

## ELECTRICAL SPECIFICATION:

Parameters	Symbol	Value	Note
Input Voltage	VIN	2.7V~5.5V	
Output Voltage	VOUT	Adjust	
Output Current	IOUT	5A	
Enable Voltage	EN	1.2V~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  $R_{FB\_TOP}$  (R3) set 100 Kohm, the resistance according to typical output voltage is shown in table 1

Vout	1V	1.2V	1.8V	2.5V	3.3V
$R_{FB\_BOT}$ (R4~R8)	150k	100k	50k	31.58k	22.22k

**TABLE 1 OUTPUT VOLTAGE SETTING**

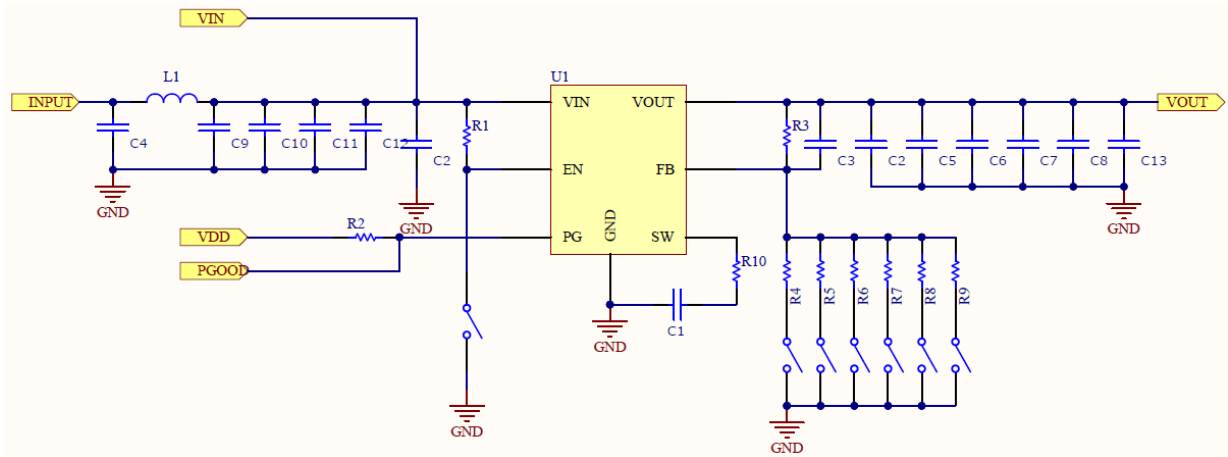
## LOAD TRANSIENT RESPONSE INCREASE:

In some applications, adding a ceramic cap (CFB) (C3) in parallel with RFB-top may further speed up the load transient responses, recommend capacitance as below table 2.

VOUT (V)	CFB (C3) (pF)
0.6~3.3	100

**TABLE 2 RECOMMEND CFB FOR LOAD TRANSIENT**

## EVALUATION BOARD SCHEMATIC:

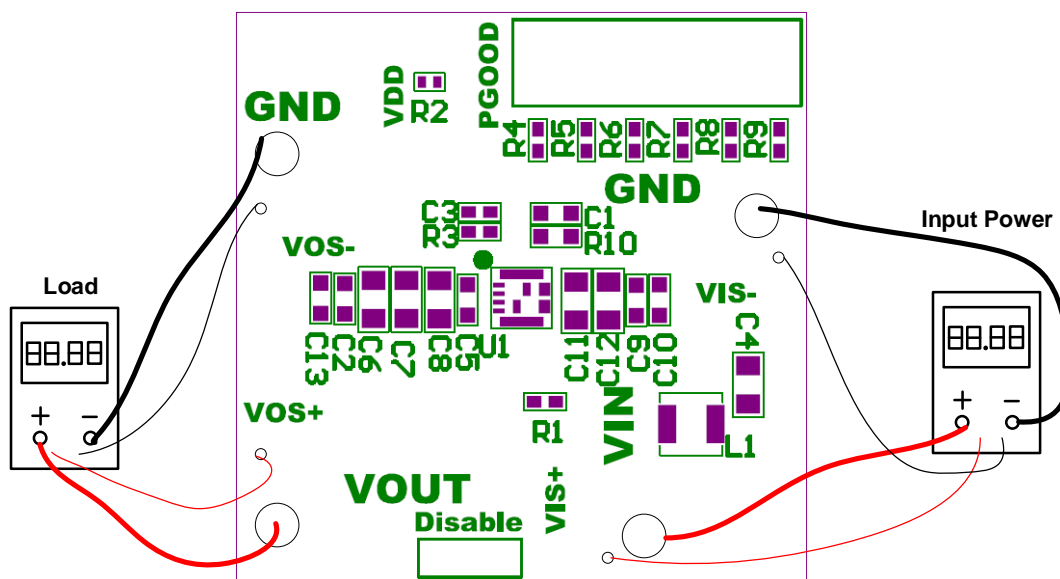


## QUICK START GUIDE:

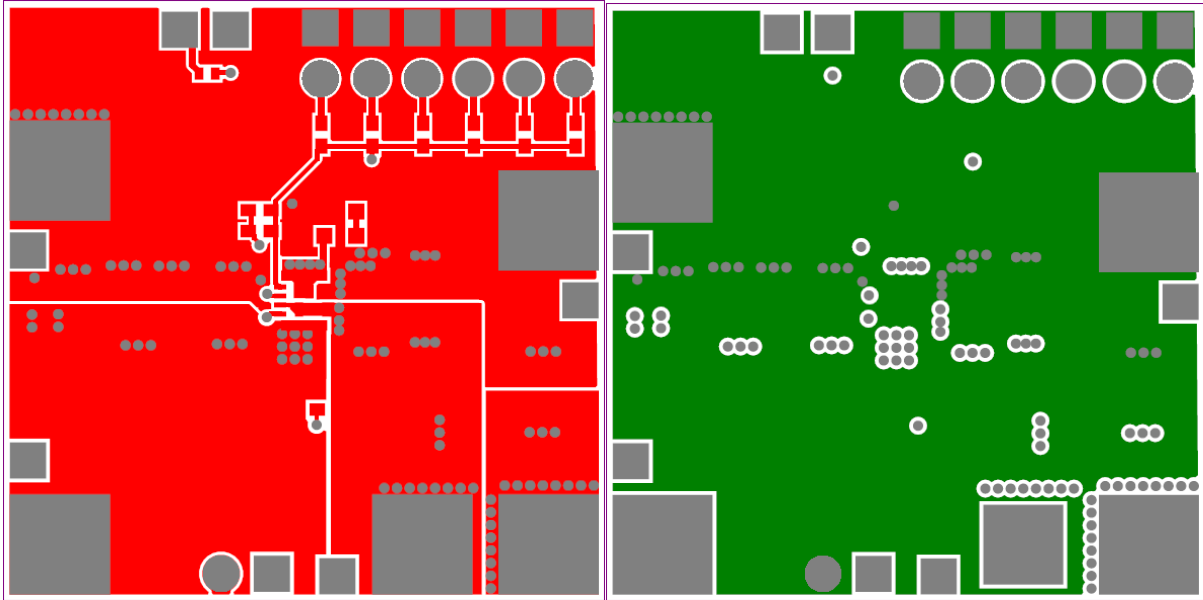
1. Power the MUN3CAD05-JF module on while Disable jump open.
2. Short S1~S6 can set output voltage from 1.0V to 3.3V

	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.

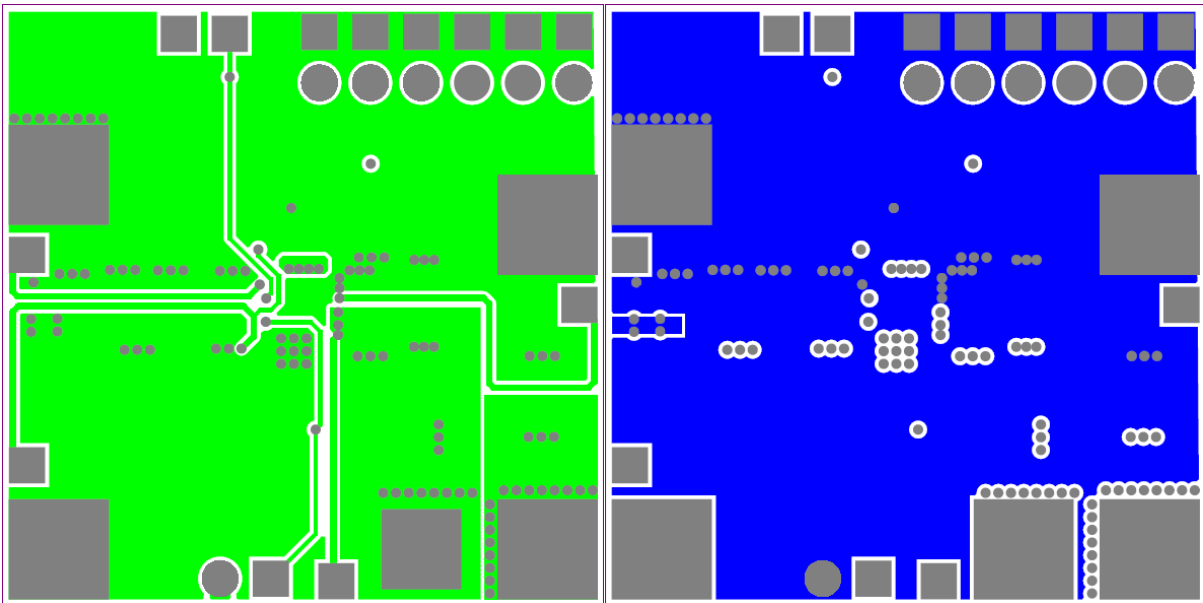


## PRINTED CIRCUIT BOARD LAYOUT:



Top Layer

Mid 1 Layer



Mid 2 Layer

Bottom Layer

## BOM LIST:

COUNT	REF DES	DESCRIPTION	PART NUMBER	MFR
1	U1	Power module, 3.0*3.0*1.3mm	MUN3CAD05-JF	Cyntec
4	C7, C8, C11, C12	MLCC, 22uF, 6.3V, X7T, 0805	GRM21BD70J226ME44L	Murata
1	C3	MLCC, 100pF, 50V, X7R, 0402	0402B101K500	Walsin
3	R1, R3, R5	Resistor, 100kOhm, $\pm 1\%$ , 0402	Std	Std
1	R4	Resistor, 150kOhm, $\pm 1\%$ , 0402	Std	Std
1	R6	Resistor, 49.9kOhm, $\pm 1\%$ , 0402	Std	Std
1	R7	Resistor, 31.6kOhm, $\pm 1\%$ , 0402	Std	Std
1	R8	Resistor, 22.1kOhm, $\pm 1\%$ , 0402	Std	Std
0	C1, C2, C4, C5, C6, C9, C10, C13	N.C	-	-
0	R2, R9, R10	N.C	-	-
0	L1	N.C	-	-



## MUN3CAD05-JF EVB GUIDE

### REVISION HISTORY:

<b>Date</b>	<b>Revision</b>	<b>Changes</b>
2021.01.11	00	Issue initial preliminary EVB guide.
2021.09.14	01	Modify the Bom list.
2022.10.14	02	Modify the schematic and layout.
2022.12.22	03	Modify the TABLE 2.