

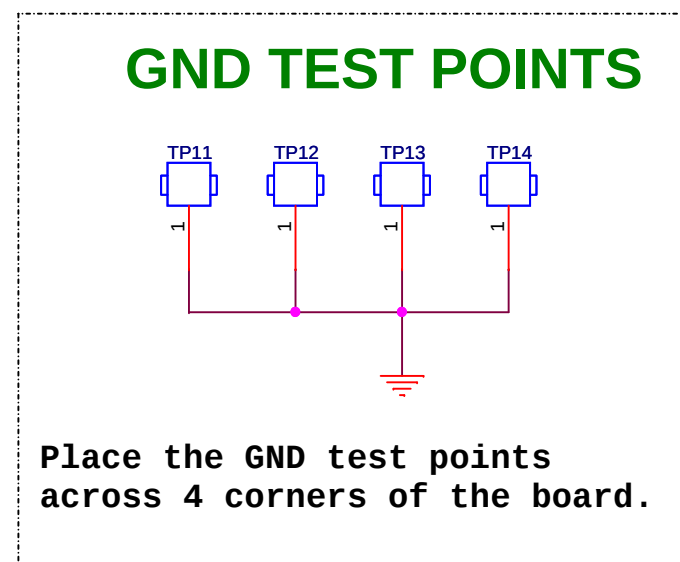
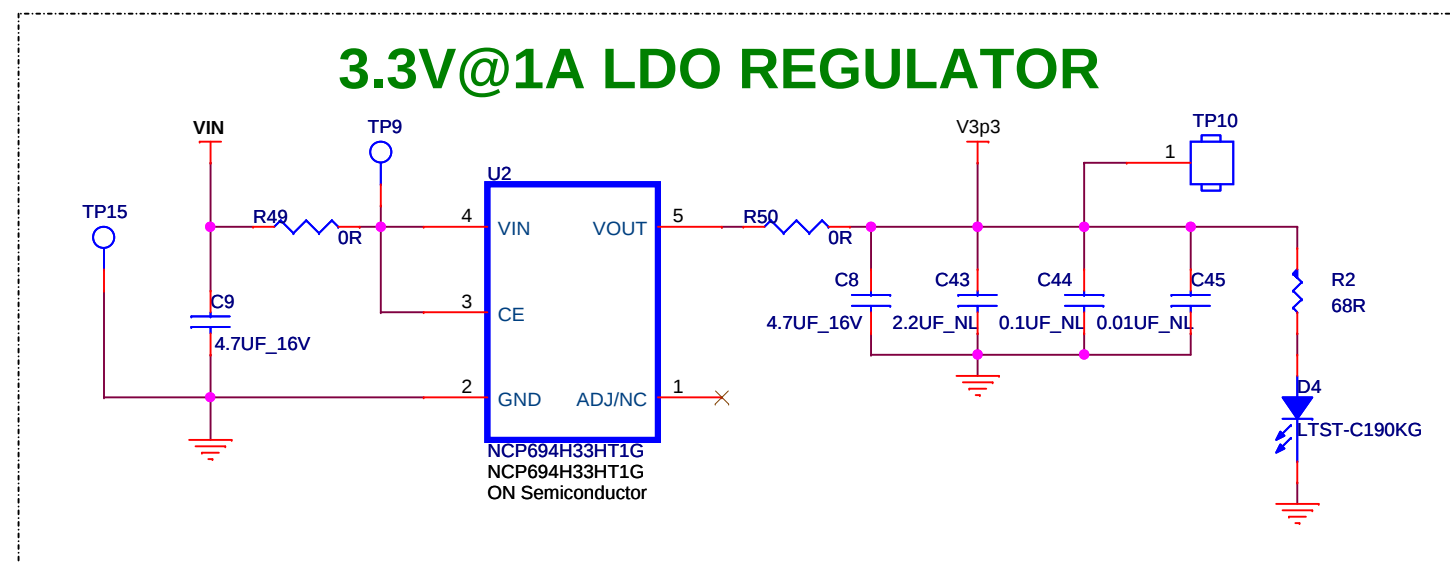
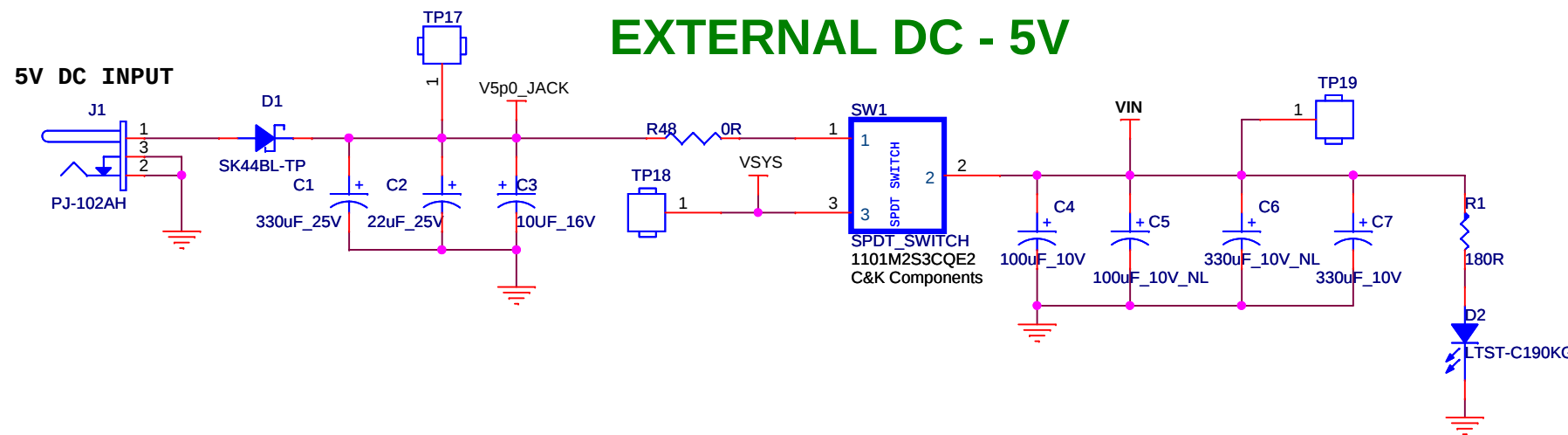
CYUSBS234 USB TO SERIAL DVK BOARD

PAGE NO	TITLE
01	TITLE PAGE
02	POWER SUPPLIES
03	CYUSBS234 DEVICE CONNECTION
04	PMIC, MICRO USB CKT
05	UART,EEPROM FOR SCB0
06	GPIO HDR,JUMPERS FOR SCB0

PCBA NUMBER : 121-60096-01
PCB NUMBER : 600-60114-01
FAB DRAWING NUMBER : 610-60113-01
ASSEMBLY DRAWING NUMBER : 620-60114-01



CYPRESS SEMICONDUCTOR © 2013		
Title CYUSBS234 USB TO SERIAL DVK BOARD		
Size A	Document Number 630-60114-01	Rev 02
TITLE PAGE		
Date: Tuesday, June 25, 2013	Sheet 1	of 6



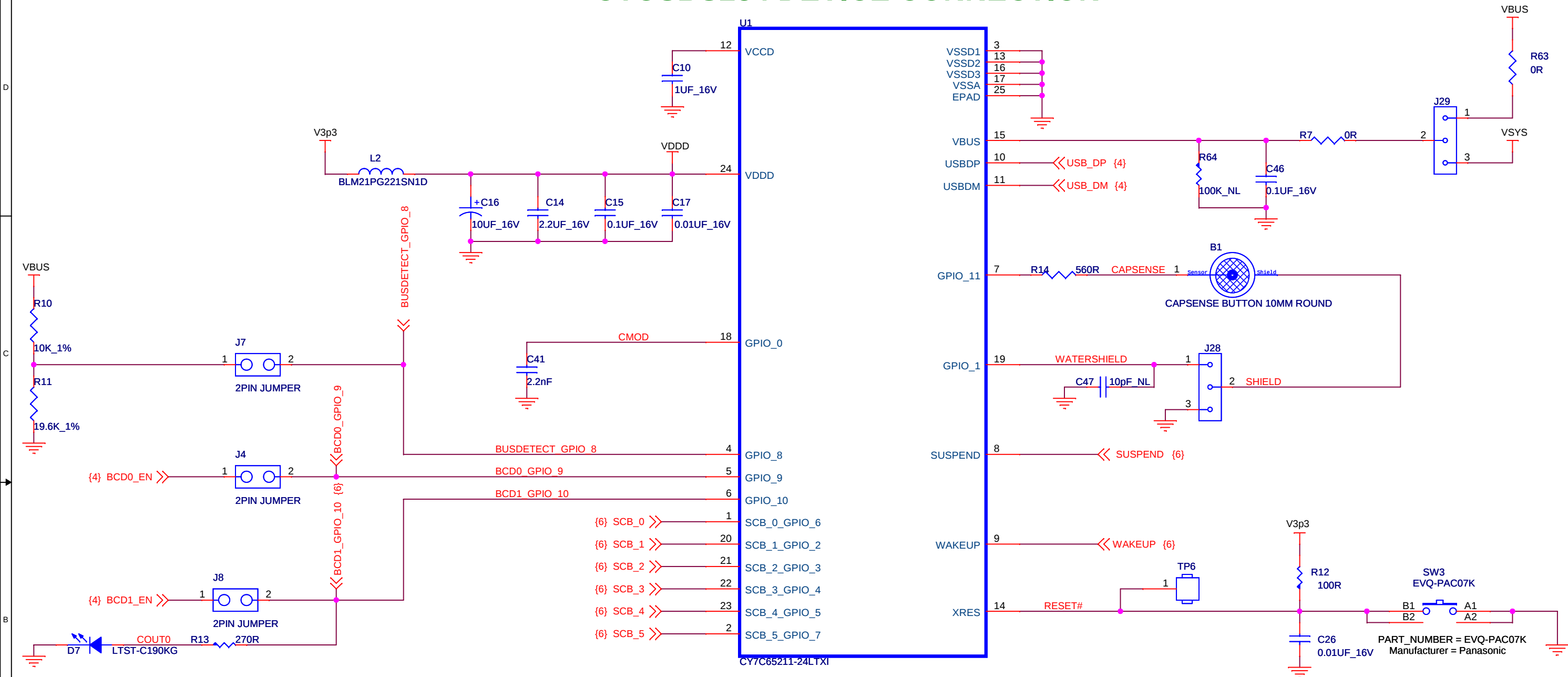
GENERAL LAYOUT NOTE

- 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.



CYPRESS SEMICONDUCTOR © 2013		
Title CYUSBS234 USB TO SERIAL DVK BOARD		
Size B	Document Number 630-60114-01	Rev 02
POWER SUPPLIES		
Date:	Tuesday, June 25, 2013	Sheet 2 of 6

CYUSBS234 DEVICE CONNECTION



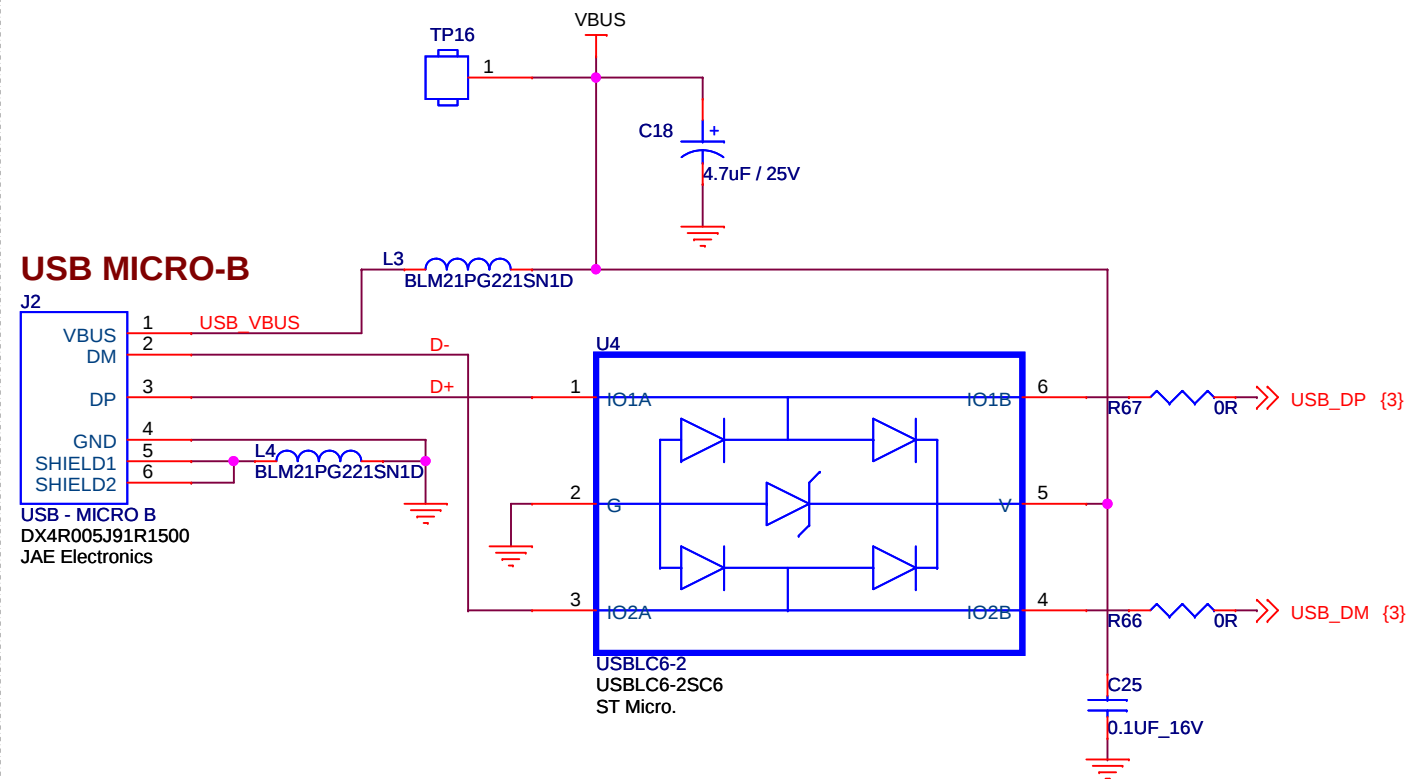
LAYOUT NOTES

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).



CYPRESS SEMICONDUCTOR © 2013			
Title CYUSBS234 USB TO SERIAL DVK BOARD			
Size B	Document Number 630-60114-01		Rev 02
CYUSBS234 DEVICE CONNECTION			
Date:	Tuesday, June 25, 2013	Sheet	3 of 6

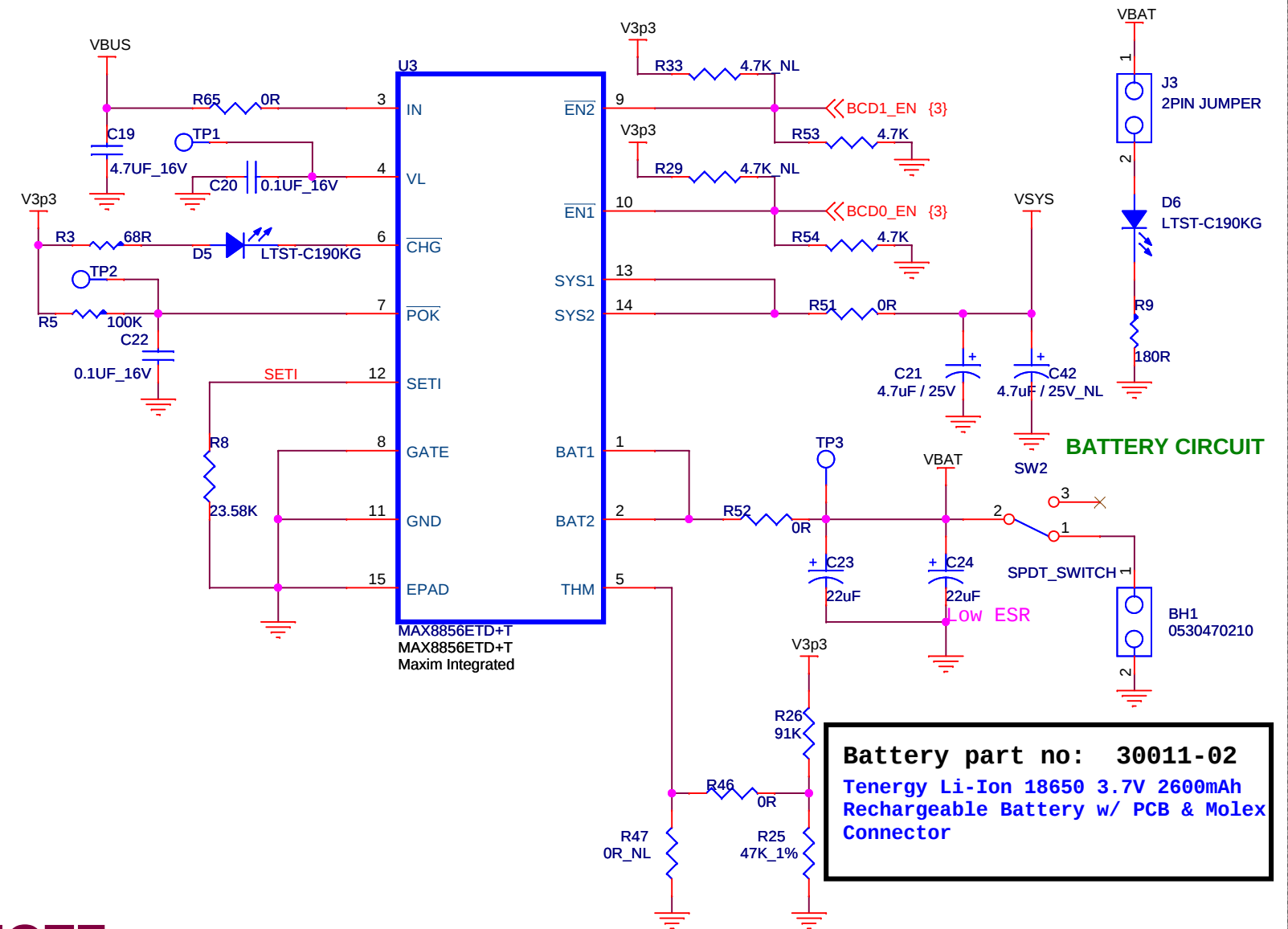
USB TO UART



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



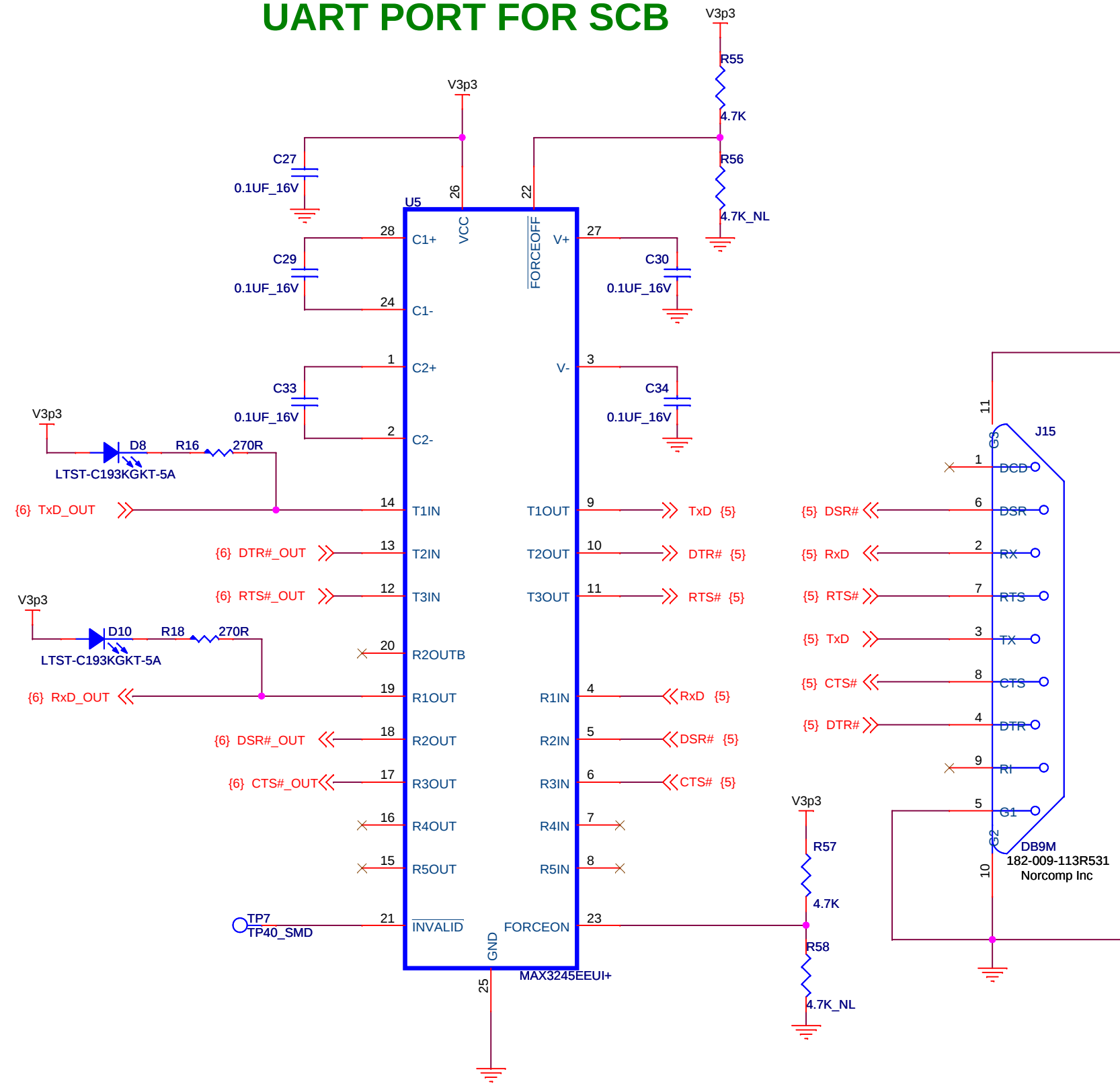
NOTE:

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

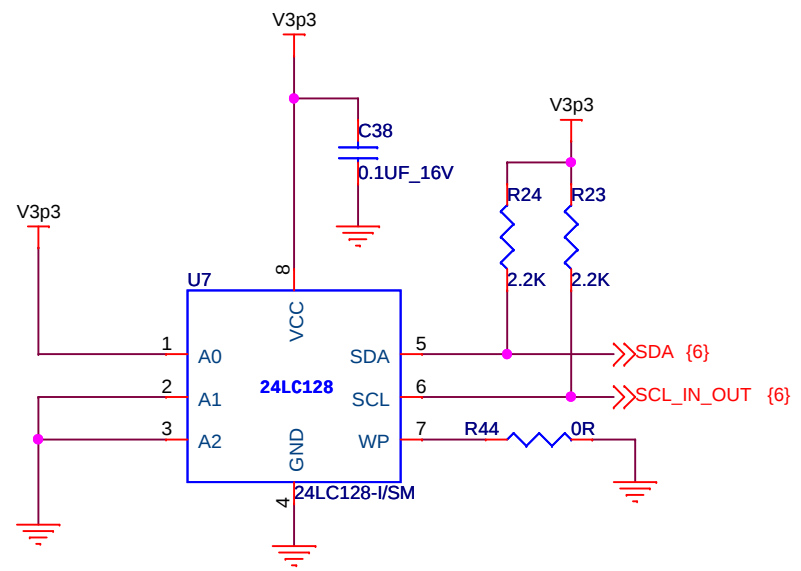


CYPRESS SEMICONDUCTOR © 2013			
Title CYUSBS234 USB TO SERIAL DVK BOARD			
Size B	Document Number 630-60114-01		Rev 02
PMIC, MICRO USB CKT			
Date:	Tuesday, June 25, 2013	Sheet	4 of 6

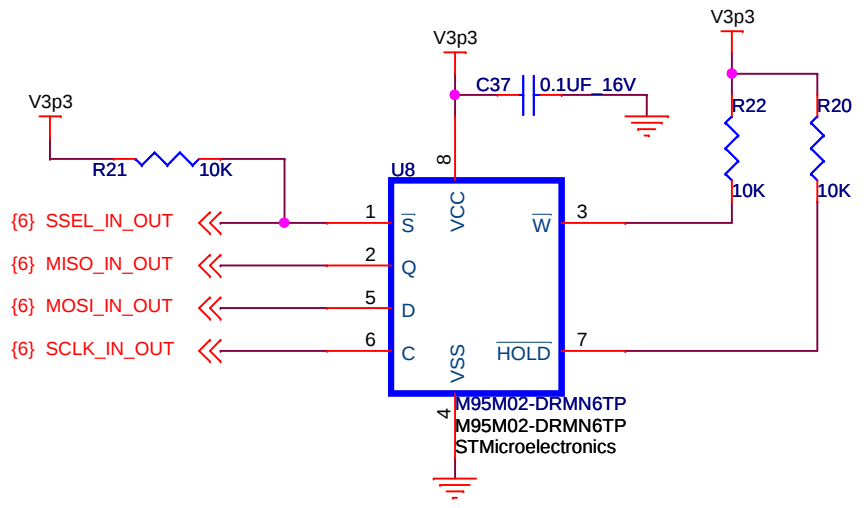
UART PORT FOR SCB



I2C EEPROM FOR SCB

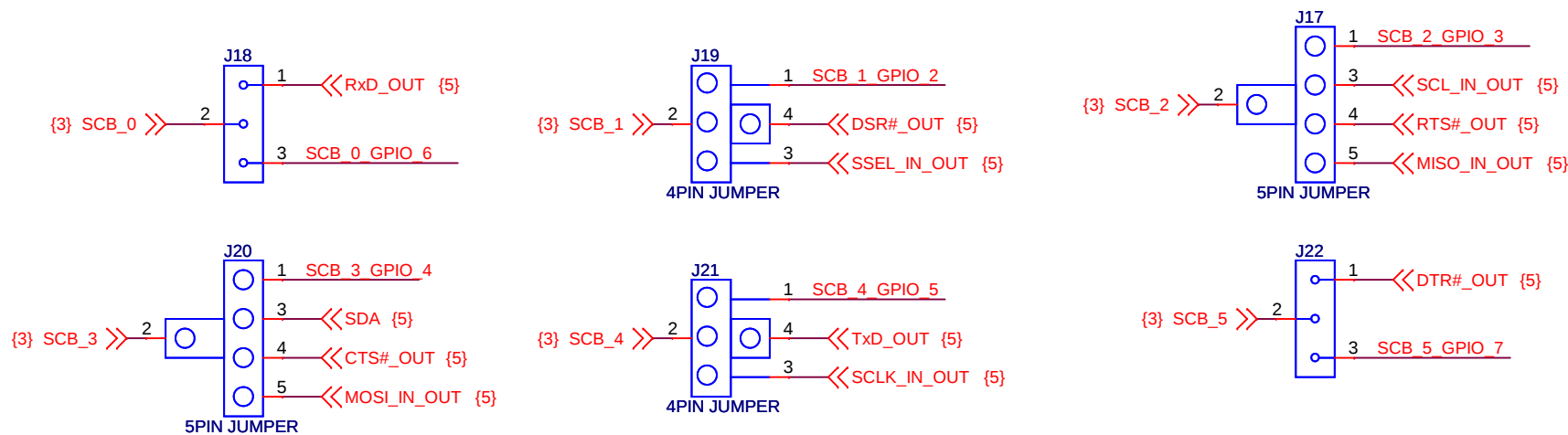


SPI EEPROM FOR SCB



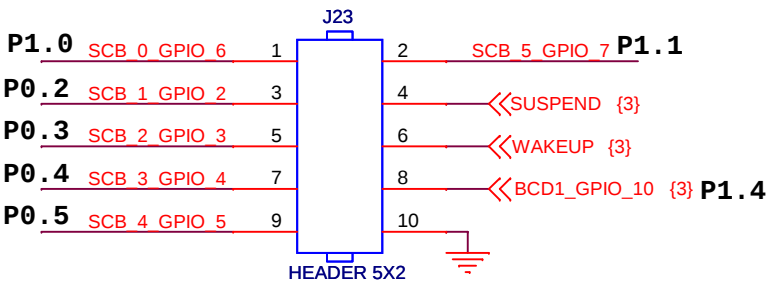
CYPRESS SEMICONDUCTOR © 2013		
Title CYUSBS234 USB TO SERIAL DVK BOARD		
Size B	Document Number 630-60114-01	Rev 02
UART,EEPROM FOR SCB		
Date:	Tuesday, June 25, 2013	Sheet 5 of 6

JUMPER CONFIG FOR SCB

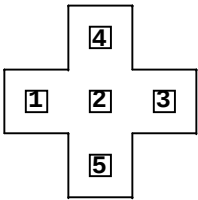


24-QFN		DEFAULT	UART	SPI	I2C	EXTERNAL HEADER
PIN	NAME	CONFIGURATION	CONFIGURATION1	CONFIGURATION2	CONFIGURATION3	CONFIGURATION4
1	SCB_0	SCB_0	RxD			GPIO_6
20	SCB_1	SCB_1	DSR#	SSEL_OUT		GPIO_2
21	SCB_2	SCB_2	RTS#	MISO_IN	SCL_OUT	GPIO_3
22	SCB_3	SCB_3	CTS#	MOSI_OUT	SDA	GPIO_4
23	SCB_4	SCB_4	TxD	SCLK_OUT		GPIO_5
2	SCB_5	SCB_5	DTR#			GPIO_7

GPIO HEADER



NOTE: The Pins of 5 pin Header J17 and J20 should be placed as shown in the below figure



CYPRESS SEMICONDUCTOR © 2013		
Title CYUSBS234 USB TO SERIAL DVK BOARD		
Size B	Document Number 630-60114-01	Rev 02
GPIO HDR,JUMPER FOR SCB		
Date:	Tuesday, June 25, 2013	Sheet 6 of 6