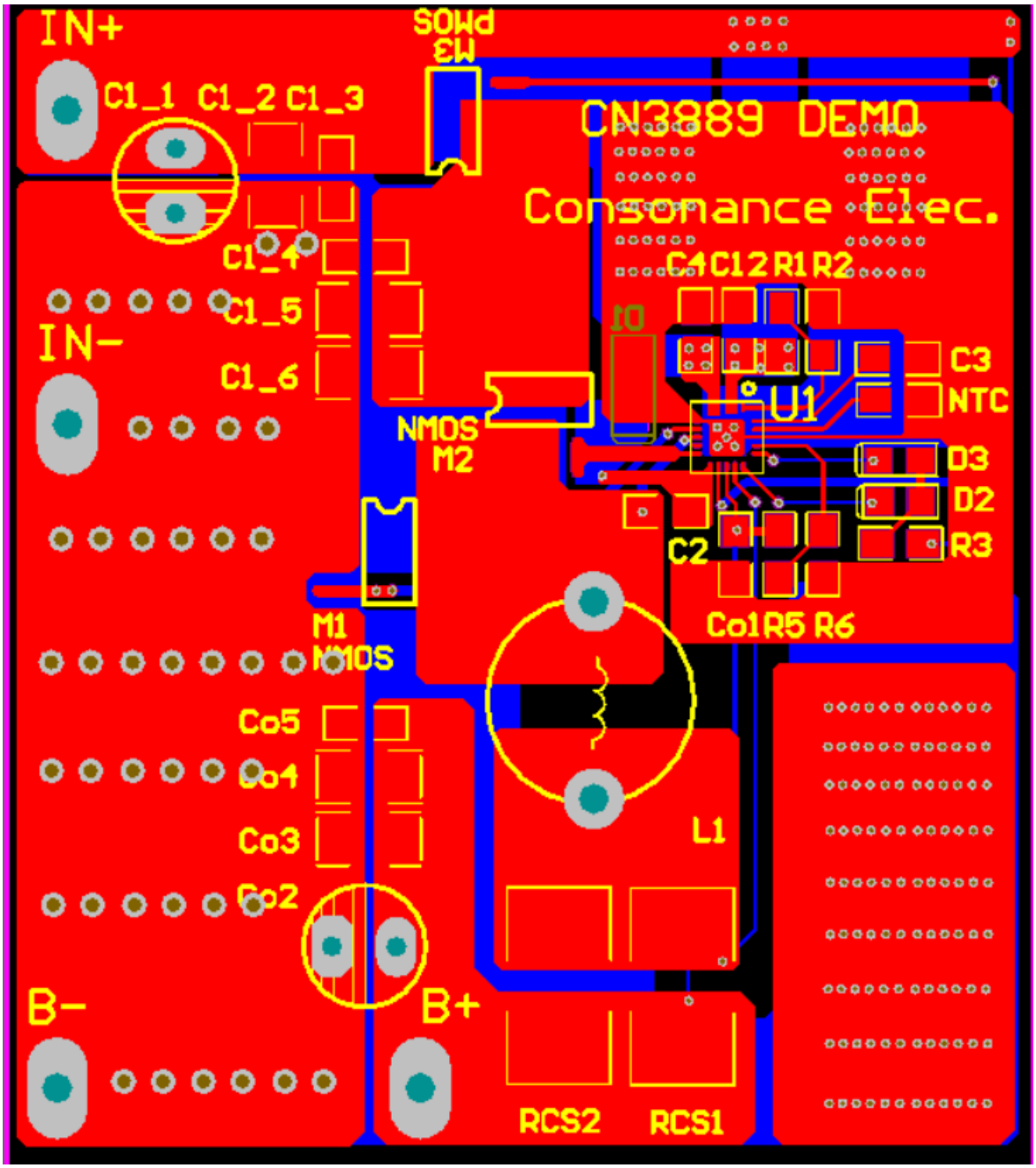
Quick Start of CN3889 Demo Board

1、Overview

CN3889 demo board is for the purpose of fast evaluation of CN3889.

2、PCB Layout of CN3889 Demo Layout



3、Component List and Descriptions

No.	Name	Description

1	IN+	Positive Terminal of Input Power Supply.
2	B+	Positive Terminal of Battery.
3	B-	Negative Terminal of Battery.
4	IN-	Negative Terminal of Input Power Supply.
5	M1	NMOS transistor, NMOS transistor packaged with SOP8, such as AO4410.
6	M2	NMOS transistor, NMOS transistor packaged with SOP8, such as AO4410.
7	M3	PMOS transistor, PMOS transistor packaged with SOP8, such as AO4407A.
8	CN3889	The Charge IC CN3889.
9	D1	Schottky Diodes. It can be used 1N5819 and packaged with SOD123.
10	D2	LED for Charge Termination Indication.
11	D3	LED for Charge Indication.
12	L1	Inductor.
13	R_{CS2} R_{CS1}	Charge Current Sense Resistor. Used to set the charging current, and the calculation formula is Ich=0.08/RCS.
14	C1_1，C1_2，C1_3，C1_4，C1_5，C1_6	Input Supply Bypassing Capacitor.
15	C12	Chip input pin bypass capacitance. 2.2uF-10uF can be used.
16	C2	Ceramic Capacitor, the capacitance value should be 100nF.
17	C3	Ceramic Capacitor, the capacitance value should be 100nF.
18	C4	Ceramic Capacitor, the capacitance value should be 10uF.
19	Co2，Co3，Co4，Co5	Output capacitor, ceramic capacitor.
20	Co1	Chip output pin bypass capacitor. 2.2uF-10uF can be used.
21	R1	MPPT resistor setting, please refer to the CN3889 datasheet for details.
22	R2	MPPT resistor setting, please refer to the CN3889 datasheet for details.
23	R3	Light emitting diode current limiting resistor. Choose different resistance values according to the brightness requirements of the light emitting diode.
24	R5	Battery constant voltage resistor setting, please refer to the CN3889 datasheet for details.
25	R6	Battery constant voltage resistor setting, please refer to the CN3889 datasheet for details.
26	NTC/10K	NTC shielding resistor, with a resistance value of 10k Ω.