

Last Updated: Oct 29, 2017

Project: **BMS\_Current\_Sense.PrjPcb**

Title: **BMS Current Sense Block Diagram**

Project Lead: **Taiping Li**

Size: **Letter**

Date: **2018-02-11**

Revision: **2.2**

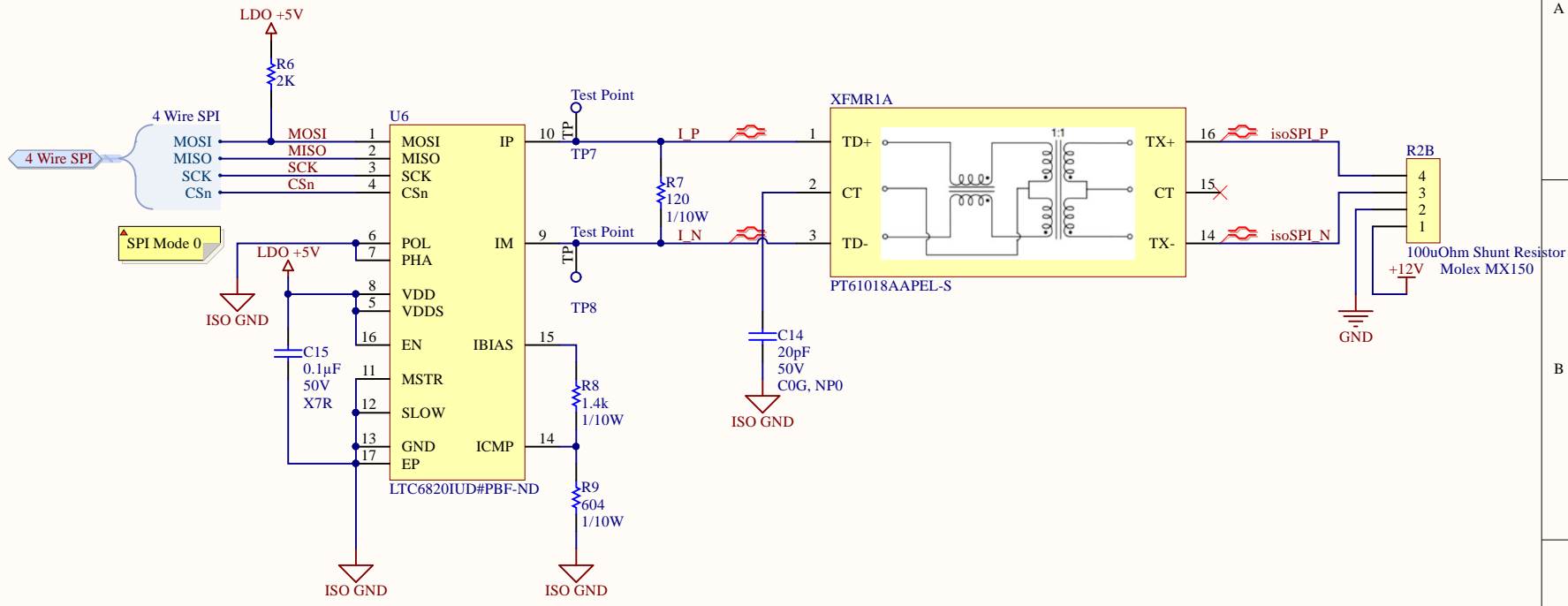
Sheet 1 of 3



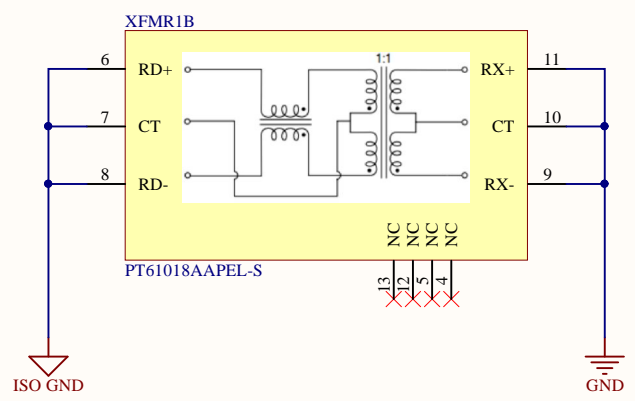
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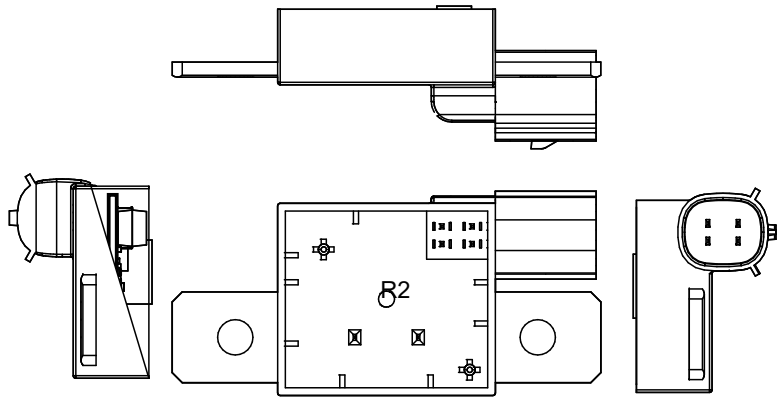
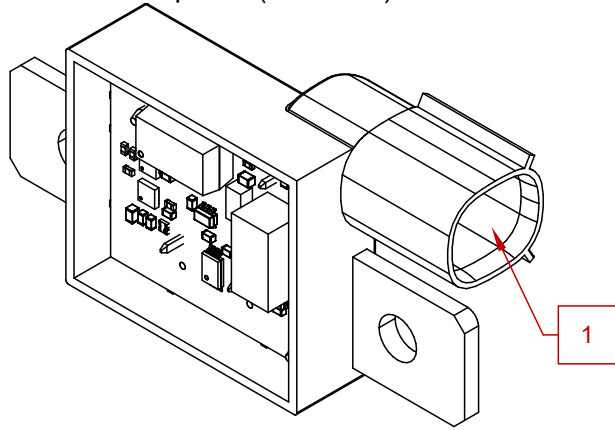


- Test Point TP MOSI
- Test Point TP9 MISO
- Test Point TP10 SCK
- Test Point TP11 CSn
- Test Point TP12



Project: <i><b>BMS_Current_Sense.PrjPcb</b></i>		<div><div>MIDNIGHT</div><div></div><div>SUN</div></div>
Title: <b>BMS Current Sense isoSPI Interface</b>		
Project Lead: <b>Taiping Li</b>		University of Waterloo 200 University Ave W Waterloo, ON, Canada N2L 3E9  Website: <a href="http://www.uwmidsun.com">www.uwmidsun.com</a>
Size: <b>Letter</b>	Revision: <b>2.2</b>	
Date: <b>2018-02-11</b>	Sheet3 of 3	

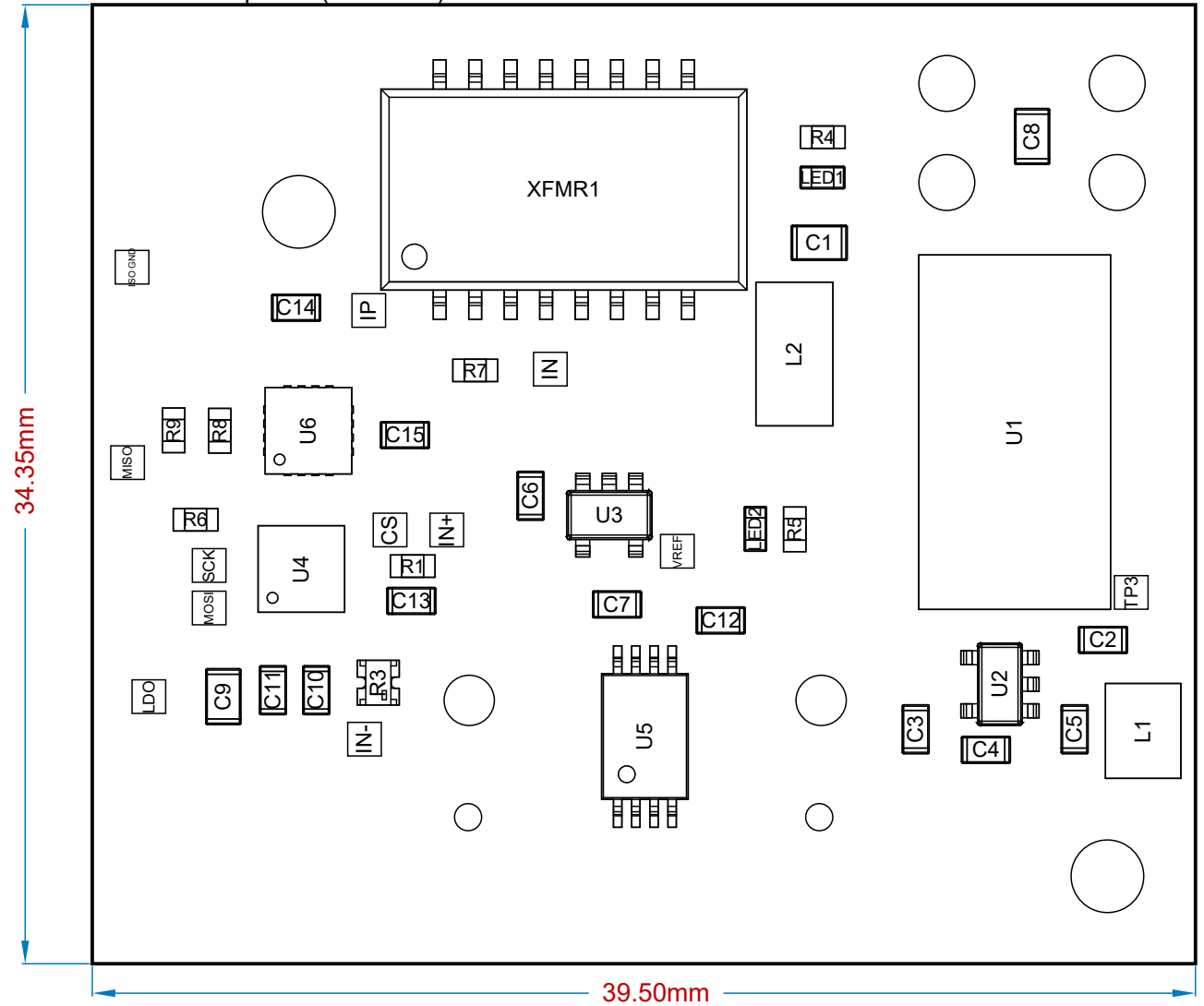
View from Top side (Scale 1:1)



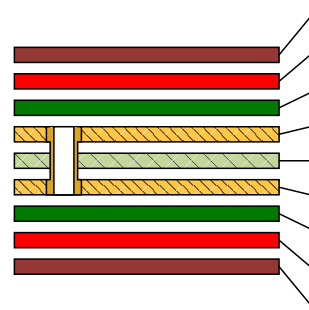
Notes:

- 1 Mating: Molex 0334824001
2. Layer stack based on data from Oshpark

View from Top side (Scale 4:1)



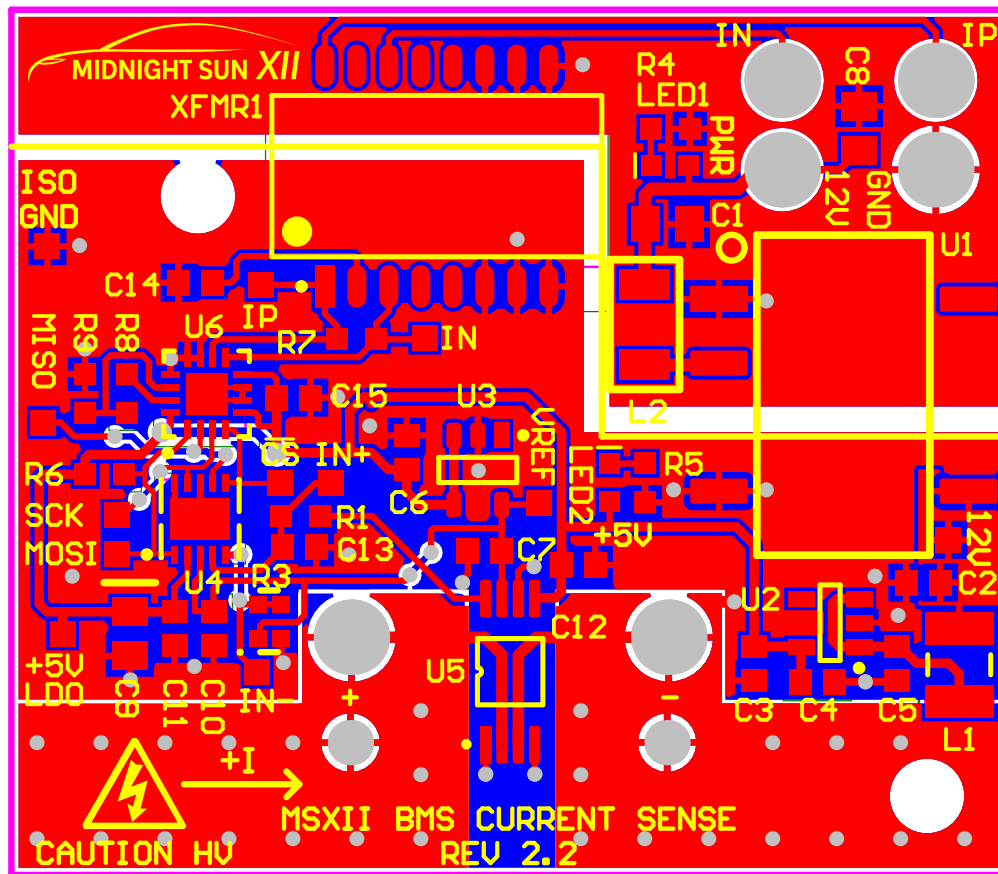
Layer Stack Legend



Total thickness: 1.60mm

Top Paste		Paste Mask	GTP
Top Overlay		Legend	GTO
Top Solder	0.00mm	Solder Resist	GTS
Top Layer	0.04mm	Signal	GTL
	1.52mm	<b>Dielectric</b>	
Bottom Layer	0.04mm	Signal	GBL
Bottom Solder	0.00mm	Solder Resist	GBS
Bottom Overlay		Legend	GBO
Bottom Paste		Paste Mask	GBP





MIDNIGHT SUN  
XFMR

ISO  
GND

IN IP  
R4 LED1  
PWR  
C8  
12 GND

C14 U6 IP R7 IN

MISO R9 R8

R6 SCK  
MOSI

C15 U3 VREF  
IN+ C6 LED2  
R1 C13 +5V  
C7

+5V LDO  
C9 C11 C10  
IN- R3

U5 C12 U2 C2  
C3 C4 C5



+I →

MSXII BMS CURRENT SENSE  
REV 2.2