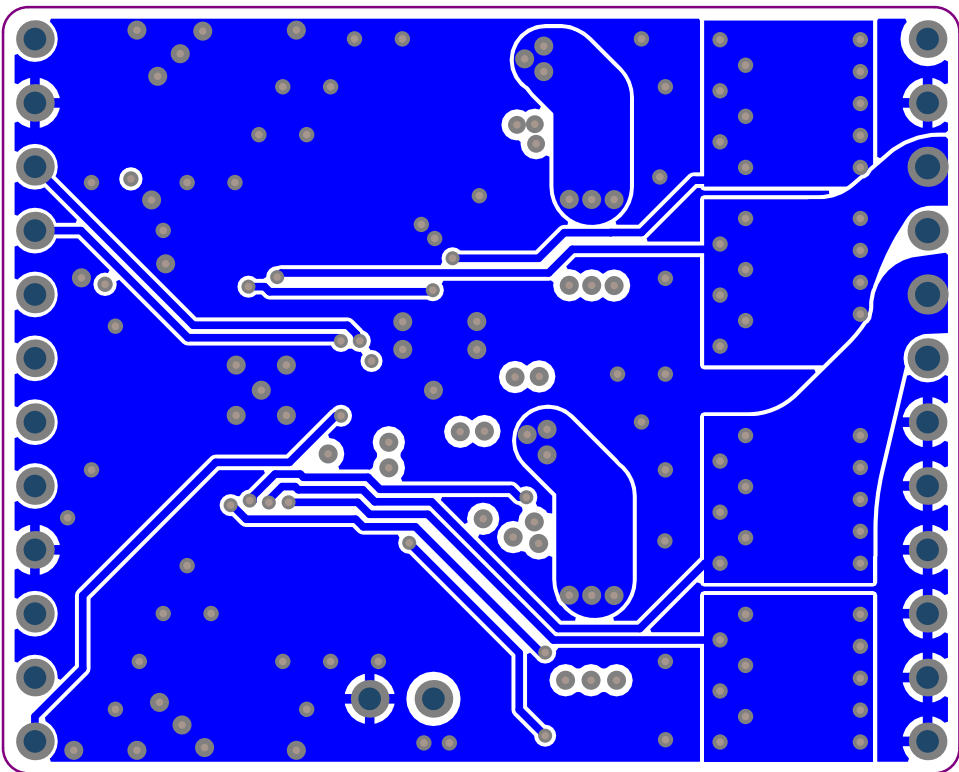
CLK16

SG_TST









VCC_IO

GND

DIR

STEP

SDO

SDI

SCK

CSN

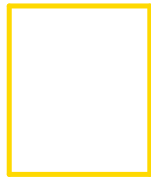
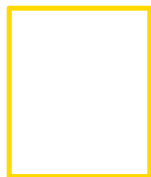
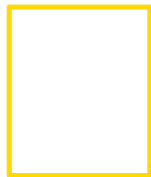
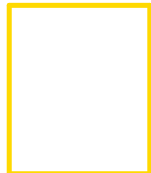
GND

DRV_ENN

CLK16

SG_TST

TMC262_BOB40
V1.2



V_S

GND

1

2

3

4

5

6

7

8

9

10

11

12

13

14

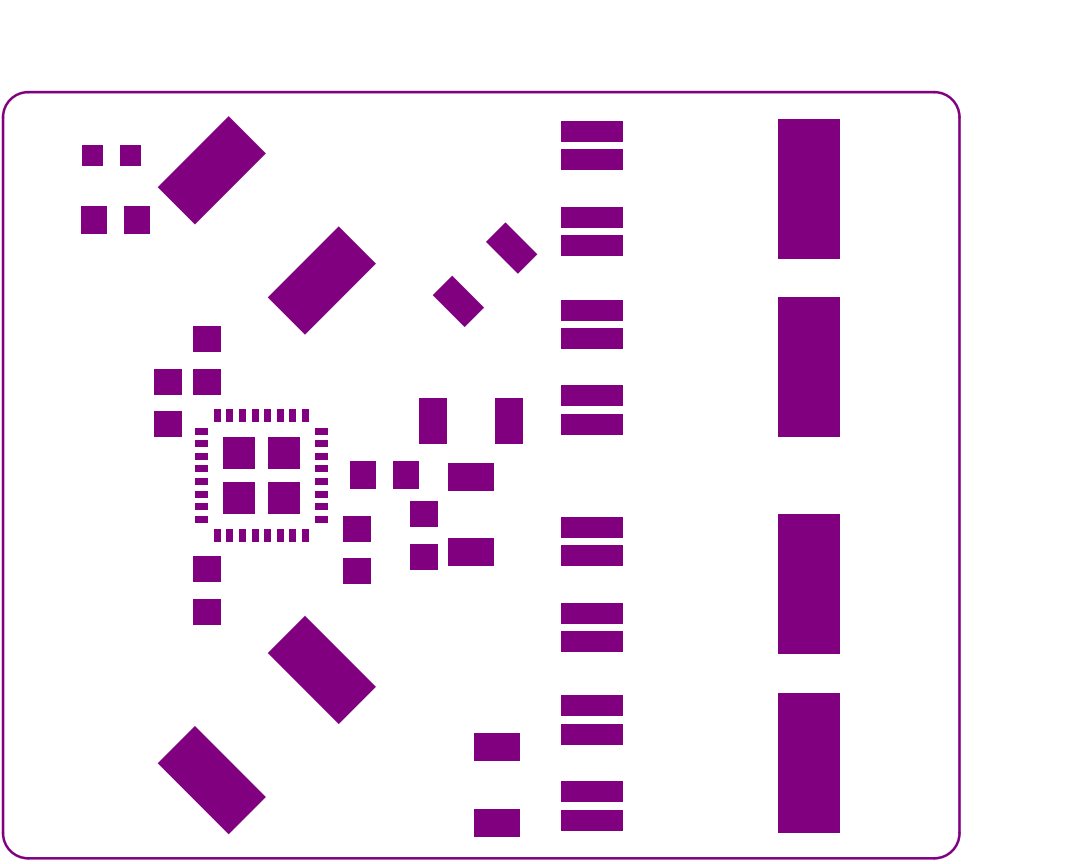
15

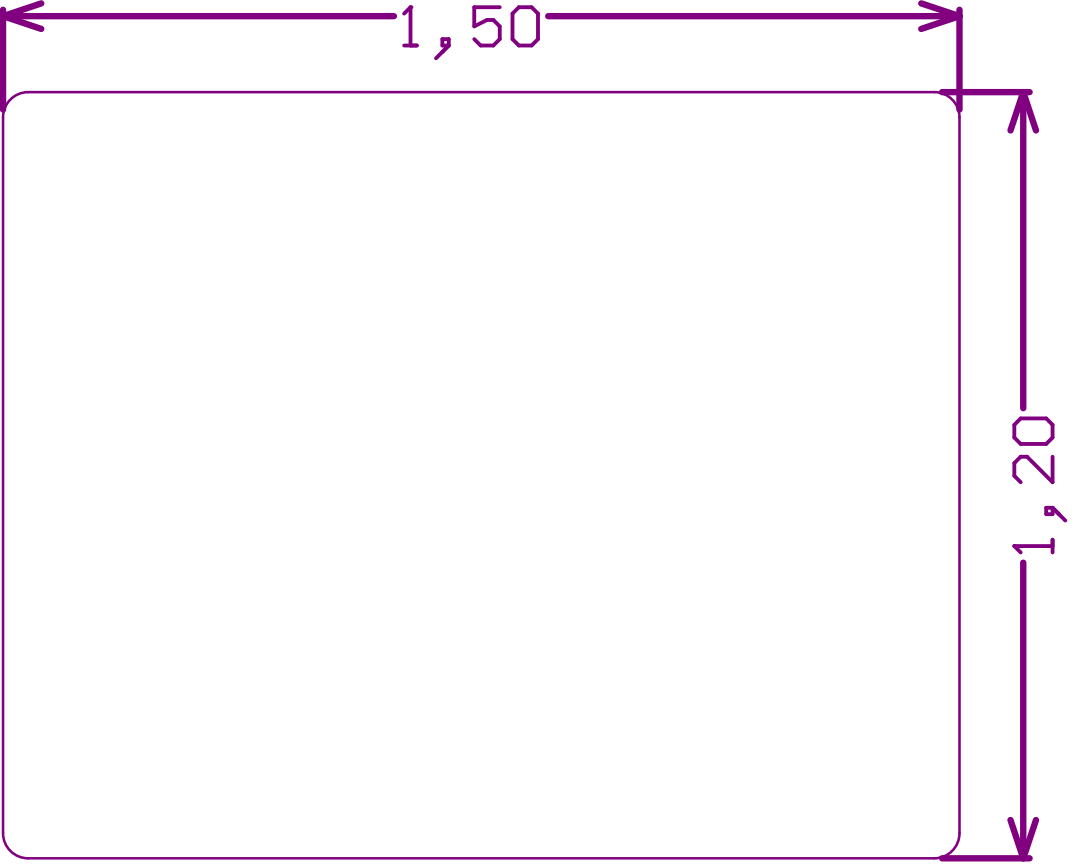
16

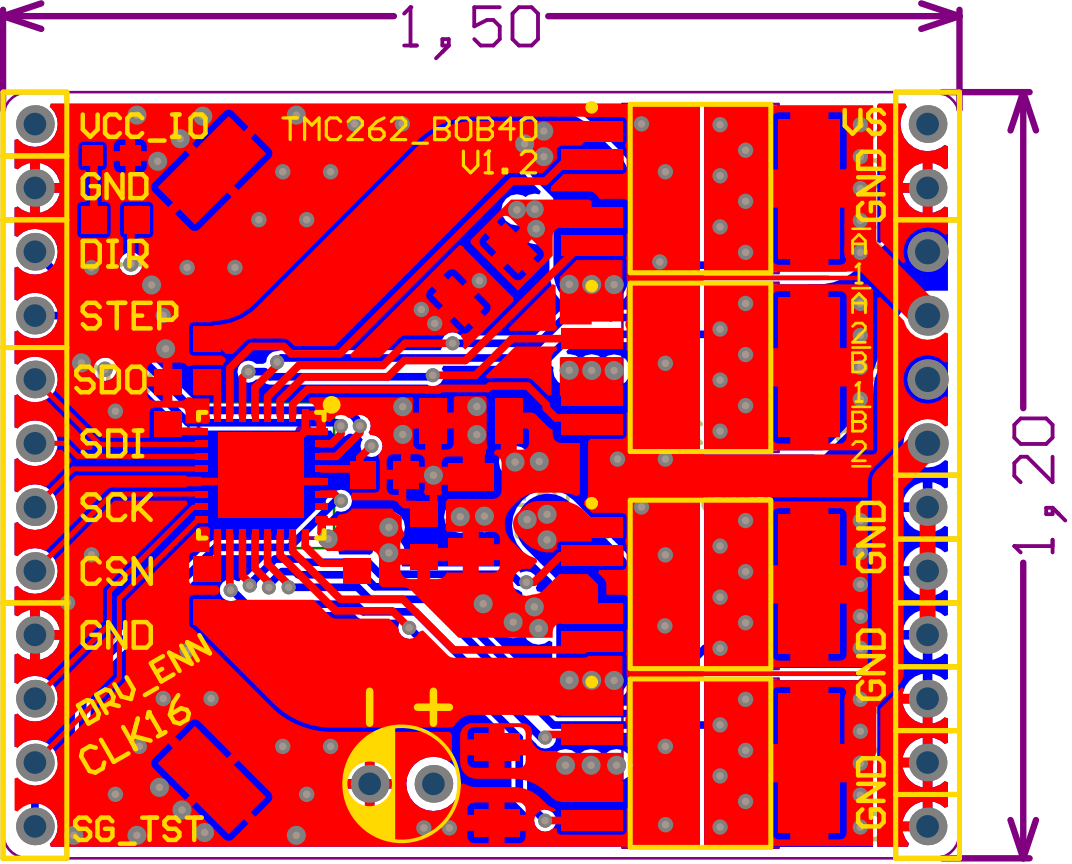
17

18

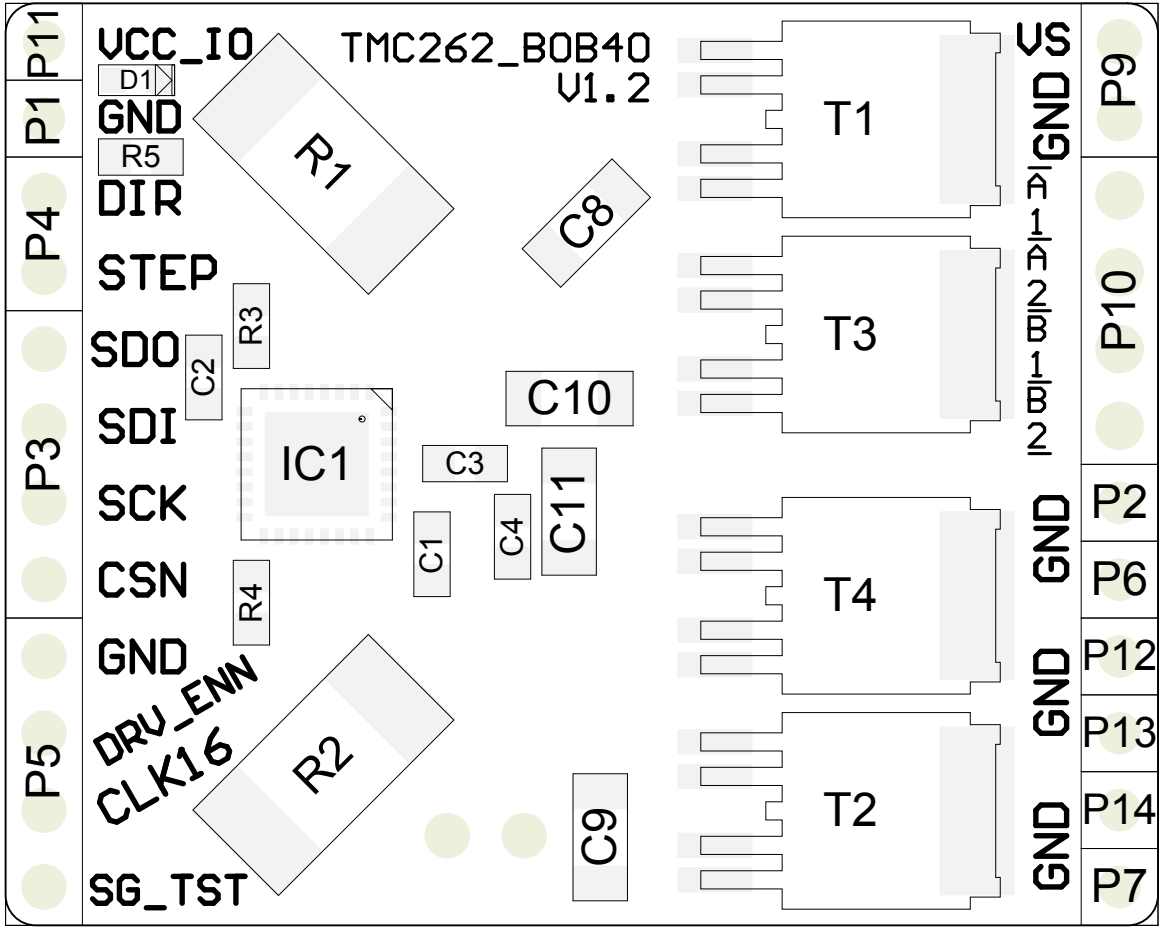
VS		VCC_IO
GND		GND
A1		DIR
A2		STEP
B1		SDO
B2	TMC262_BOB40_V1.2	SDI
GND	IC name: TMC262-LA Supply range: VS = 9...40V Max. current: IRMS = 2.8A	SCK
GND		CSN
GND		GND
GND		DRV_ENN
GND		CLK16
GND		SG_TST



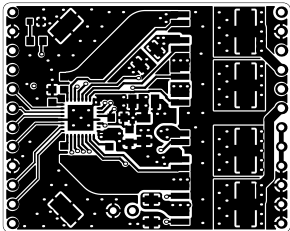




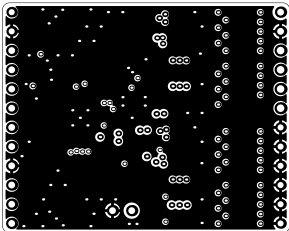
View from Top side (Scale 4:1)



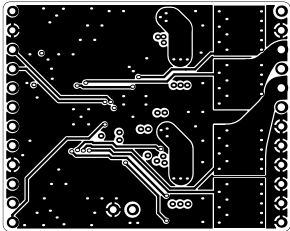
Top (Scale 1:1)



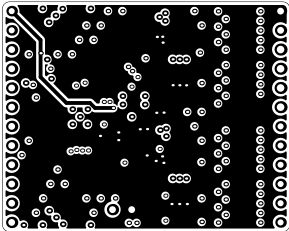
GND (Scale 1:1)



Bottom (Scale 1:1)



VM (Scale 1:1)



BOM

Project: TMC262_BOB40

Version: 1.2

Date: 18.07.2017

#	Quantity	MPN	Comment	Designator	Footprint	Description	Note	MF
1	1	MC0603B224K160CT	220nF/16V/10%	C1	C0603	Ceramic capacitor		Multicomp
2	1	MC0603X474K160CT	470nF/16V/10%	C2	C0603	Ceramic capacitor		Multicomp
3	1	MC0603B104K160CT	100nF/16V/10%	C3	C0603	Ceramic capacitor		Multicomp
4	1	MC0603F104M500CT	100nF/50V/20%	C4	C0603	Ceramic capacitor		Multicomp
5	4	GRM31CR61H106KA12L	10uF/50V/10%	C8, C9, C10, C11	C1206	SMD Multilayer Ceramic Capacitor, 1206 [3216 Metric], 10 µF, 50 V, ± 10%, X5R, GRM Series		MURATA
6	1	LTST-C191TBKT-5A	LED, Blue, SMD, 20mA, 2.8V, 465 nm	D1	LED_0603	LED, Blue, SMD, 20mA, 2.8V, 465 nm		Lite-On
7	1	TMC262-LA	TMC262-LA	IC1	TMC262_QFN32_0.5_5.0X5.0	Energy saving high resolution microstepping two phase stepper driver with Step/Dir, SPI, up to 60V, QFN32(5x5)		TRINAMIC
8	2	TLR3A20WR075FTDG	.075R / 2W / 1%	R1, R2	R2512	SMD Current Sense Resistor, 0.075 ohm, 2 W, 2512 [6432 Metric], ± 1%, TLR Series		TE CONNECTIVITY
9	2	MCWR06X10R0FTL	10R / 1%	R3, R4	R0603	SMD Chip Resistor, Thick Film, 10 ohm, 50 V, 0603 [1608 Metric], 100 mW, ± 1%, MCWR Series		Multicomp
10	1	MC0063W060311K	1k	R5	R0603	1 kohm, 50 V, 0603 [1608 Metric], 63 mW, ± 1%, MC Series		MULTICOMP
11	4	FDD8424H	FDD8424H	T1, T2, T3, T4	SOT114P991X239-6N	Dual MOSFET, N and P Channel, 9 A, 40 V, 0.019 ohm, 10 V, 1.7 V		FAIRCHILD SEMICONDUCTOR

Approved	Notes	33

ChangeLog

V1.0 - Initial design

- V1.1 - Redesign and Optimization after 1st Round
- + Added 2 additional 10uF ceramic caps.
 - + Modified bottom side labels (IC Name, Supply range, Max. current):
TMC262-LA, VS = 9...40V, IphaseRMS = 2.8A
 - + Changed right connector: signals starting from top: VS / GND / A1 / A2 / B1 / B2.
 - + Changed silkscreen text width from 5mil to 7mil.
 - + Changed board name text height to 35mil.
 - + Made sure that all components are good for 40V supply.

V1.2 - Changed pin hole diameters from 0.9mm to 1mm for header P10 (MAB).

Title			<i>TMC262_BOB40</i>		
Size	Number			Revision	
A4				<i>1.2</i>	
Date:	18.07.2017			Sheet	of
File:	C:\Users\...\ChangeLog.SchDoc			Drawn By:	

