ELECTRICAL SPECIFICATION:

Parameters	Symbol	Value	Note
Input Voltage	VIN	2.75V~5.5V	
Output Voltage	VOUT	Adjust	
Output Current	IOUT	3A	
Enable Voltage	EN	1.2V~5V	
External VDD	VDD	3.3V~5V	

PROGRAMMING OUTPUT VOLTAGE:

$$V_{OUT}(V) = 0.6 \times \left(1 + \frac{R_{FB\_TOP}}{R_{FB\_BOT}}\right) \quad \text{(EQ.1)}$$

Assume RFB_top set 200 Kohm, the resistance according to typical output voltage is shown in table 1

Vout	1V	1.2V	1.8V	2.5V	3.3V
RFB (Ohm)	300k	200k	100k	63.4k	44.2k

TABLE 1: OUTPUT VOLTAGE SETTING

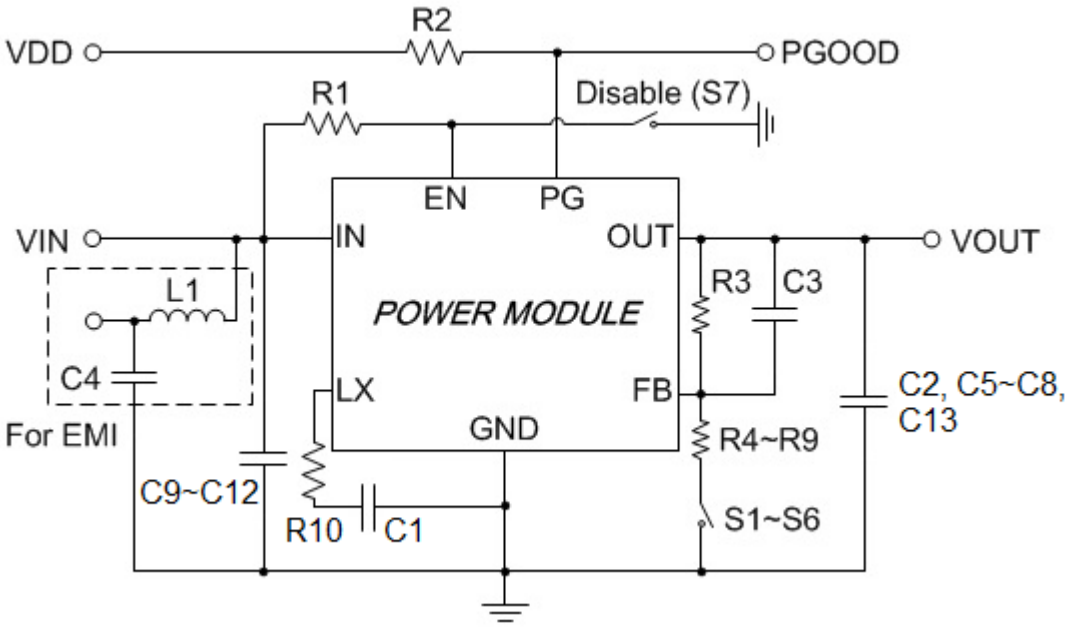
LOAD TRANSIENT RESPONSE INCREASE:

In some applications, adding a ceramic cap (CFB) in parallel with RFB-top may further speedy up the load transient responses, recommend capacitance as below table 2.

Vout (V)	CFB (pF)
1.0	22~100
1.2	22~100
1.8	22~100
2.5	22~47
3.3	22

TABLE.2 RECOMMEND CFB FOR LOAD TRANSIENT

EVALUATION BOARD SCHEMATIC:



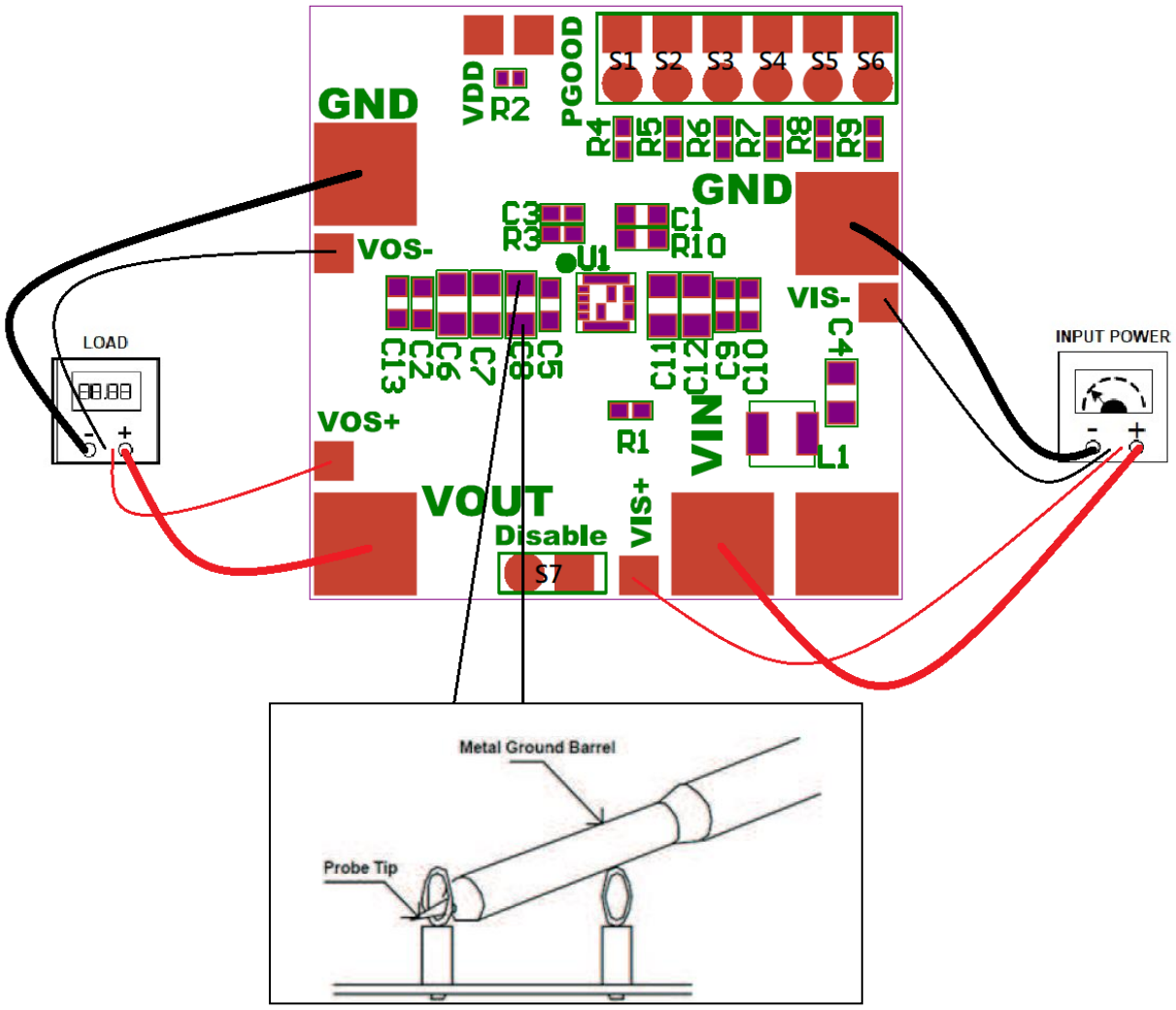
QUICK START GUIDE:

1. Power the MUN3CAD03-SF module on while Disable jump open.
2. Short S1~S6 can set output voltage from 1.0V to 3.3V

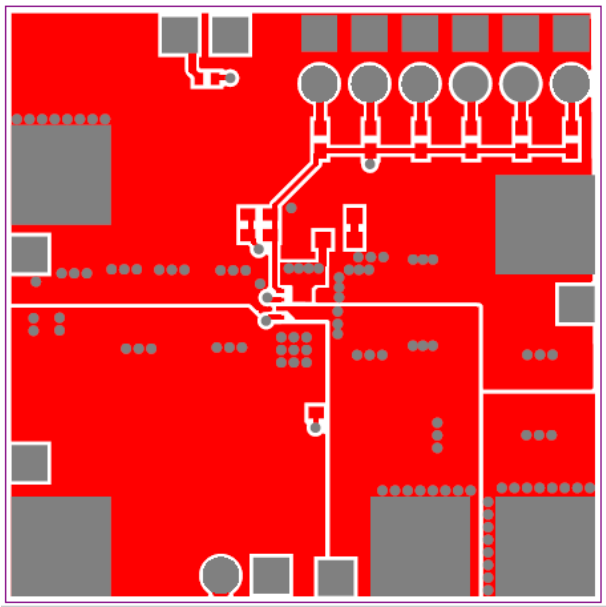
	S1	S2	S3	S4	S5	S6
Vout	1V	1.2V	1.8V	2.5V	3.3V	N.C

3. Short Disable jump can be turn off Power module.

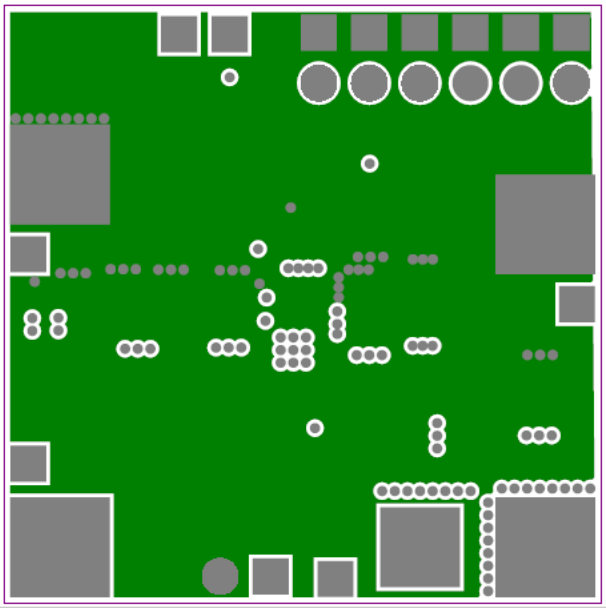
QUICK START GUIDE (cont.):



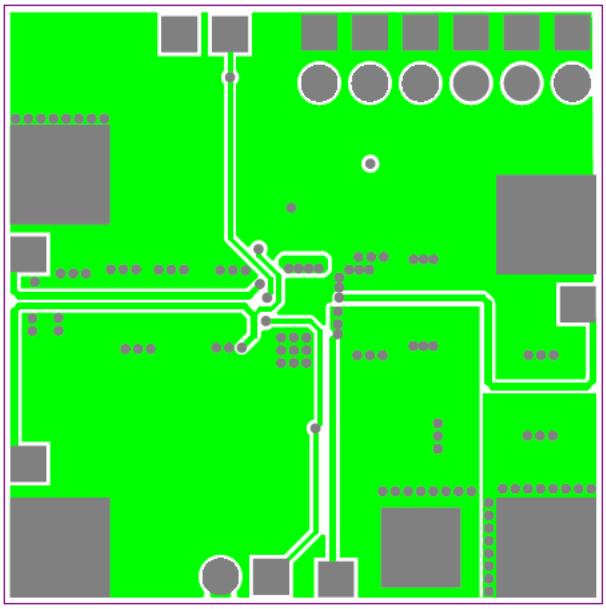
PRIENTED CIRCUIT BOARD LAYOUT:



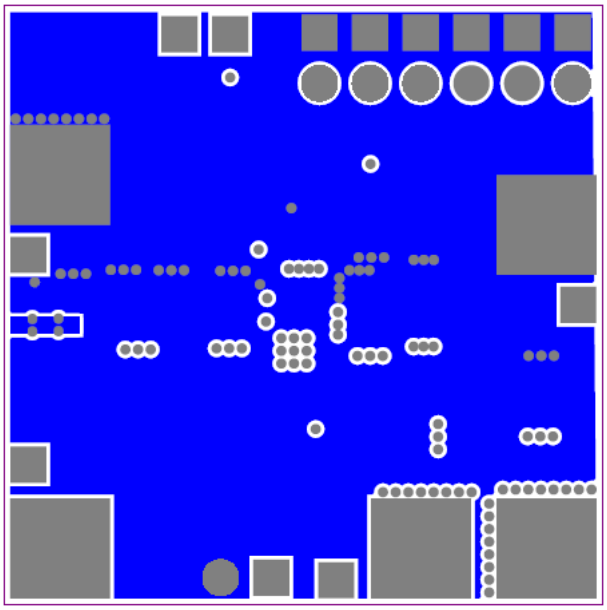
Top Layer



Mid 1 Layer



Mid 2 Layer



Bottom Layer

BOM LIST:

COUNT	REF DES	DESCRIPTION	PART NUMBER	MFR
1	C8	MLCC, 47uF, 6.3V, X5R, 0805	GRM21BR60J476ME15	Murata
1	C11	MLCC, 22uF, 6.3V, X5R, 0805	GRM21BR60J226ME39	Murata
1	C3	MLCC, 22pF, 50V, C0G, 0402	GRM1555C1H220JA01	Murata
0	C1,C2,C4, C5~C10, C12,C13	MLCC, TBD	TBD	TBD
1	R1	Resistor, 100kOhm, ±1%, 0402	Std	Std
1	R2	Resistor, 100kOhm, ±1%, 0402	Std	Std
1	R3	Resistor, 200kOhm, ±1%, 0402	Std	Std
1	R4	Resistor, 300kOhm, ±1%, 0402	Std	Std
1	R5	Resistor, 200kOhm, ±1%, 0402	Std	Std
1	R6	Resistor, 100kOhm, ±1%, 0402	Std	Std
1	R7	Resistor, 63.4kOhm, ±1%, 0402	Std	Std
1	R8	Resistor, 44.2kOhm, ±1%, 0402	Std	Std
0	R9	N.C	-	-
0	L1	Inductance, TBD	TBD	TBD
6	S1, S2, S3, S4, S5, S6	Jump, pitch 2.54mm	Std	Std
1	Disable(S7)	Jump, pitch 2.54mm	Std	Std
1	U1	Power module, 3.0*3.0*1.3mm	MUN3CAD03-SF	Cyntec

REVISION HISTORY:

Date	Revision	Changes
2017.08.08	00	Issue initial preliminary EVB guide.
2021.12.21	01	Update EVB schematic and layout