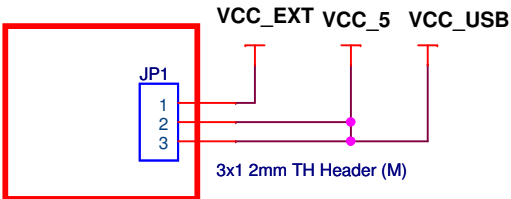


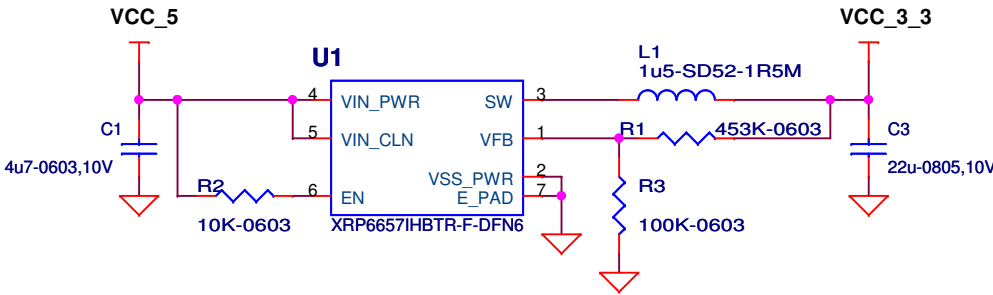
NOT INSTALLED



- Notes:**
- [1] This jumper can also be used for current/power measurement of the board. Remove the jumper and connect probe instead of the jumper.
 - [2] The necessary strapping options must be selected for the USB-UART chip for the bus-powered or self-powered configurations.
 - [3] None of these pins should be opened in the power plane to support the isolation of the traces.

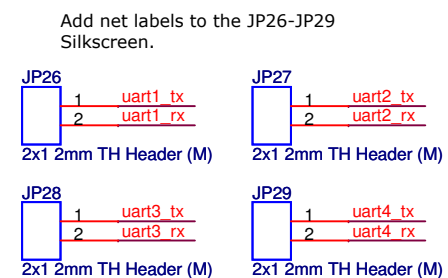
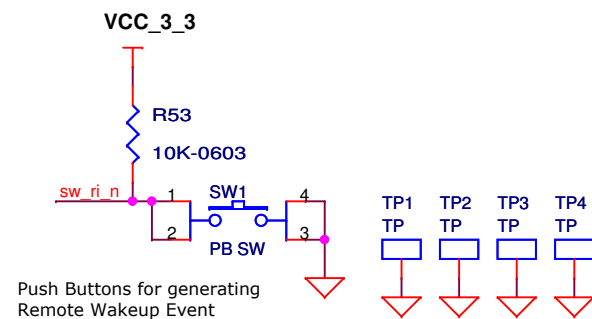
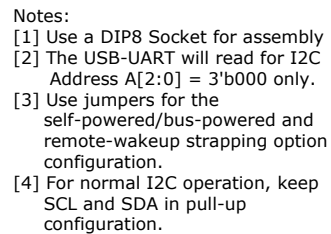
Power Select Header Jumper Options:
Short pins 2-1 => The board is powered from external power supply of 5V (self-powered)
Short pins 2-3 => The board is powered from USB VBUS power (bus-powered)

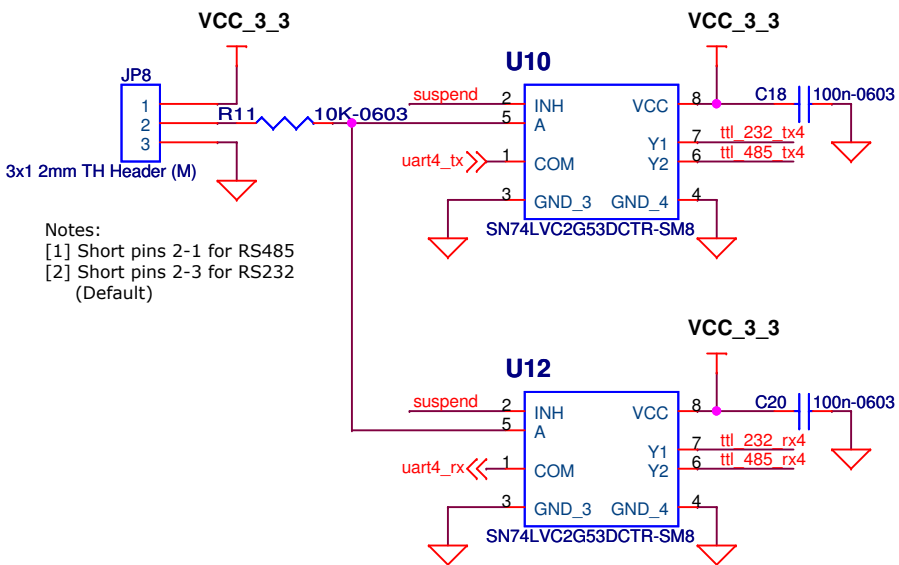
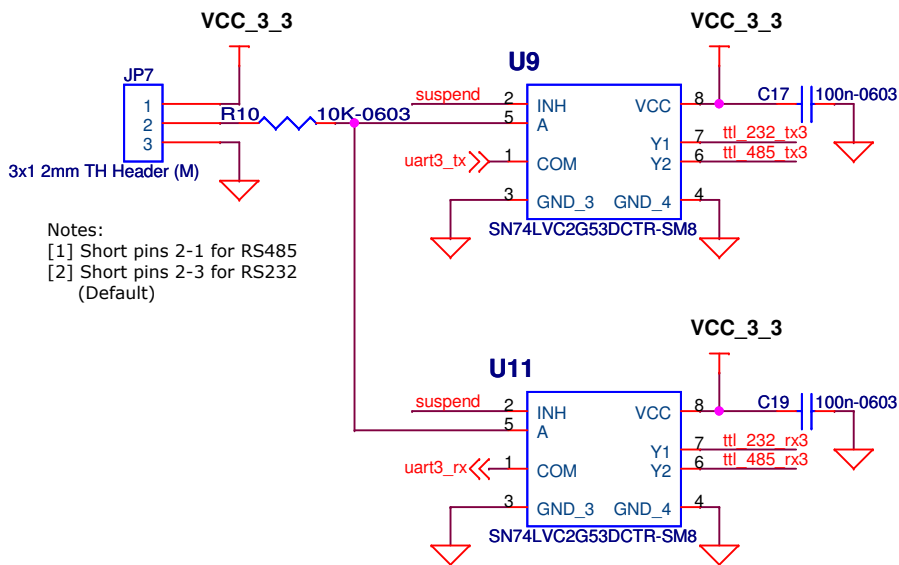
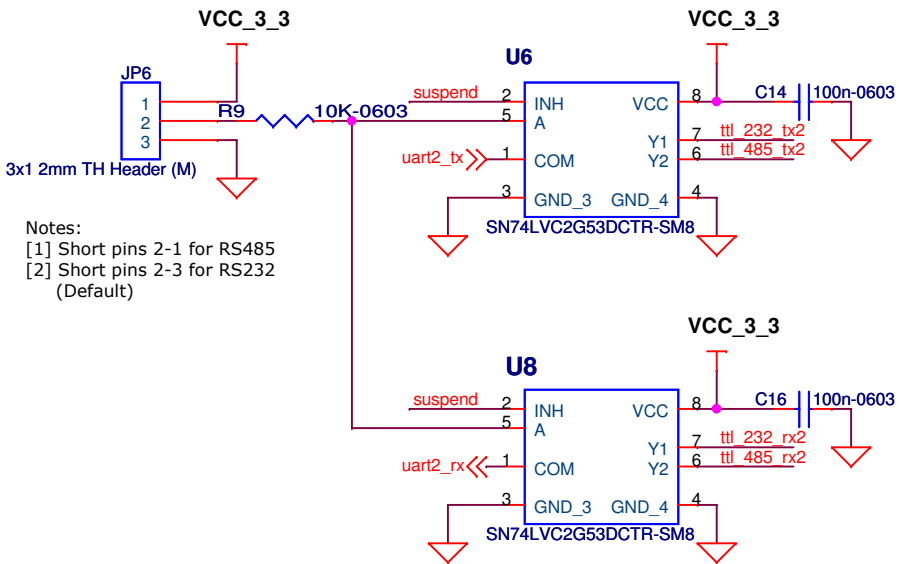
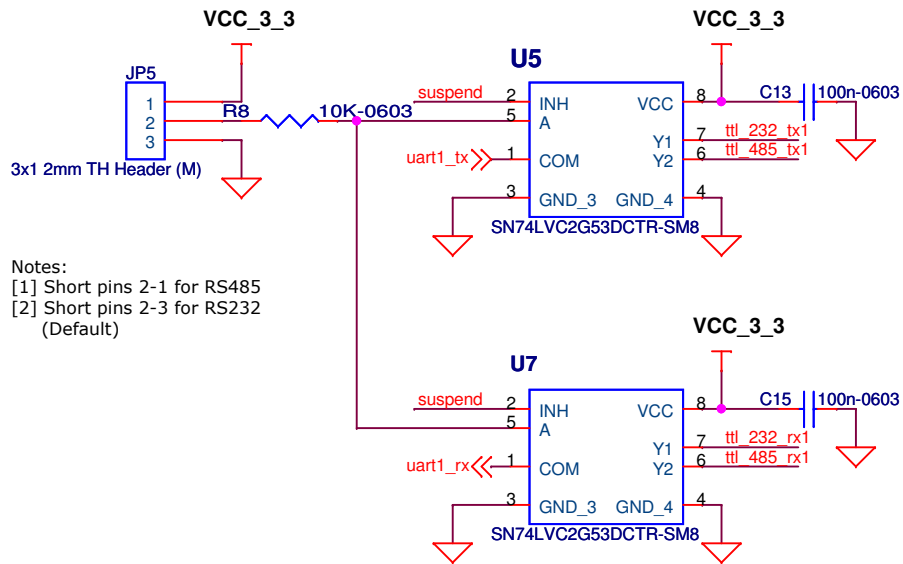
NOTES:
NOT INSTALLED: CON1 & JP1



NOTE: For self-power, EN pin should be connected to VCC_USB

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Schematic		sch_top Power Supply	
Title			
USB-UART 4-Channel Evaluation Board			
Size	Document Number		Rev
Custom	SCH-UU4CHEVB-0911-B1B		2.3
Date: Friday, June 25, 2010		Sheet	2 of 14





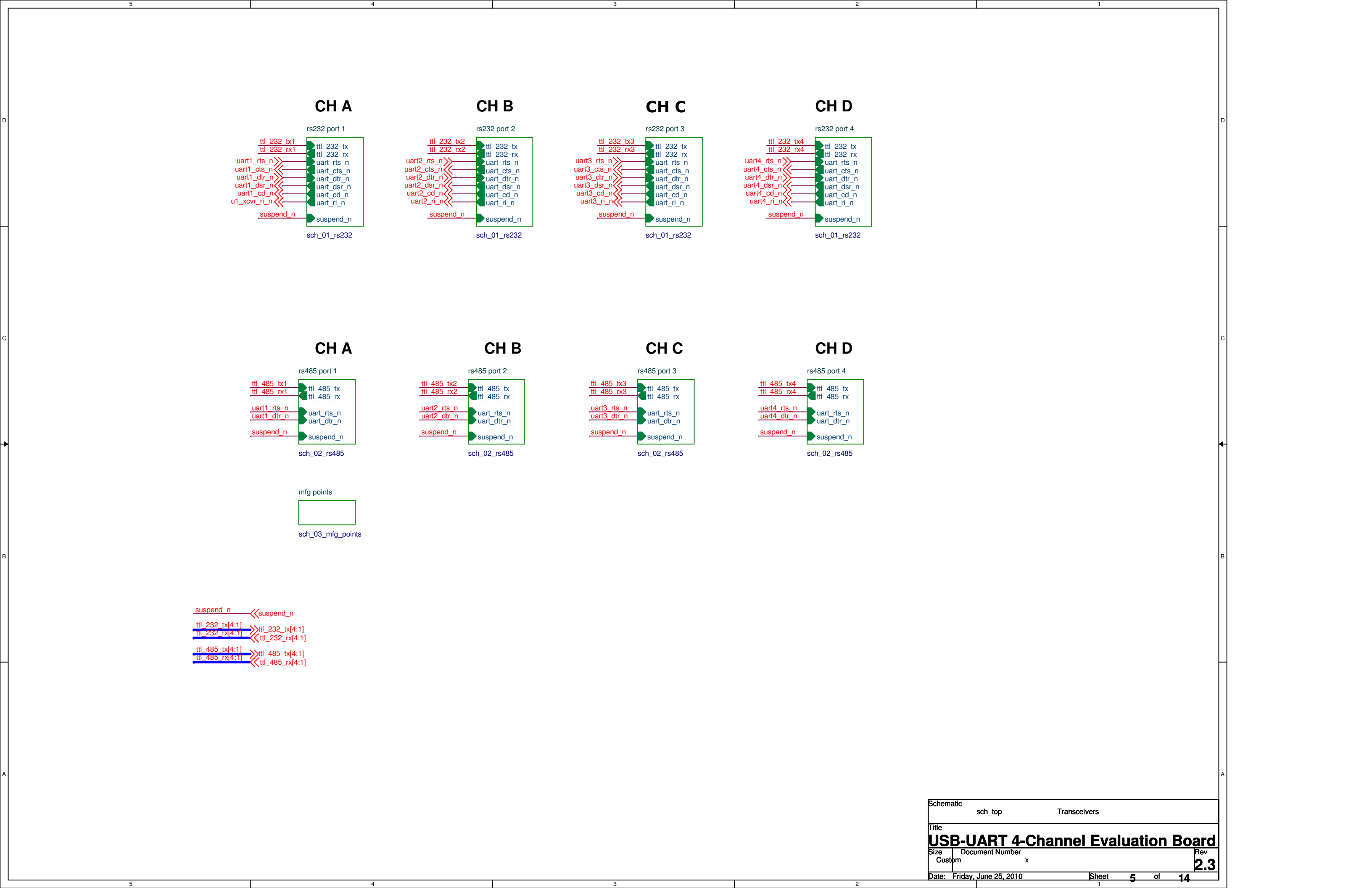
suspend <<suspend

t1l 232 tx[4:1] >>t1l 232 tx[4:1]

t1l 232 rx[4:1] <<t1l 232 rx[4:1]

t1l 485 tx[4:1] >>t1l 485 tx[4:1]

t1l 485 rx[4:1] <<t1l 485 rx[4:1]



CH A

rs485 port 1

ttl_485_tx1

ttl_485_rx1

uart1_rts_n

uart1_dtr_n

suspend_n

ttl_485_tx

ttl_485_rx

uart_rts_n

uart_dtr_n

suspend_n

sch_02_rs485

CH B

rs485 port 2

ttl_485_tx2

ttl_485_rx2

uart2_rts_n

uart2_dtr_n

suspend_n

ttl_485_tx

ttl_485_rx

uart_rts_n

uart_dtr_n

suspend_n

sch_02_rs485

CH C

rs485 port 3

ttl_485_tx3

ttl_485_rx3

uart3_rts_n

uart3_dtr_n

suspend_n

ttl_485_tx

ttl_485_rx

uart_rts_n

uart_dtr_n

suspend_n

sch_02_rs485

CH D

rs485 port 4

ttl_485_tx4

ttl_485_rx4

uart4_rts_n

uart4_dtr_n

suspend_n

ttl_485_tx

ttl_485_rx

uart_rts_n

uart_dtr_n

suspend_n

sch_02_rs485

mfg points

sch_03_mfg_points

suspend_n

ttl_232_tx[4:1]

ttl_232_rx[4:1]

ttl_485_tx[4:1]

ttl_485_rx[4:1]

suspend_n

<<suspend_n

>>ttl_232_tx[4:1]

<<ttl_232_rx[4:1]

>>ttl_485_tx[4:1]

<<ttl_485_rx[4:1]

<<suspend_n

Schematic

sch_top

Transceivers

Title

USB-UART 4-Channel Evaluation Board

Size

Document Number

Rev

Custom

x

2.3

Date:

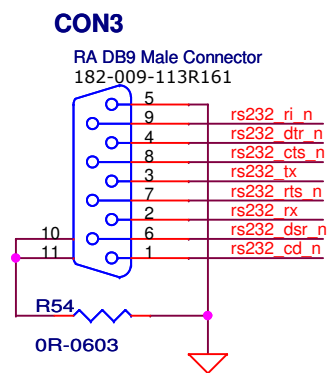
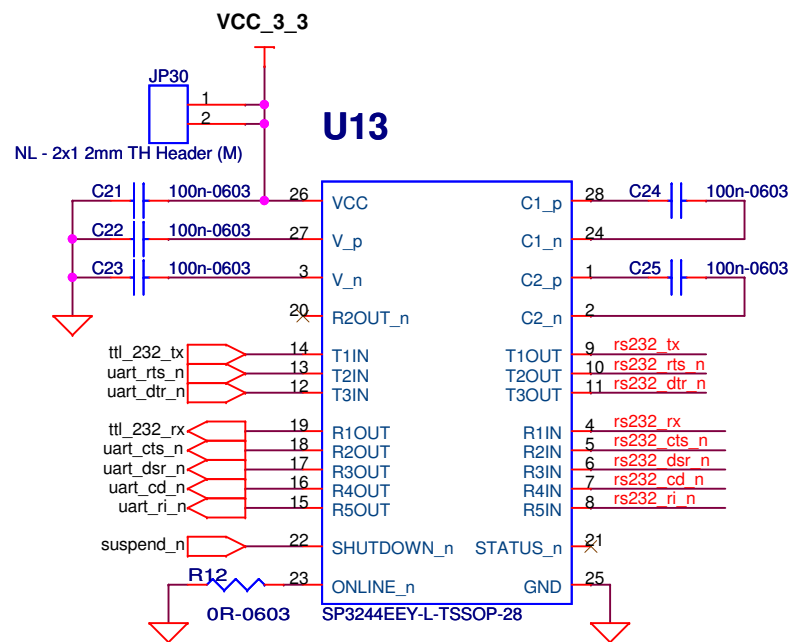
Friday, June 25, 2010

Sheet

5

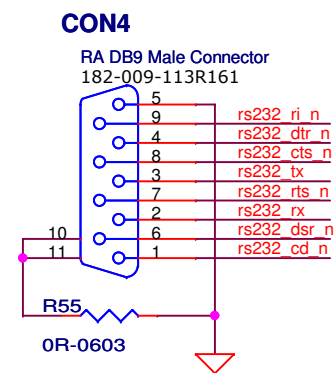
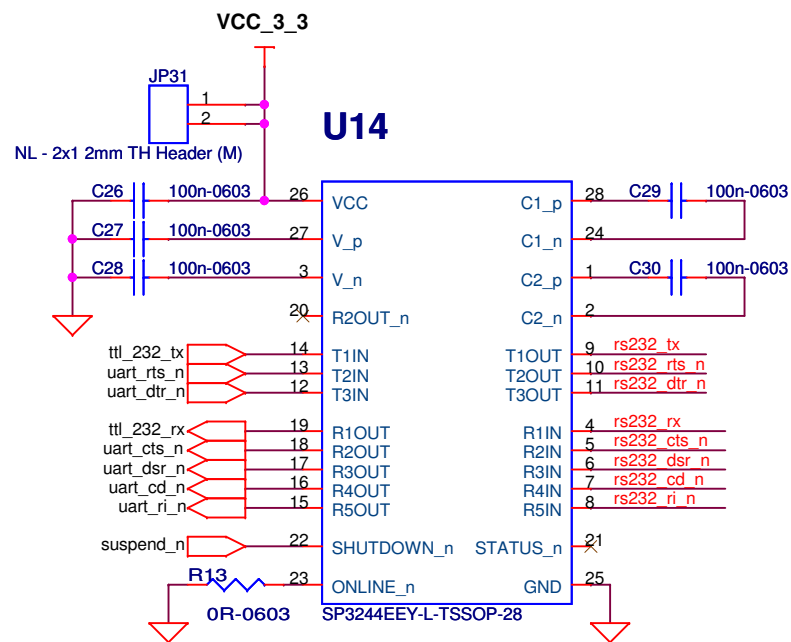
of

14



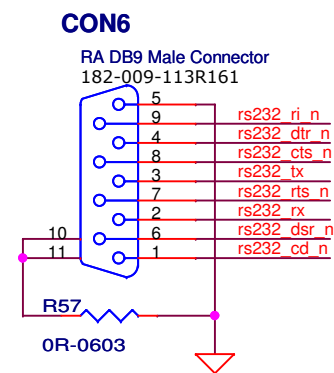
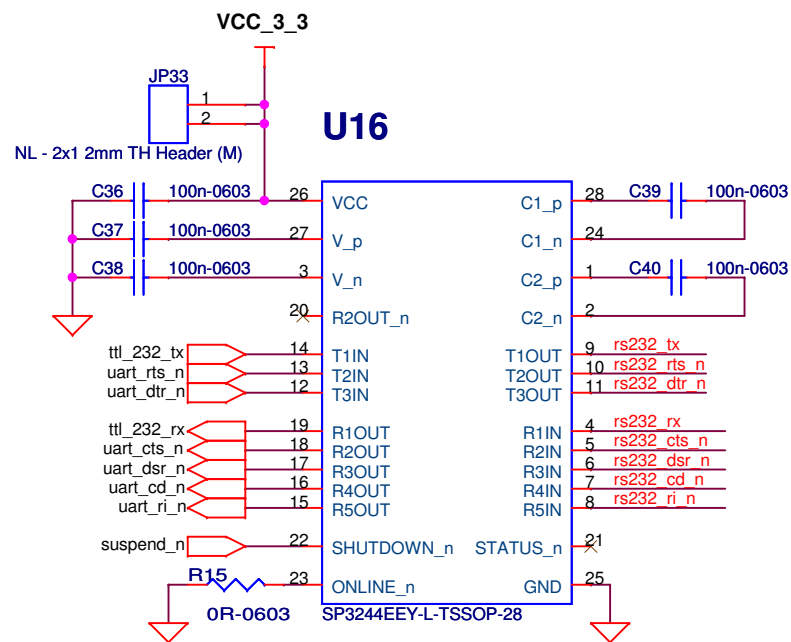
NOTES:
1) NOT INSTALLED: JP30
2) WHEN USING SP3243, TIE PIN23 TO VCC_3_3

Schematic				sch_01_rs232		RS-232 Transceiver	
Title							
USB-UART 4-Channel Evaluation Board							
Size	Document Number					Rev	
Custom	SCH-UU4CHEVB-0911-B1B					2.3	
Date:	Friday, June 25, 2010				Sheet	6	of 14



NOTES:
1) NOT INSTALLED: JP30
2) WHEN USING SP3243, TIE PIN23 TO VCC_3_3

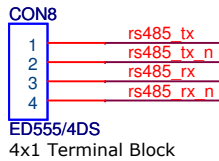
Schematic				sch_01_rs232		RS-232 Transceiver	
Title				USB-UART 4-Channel Evaluation Board			
Size	Document Number			SCH-UU4CHEVB-0911-B1B		Rev	
Custom						2.3	
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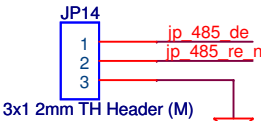
NOTES:
1) NOT INSTALLED: JP30
2) WHEN USING SP3243, TIE PIN23 TO VCC_3_3

Schematic		sch_01_rs232		RS-232 Transceiver	
Title		USB-UART 4-Channel Evaluation Board			
Size	Document Number	SCH-UU4CHEVB-0911-B1B		Rev	
Custom				2.3	
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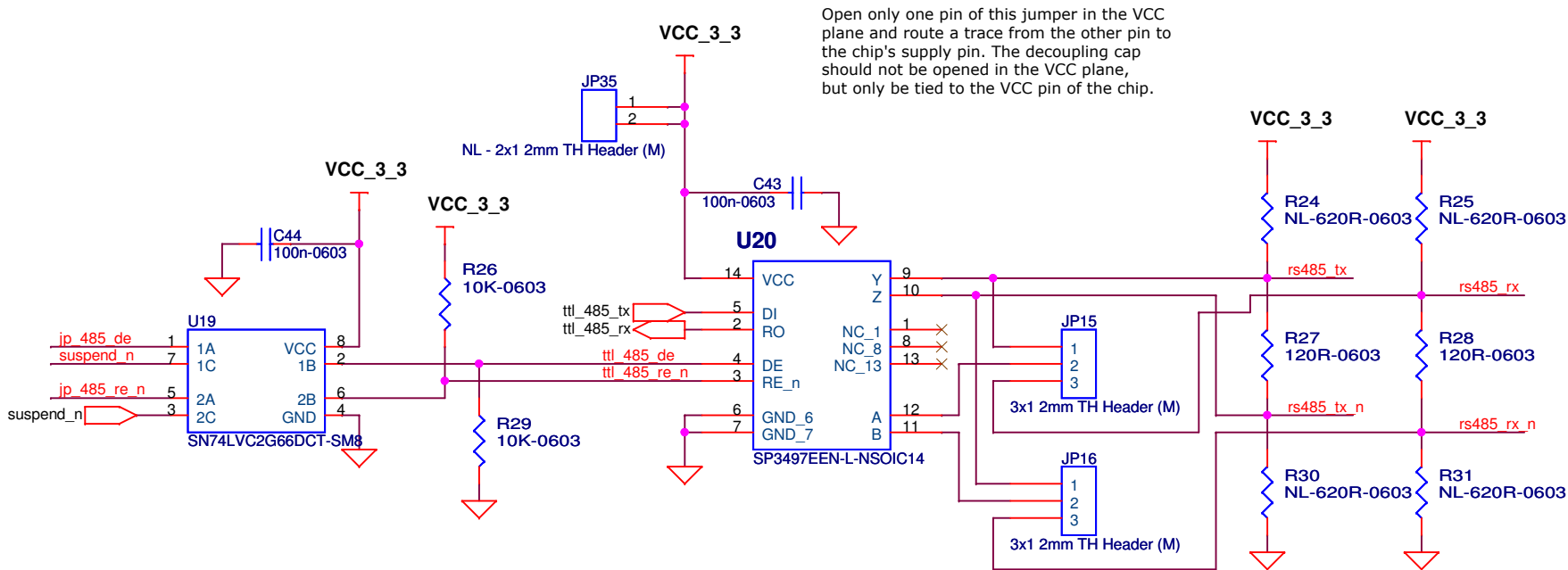
Copyright ©2009 Exar Corporation. All rights reserved.			
Schematic		sch_02_rs485 RS-485 Transceiver	
Title			
USB-UART 4-Channel Evaluation Board			
Size	Document Number		Rev
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Notes:
[1] Short pins 2-1 for RTS based direction control for TX
[2] Short pins 2-3 for DTR based direction control for TX (Default)



Notes:
[1] Short pins 2-1 for common direction control for RX and TX (Default)
[2] Short pins 2-3 for always enabled RX (This will result in TX Echo mode in Half Duplex Mode)

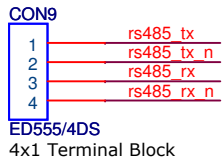


Open only one pin of this jumper in the VCC plane and route a trace from the other pin to the chip's supply pin. The decoupling cap should not be opened in the VCC plane, but only be tied to the VCC pin of the chip.

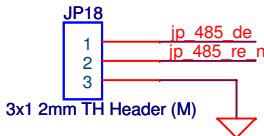
Notes:
[1] Short pins 2-1 for Half Duplex Mode
[2] Short pins 2-3 for Full Duplex Mode (Default)
[3] TX channel is used for TX and RX in Half Duplex Mode

NOTES:
1) NOT INSTALLED: JP40,R41,R17,R46 & R47

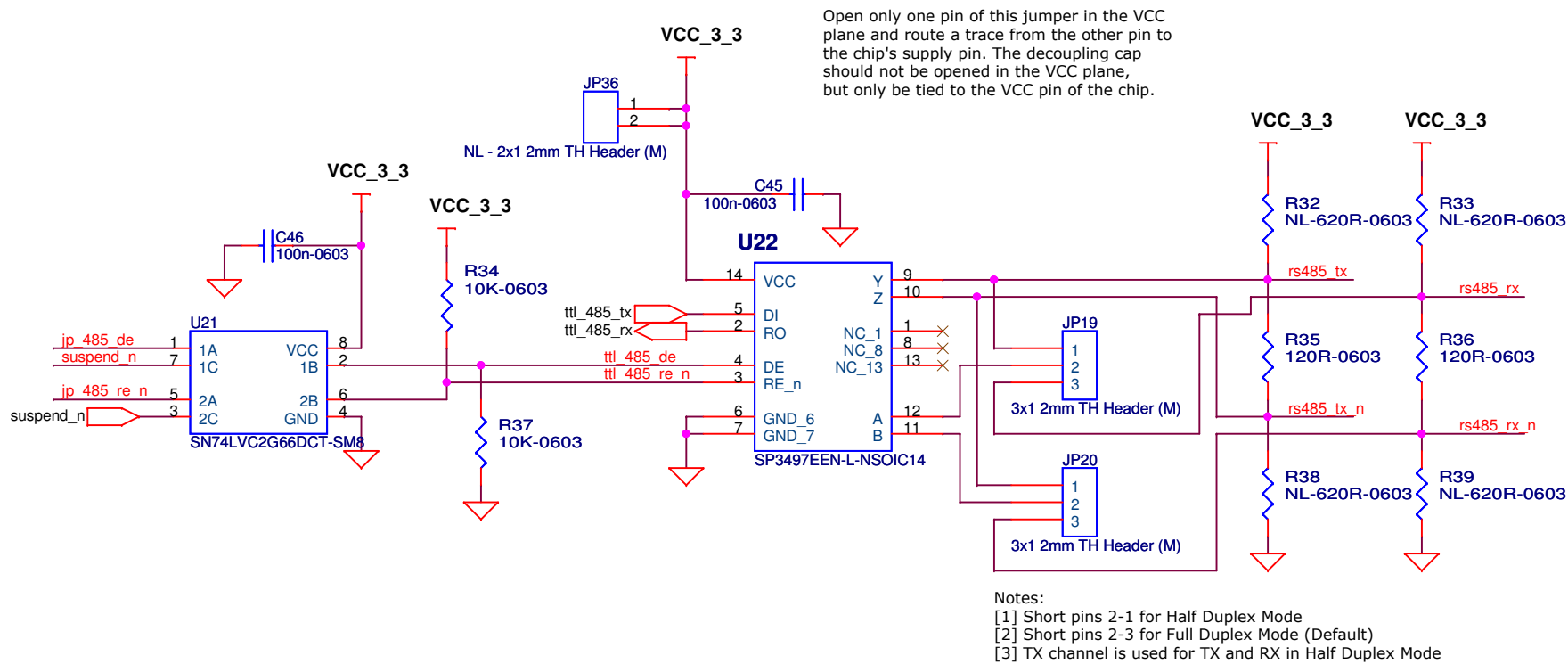
Copyright ©2009 Exar Corporation. All rights reserved.		
Schematic	sch_02_rs485 RS-485 Transceiver	
Title		
USB-UART 4-Channel Evaluation Board		
Size	Document Number	Rev
Custom	x	2.3
Date:	Friday, June 25, 2010	Sheet 11 of 14



Notes:
[1] Short pins 2-1 for RTS based direction control for TX
[2] Short pins 2-3 for DTR based direction control for TX (Default)



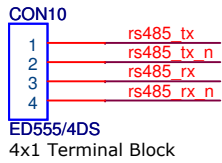
Notes:
[1] Short pins 2-1 for common direction control for RX and TX (Default)
[2] Short pins 2-3 for always enabled RX (This will result in TX Echo mode in Half Duplex Mode)



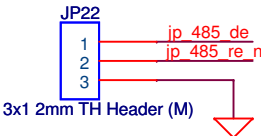
NOTES:

1) NOT INSTALLED: JP40,R41,R17,R46 & R47

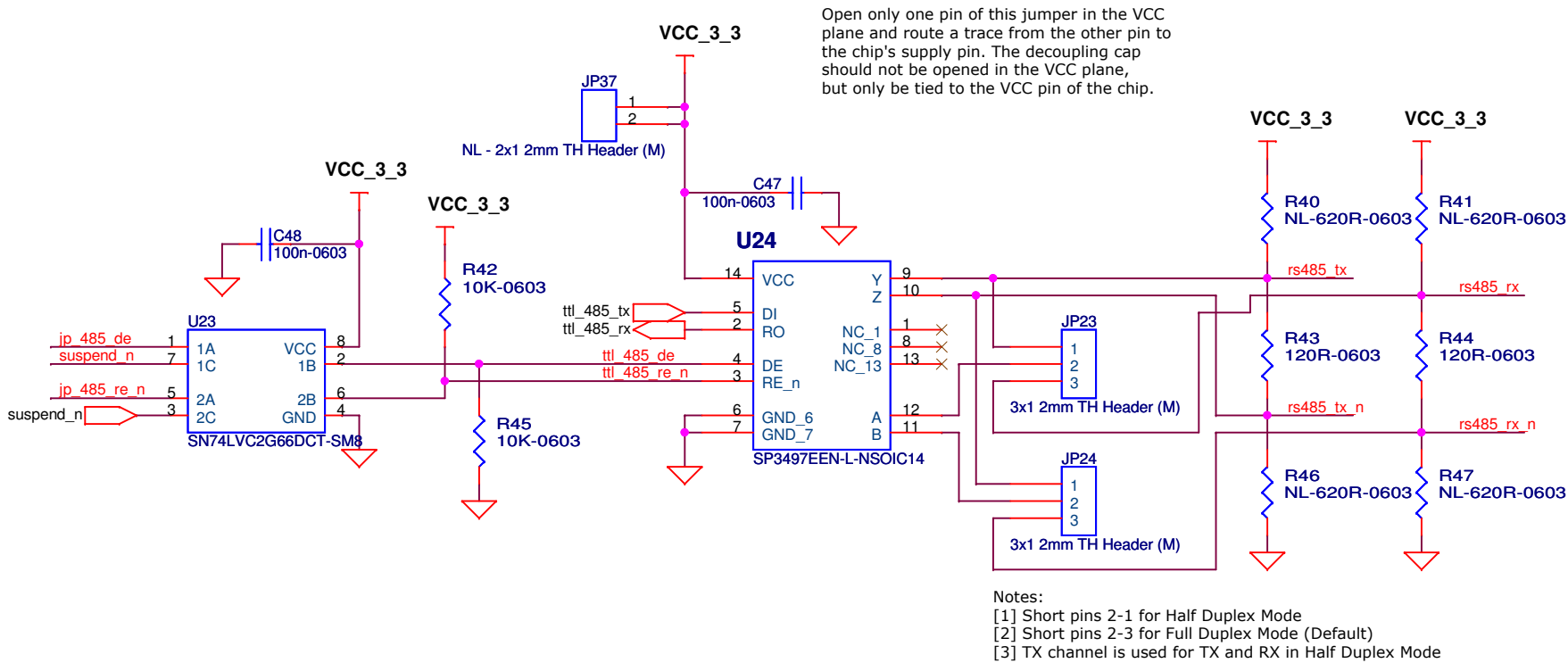
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Schematic		sch_02_rs485 RS-485 Transceiver	
Title			
USB-UART 4-Channel Evaluation Board			
Size	Document Number		Rev
Custom	x		2.3
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Notes:
[1] Short pins 2-1 for RTS based direction control for TX
[2] Short pins 2-3 for DTR based direction control for TX (Default)



Notes:
[1] Short pins 2-1 for common direction control for RX and TX (Default)
[2] Short pins 2-3 for always enabled RX (This will result in TX Echo mode in Half Duplex Mode)



NOTES:
1) NOT INSTALLED: JP40,R41,R17,R46 & R47

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Schematic		sch_02_rs485 RS-485 Transceiver	
Title			
USB-UART 4-Channel Evaluation Board			
Size	Document Number		Rev
Custom	x		2.3
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