

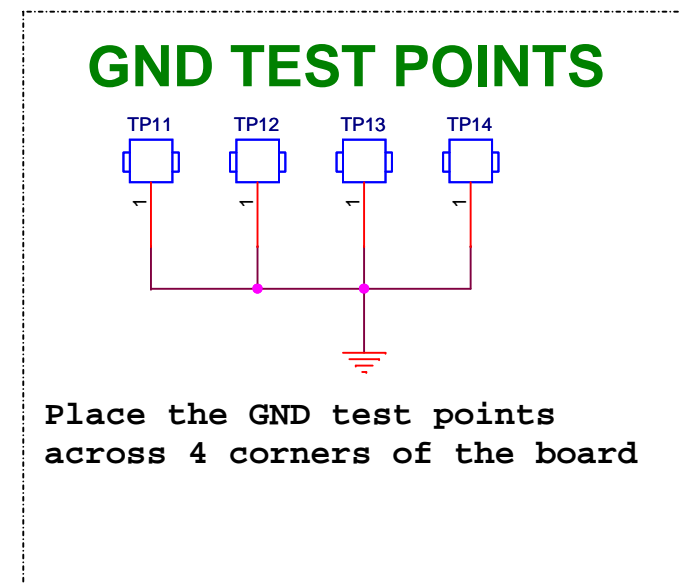
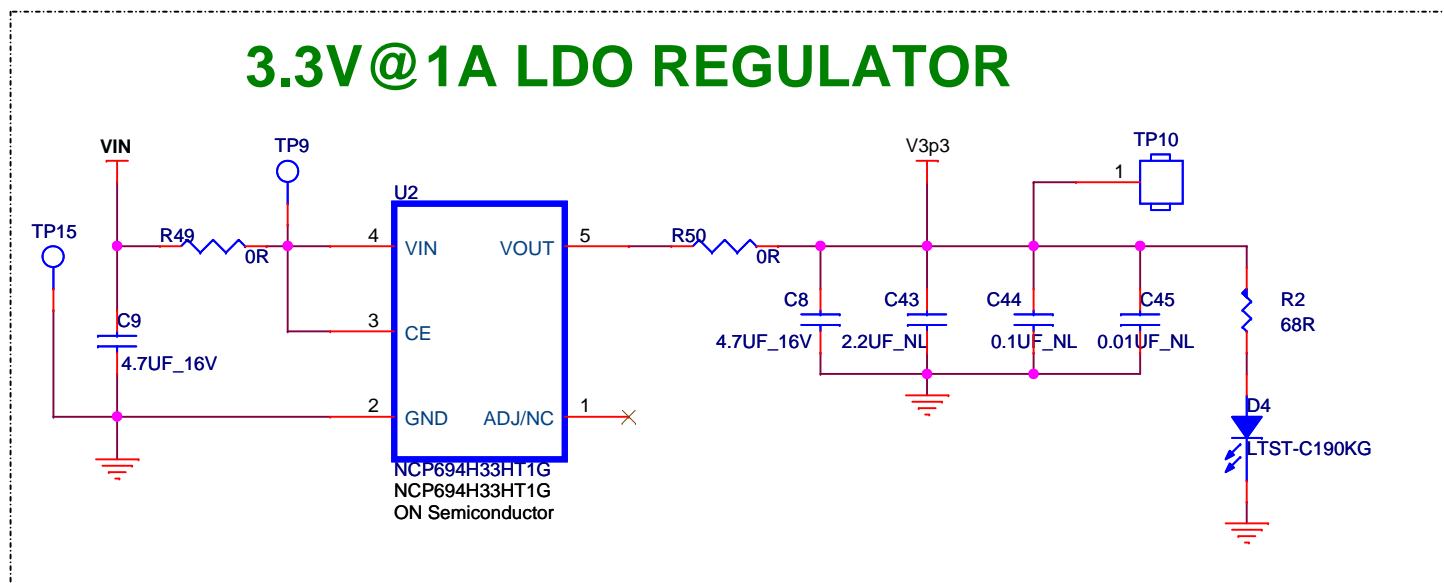
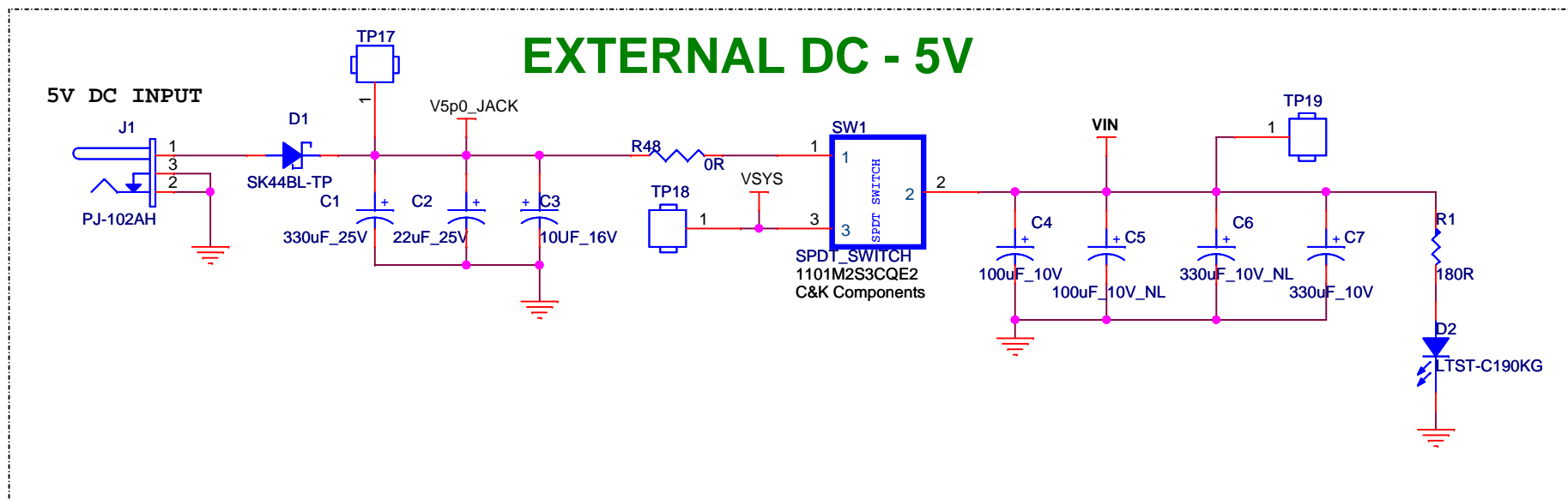
# CYUSBS236 USB TO SERIAL DVK BOARD

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06	GPIO HDR,JUMPERS FOR SCB0 & SCB1

PCBA NUMBER : 121-60095-01  
PCB NUMBER : 600-60113-01  
FAB DRAWING NUMBER : 610-60112-01  
ASSEMBLY DRAWING NUMBER : 620-60113-01



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Size A	Document Number 630-60113-01	Rev 02
<b>TITLE PAGE</b>		
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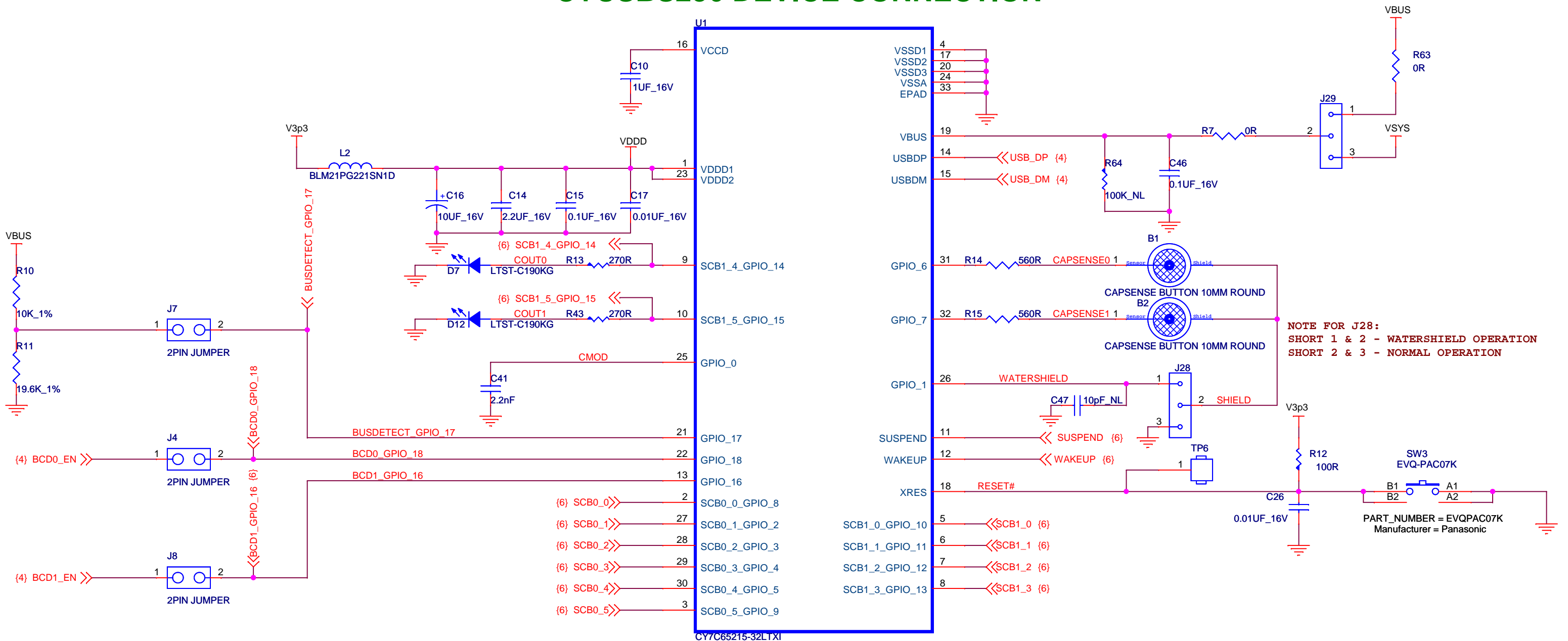


- ### GENERAL LAYOUT NOTE
1. Label all the Jumpers with prompt net names.
  2. Provide 3X spacing between digital traces.
  3. Power Trace minimum width should be 40 mil.
  4. Add Four #4-40 mounting holes at board corner.



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# CYUSBS236 DEVICE CONNECTION



**NOTE FOR J28:**  
 SHORT 1 & 2 - WATERSHIELD OPERATION  
 SHORT 2 & 3 - NORMAL OPERATION

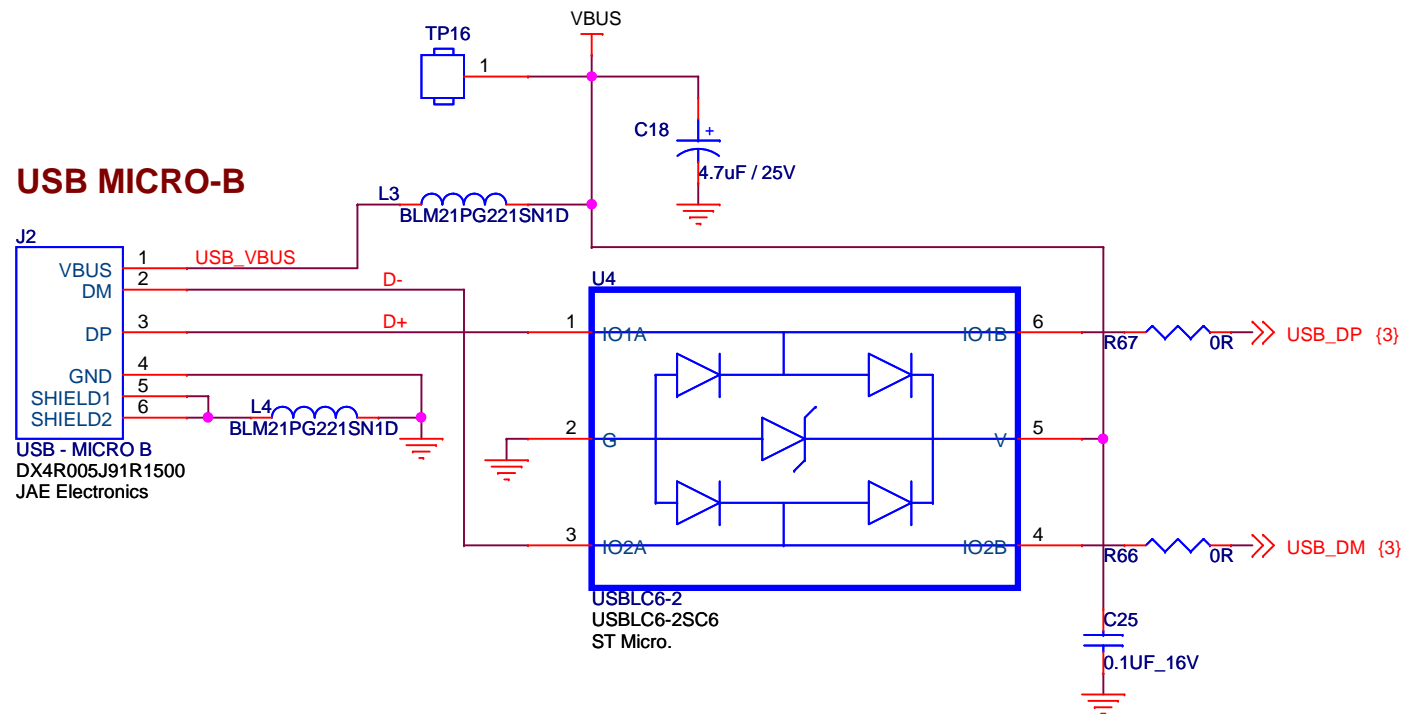
## LAYOUT NOTES

1. Capsense pin should be 10mm dia.
2. No plane or trace under capsense button in any layer.
3. Hatching around capsense button is needed.
4. Capsense button to ground spacing should be 20mil.
5. Hatching Details: Typical hatching for the ground fill is 25 percent on the top layer (7 mil line, 45 mil spacing) and 17 percent on the bottom layer (7 mil line, 70 mil spacing).



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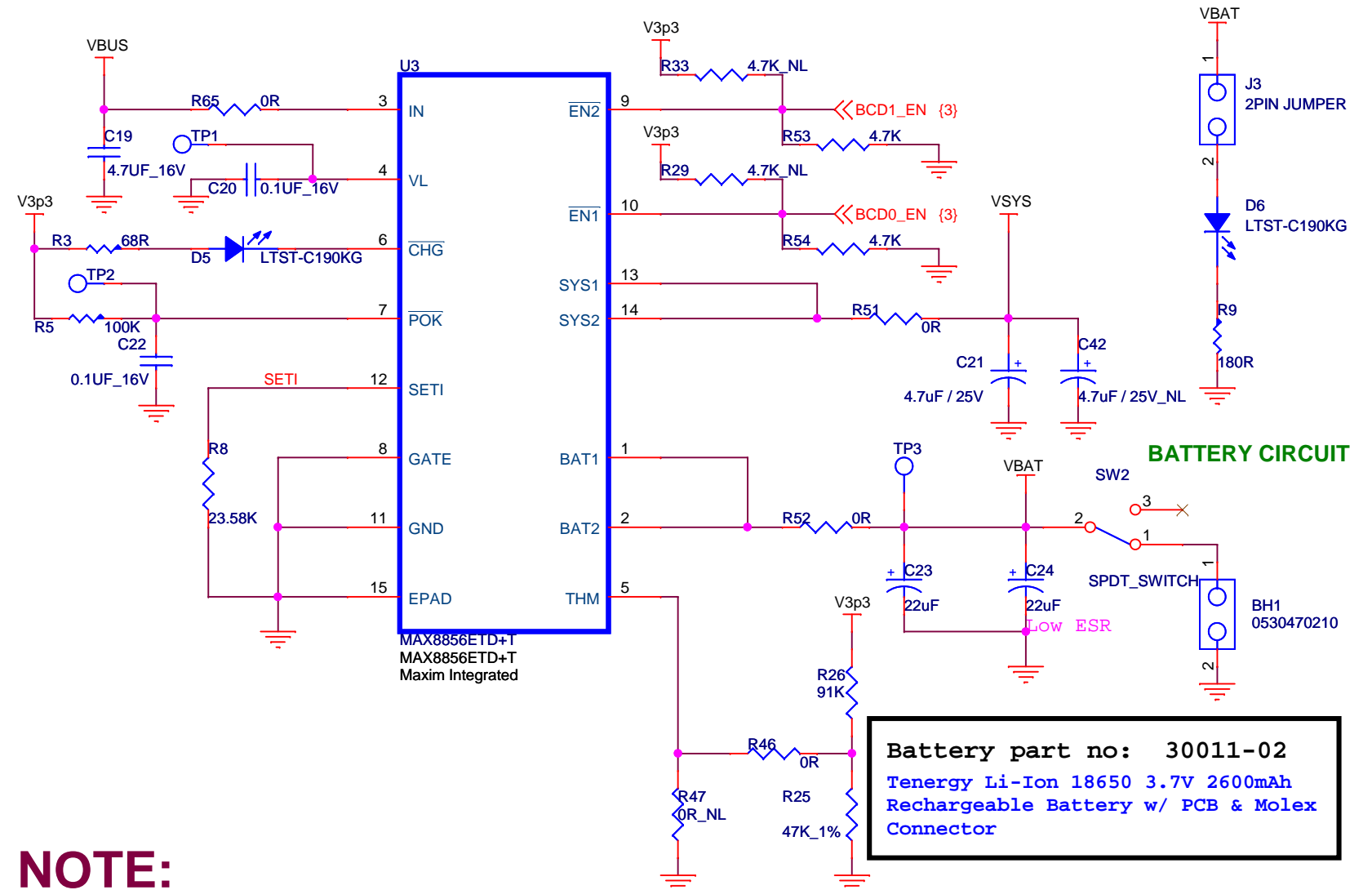
## USB TO UART



## LAYOUT NOTES

1. Place U4 closer to J2.
2. USB 90 ohm differential pairs should be routed with ground reference.
3. Add ground vias near the USB differential vias for Z-Axis reference.
4. VBUS trace width should be minimum 20mil.

## PMIC CIRCUIT



## BATTERY CIRCUIT

**Battery part no: 30011-02**  
 Tenergy Li-Ion 18650 3.7V 2600mAh  
 Rechargeable Battery w/ PCB & Molex  
 Connector

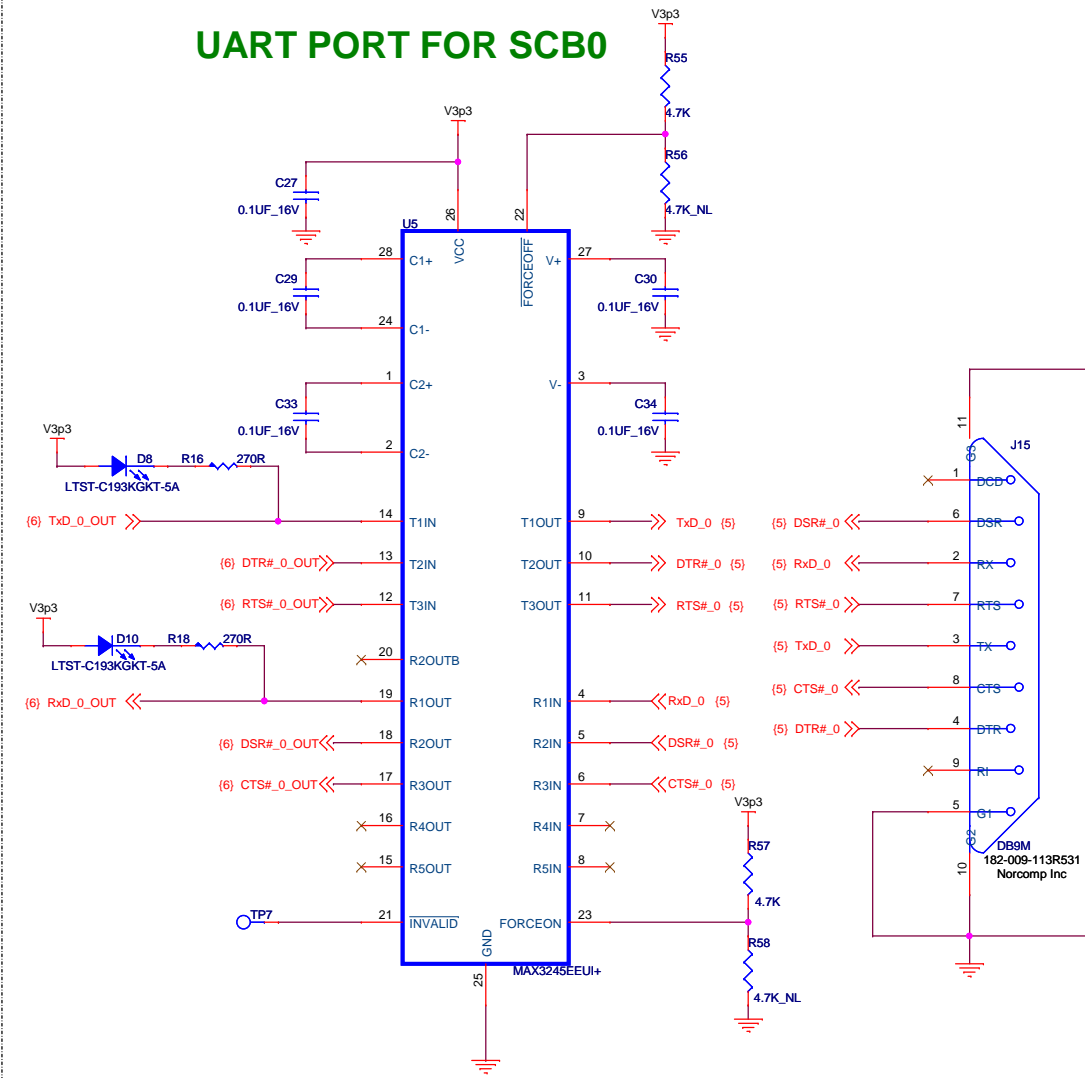
## NOTE:

1. Load the resistor R46 by default, if temperature sensing is not required remove R46 and load R47.
2. Place NTC Thermistor R25 in close proximity to Battery to monitor the Battery Temperature

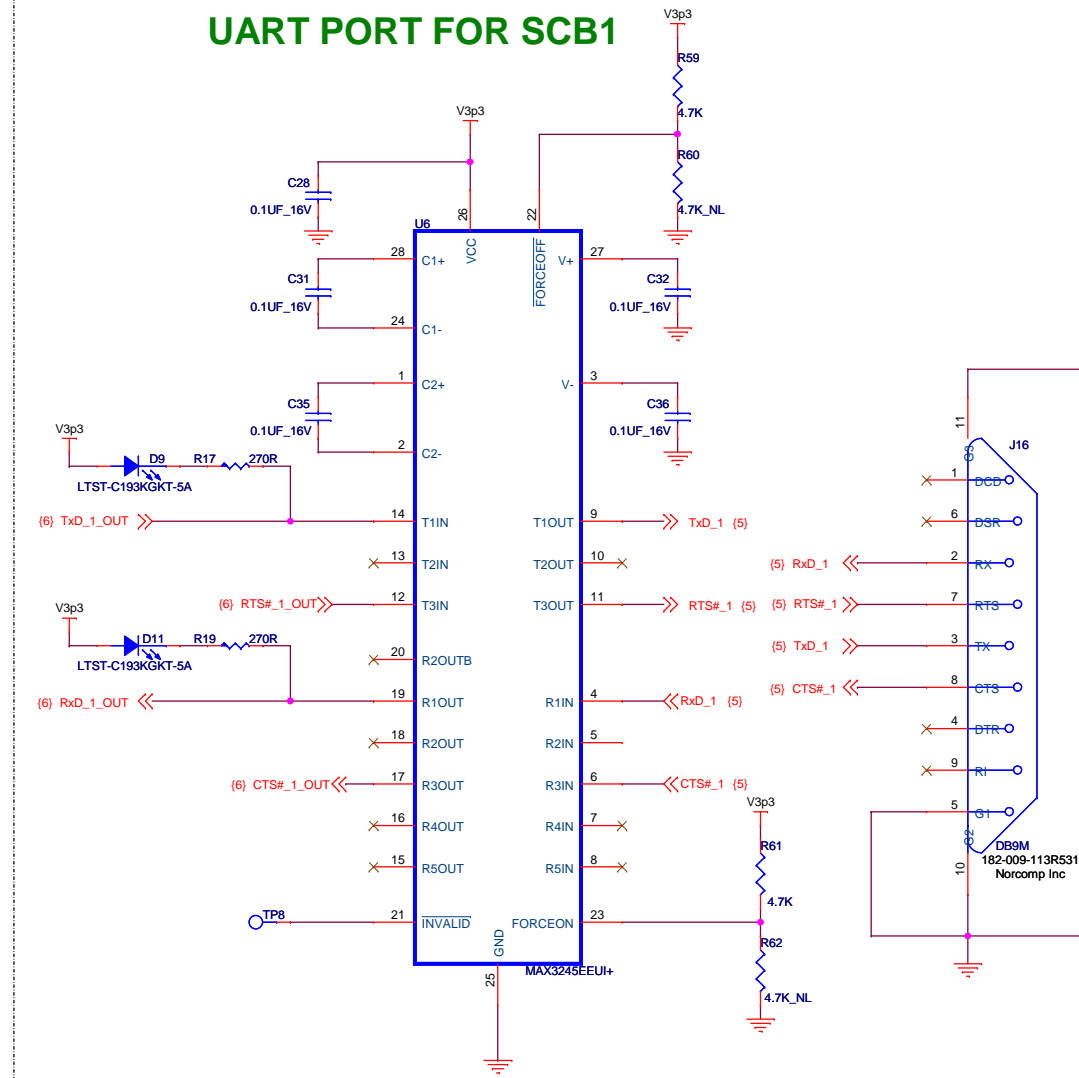


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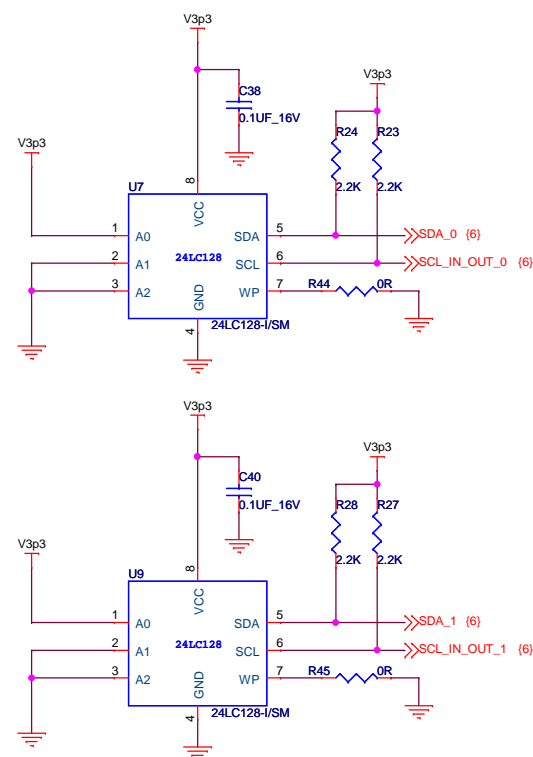
## UART PORT FOR SCB0



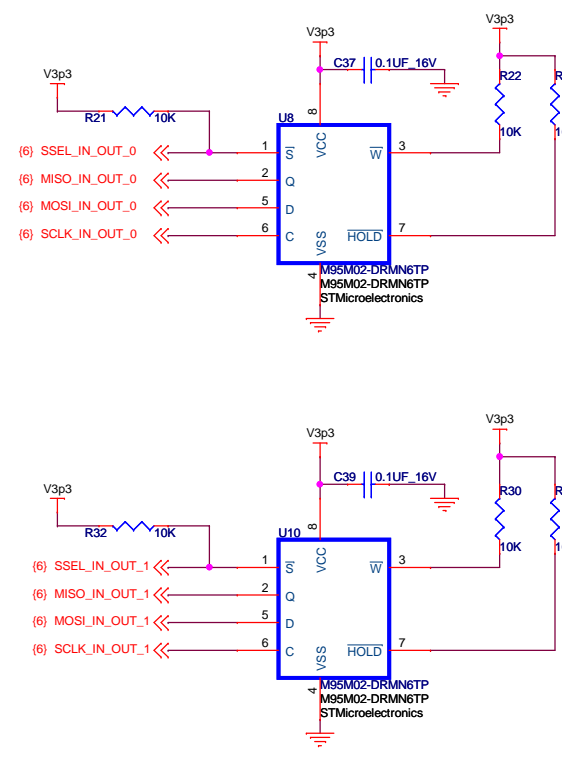
## UART PORT FOR SCB1



## I2C EEPROM FOR SCB 0 & SCB1

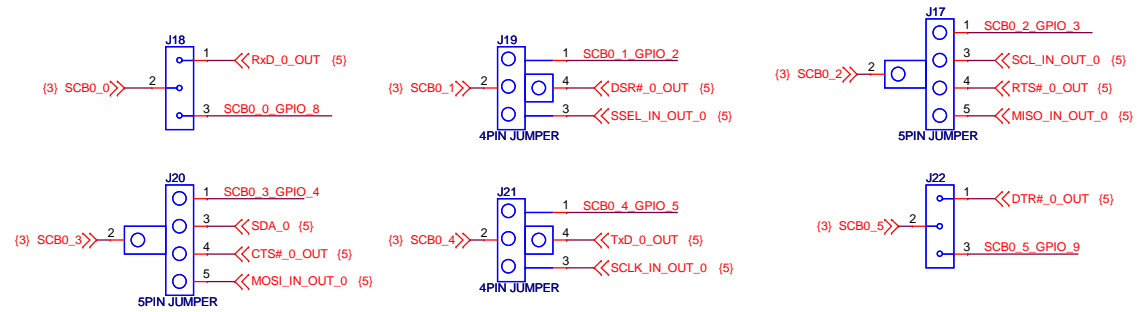


## SPI EEPROM FOR SCB 0 & SCB1



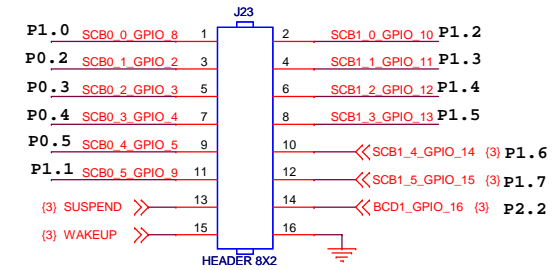
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## JUMPER CONFIG FOR SCB0

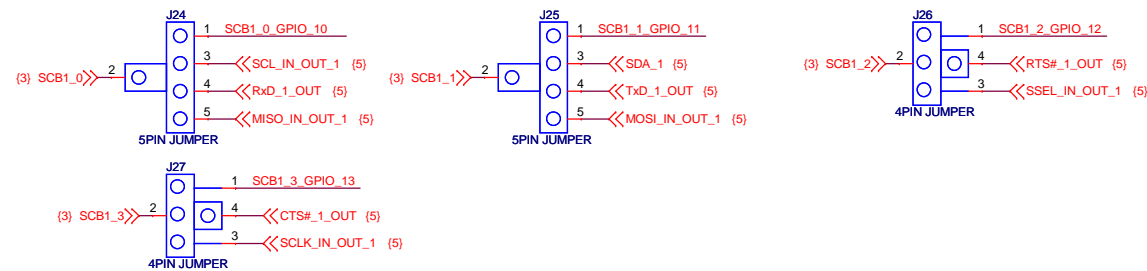


32-QFN	DEFAULT	UART	SPI	I2C	EXTERNAL HEADER	
PIN	NAME	CONFIGURATION	CONFIGURATION1	CONFIGURATION2	CONFIGURATION3	CONFIGURATION4
2	P1.0	SCB0_0	RxD_0			GPIO_8
27	P0.2	SCB0_1	DSR#_0	SSEL_OUT_0		GPIO_2
28	P0.3	SCB0_2	RTS#_0	MISO_IN_0	SCL_OUT_0	GPIO_3
29	P0.4	SCB0_3	CTS#_0	MOSI_OUT_0	SDA_0	GPIO_4
30	P0.5	SCB0_4	TxD_0	SCLK_OUT_0		GPIO_5
3	P1.1	SCB0_5	DTR#_0			GPIO_9

## GPIO HEADER



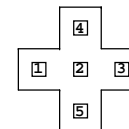
## JUMPER CONFIG FOR SCB1



32-QFN	DEFAULT	UART	SPI	I2C	EXTERNAL HEADER	
PIN	NAME	CONFIGURATION	CONFIGURATION1	CONFIGURATION2	CONFIGURATION3	CONFIGURATION4
5	P1.2	SCB1_0	RxD_1	MISO_IN_1	SCL_OUT_1	GPIO_10
6	P1.3	SCB1_1	TxD_1	MOSI_OUT_1	SDA_1	GPIO_11
7	P1.4	SCB1_2	RTS#_1	SSEL_OUT_1		GPIO_12
8	P1.5	SCB1_3	CTS#_1	SCLK_OUT_1		GPIO_13

## NOTE:

The pins of 5 pin Header J17, J20, J24, J25 should be placed as shown in the below figure



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GPIO HDR, JUMPER FOR SCB		
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