



VCCIO

GND

DIR

STEP

SDO

SDI

SCK

CSN

GND

DRV\_ENN

CLK16

SG\_TST

TMC262\_BOB60  
V1.2

VS

GND

A

1

A

2

B

1

B

2

GND

GND

GND

GND

GND

GND

GND

GND

GND

GND

GND

GND

GND

GND

GND

GND

GND

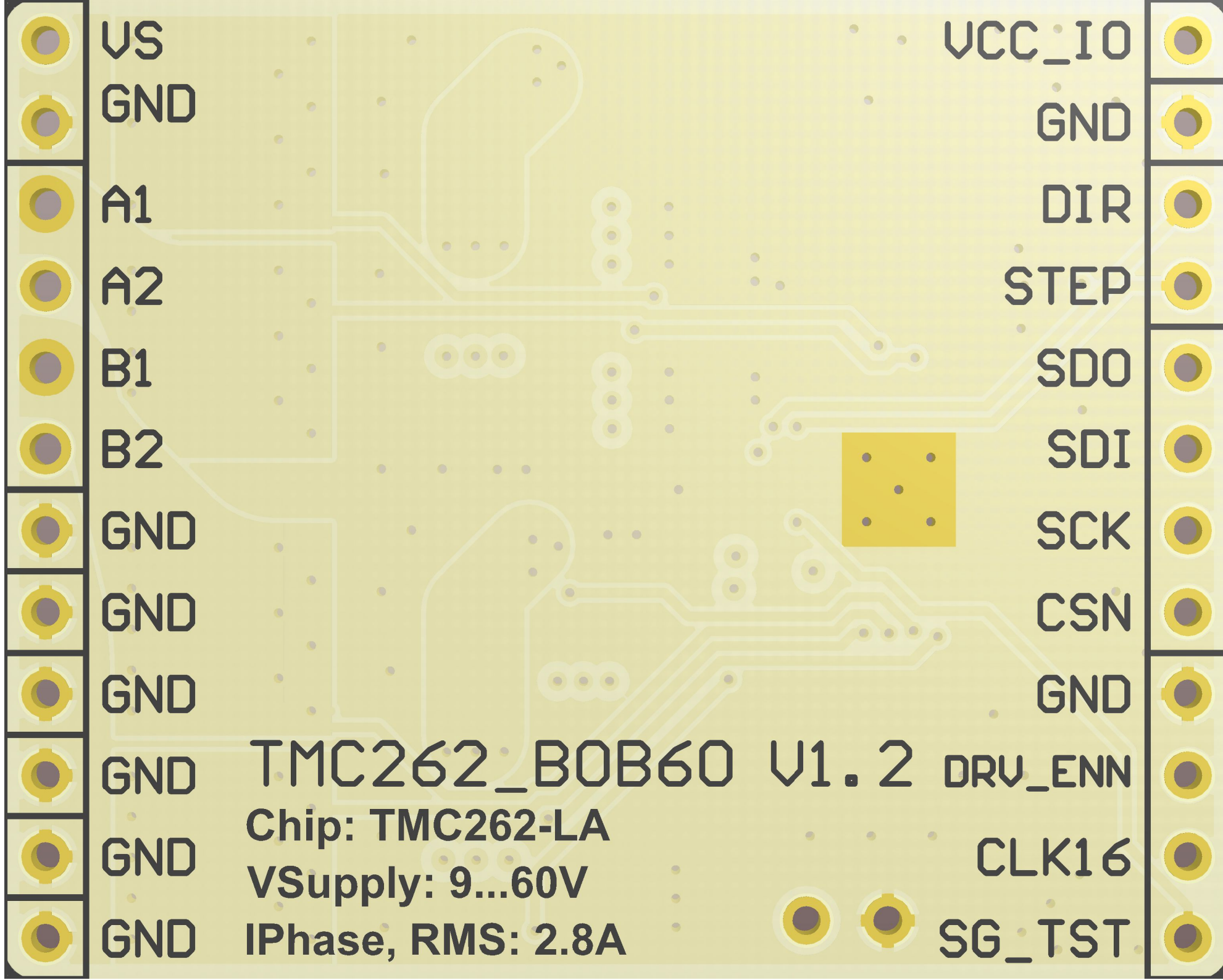
GND

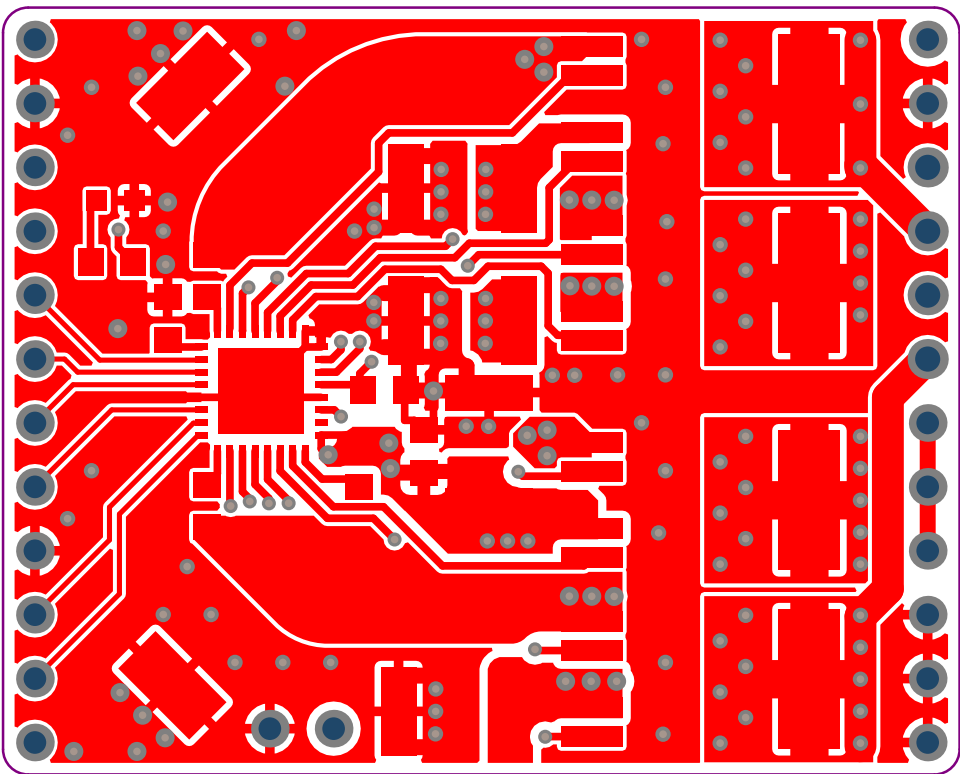
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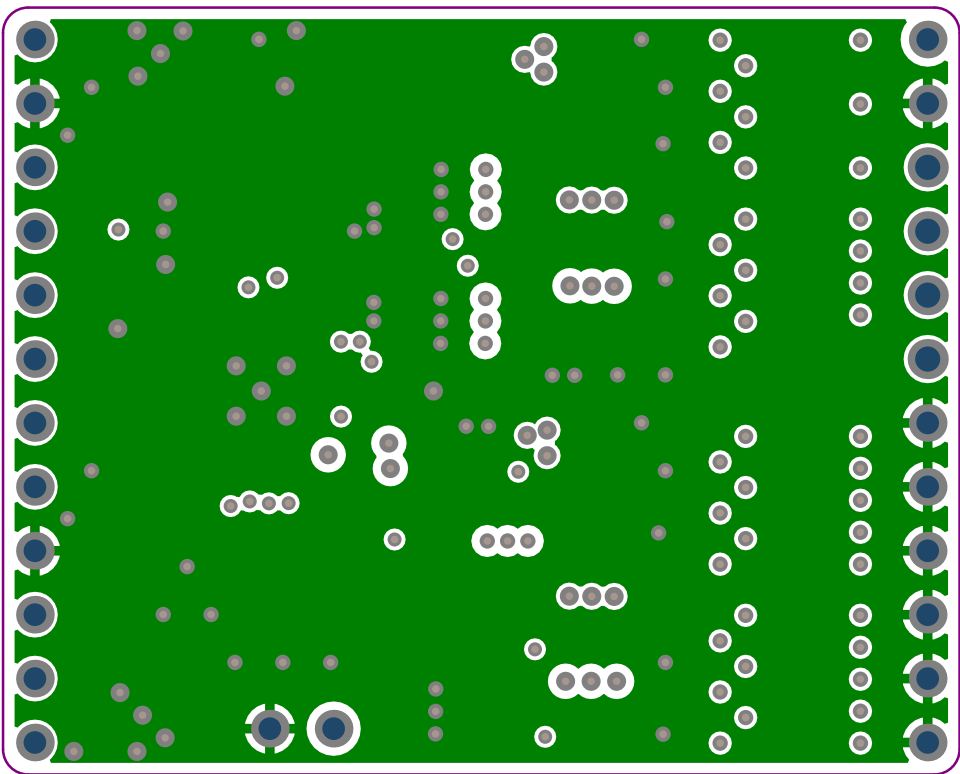
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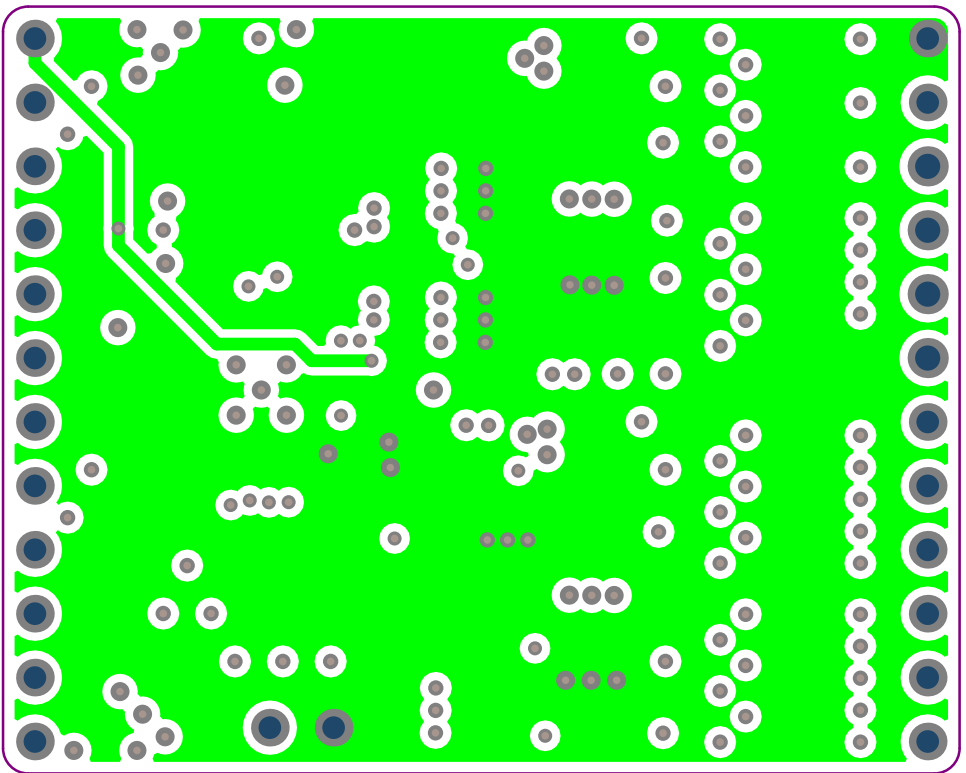
GND

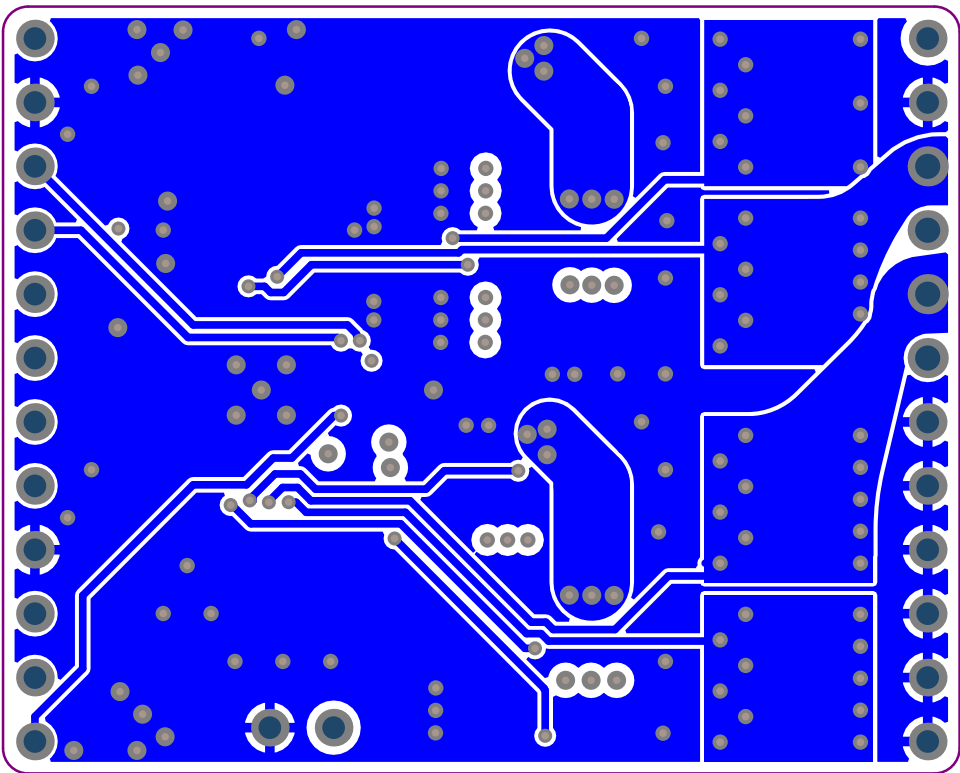
GND













VCCIO

GND

DIR

STEP

SDO

SDI

SCK

CSN

GND

DRV\_ENN  
CLK16

SG\_TST

TMC262\_BOB60  
V1.2

•



•



•



•



VS

GND

A1

A2

B1

B2

GND

GND

GND

GND

GND

GND

GND

GND

GND

GND

GND

GND

GND

GND

GND

GND

GND

GND

GND

GND

GND

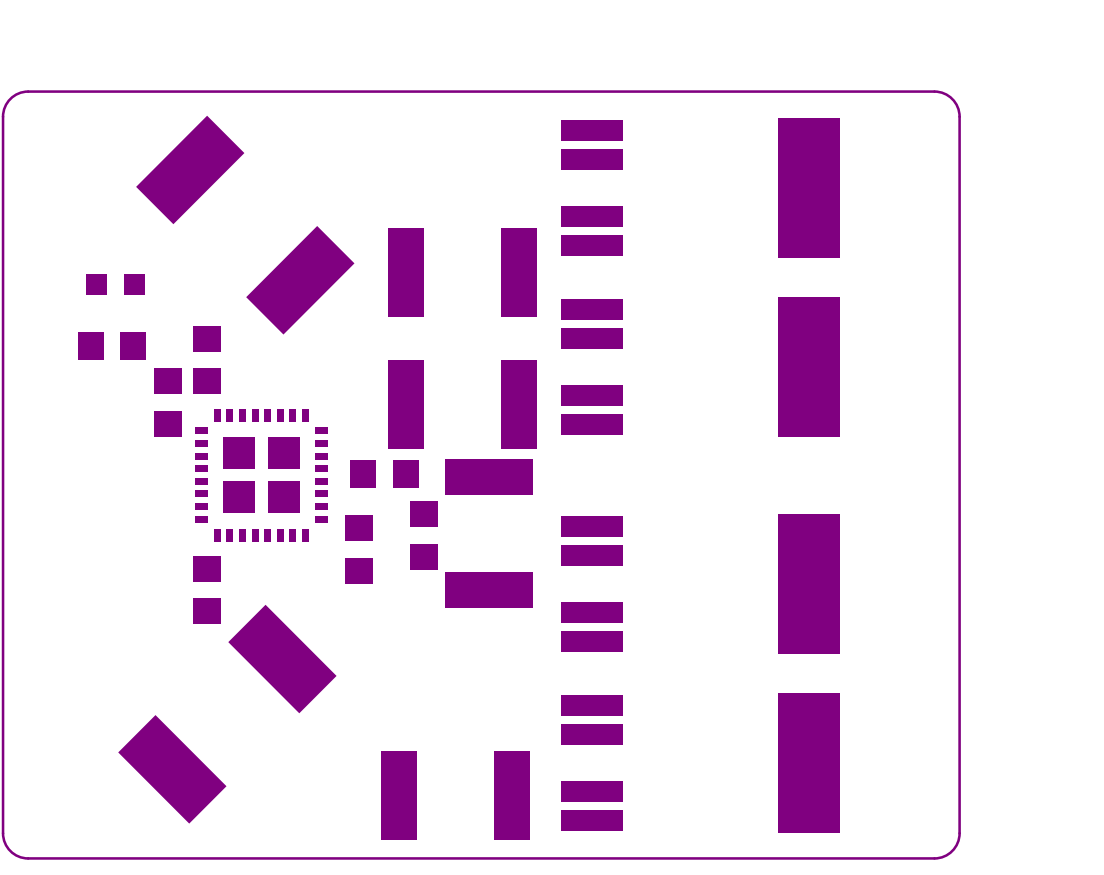
GND

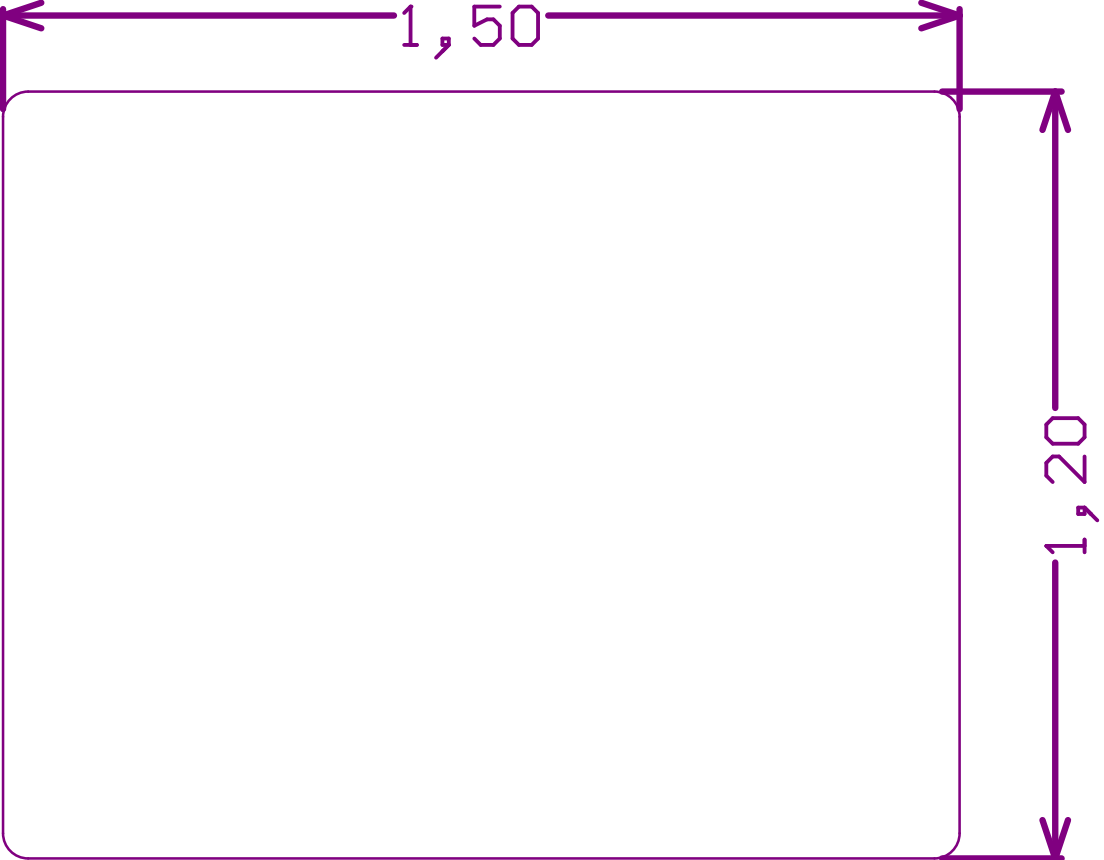
GND

GND

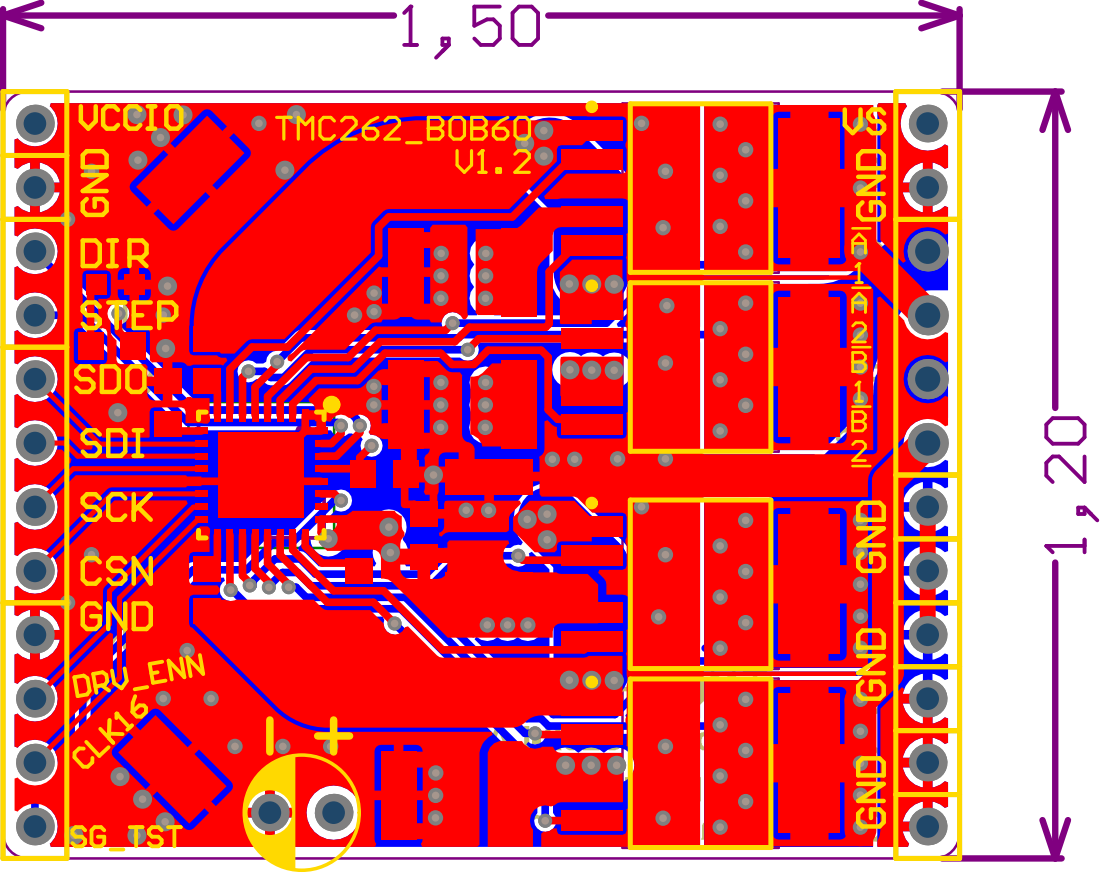
GND

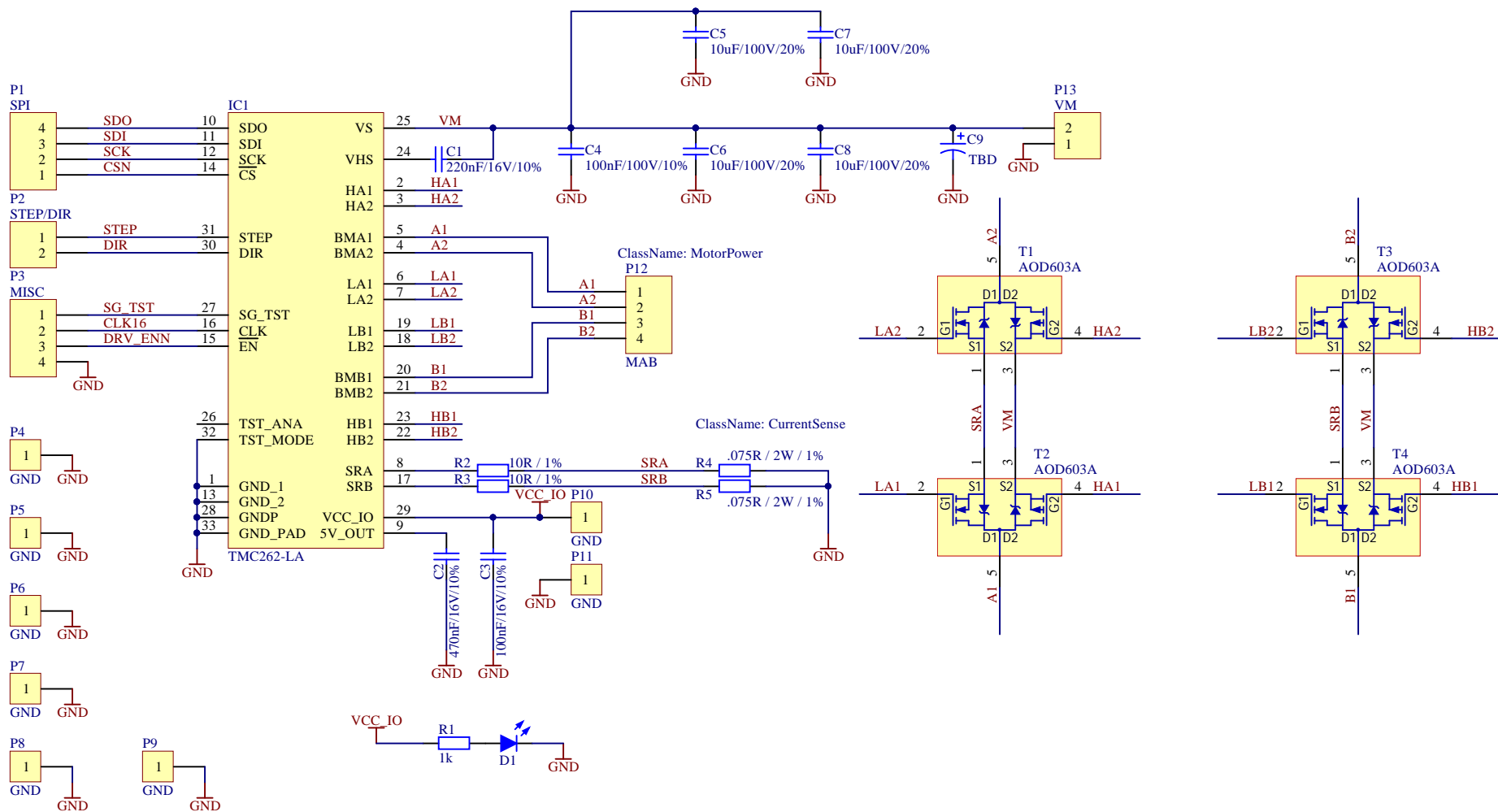
VS		VCC_IO
GND		GND
A1		DIR
A2		STEP
B1		SDO
B2		SDI
GND		SCK
GND		CSN
GND		GND
GND	TMC262_BOB60 V1.2	DRV_ENN
GND	Chip: TMC262-LA	CLK16
GND	VSupply: 9...60V	
GND	IPhase, RMS: 2.8A	SG_TST





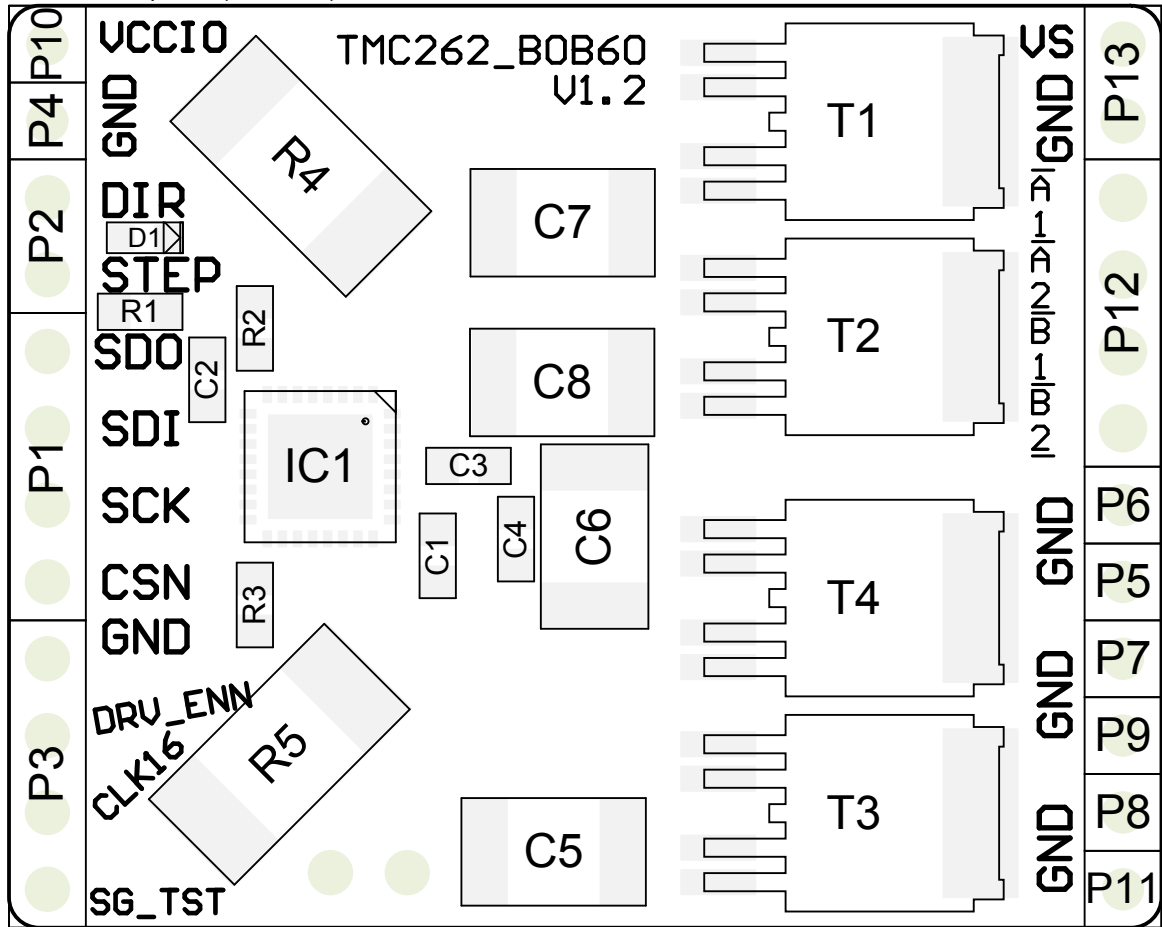




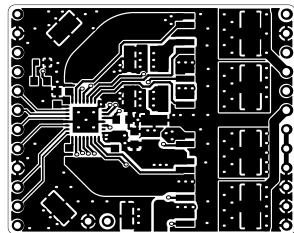


Title <i>TMC262_BOB60</i>		
Size A4	Number	Revision <i>1.2</i>
Date: 18.07.2017	Sheet of	
File: C:\Users\...\TMC262_BOB60_V1_2.SchDoc	Drawn By:	

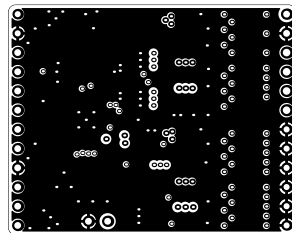
View from Top side (Scale 4:1)



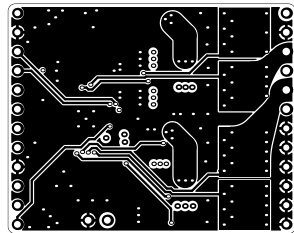
Top (Scale 1:1)



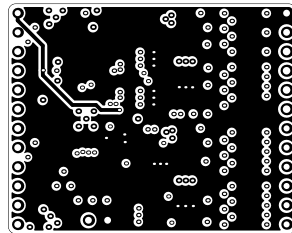
GND (Scale 1:1)



Bottom (Scale 1:1)



VM (Scale 1:1)



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...60V, 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 60V supply.

V1.2 - Changed pin hole diameters from 0.9mm to 1mm for header P12 (MAB).

Title			<i>TMC262_BOB60</i>		
Size	Number			Revision	
A4				<i>1.2</i>	
Date:	18.07.2017			Sheet	of
File:	C:\Users\...\ChangeLog.SchDoc			Drawn By:	



# BOM

Project: TMC262\_BOB60

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	GRM188R72A104KA35D	100nF/100V/10%	C4	C0603	SMD Multilayer Ceramic Capacitor, 0603 [1608 Metric], 0.1 µF, 100 V, ± 10%, X7R, GRM Series		MURATA
5	4	CKG45NX7S2A106M500JH	10uF/100V/20%	C5, C6, C7, C8	CKG45NX7S2A106M500JH	SMD Multilayer Ceramic Capacitor, 1812 [4532 Metric], 10 µF, 100 V, ± 20%, X7S, CKG Series		TDK
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	1	MC0063W060311K	1k	R1	R0603	1 kohm, 50 V, 0603 [1608 Metric], 63 mW, ± 1%, MC Series		MULTICOMP
9	2	MCWR06X10R0FTL	10R / 1%	R2, R3	R0603	SMD Chip Resistor, Thick Film, 10 ohm, 50 V, 0603 [1608 Metric], 100 mW, ± 1%, MCWR Series		Multicomp
10	2	TLR3A20WR075FTDG	.075R / 2W / 1%	R4, R5	R2512	SMD Current Sense Resistor, 0.075 ohm, 2 W, 2512 [6432 Metric], ± 1%, TLR Series		TE CONNECTIVITY
11	4	AOD603A	AOD603A	T1, T2, T3, T4	SOT114P991X239-6N	Transistor: N/P-MOSFET; unipolar; complementary; -60/60V; TO252-4		ALPHA & OMEGA SEMICONDUCTOR
Approved			Notes					

