

REVISION HISTORY				
REV	ZONE	DESCRIPTION	DATE	APPR
A		INITIAL RELEASE	8/14/2015	
B		ADDITION OF PULLDOWN RESISTORS ON PWM SIGNALS AND VALUE OF R2	12/7/2015	

U_max14871_shield_pwr
max14871_shield_pwr.SchDoc

SCL ☐
SDA ☐
MDX_INT ☐

MD1_PWM ☐
MD2_PWM ☐
MD3_PWM ☐
MD4_PWM ☐

U_max14871_shield_cntl
max14871_shield_cntl.SchDoc

☐ SCL MD1_EN ☐
☐ SDA MD1_DIR ☐
☐ MDX_INT MD1_MODE0 ☐
MD1_MODE1 ☐
MD1_VREF ☐
MD1_FAULT ☐

MD2_EN ☐
MD2_DIR ☐
MD2_MODE0 ☐
MD2_MODE1 ☐
MD2_VREF ☐
MD2_FAULT ☐

MD3_EN ☐
MD3_DIR ☐
MD3_MODE0 ☐
MD3_MODE1 ☐
MD3_VREF ☐
MD3_FAULT ☐

MD4_EN ☐
MD4_DIR ☐
MD4_MODE0 ☐
MD4_MODE1 ☐
MD4_VREF ☐
MD4_FAULT ☐

U_max14871_shield_md1
max14871_shield_md1.SchDoc

☐ MD1_EN ☐
☐ MD1_DIR ☐
☐ MD1_MODE0 ☐
☐ MD1_MODE1 ☐
☐ MD1_VREF ☐
☐ MD1_FAULT ☐

☐ MD1_PWM

U_max14871_shield_md2
max14871_shield_md2.SchDoc

☐ MD2_EN ☐
☐ MD2_DIR ☐
☐ MD2_MODE0 ☐
☐ MD2_MODE1 ☐
☐ MD2_VREF ☐
☐ MD2_FAULT ☐

☐ MD2_PWM

U_max14871_shield_md3
max14871_shield_md3.SchDoc

☐ MD3_EN ☐
☐ MD3_DIR ☐
☐ MD3_MODE0 ☐
☐ MD3_MODE1 ☐
☐ MD3_VREF ☐
☐ MD3_FAULT ☐

☐ MD3_PWM

U_max14871_shield_md4
max14871_shield_md4.SchDoc

☐ MD4_EN ☐
☐ MD4_DIR ☐
☐ MD4_MODE0 ☐
☐ MD4_MODE1 ☐
☐ MD4_VREF ☐
☐ MD4_FAULT ☐

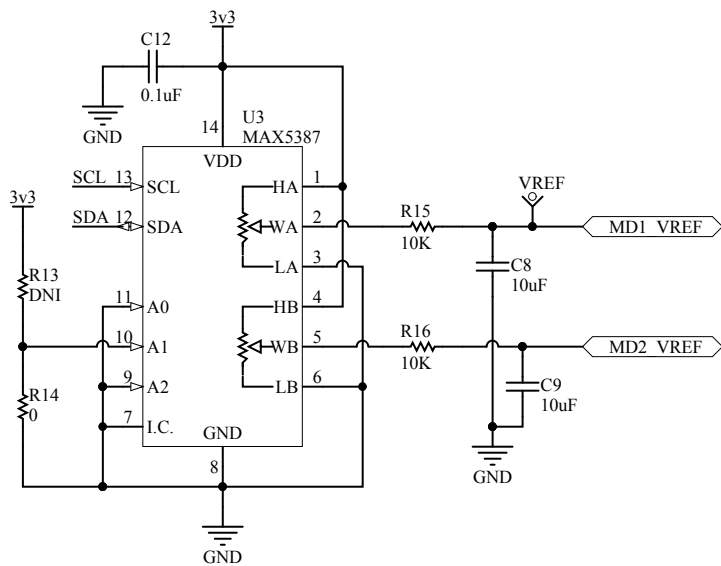
☐ MD4_PWM



Title MBED MAX14871 SHIELD

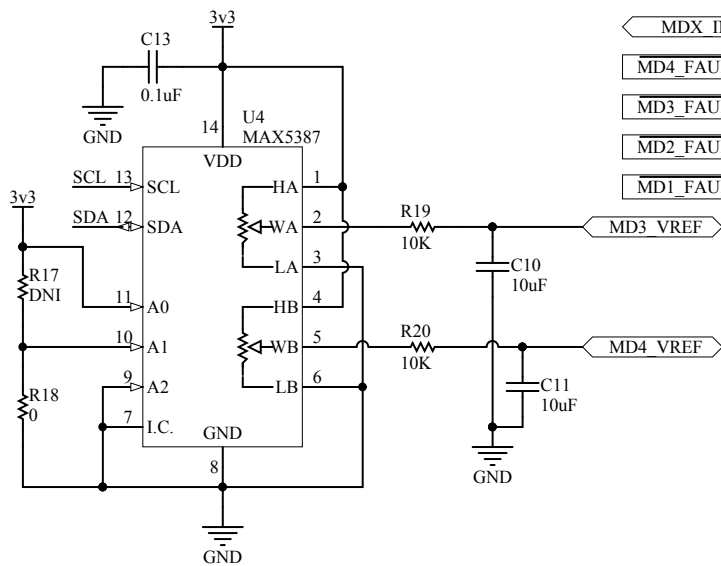
Size: A MASTER Revision: B

Date: 12/7/2015 Sheet 1 of 7
File: max14871_shield_master.SchDoc Drawn By:

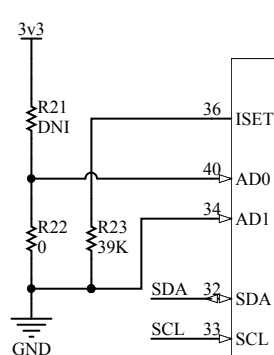


Default 7 bit slave address is 0x28

SCL SCL
SDA SDA



Default 7 bit slave address is 0x29



U2
MAX7300

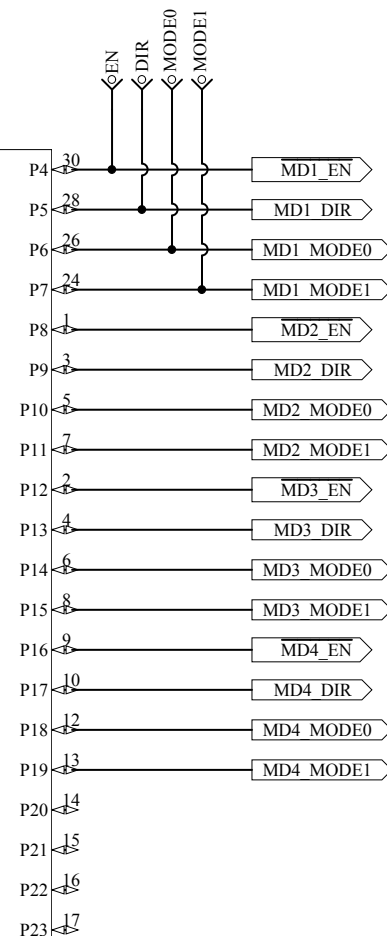
11 N.C.
20 N.C.
31 N.C.

MDX INT
MD4_FAULT
MD3_FAULT
MD2_FAULT
MD1_FAULT

29 P31
27 P30
25 P29
23 P28
22 P27
21 P26
19 P25
18 P24

GND GND GND EP
37 38 39
GND

7 bit slave address is 0x40



Title MBED MAX14871 SHIELD

Size:

A

CONTROL

Revision:

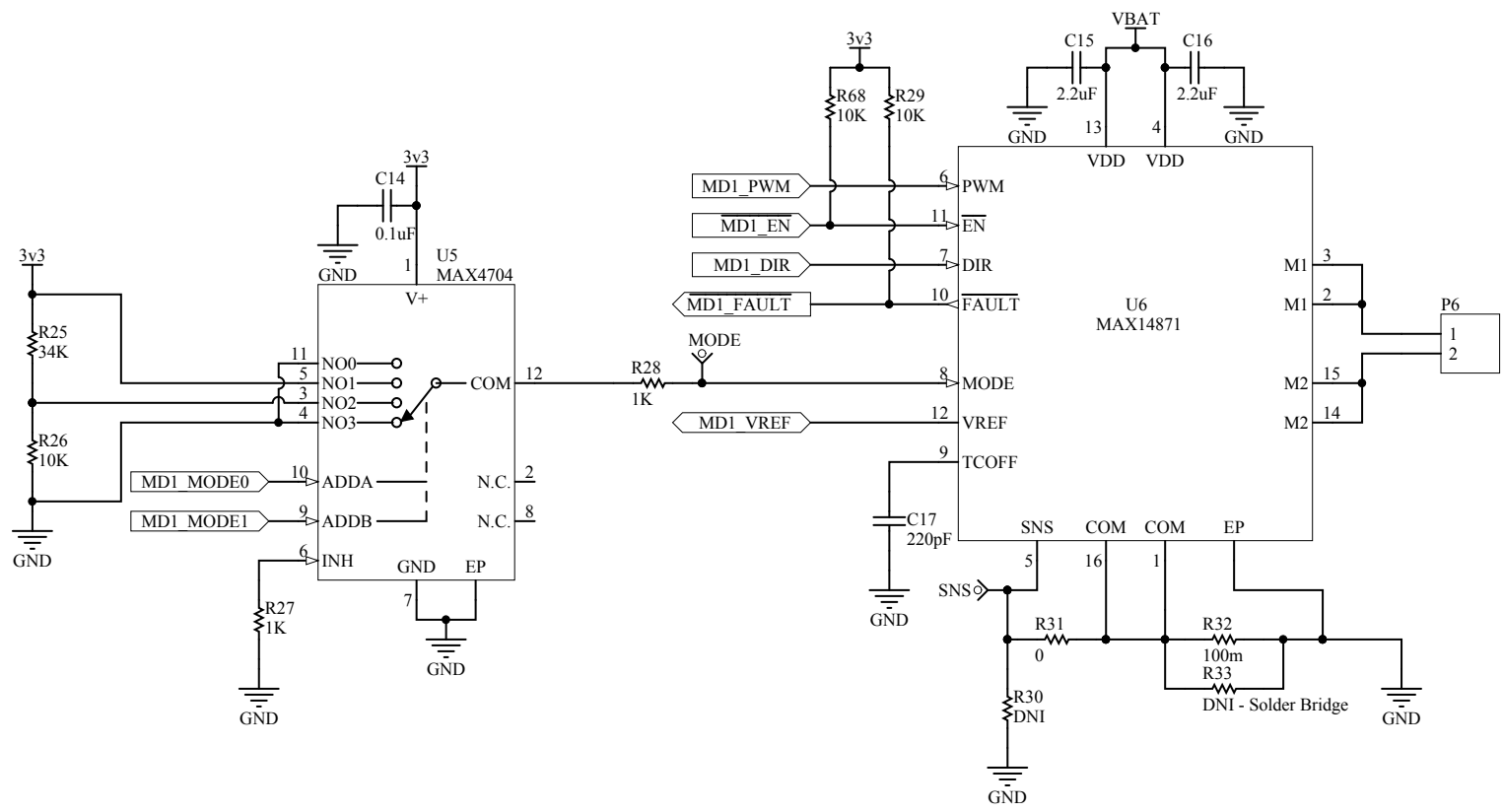
B

Date: 12/7/2015

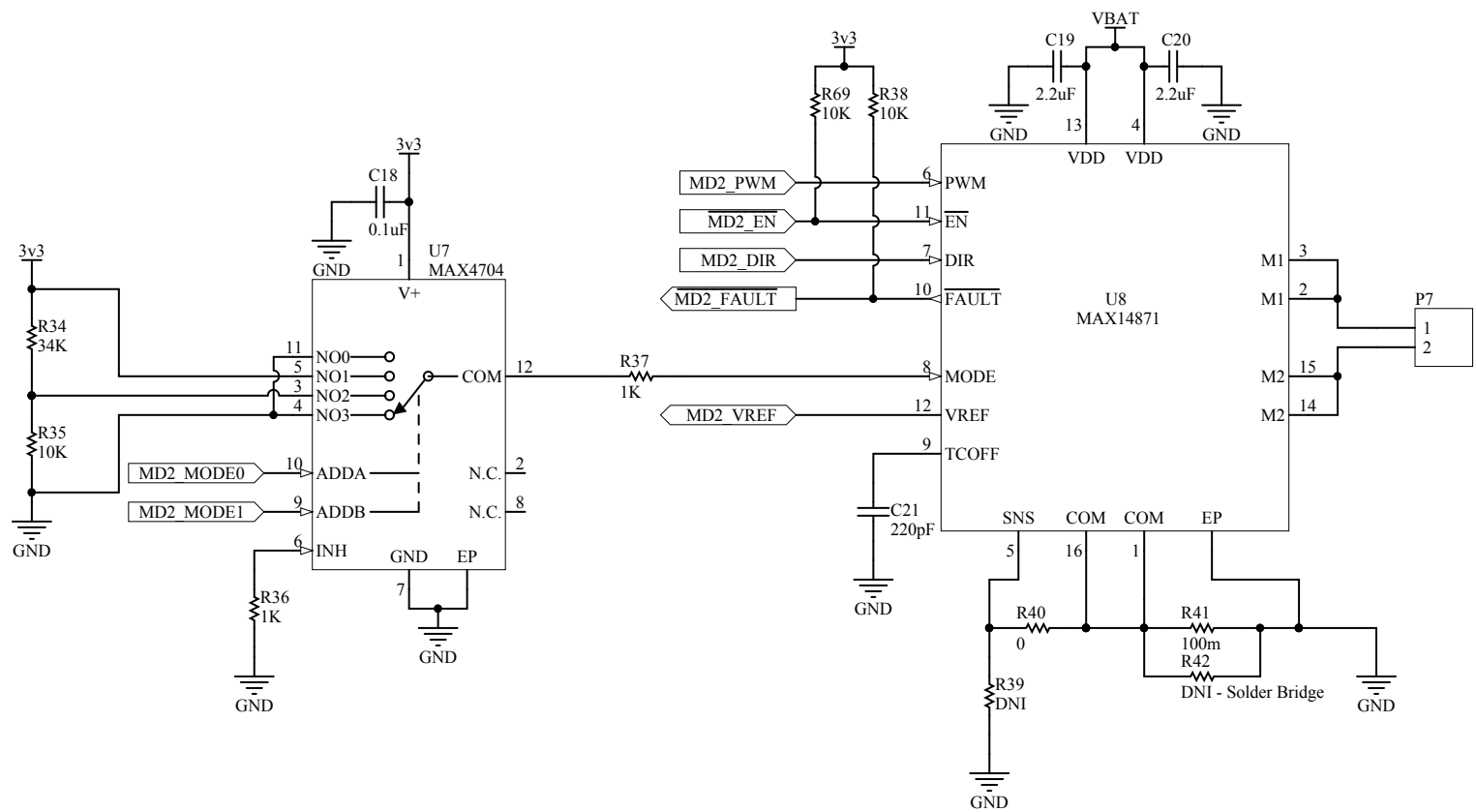
File: max14871 shield cntl.SchDoc

Sheet 3 of 7

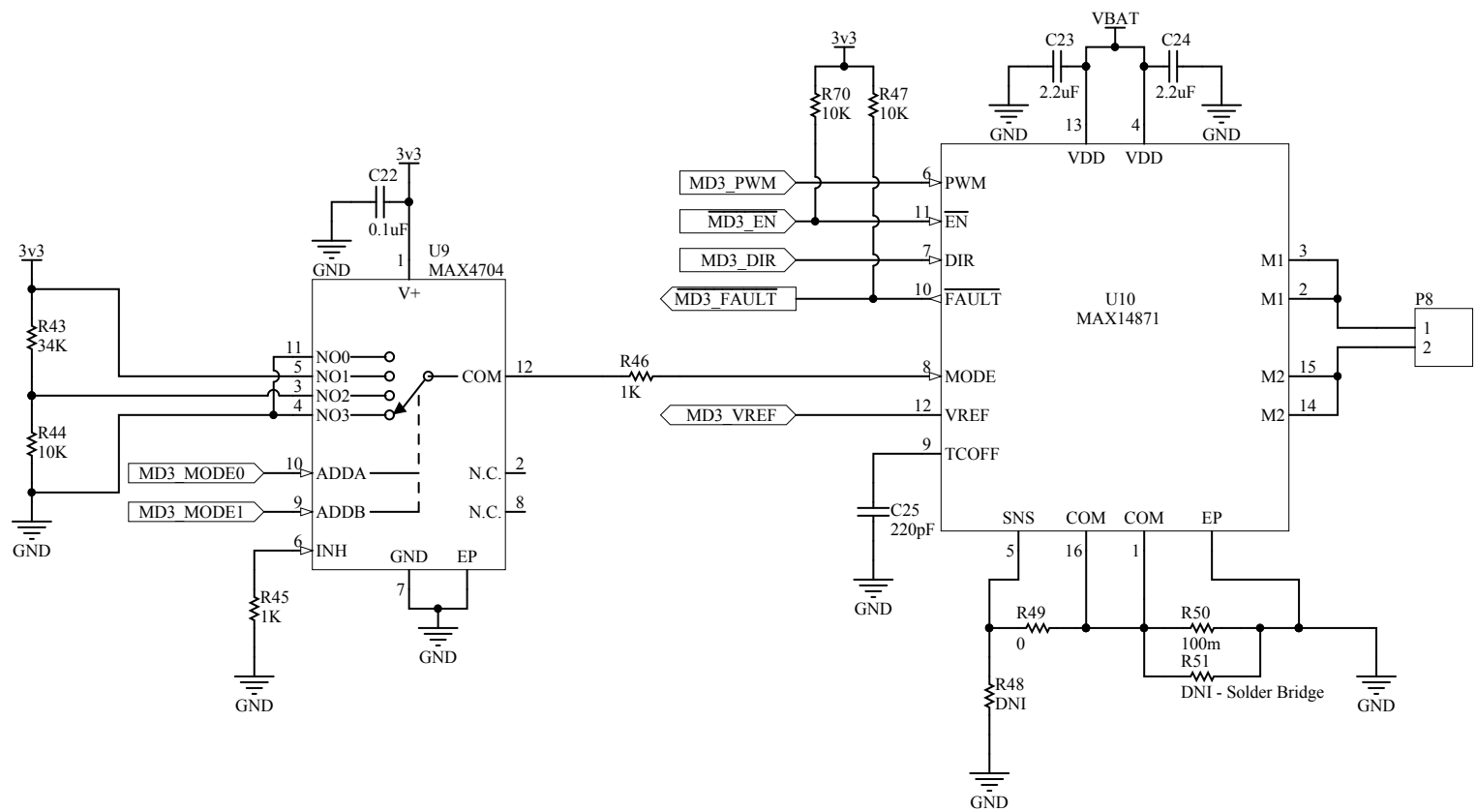
Drawn By:



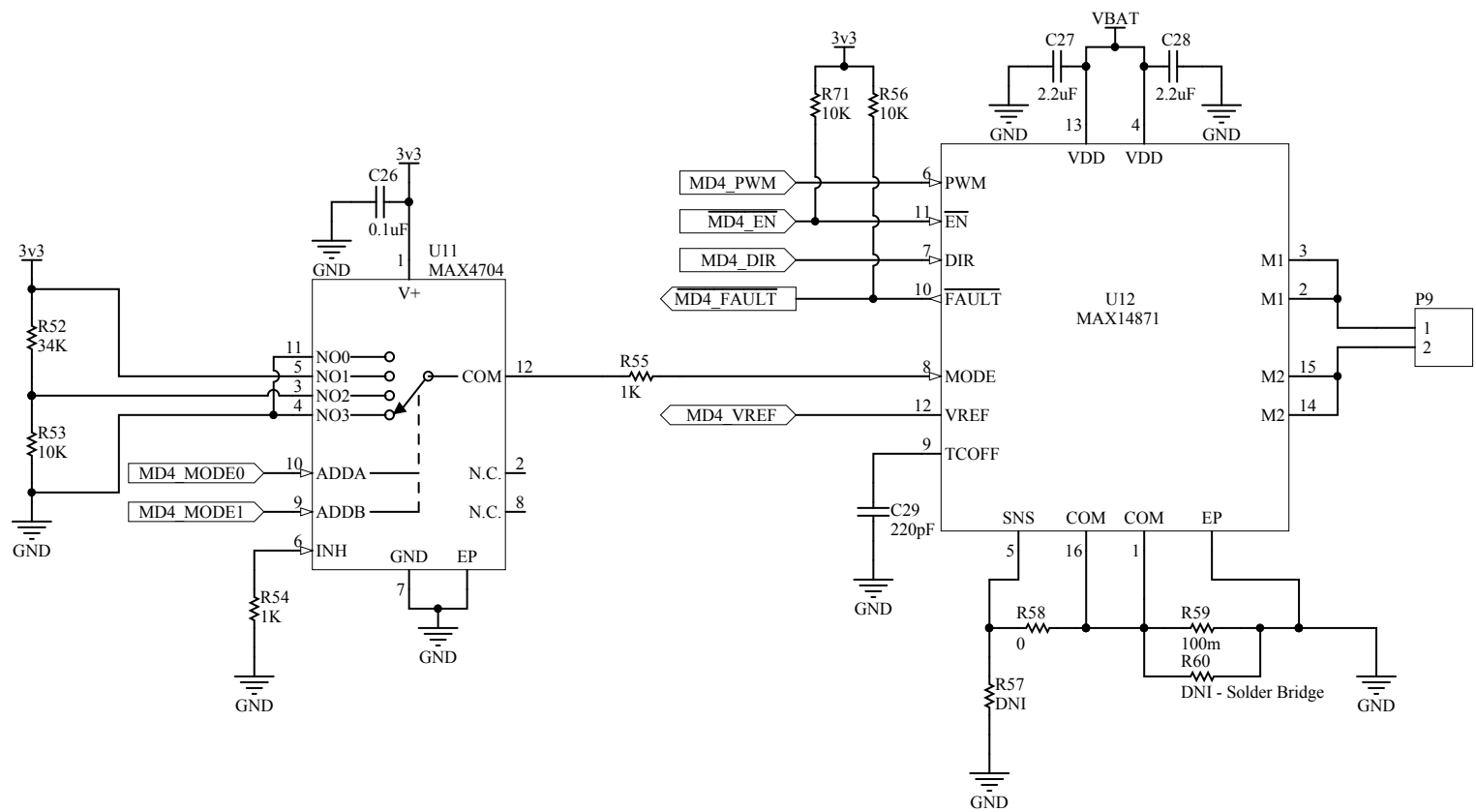
Title			MBED MAX14871 SHIELD	
Size:	A	MOTOR DRIVER 1		Revision: B
Date:	12/7/2015		Sheet 4	of 7
File:	max14871 shield md1.SchDoc		Drawn By:	



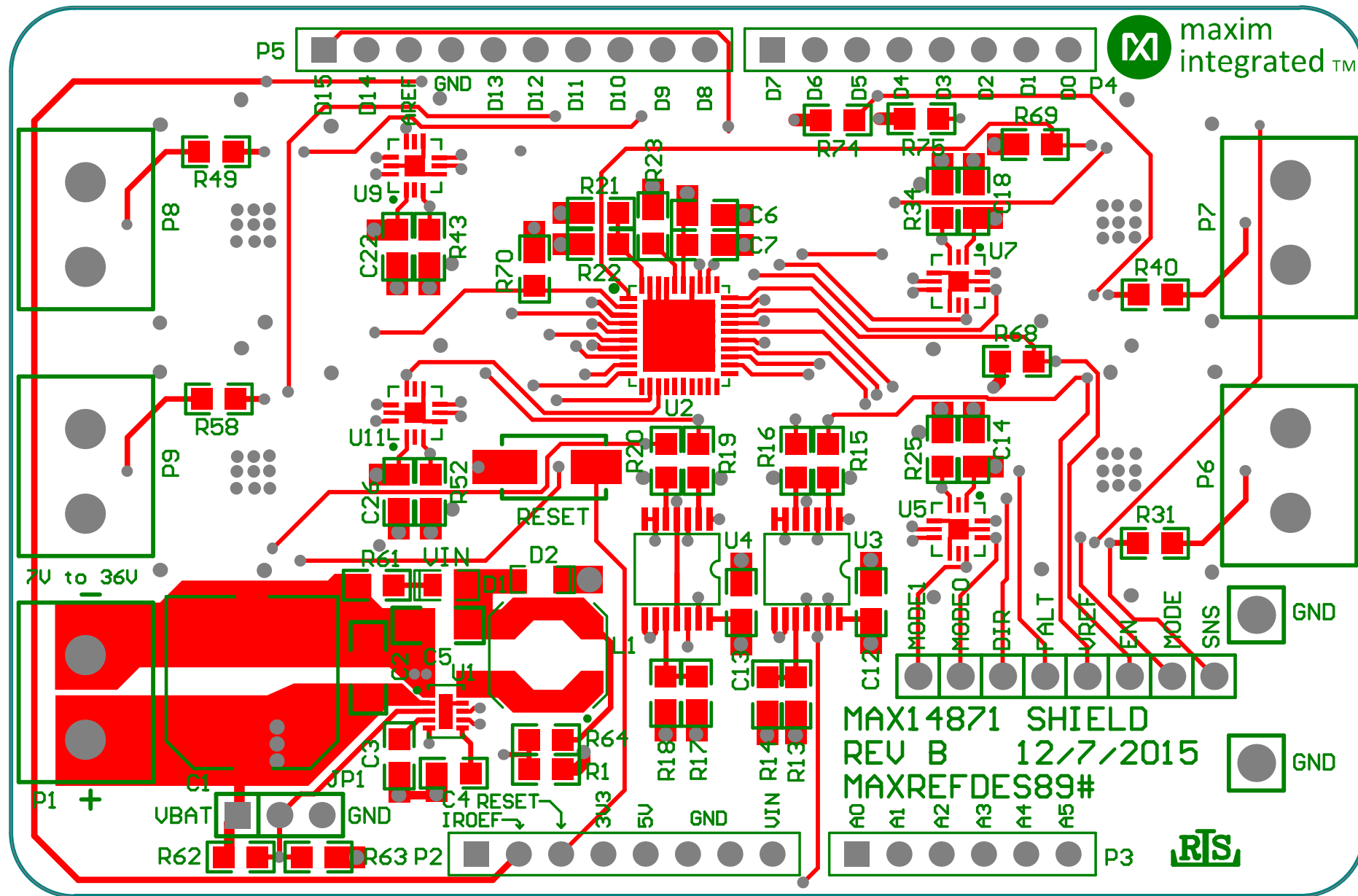
Title			MBED MAX14871 SHIELD	
Size:	A		MOTOR DRIVER 2	Revision: B
Date:	12/7/2015		Sheet 5 of 7	
File:	max14871 shield md2.SchDoc		Drawn By:	



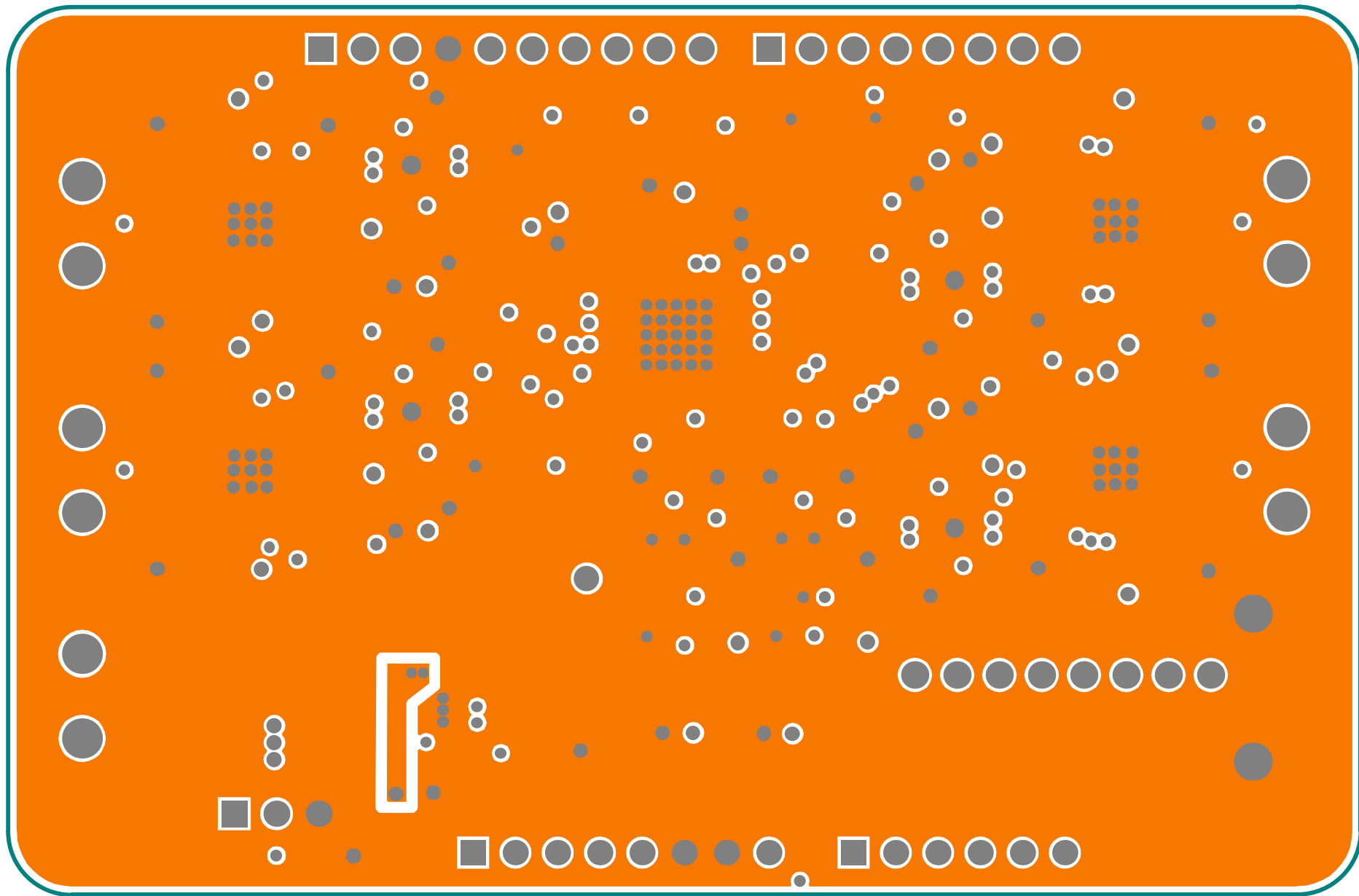
Title MBED MAX14871 SHIELD		
Size: A	MOTOR DRIVER 3	Revision: B
Date: 12/7/2015	Sheet 6 of 7	
File: max14871 shield md3.SchDoc	Drawn By:	



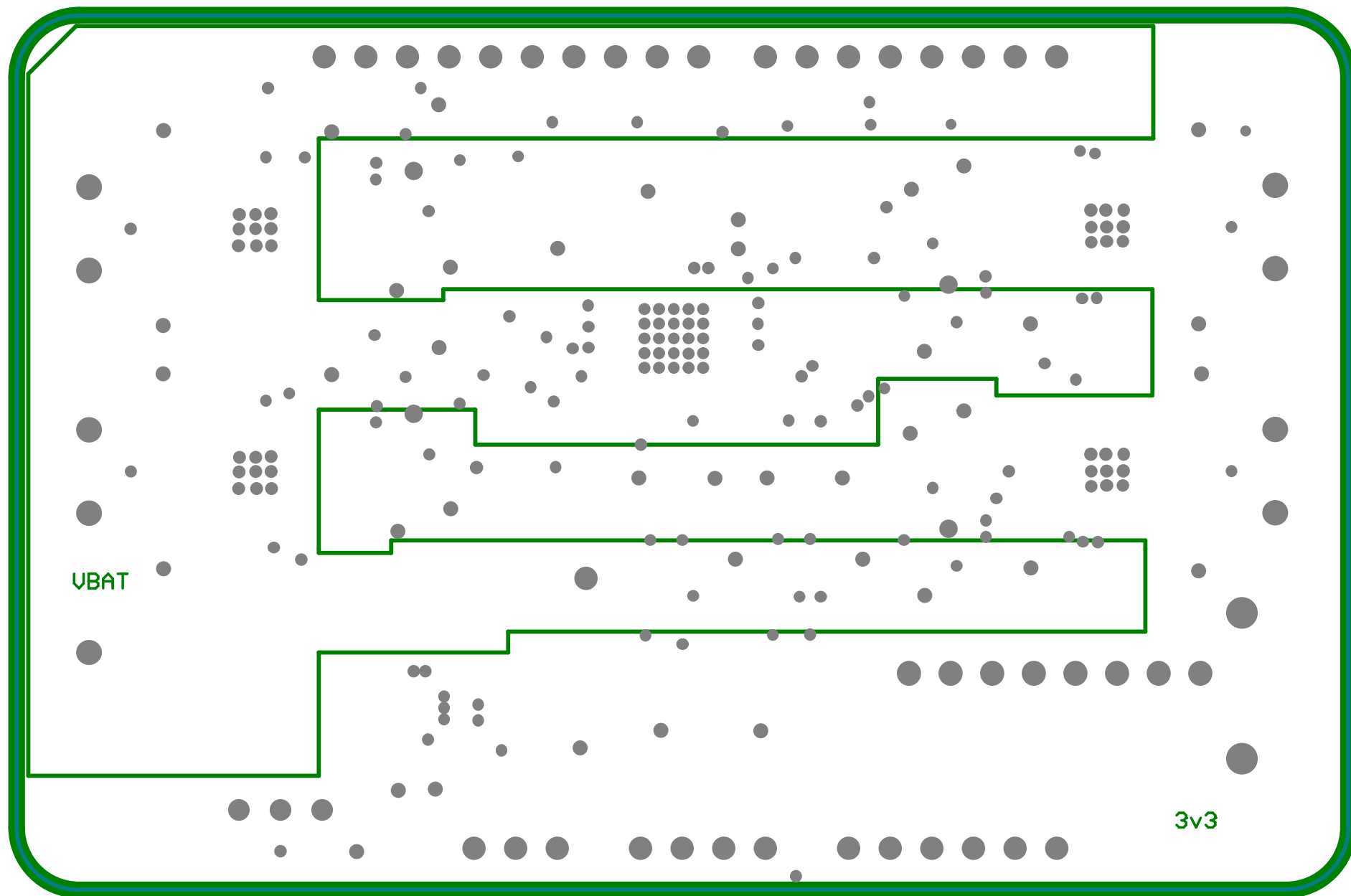
Title MBED MAX14871 SHIELD		
Size: A	MOTOR DRIVER 4	Revision: B
Date: 12/7/2015		Sheet 7 of 7
File: max14871 shield md4.SchDoc		Drawn By:



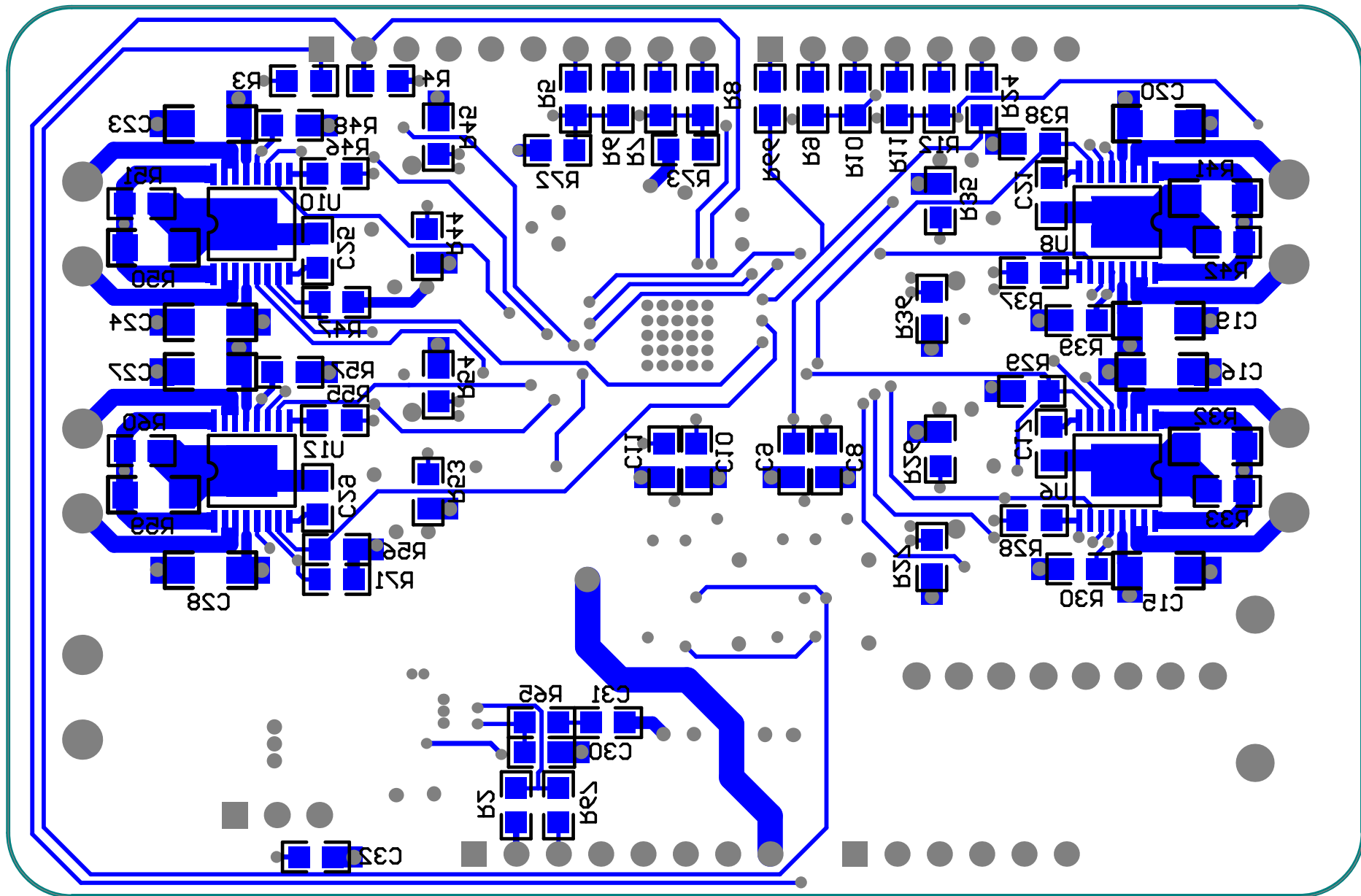
MAXIM INTEGRATED
MAX14871 SHIELD
LAYER 1 (TOP LAYER)
TOP SILKSCREEN



MAXIM INTEGRATED
MAX14871 SHIELD
LAYER 2 (GND PLANE)



MAXIM INTEGRATED
MAX14871 SHIELD
LAYER 3 (POWER PLANE)



MAXIM INTEGRATED
MAX14871 SHIELD
LAYER 4 (BOTTOM LAYER)
BOTTOM SILKSCREEN