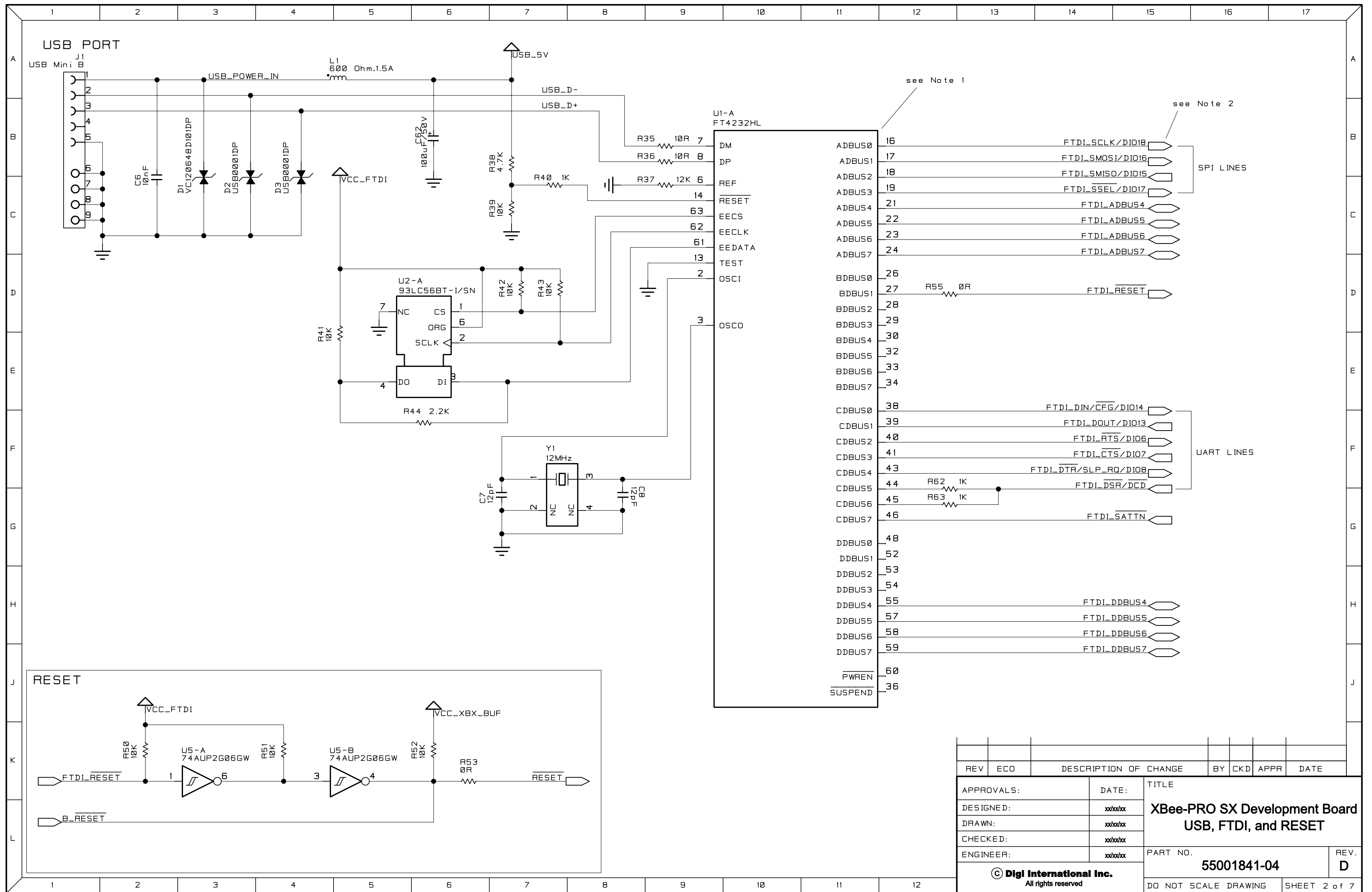


REV	ECO	DESCRIPTION OF CHANGE	BY	CKD	APPR	DATE
APPROVALS:		DATE:	TITLE			
DESIGNED:		xxxxxx	XBee-PRO SX Development Board XBee SX Module			
DRAWN:		xxxxxx				
CHECKED:		xxxxxx	PART NO.		REV.	
ENGINEER:		xxxxxx	55001841-04		D	
© Digi International Inc. All rights reserved						DO NOT SCALE DRAWING SHEET 1 of 7



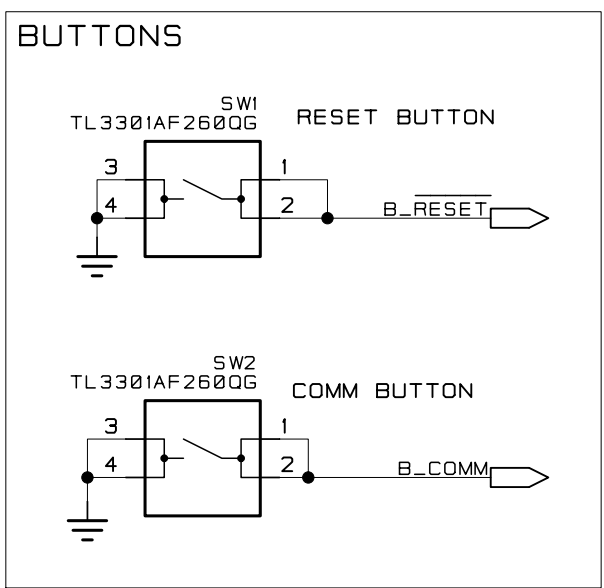
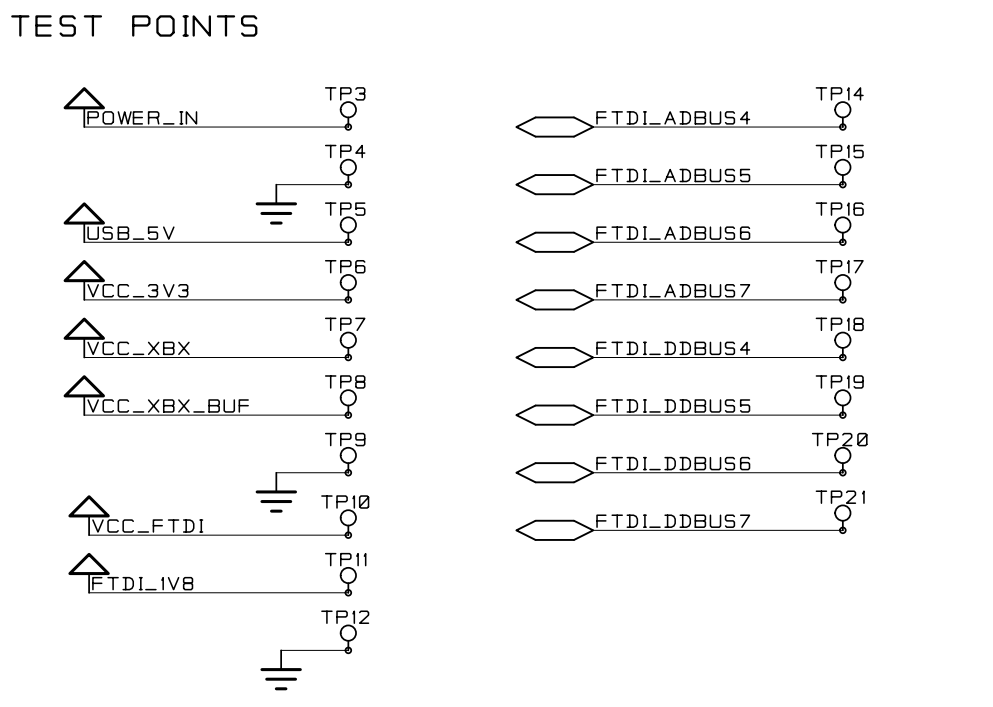
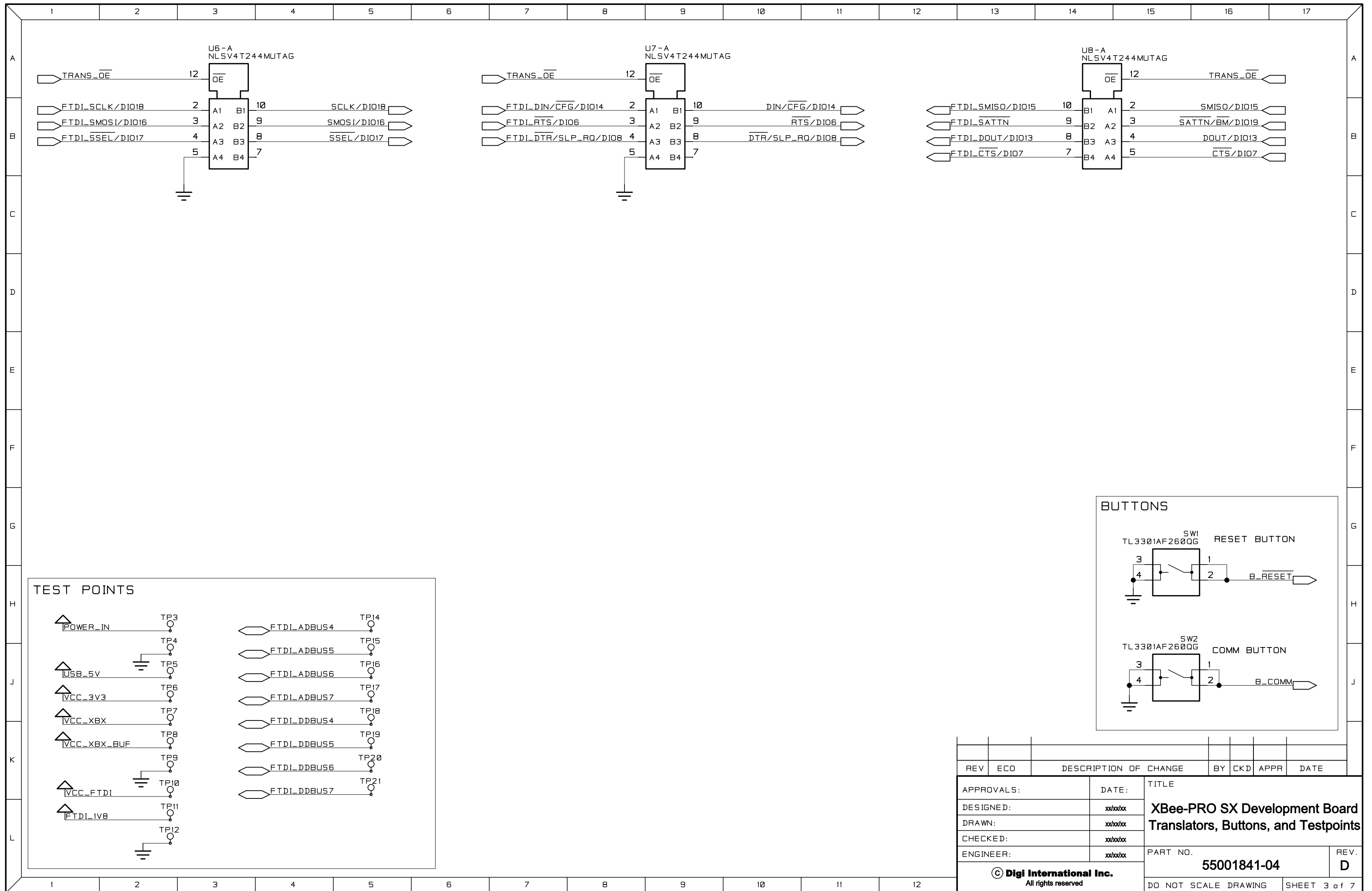
see Note 1

see Note 2

SPI LINES

UART LINES

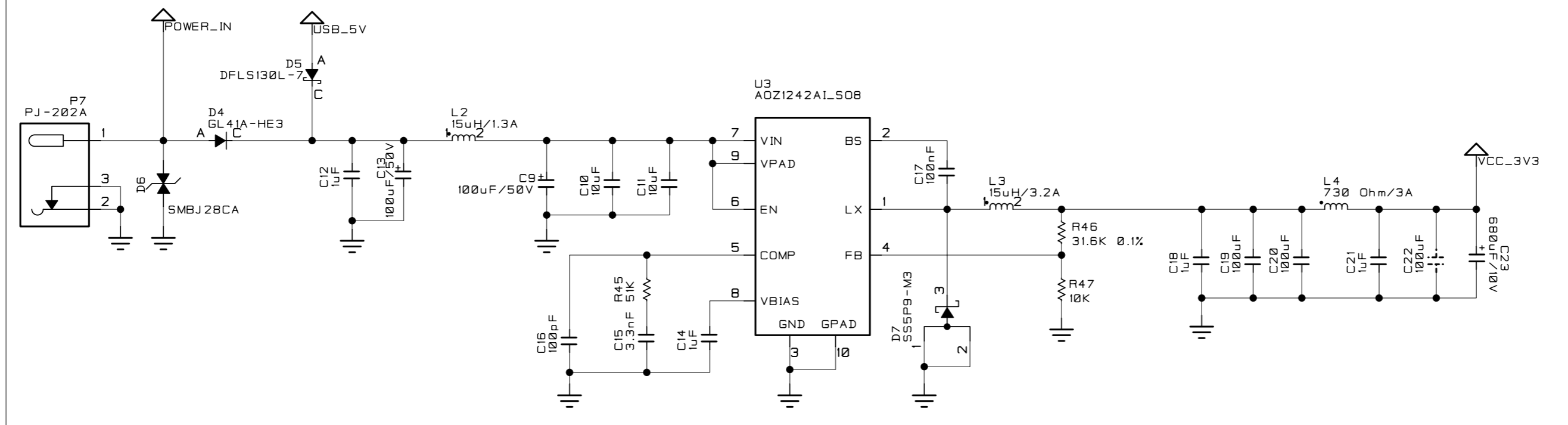
REV	ECO	DESCRIPTION OF CHANGE	BY	CKD	APPR	DATE
APPROVALS:		DATE:	TITLE			
DESIGNED:		xx/xx/xx	XBee-PRO SX Development Board			
DRAWN:		xx/xx/xx	USB, FTDI, and RESET			
CHECKED:		xx/xx/xx	PART NO.		REV.	
ENGINEER:		xx/xx/xx	55001841-04		D	
© Digi International Inc. All rights reserved			DO NOT SCALE DRAWING		SHEET 2 of 7	



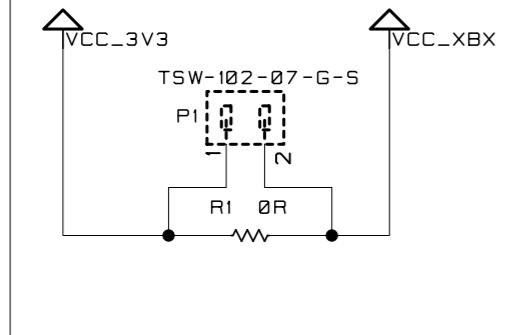
REV	ECO	DESCRIPTION OF CHANGE	BY	CKD	APPR	DATE

APPROVALS:	DATE:	TITLE
DESIGNED:	xxxxxx	<b>XBee-PRO SX Development Board Translators, Buttons, and Testpoints</b>
DRAWN:	xxxxxx	
CHECKED:	xxxxxx	
ENGINEER:	xxxxxx	
© Digi International Inc. All rights reserved		PART NO. <b>55001841-04</b>
DO NOT SCALE DRAWING		REV. <b>D</b>
SHEET 3 of 7		

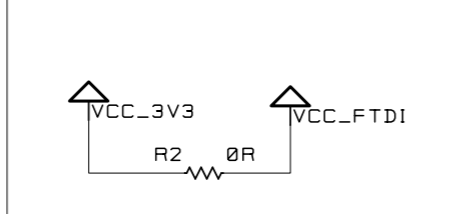
### 3.3V SWITCHING REGULATOR



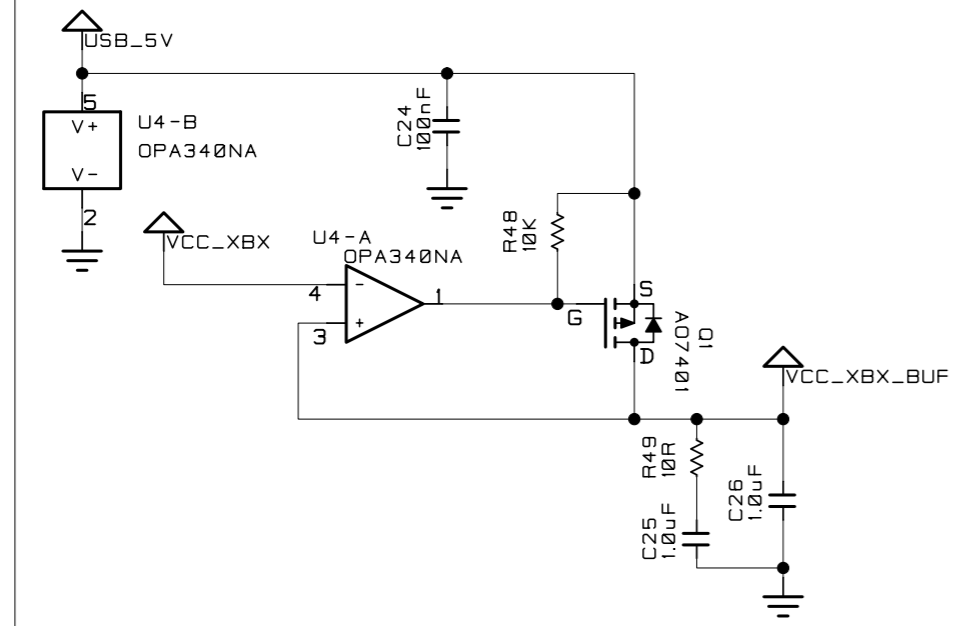
### CURRENT TESTING



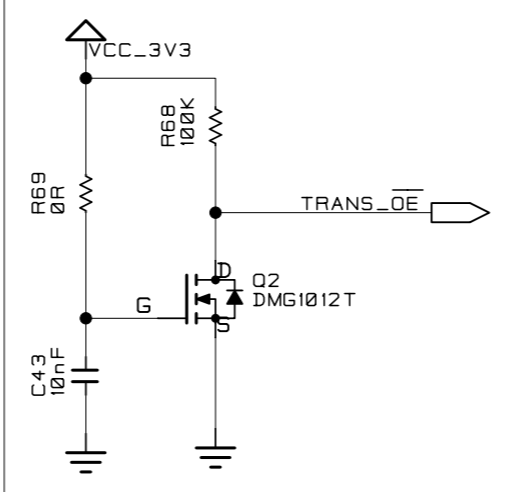
### FTDI VCC



### VCC XBEE BUFFER

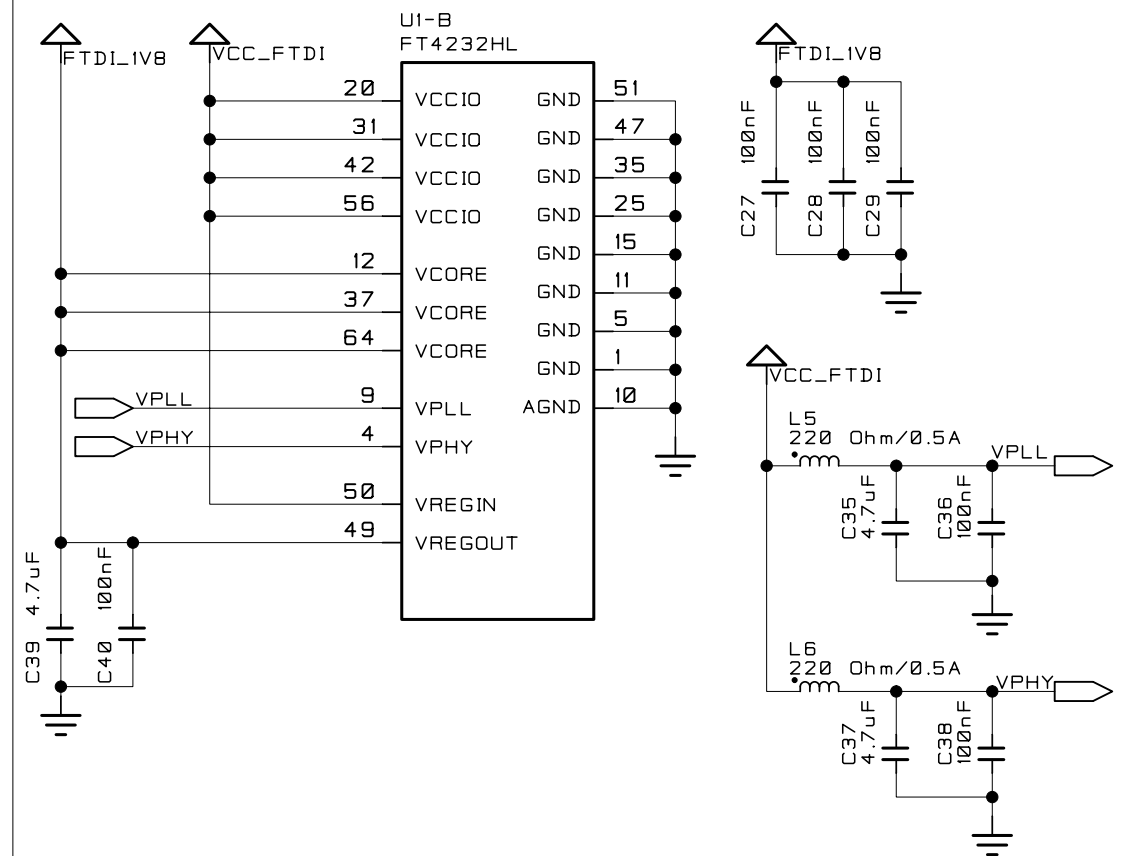


### OE INVERTER

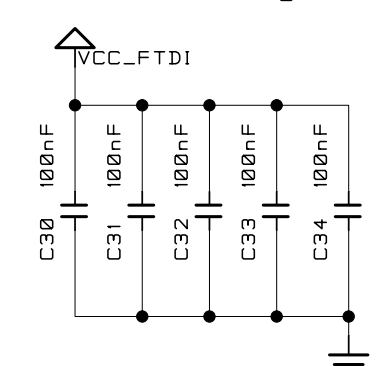


REV	ECO	DESCRIPTION OF CHANGE	BY	CKD	APPR	DATE
APPROVALS:		DATE:	TITLE			
DESIGNED:		xxxxxx	XBee-PRO SX Development Board			
DRAWN:		xxxxxx	Power - Supplies			
CHECKED:		xxxxxx	PART NO.		REV.	
ENGINEER:		xxxxxx	55001841-04		D	
© Digi International Inc. All rights reserved						
DO NOT SCALE DRAWING						SHEET 4 of 7

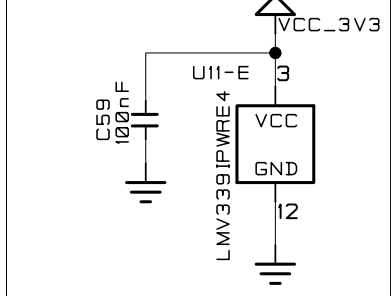
FTDI CHIP



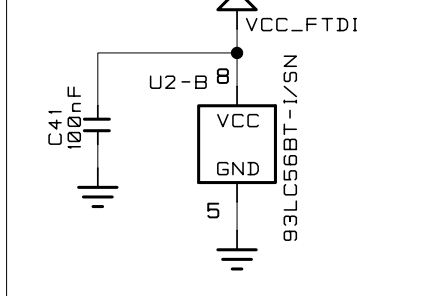
- Place C27 close to U1.12
- Place C28 close to U1.37
- Place C29 close to U1.64
- Place C30 close to U1.20
- Place C31 close to U1.31
- Place C32 close to U1.42
- Place C33 close to U1.56
- Place C34 close to U1.50
- Place C35 and C36 close to U1.9
- Place C37 and C38 close to U1.4
- Place C39 and C40 close to U1.49



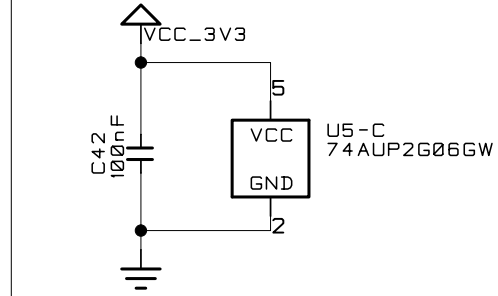
COMPARATOR



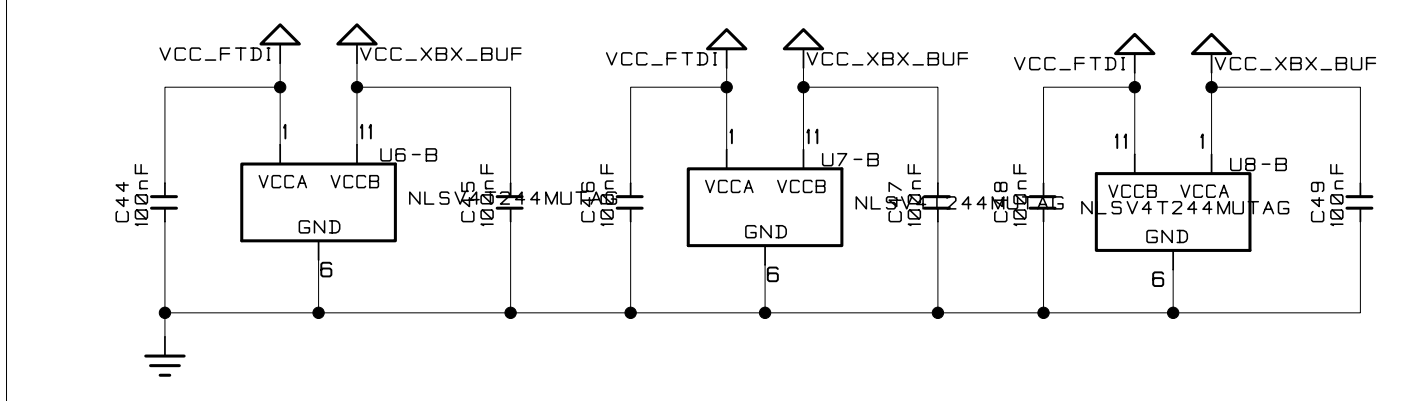
EEPROM



RESET INVERTER

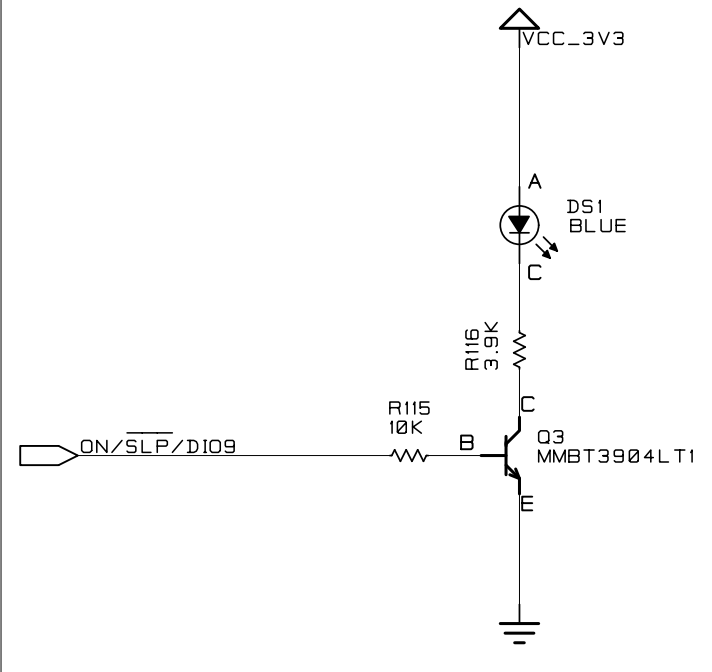


TRANSLATORS

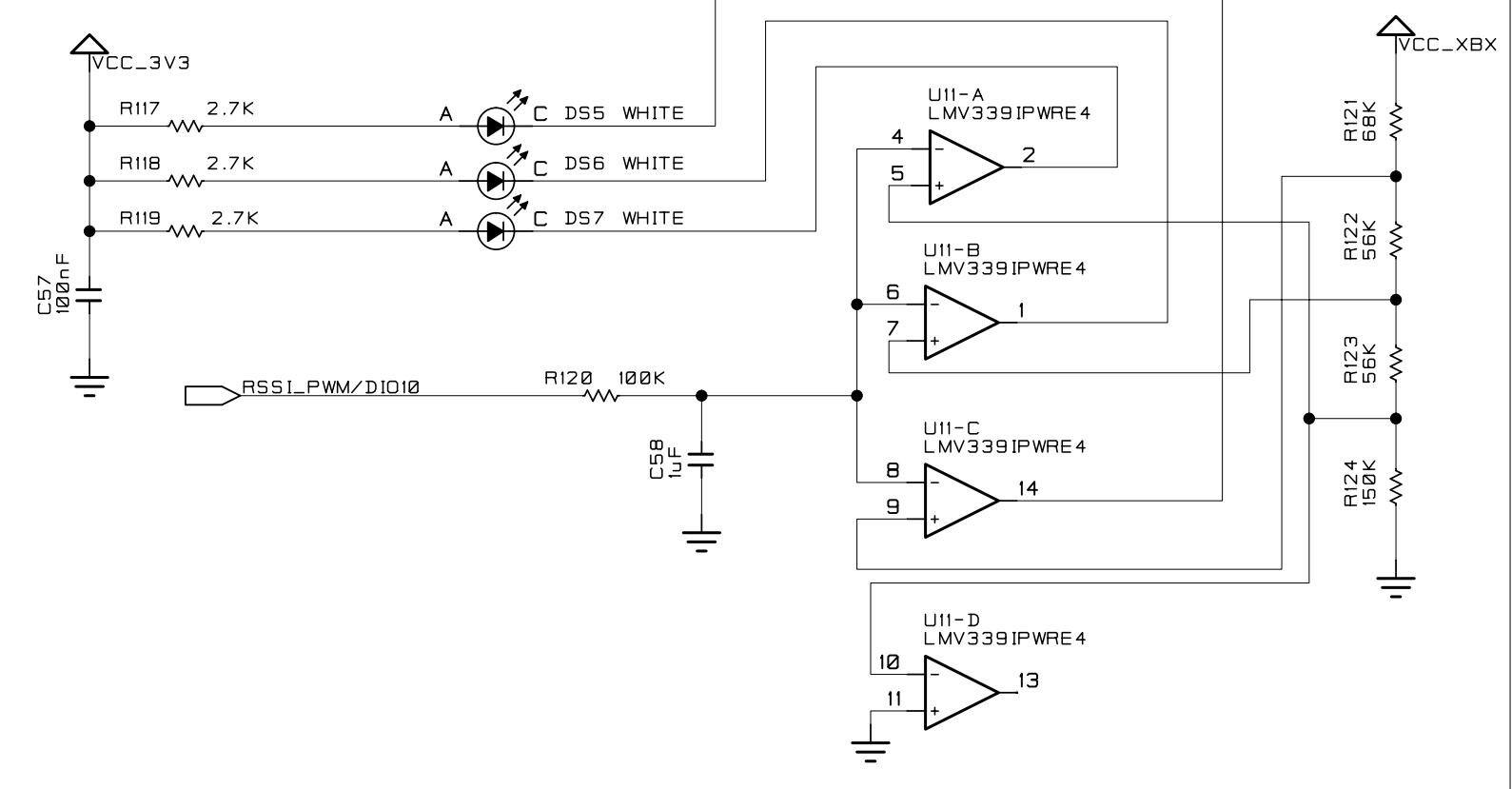


REV	ECO	DESCRIPTION OF CHANGE	BY	CKD	APPR	DATE
APPROVALS:		DATE:	TITLE			
DESIGNED:		xxxxxx	XBee-PRO SX Development Board			
DRAWN:		xxxxxx	Power - Chips			
CHECKED:		xxxxxx	PART NO.		REV.	
ENGINEER:		xxxxxx	55001841-04		D	
© Digi International Inc. All rights reserved			DO NOT SCALE DRAWING		SHEET 5 of 7	

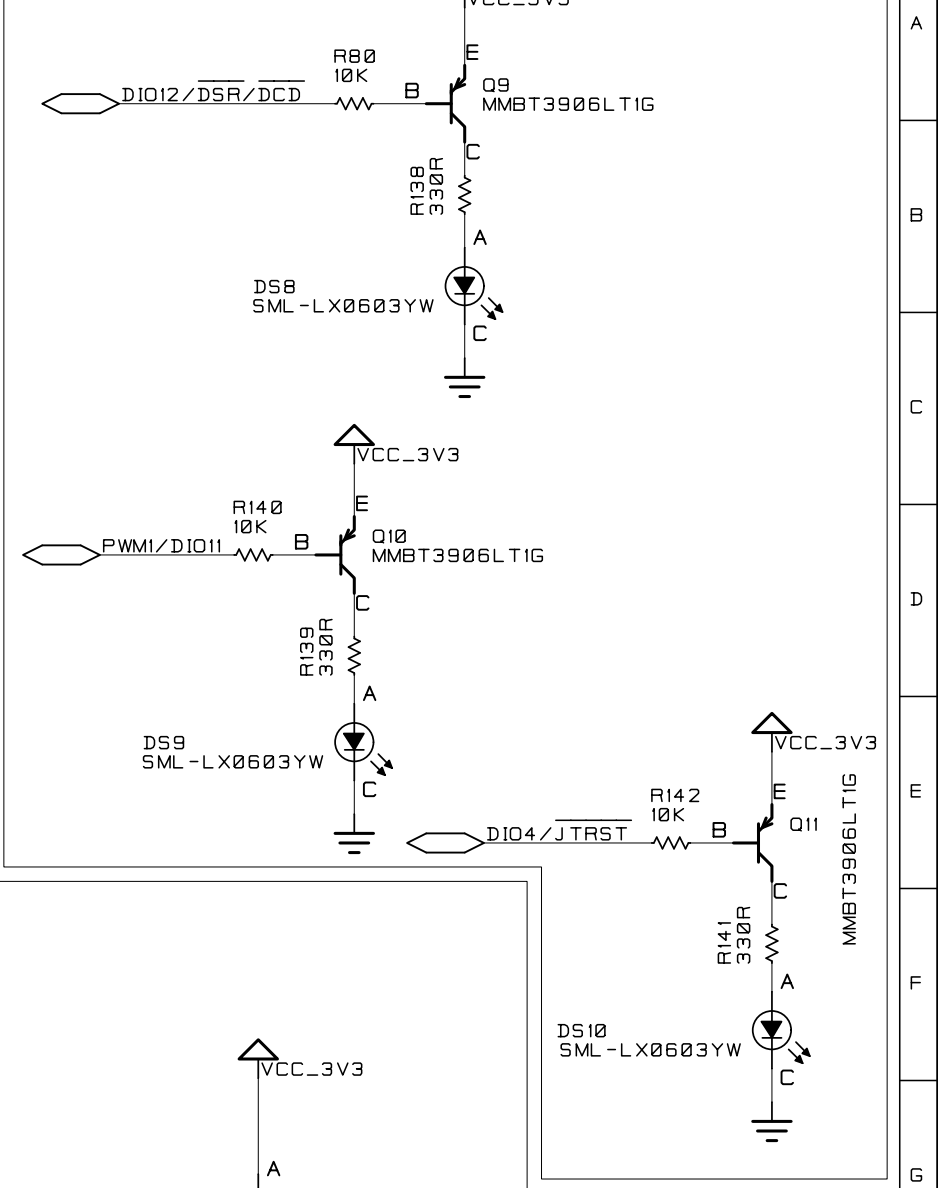
ON/SLEEP LED



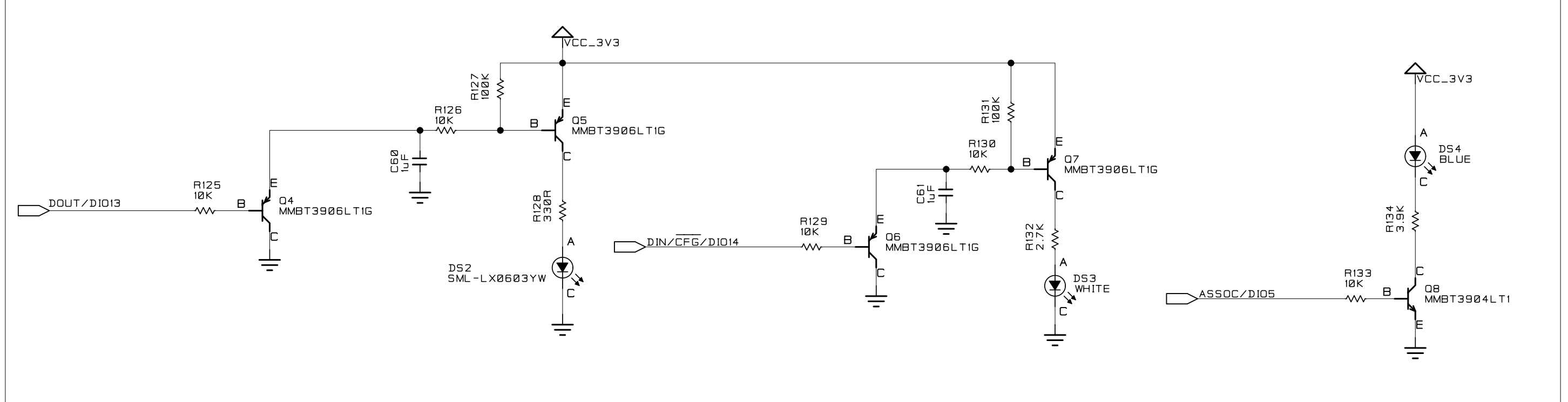
RSSI LEDs



OTHER LEDS



DOUT, DIN, AND ASSOC LEDS



REV	ECO	DESCRIPTION OF CHANGE	BY	CKD	APPR	DATE
APPROVALS:		DATE:	TITLE			
DESIGNED:		xxxxxx	XBee-PRO SX Development Board			
DRAWN:		xxxxxx	LEDS			
CHECKED:		xxxxxx	PART NO.		REV.	
ENGINEER:		xxxxxx	55001841-04		D	
© Digi International Inc. All rights reserved						
DO NOT SCALE DRAWING					SHEET 6 of 7	

Notes

1. The FT4232H chip has 4 separate I/O ports. Each of these ports can be set to different modes at any time. Only one mode can be set on a port at a time. All of the ports can be set to serial, asynchronous bit-bang, or synchronous bit-bang. Only ports A and B can be set to MPSSE mode, which includes SPI, I2C, and JTAG modes. The default state for all of the ports will be UART whenever plugged in. This cannot be changed.

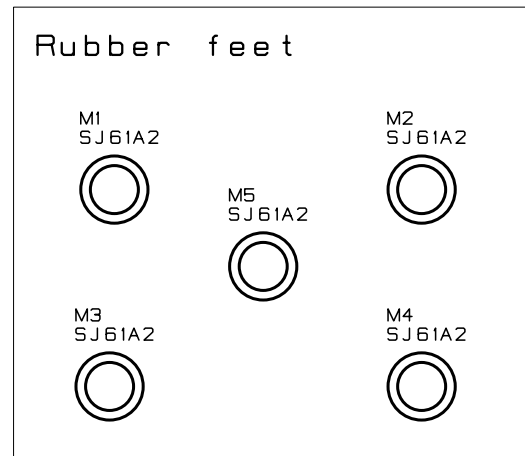
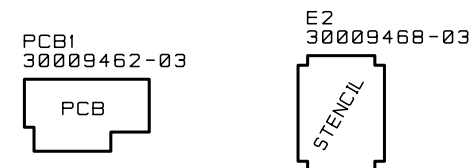
2. The FT4232H chip supports two modes for the SPI clock. The first mode supports speeds from 92 Hz to 6 MHz and follows the equation below (CD is the clock divisor and must be an integer:

$$f = 12\text{MHz} / (2 * (1 + \text{CD}))$$

The other mode can handle speeds between 460 Hz and 30 MHz and follows the equation below:

$$f = 60 \text{ MHz} / (2 * (1 + \text{CD}))$$

The MOSI and MISO lines are synchronous with the SPI clock. All of the other GPIO pins are not.



REV	ECO	DESCRIPTION OF CHANGE	BY	CKD	APPR	DATE	
APPROVALS:		DATE:	TITLE				
DESIGNED:		xxxxxx	XBee-PRO SX Development Board				
DRAWN:		xxxxxx	Notes and Mechanicals				
CHECKED:		xxxxxx	PART NO.		REV.		
ENGINEER:		xxxxxx	55001841-04		D		
© Digi International Inc. All rights reserved						DO NOT SCALE DRAWING	SHEET 7 of 7