

REVISIONS			
LTR	DESCRIPTION	DATE	APPVL
B	Production Release	04/15/08	

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APPROVALS				Applied Data Systems, Inc. 10260 Old Columbia Road, Columbia, Maryland 21046		
ORIGINATOR:	DATE	ENGINEER DIRECTOR:	DATE	TITLE		
				<b>SCHEMATIC, CATALYST CARRIER BOARD</b>		
CHECKED:	DATE	CONFIGURATION MGR:	DATE	SIZE	DRAWING NUMBER	REV
				<b>B</b>	<b>640122-300R</b>	<b>B</b>
				SCALE 1/1	© Copyright 2006 Applied Data Systems, Inc. All Rights Reserved	COVER SHEET

# Catalyst Carrier Board Schematic

<Variant Name>

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B	See udpates 3-25-08 thru 4-9-08	04/09/08	CA
A	See udpates 2-26-08	02/26/08	CA
Rev	Description / ECN	Date	Ini.
Title		APPLIED DATA SYSTEMS, INC. 10260 Old Columbia Rd, Suite G Columbia, MD 21046 1-800-541-2003	
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# Revision History

## 11-7-07-A Changes

p15 Added SIM Connector (Symbol must be replaced with ADS symbol)  
 p30 & 31 Changed R394 & R402 to 1% to reduce part count.  
 p24 Swapped voltage dividers resistor placement and changed R337 to 3.4K to reduce part count  
 p16 Changed package on C167, C169, C179 & C183 to reduce part count.  
 p7 Replaced R32 with 221 ohm resistor to reduce part count.  
 p6, 8, 11 & 19 Changed C00021-00073E to C00021-00080E to reduce part count.  
 p16 Changed package size on C170 & C171 to reduce package count.  
 p19, 20 & 21 Replaced all 2N2002 parts with updated symbol.  
 p4 Added Test points to SMB\_ALERT and USB\_OC3 & 5

### 11-8-08 Changes

p24 Replaced OS1 with SMT part.  
 p24 Replaced R309-R313, R323-R332 & R339-R351 with 1K R-pack.  
 p24 Replaced R352-R385 with 10K R-pack and R359-R368 with 100K R-pack.  
 p20 Added part of Over/Under voltage protection for +VBRICK and replaced J29.  
 p6 Replaced MMC connectors.  
 p16 Added Audio Ports E & F back into schematic.  
 p22 Added Front Panel Header.  
 p17 Added C364 & R418 to U14.

### Changes from 11-9-07 to 11-9-07-a

p9 & 11 Changed DEVICE and IPN property from C35285-004 to C35285-016 for Both J10 & J12.  
 11-14-07 Changes

Replaced 210070-00321E, 210070-00322E & 210070-00324E symbols.  
 Added netnames to SLOT0\_CD#\_R, SLOT0\_WP\_R and UART2\_SHUTDOWN nets.  
 Changed net name USBPWR\_CLLIENT to USBPWR\_CLIENT

p15 Added Mini-Addin Card Radio Disable switch and LED's.  
 p16 Added R427 and R428 series resistors to Audio Port E  
 p19 Replaced B1 Battery Socket.

### 11-26-07 Changes

p7 Deleted J9 (IDE Ziff Connector) and R33 (Series resistor for IDE Ziff Connector IDE\_RST#).  
 p12 Deleted C66, C67, R82, R83, R86 & R87 (unneeded Caps and resistors on PCIe CLK input to clock buffer).  
 p16 Deleted J20, J21 & J24 and replaced with stacked connector J20.  
 p16 Changed note R139 and R144 to place close to U12 instead of U1.  
 p17 Changed C364 to .22uF and added R448.  
 p18 Replaced U16 with different package part.

### 11-27-07

p15 Replaced U50 symbol.

### 12-10-07 Changes

See change log: 640122-300R0-00\_12-10-07\_JW.doc

### Changes 2-26-08 from Rev 1 to Rev. A

P. 16 Updated symbol for J20 to add shell connections to CGND  
 P. 20 Swap +VBRICK\_IN and GND on J29, input power connector  
 P. 20 Added RC to the enable of U37 to prevent droop on +VBRICK\_IN when enabled (R548, C517, C518)  
 P. 20 Added cap (C519 DNI) to OV\_SET to keep droop from appearing as UV event to LTC2912  
 P. 21 changed pull up of Q41 - Q43 to prevent from turning on when no ATX supply, also added RC to gates  
 P. 24 connected PE to pull up; named net SIO\_DSKCHG  
 P. 24 connected SIO\_PWR to unnamed net powering SIO  
 P. 28 named net DCD3\_I

### Changes 3-25-08 Rev A to Rev B

p.22 add pull down to JTAG\_TRST#  
 p.21 add 3x .1uf caps to slow turn on of +V\*S and +V\* rails  
 p.16 swap right and left on stacked audio connector  
 p.19 change C249 to 0402 footprint to match BOM  
 p.21 add option PU of ATX\_EN# and ATX\_ENG to +V\_ON  
 p,15 add PU to gate of FETS on LEDs to disable when no card installed  
 p.21 DNI R275 - PU on Core  
 p.21 move gate of Q45 to ATX\_EN  
 p.24 change PU to PD on CTS5\_SIO for revision indication  
 p.33 add power monitor circuit, added page  
 p.18 add strapping options on CPLD for revision indication  
 p.18 add UART\_TX to CPLD to read power measurement  
 p.22 add I2C GPIOs

### Changes 4-4-08

P. 22 Replace Thermal sensor with LM75  
 P. 26 Added jumper to enable /disable EIA-232 ports  
 P. 18 Added pull up to Carrier\_Therm\_Alert2#- no longer supported

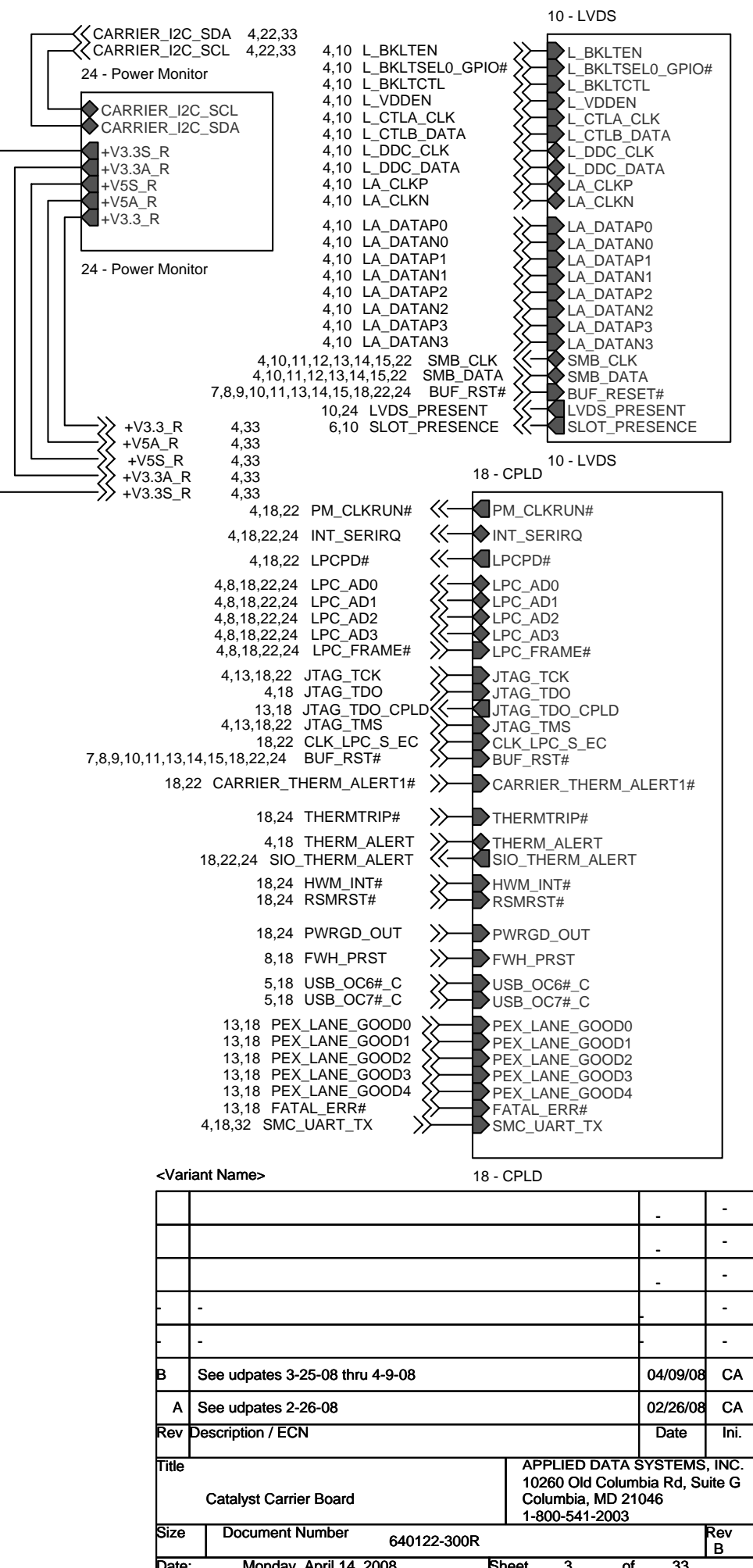
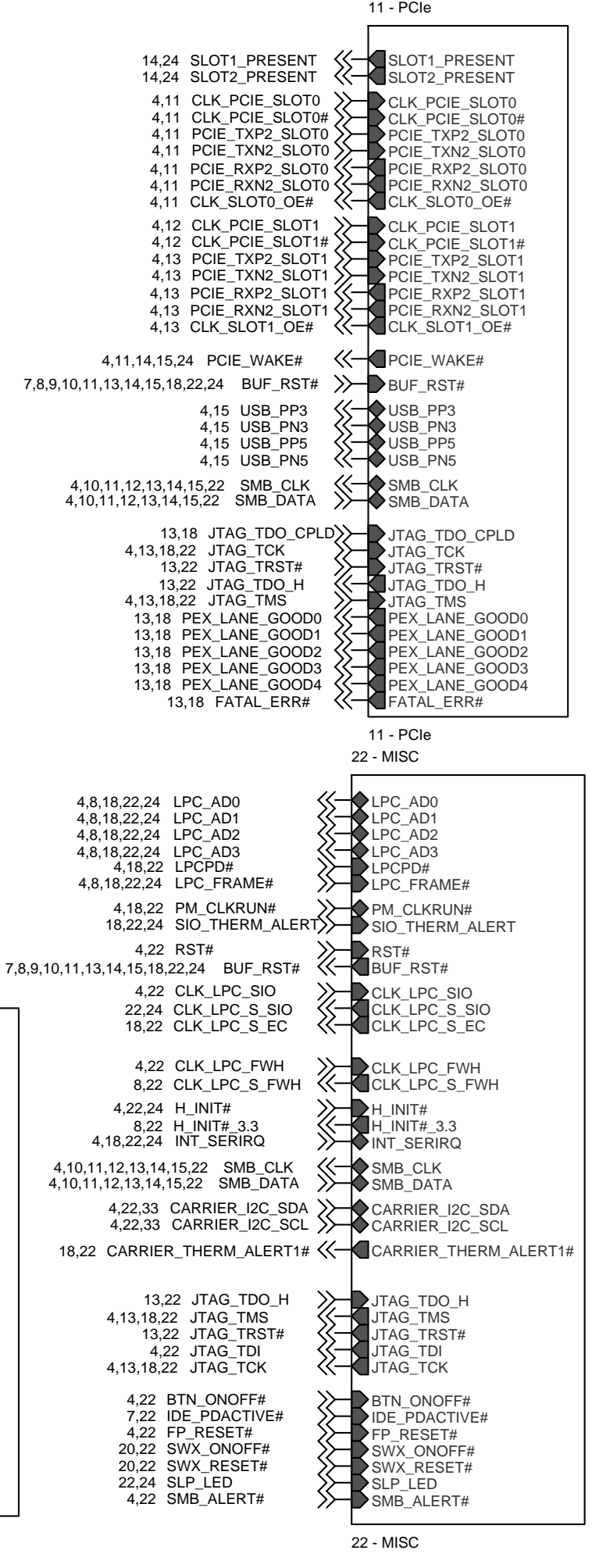
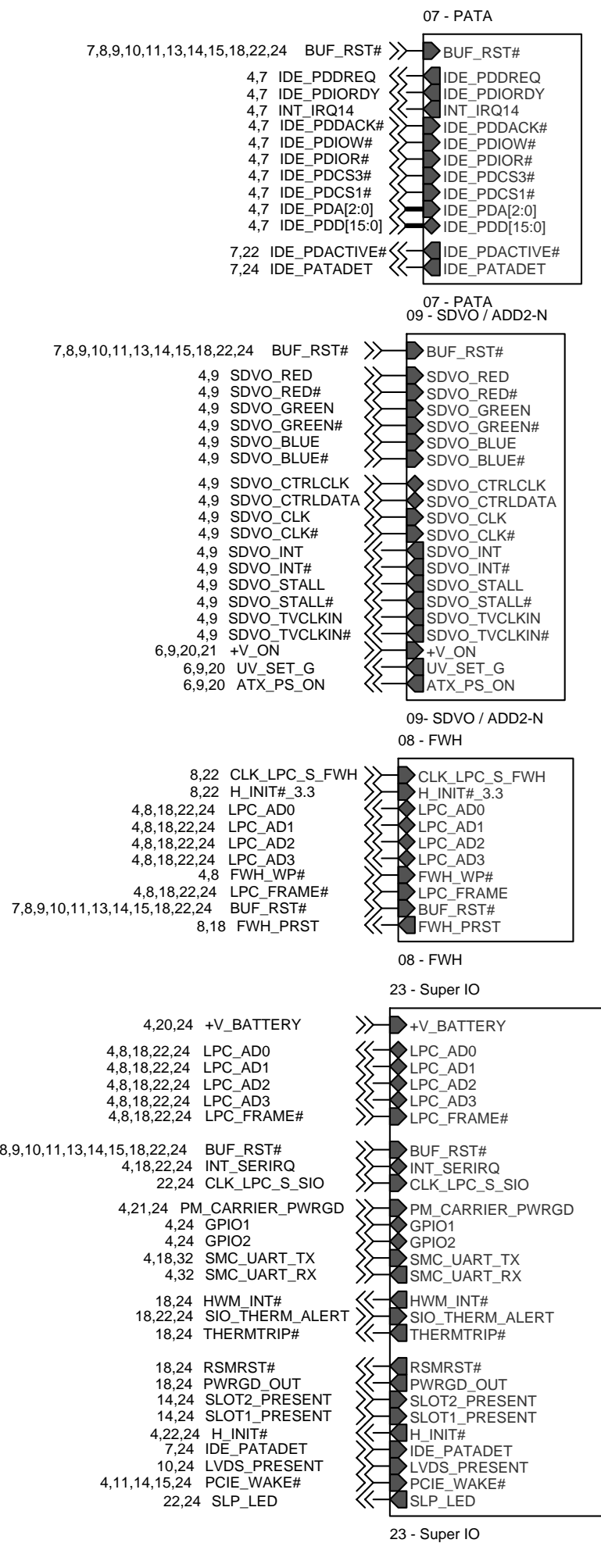
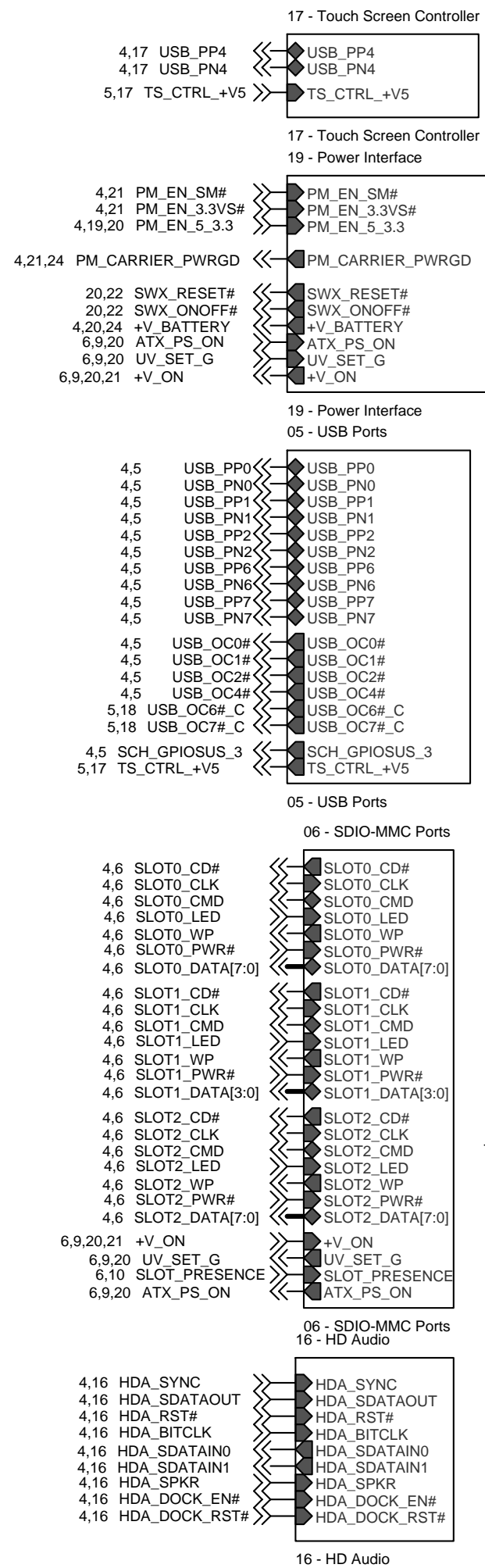
### Changes 4-09-08

p.19 add cap to delay start of 1.8V LDO

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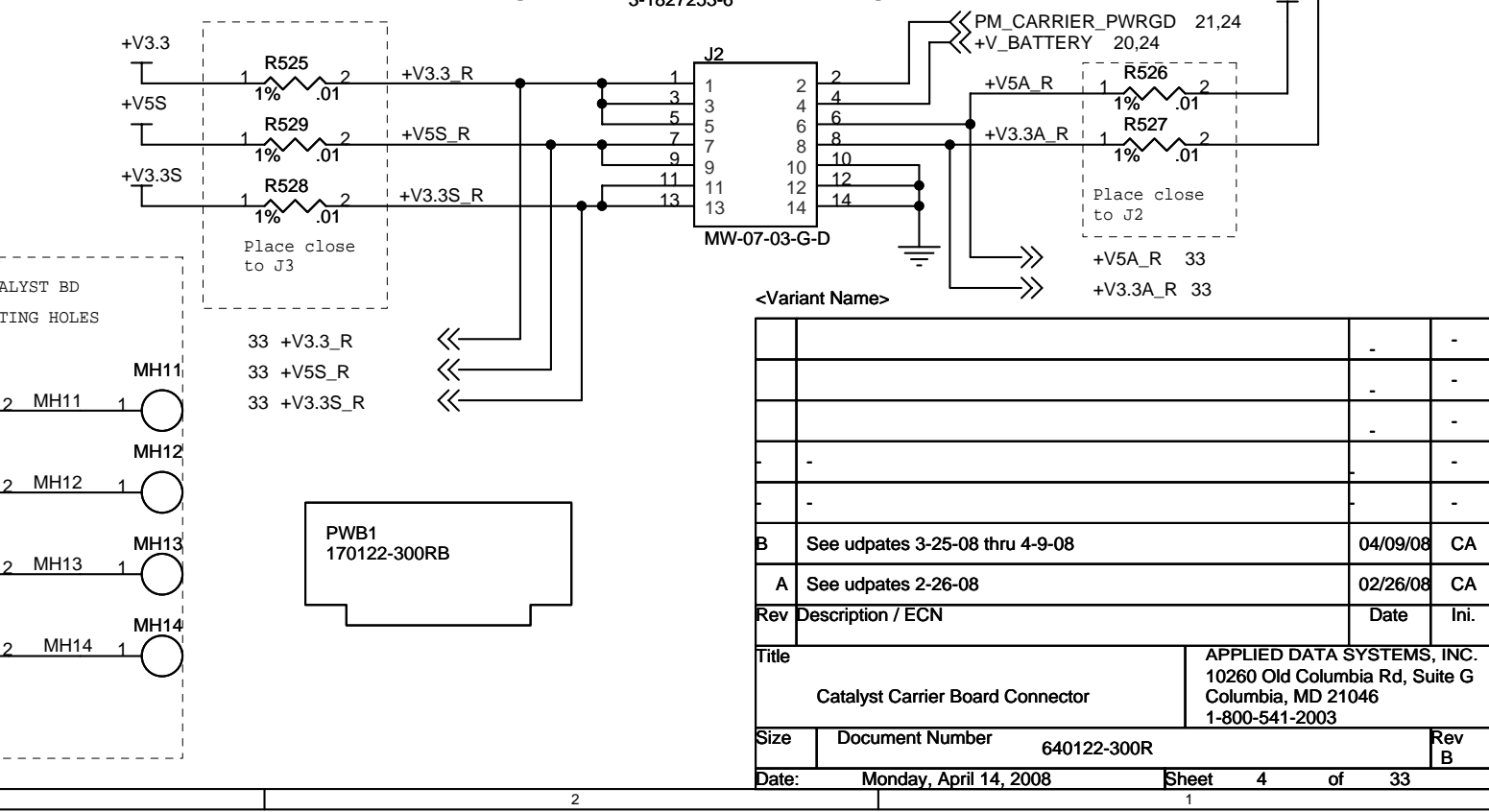
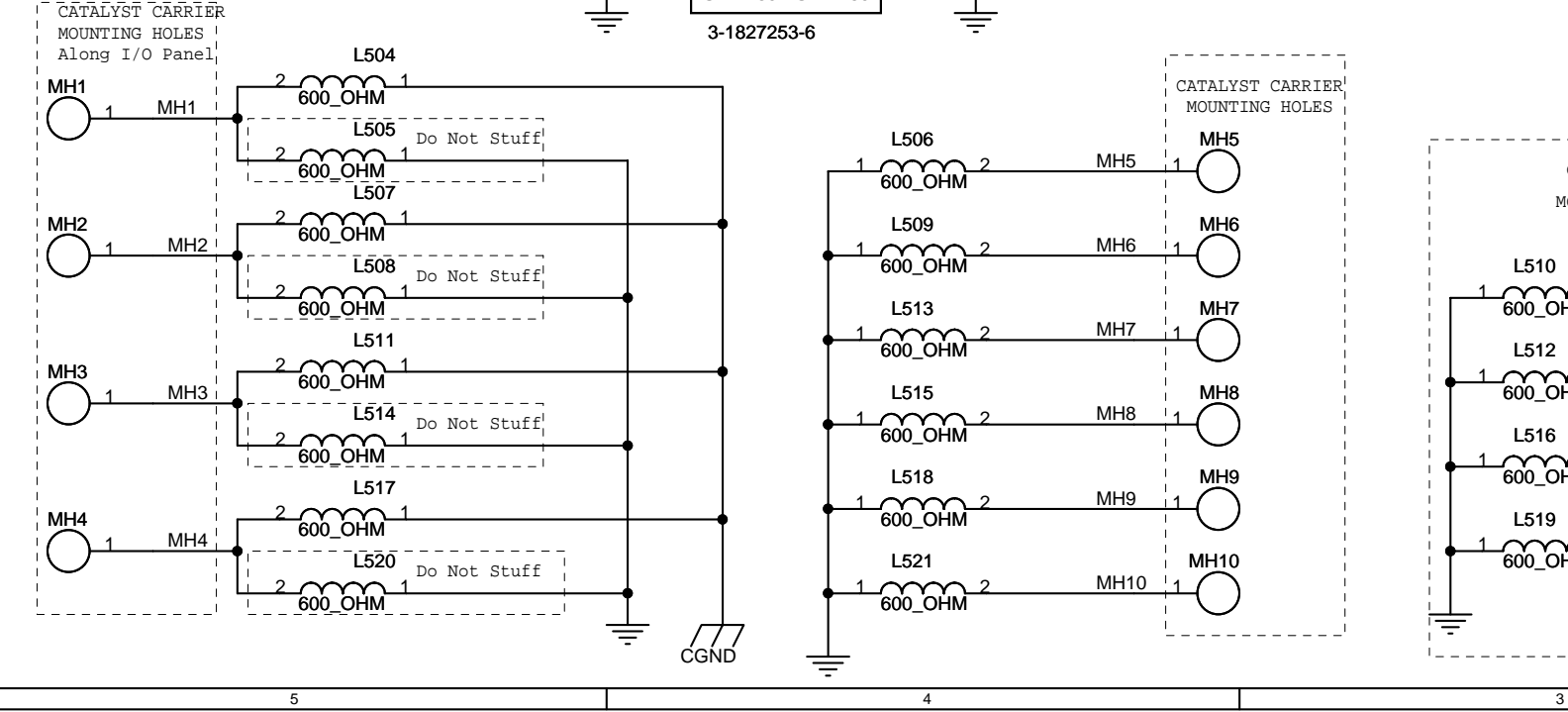
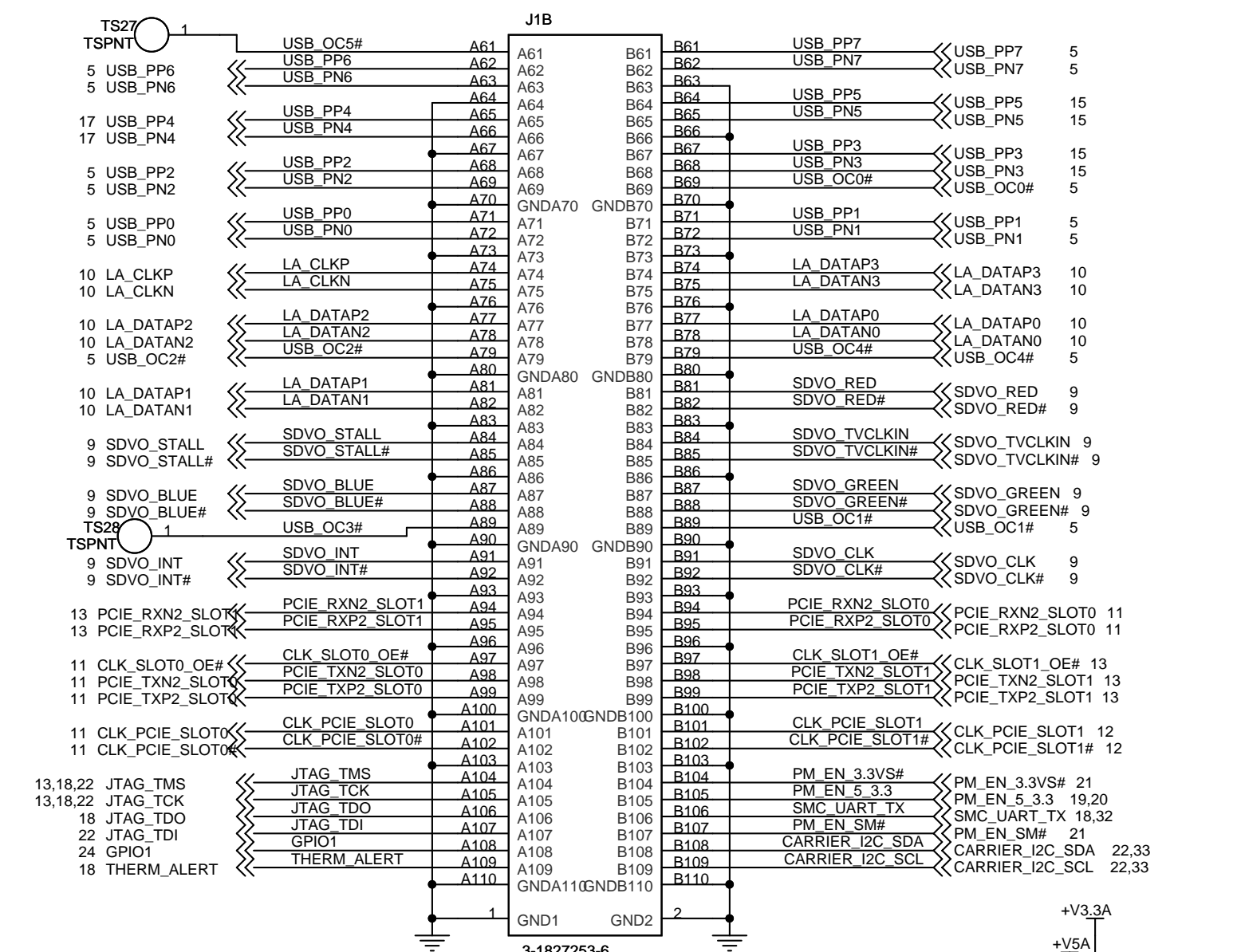
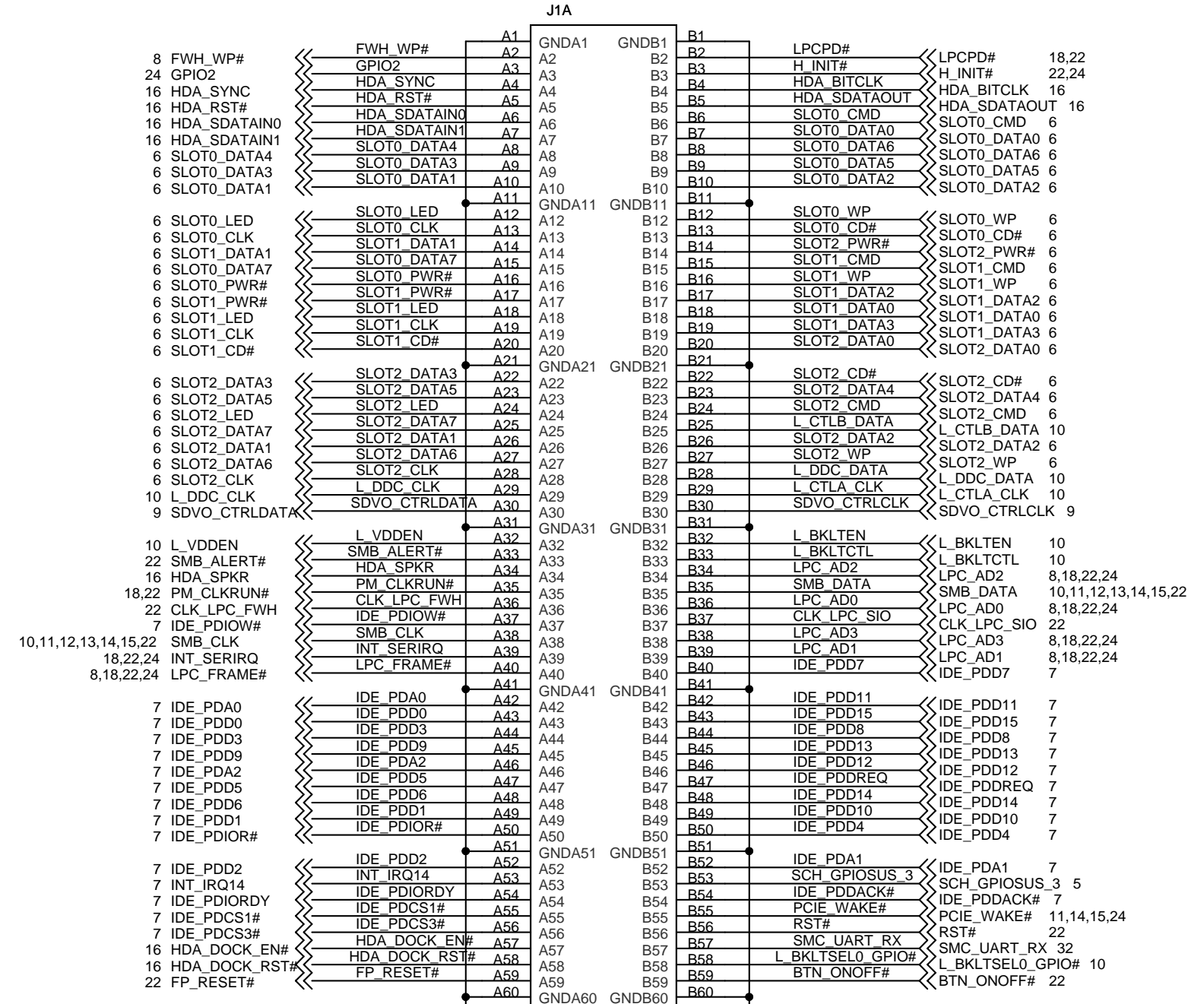
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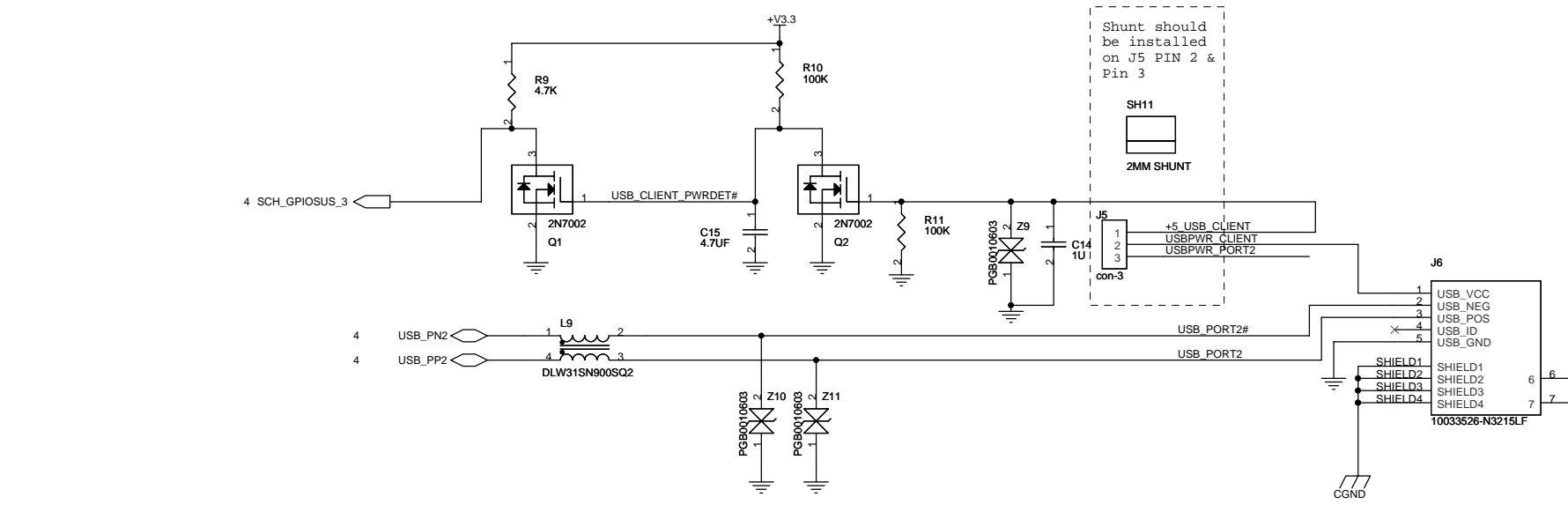
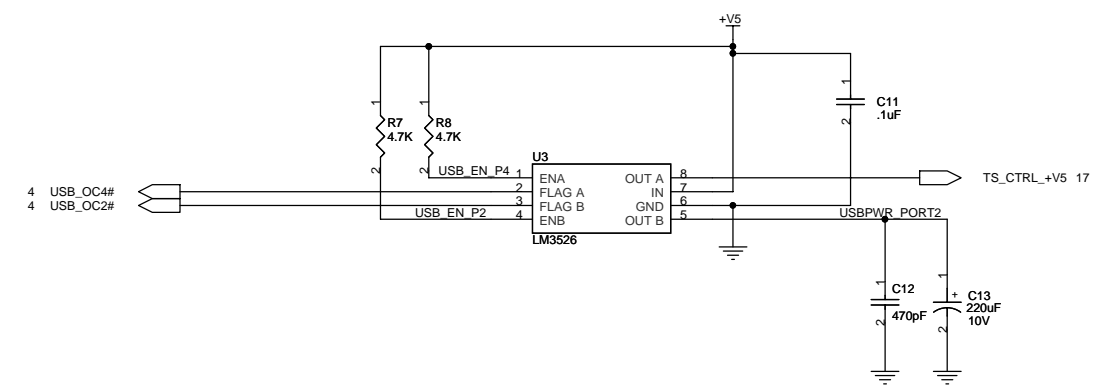
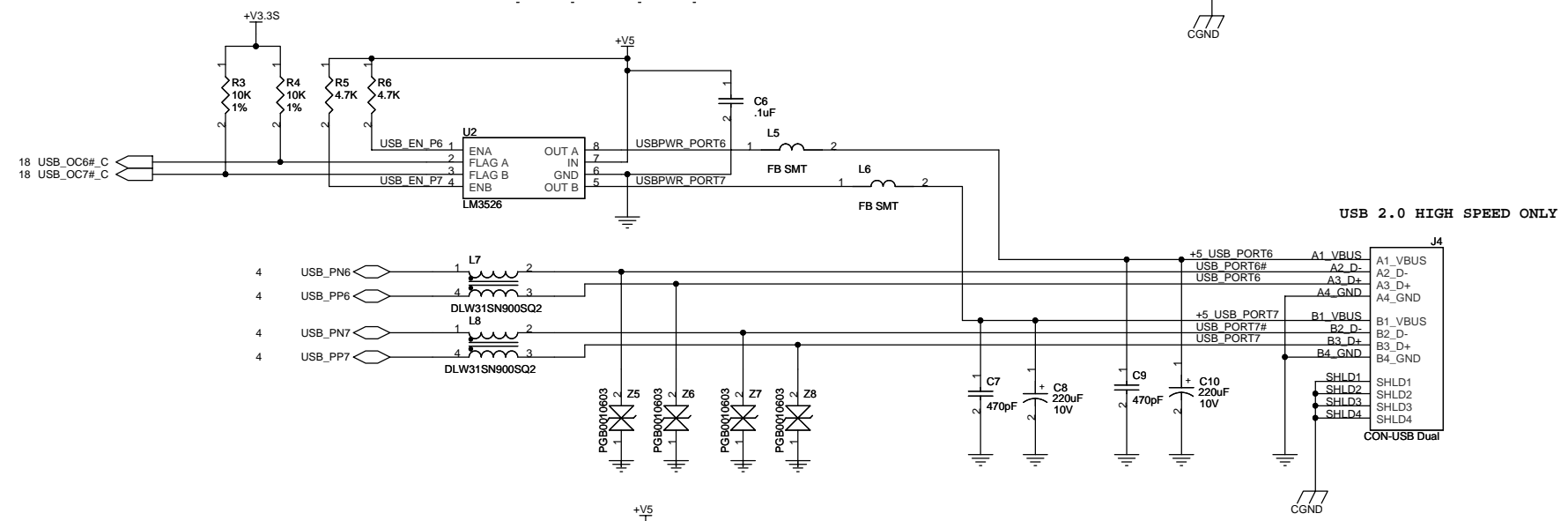
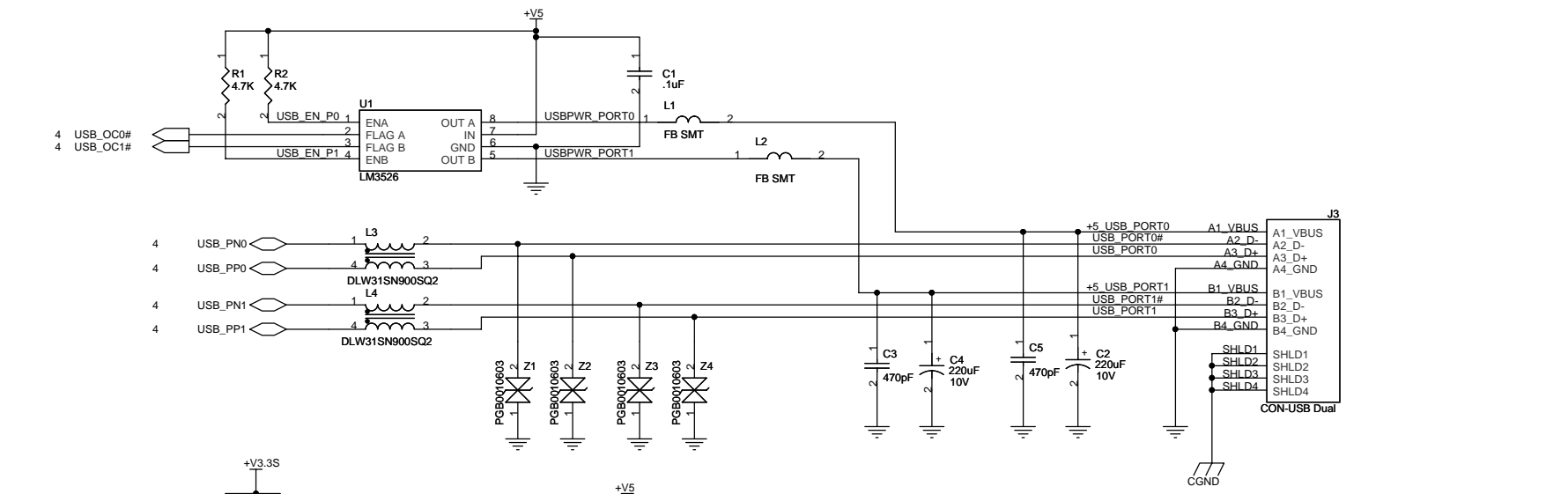
  

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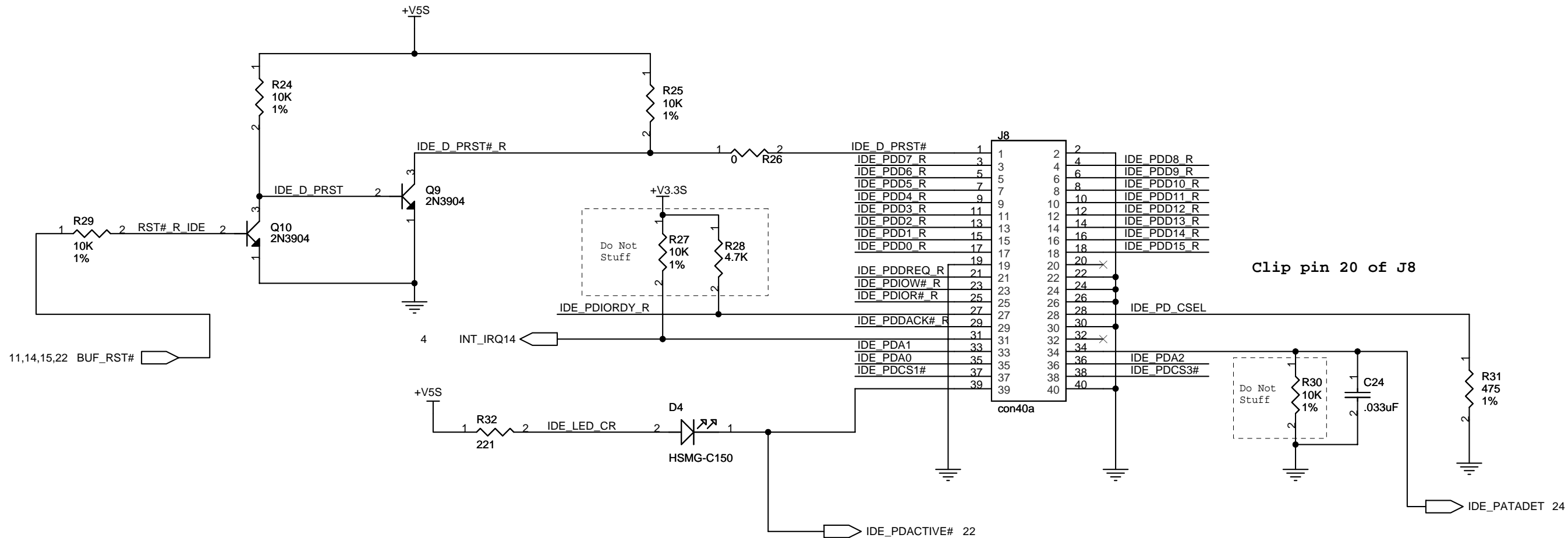
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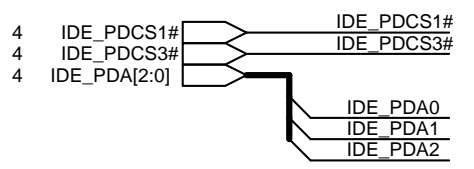
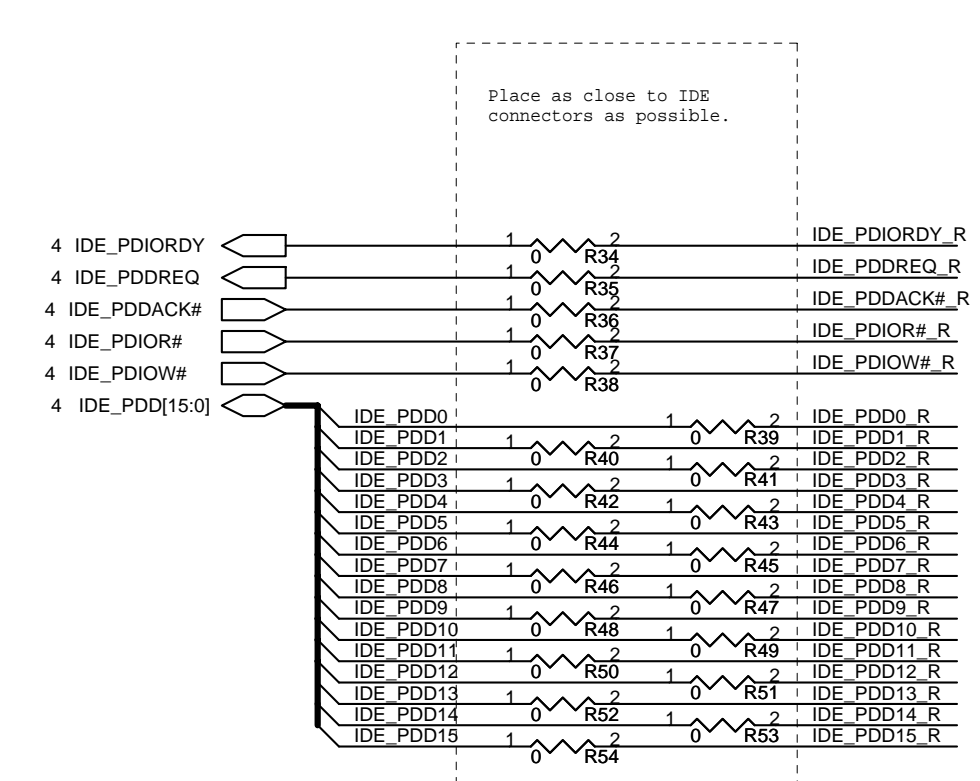
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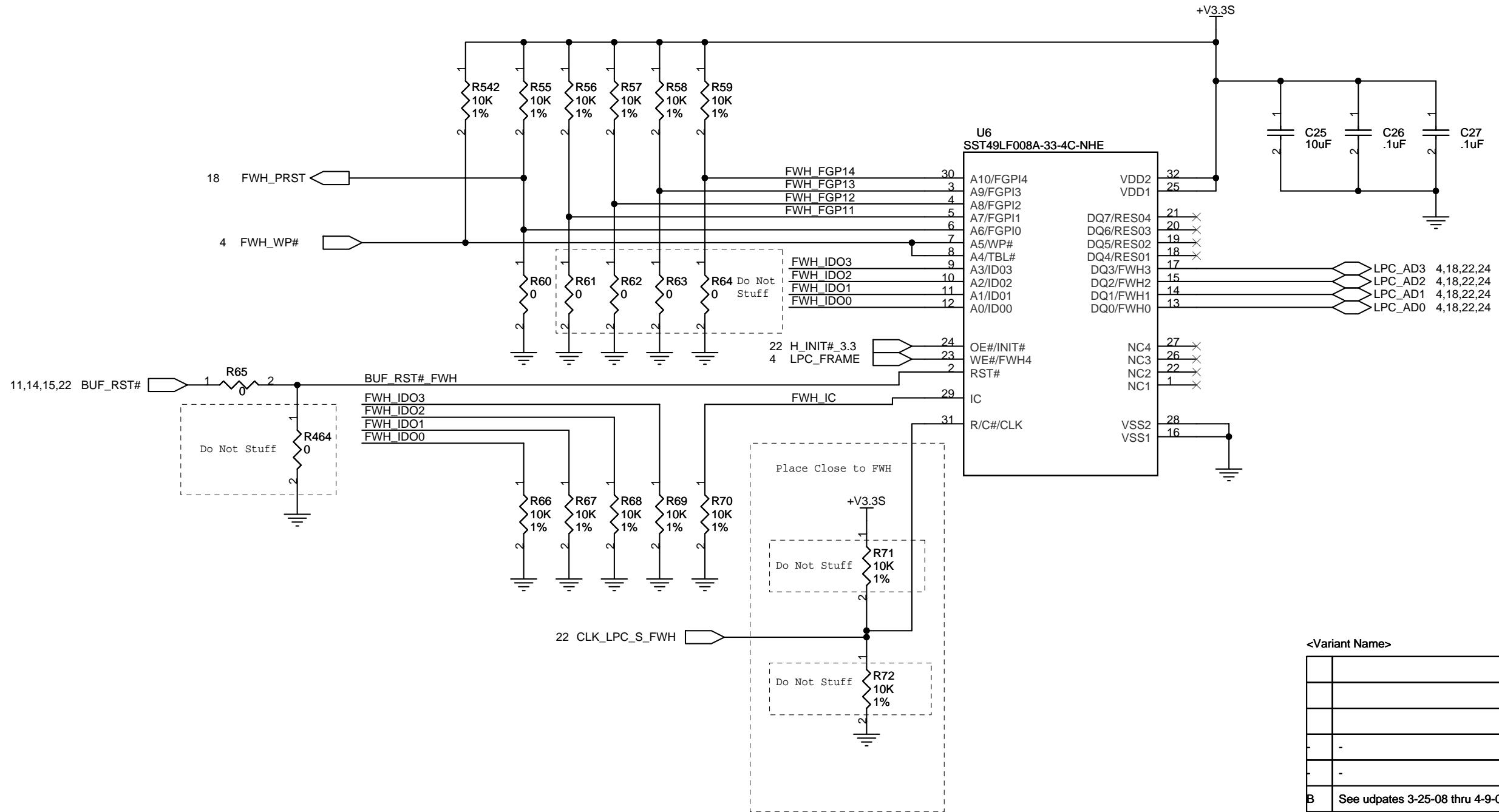
Place as close to IDE connectors as possible.



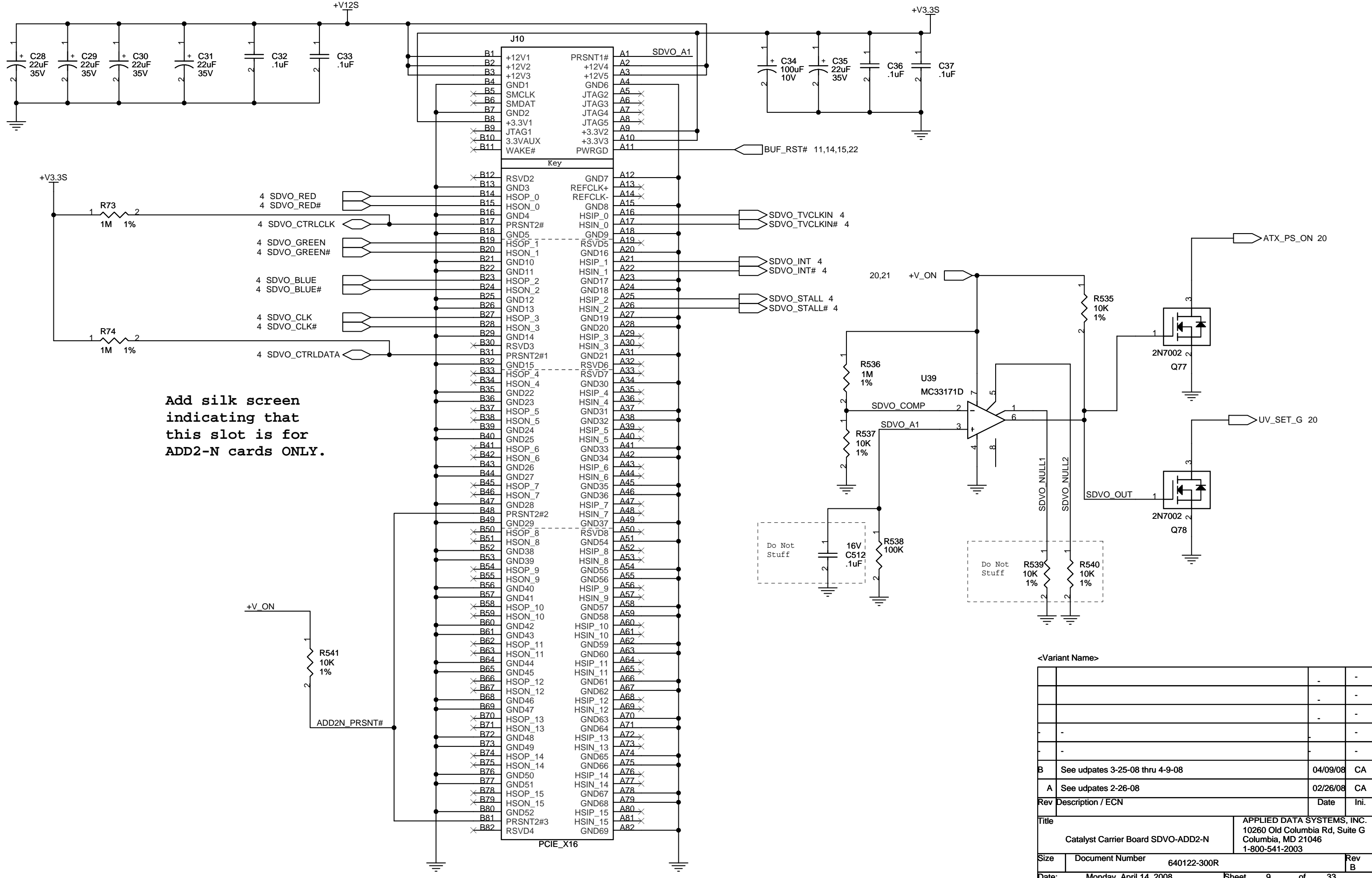
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HW1	210041-03210E	PLCC SOCKET, 32 PIN, SMT	U6
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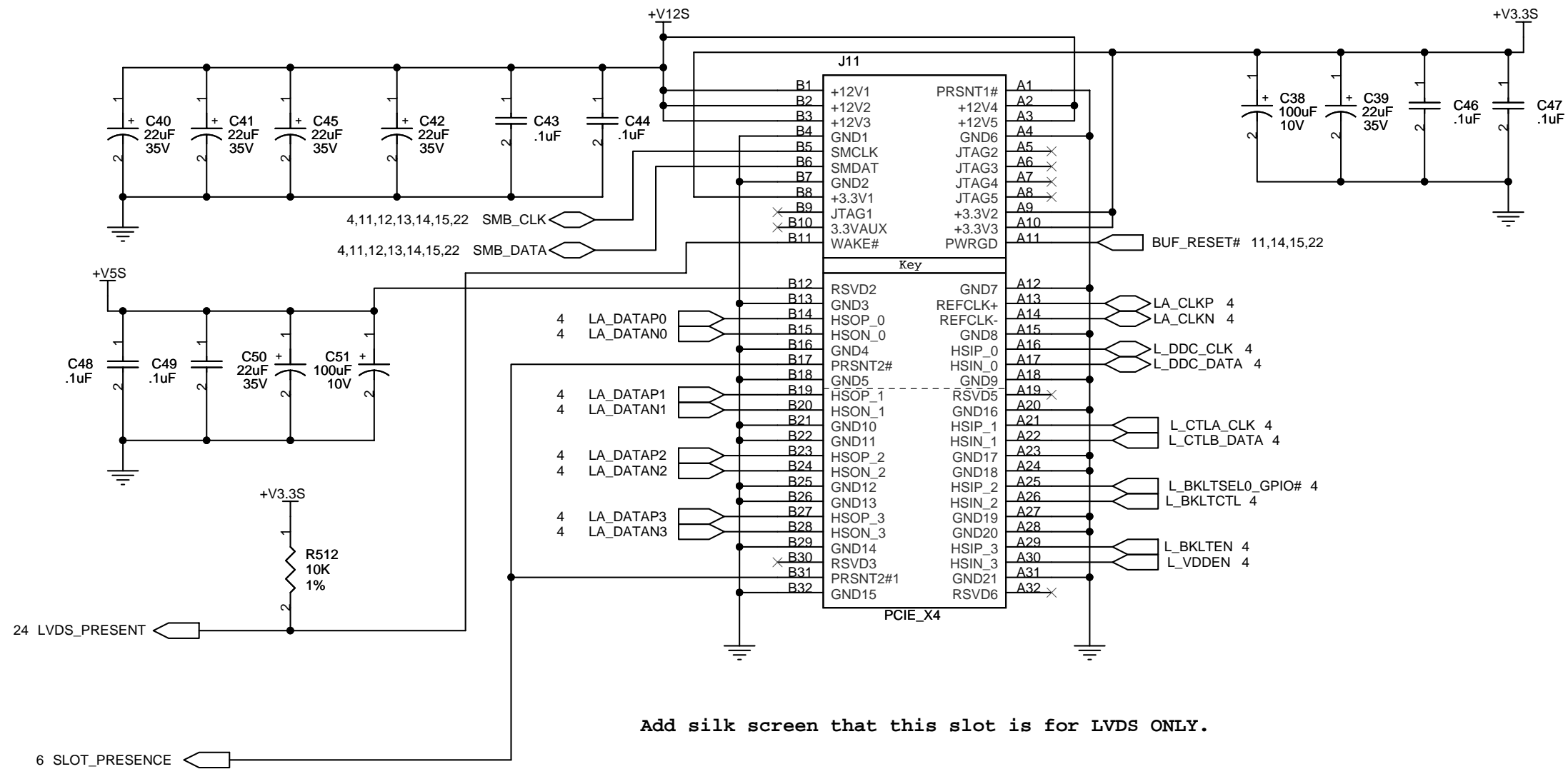


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Add silk screen indicating that this slot is for ADD2-N cards ONLY.

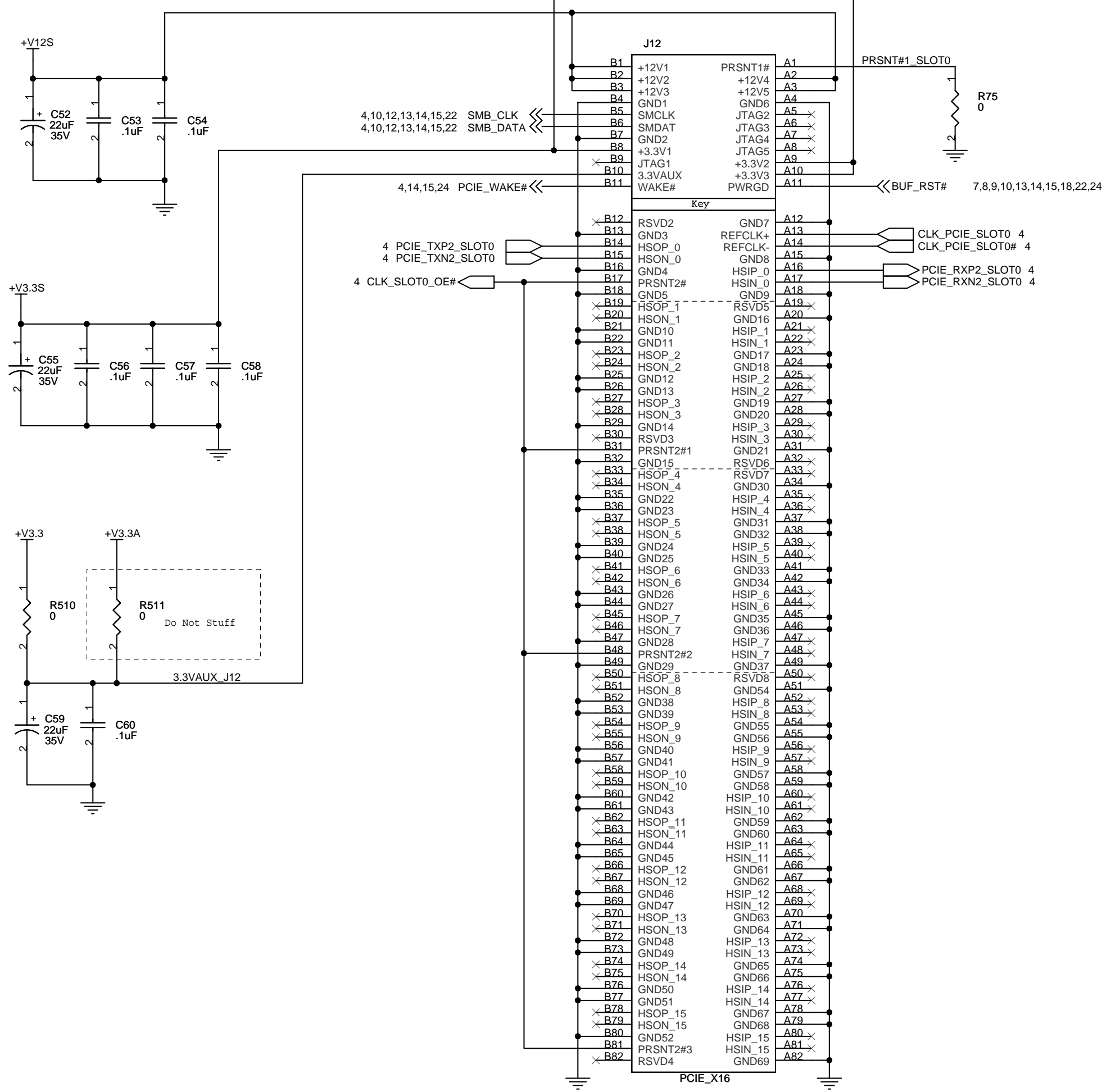
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Add silk screen that this slot is for LVDS ONLY.

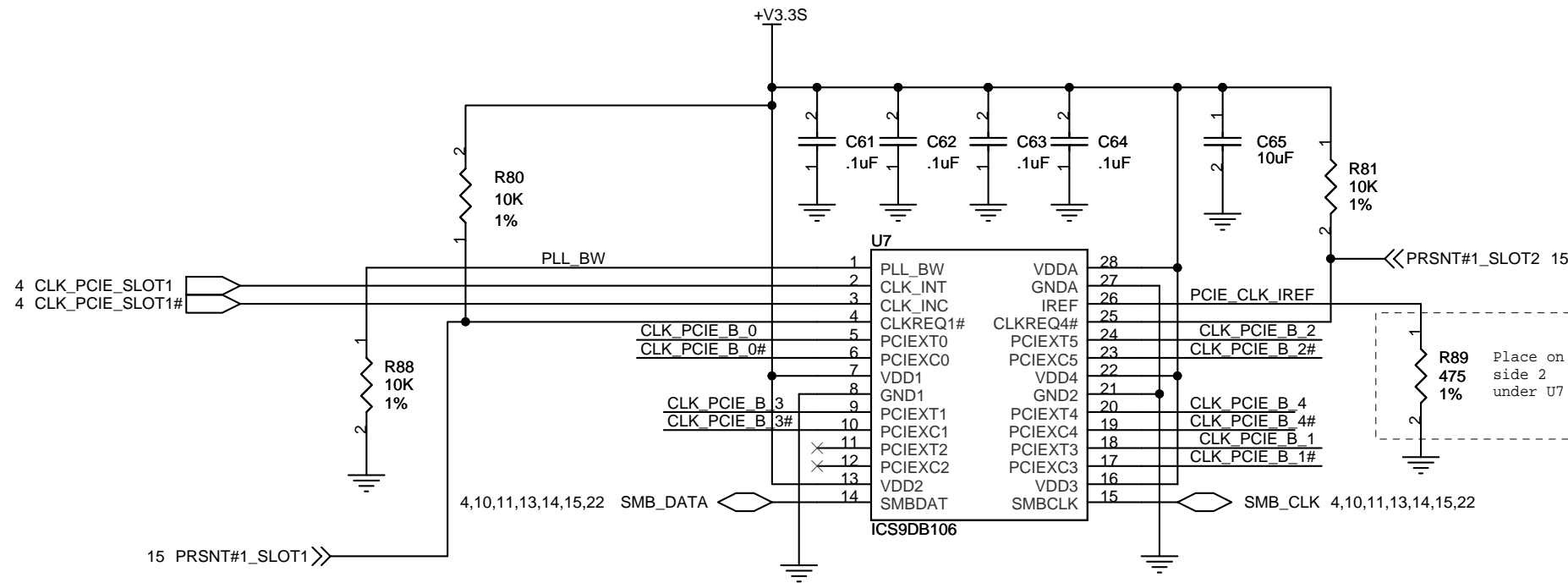
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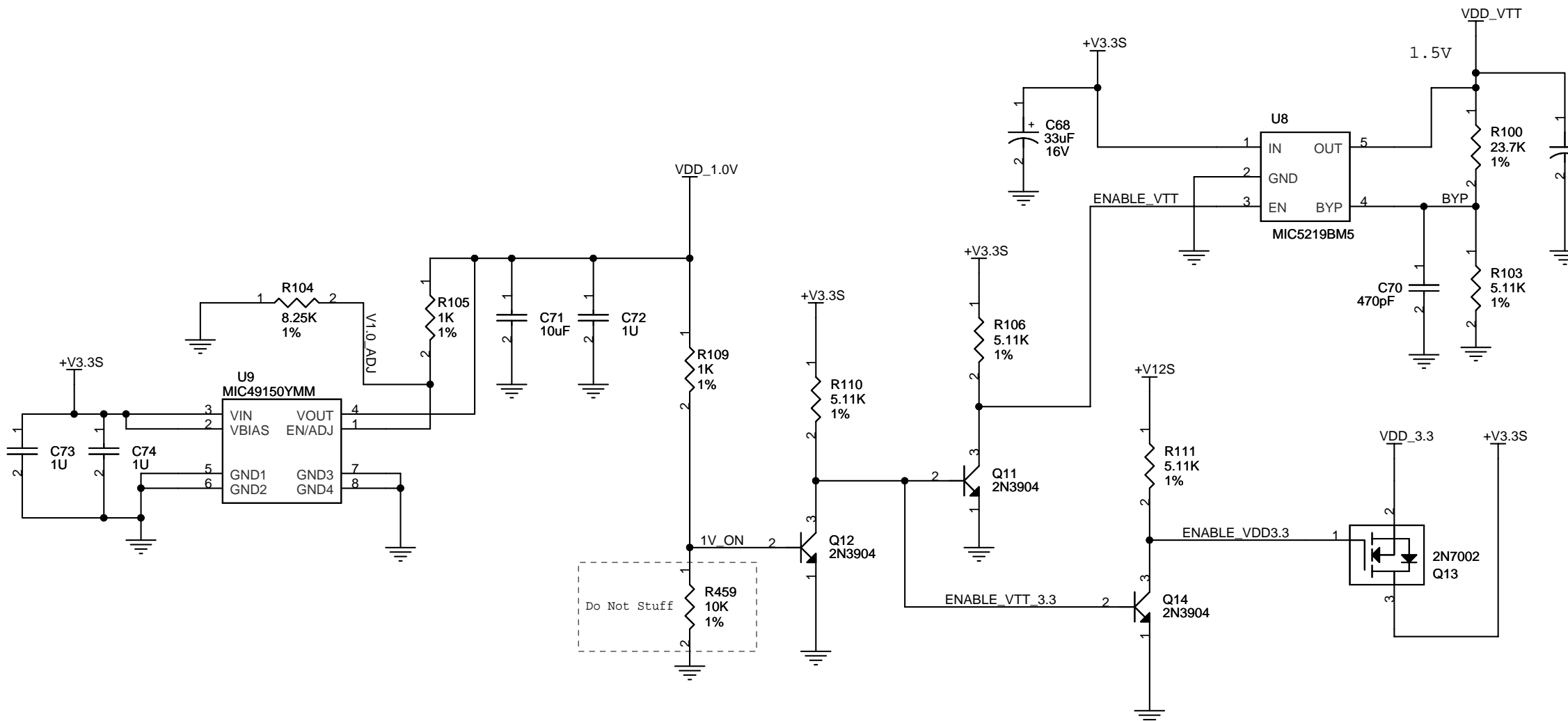
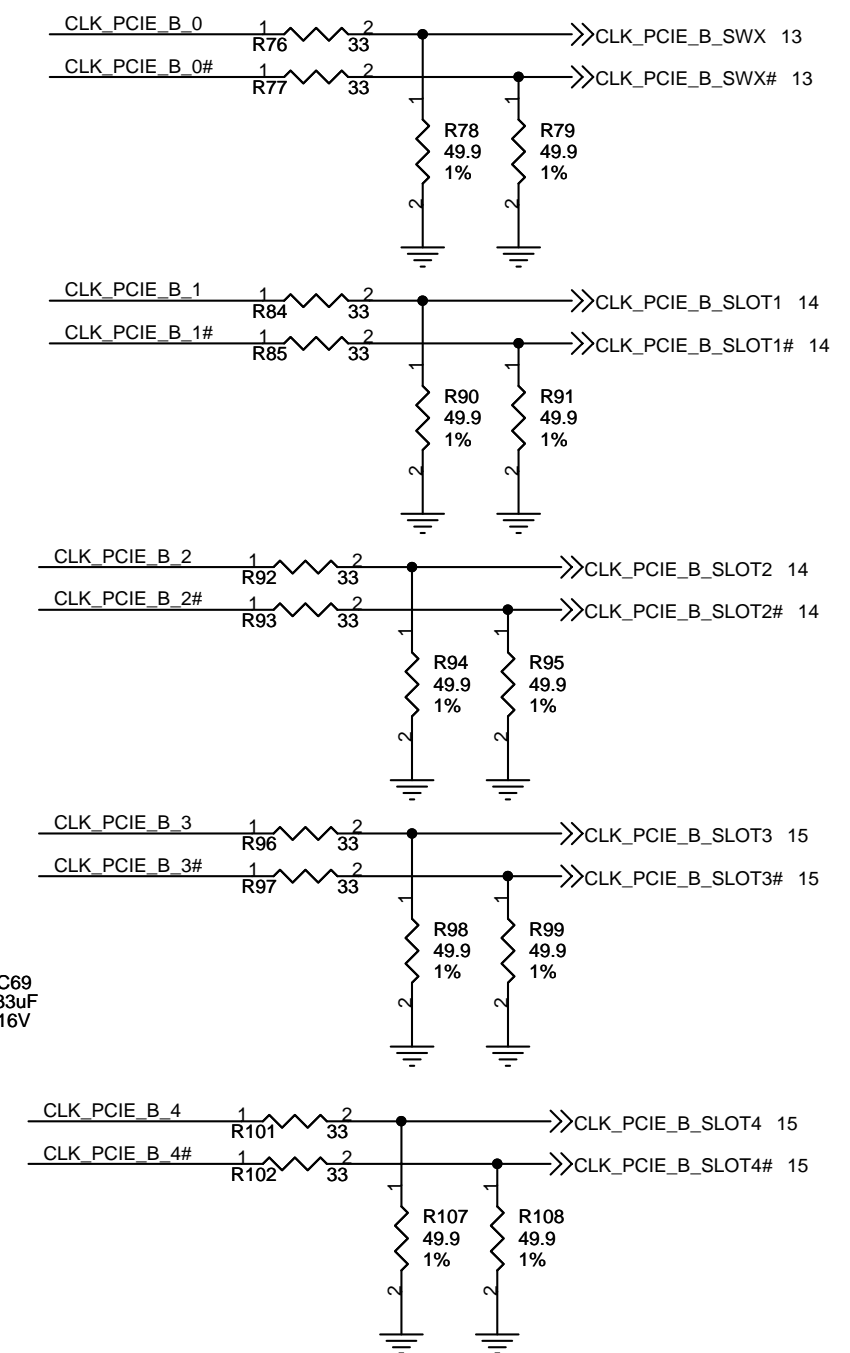


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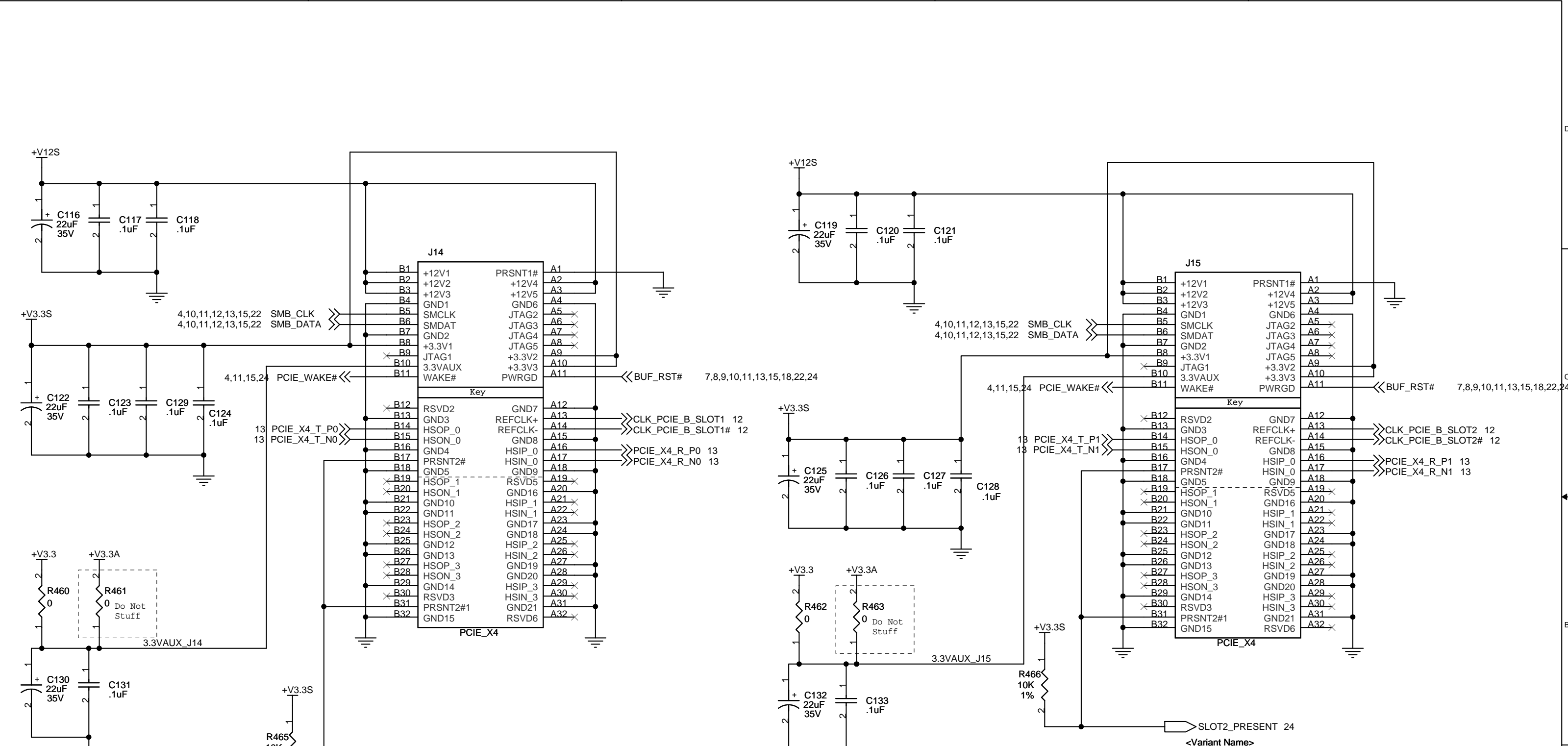
SM BUS ADDR  
1101010 = D4 for writes, D5 for reads



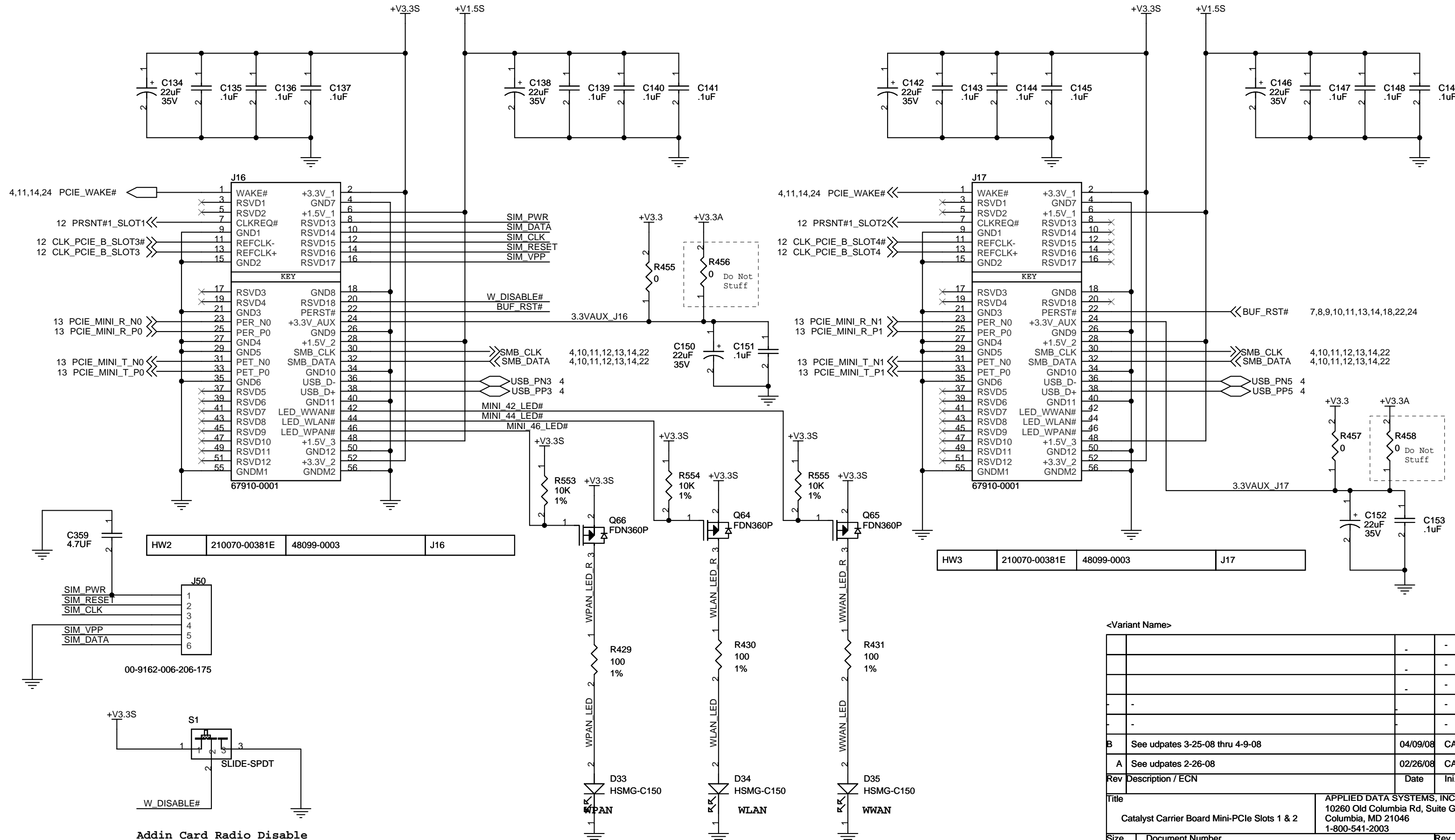
Power sequencing circuit for PCIe Switch

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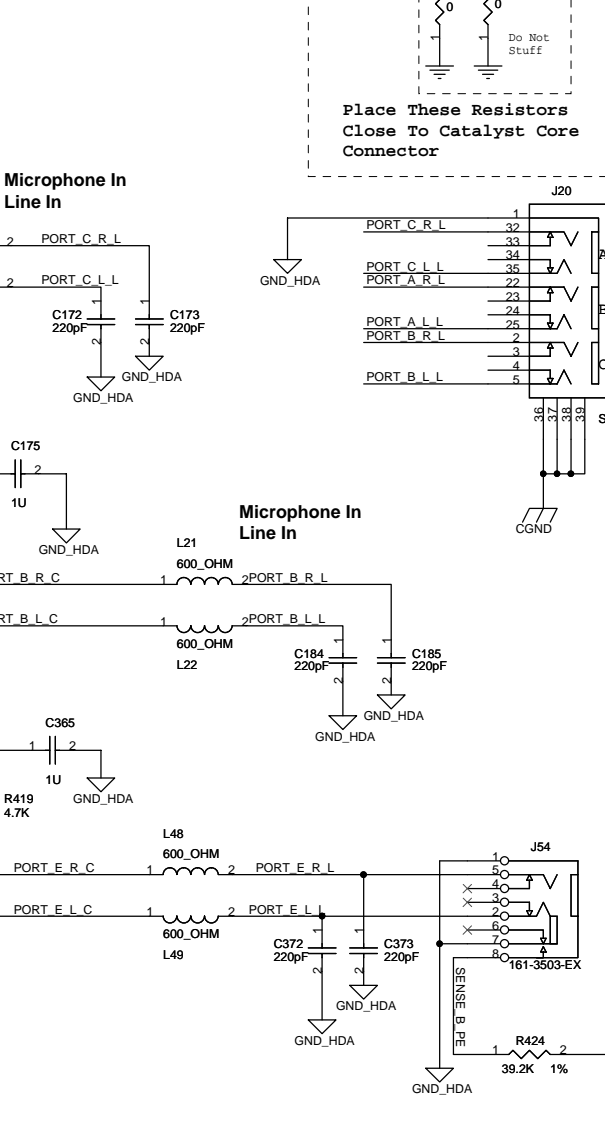
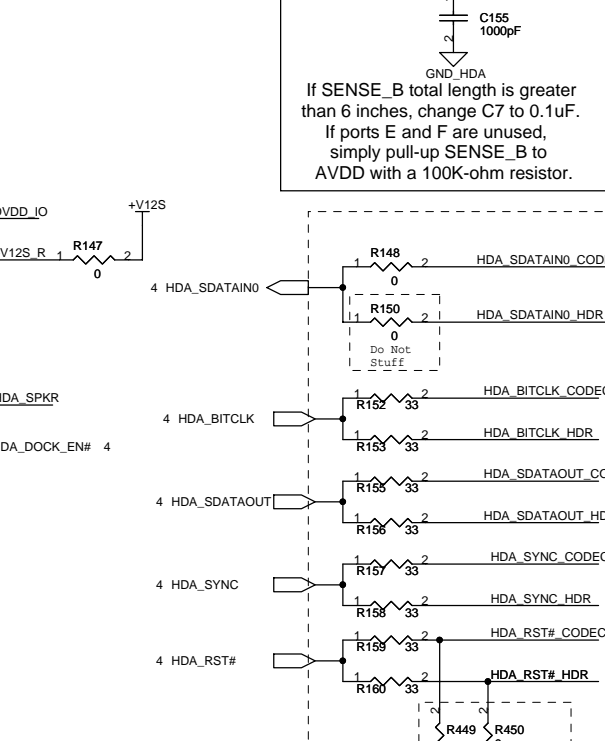
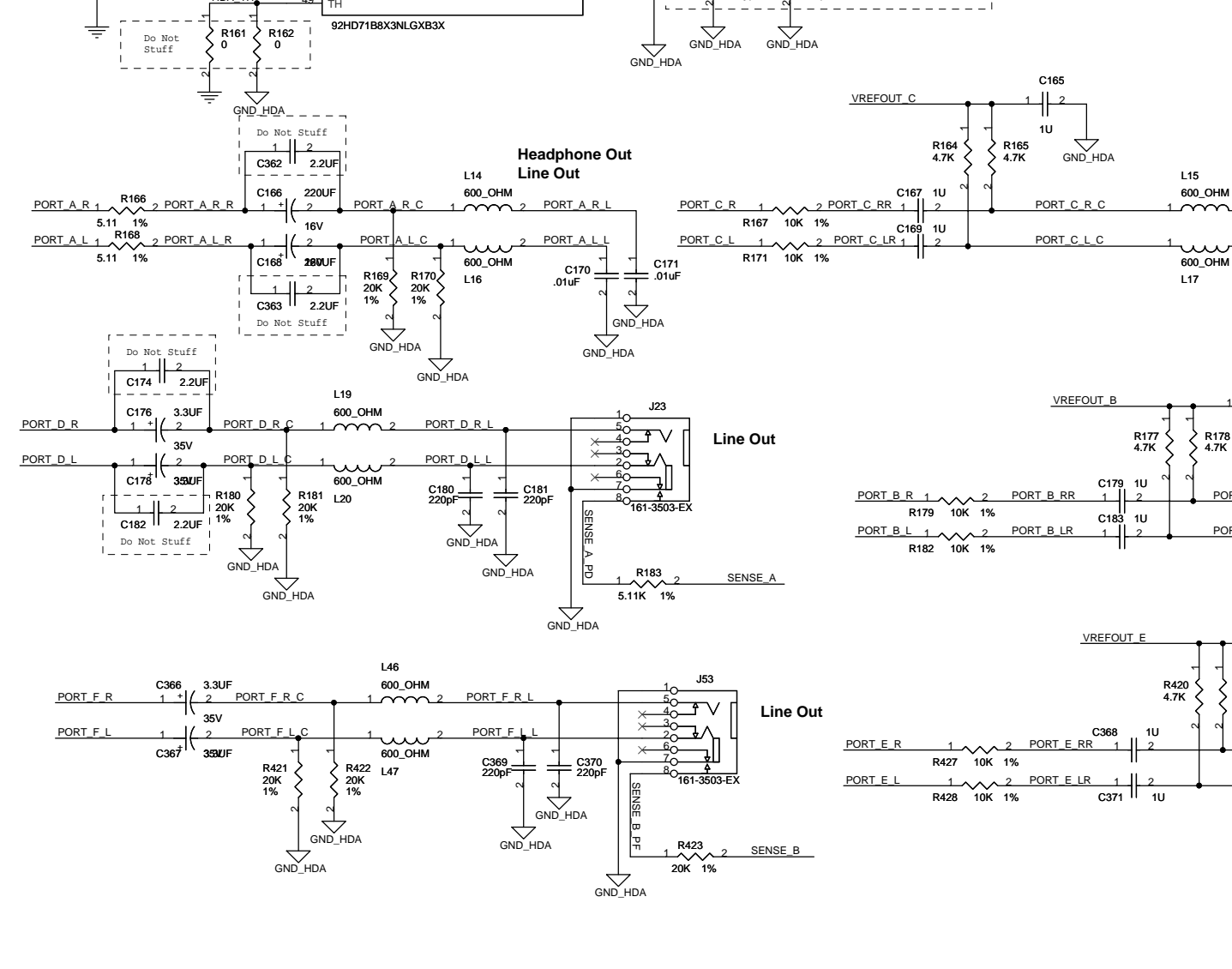
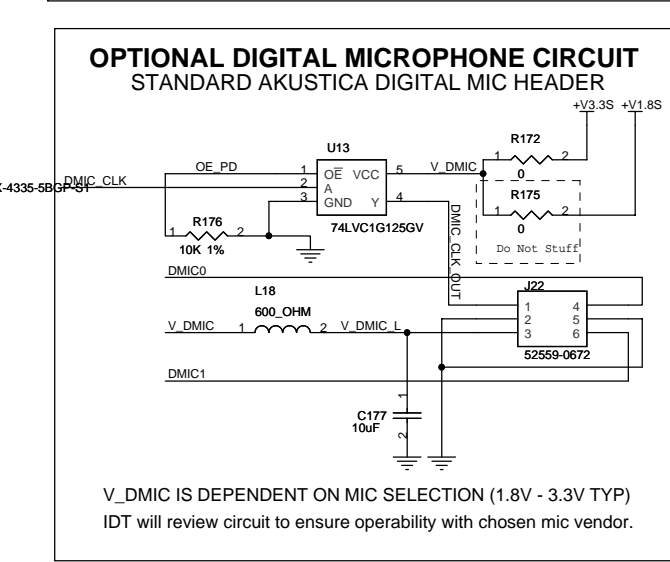
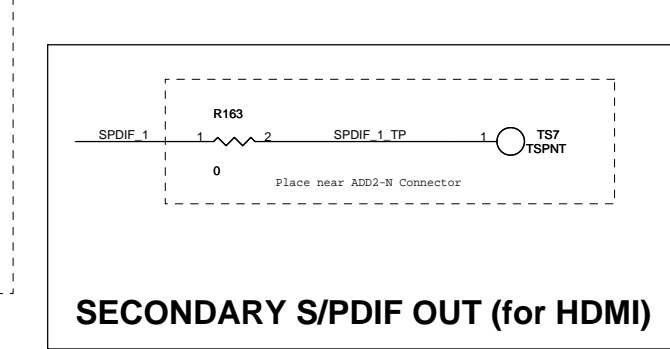
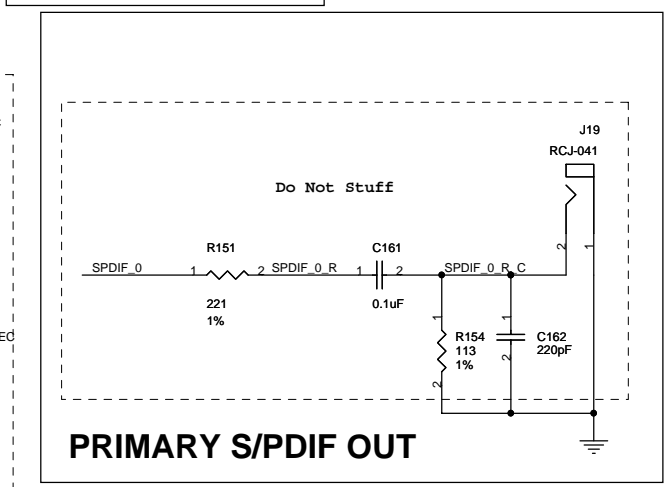
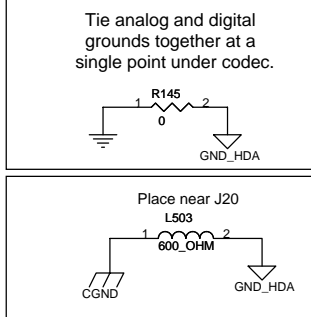
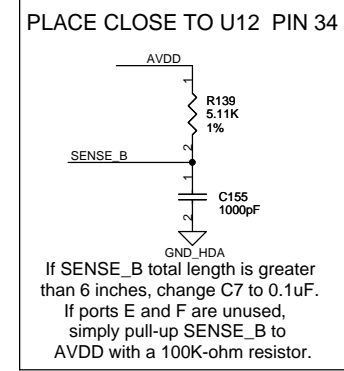
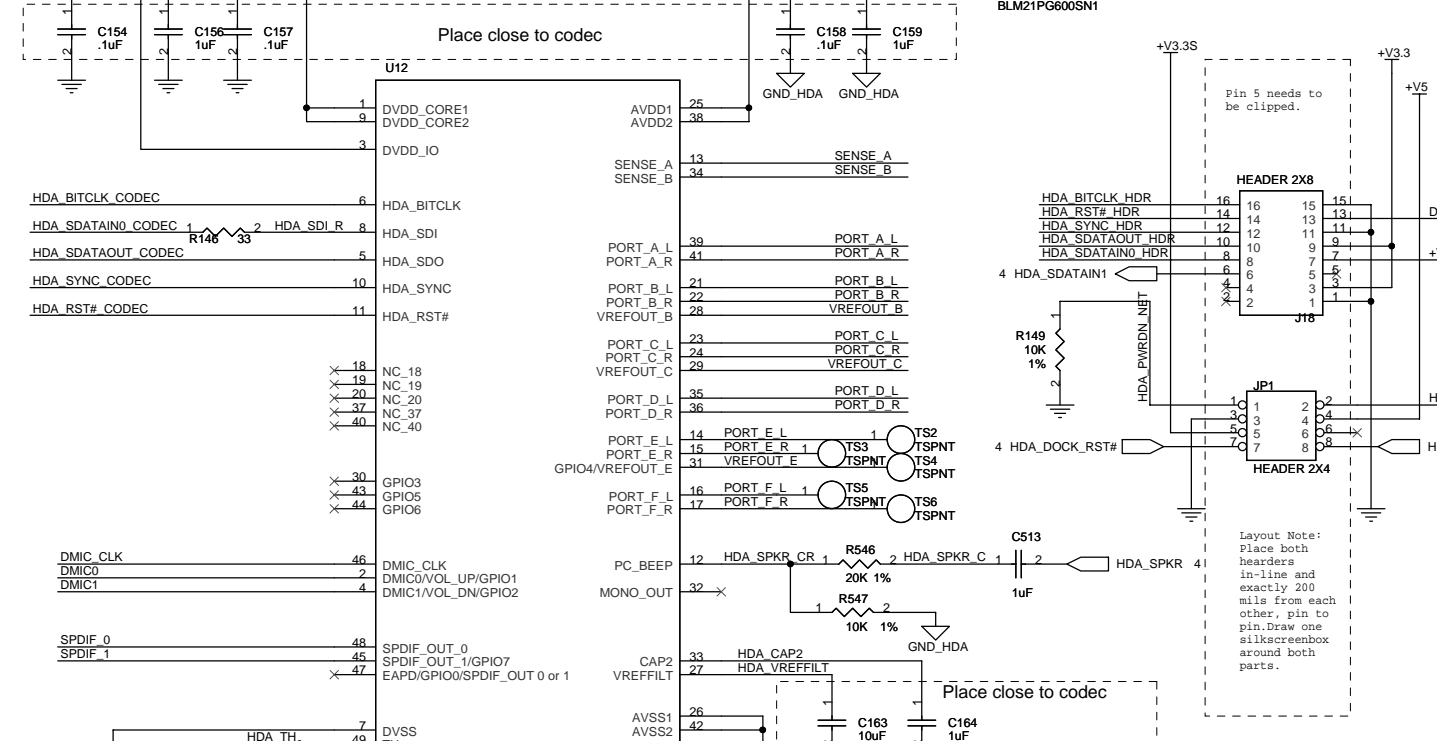
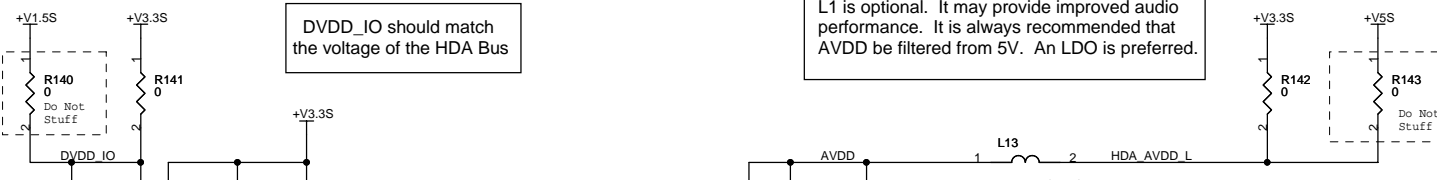


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Addin Card Radio Disable

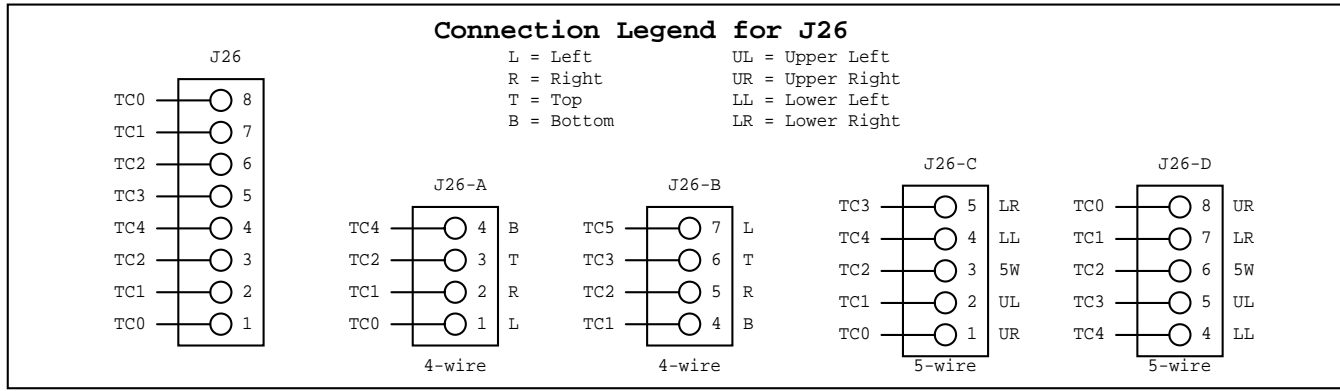
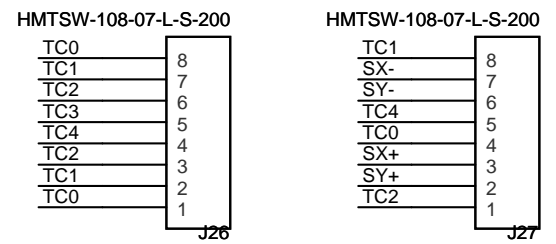
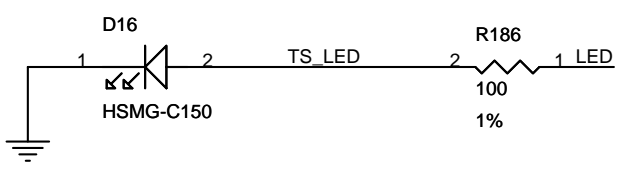
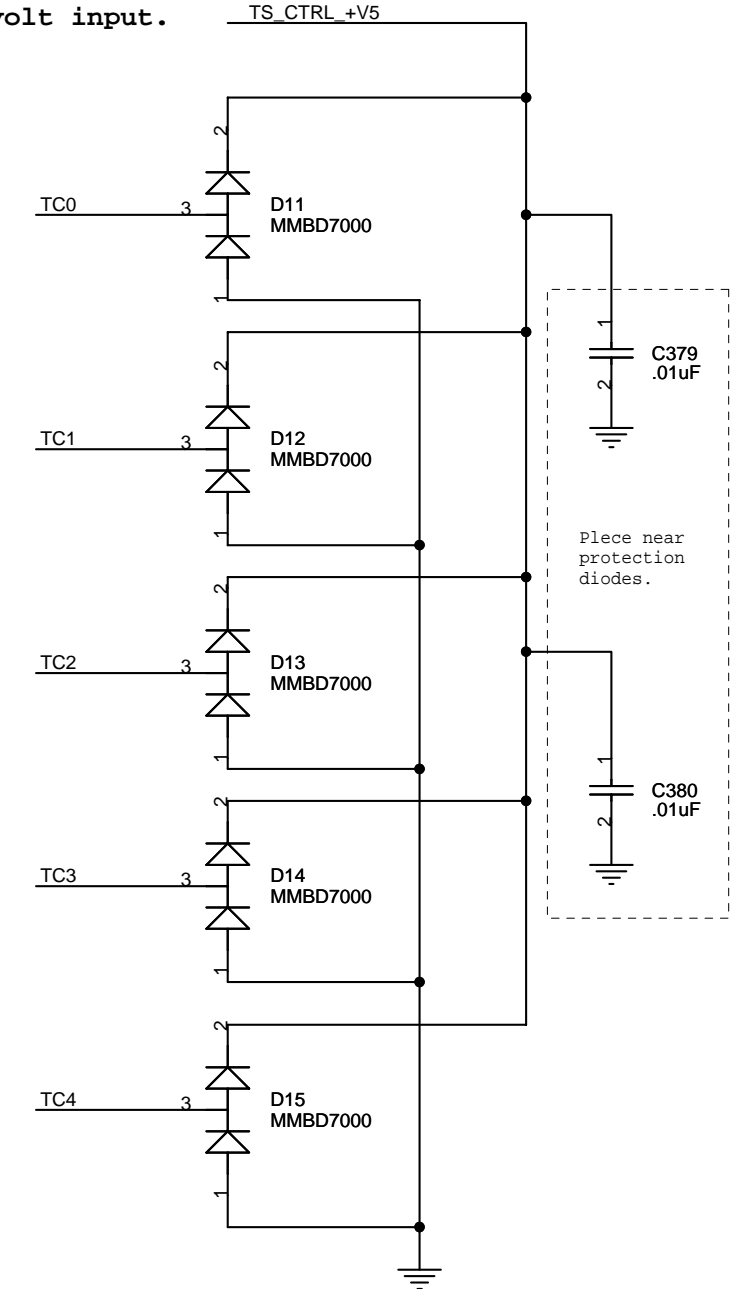
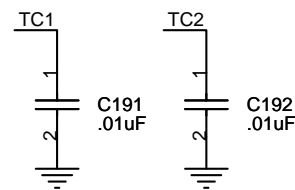
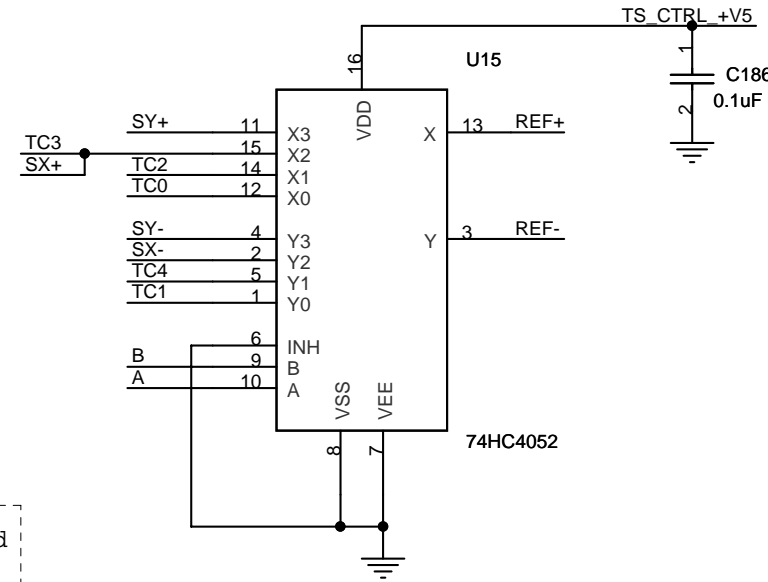
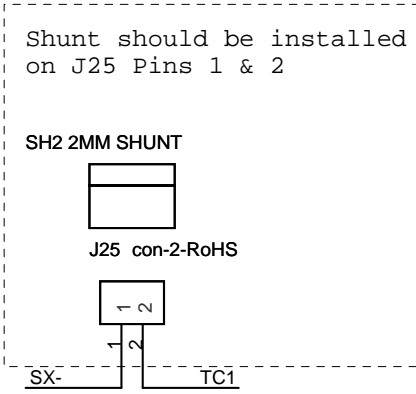
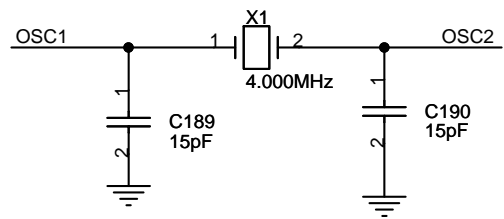
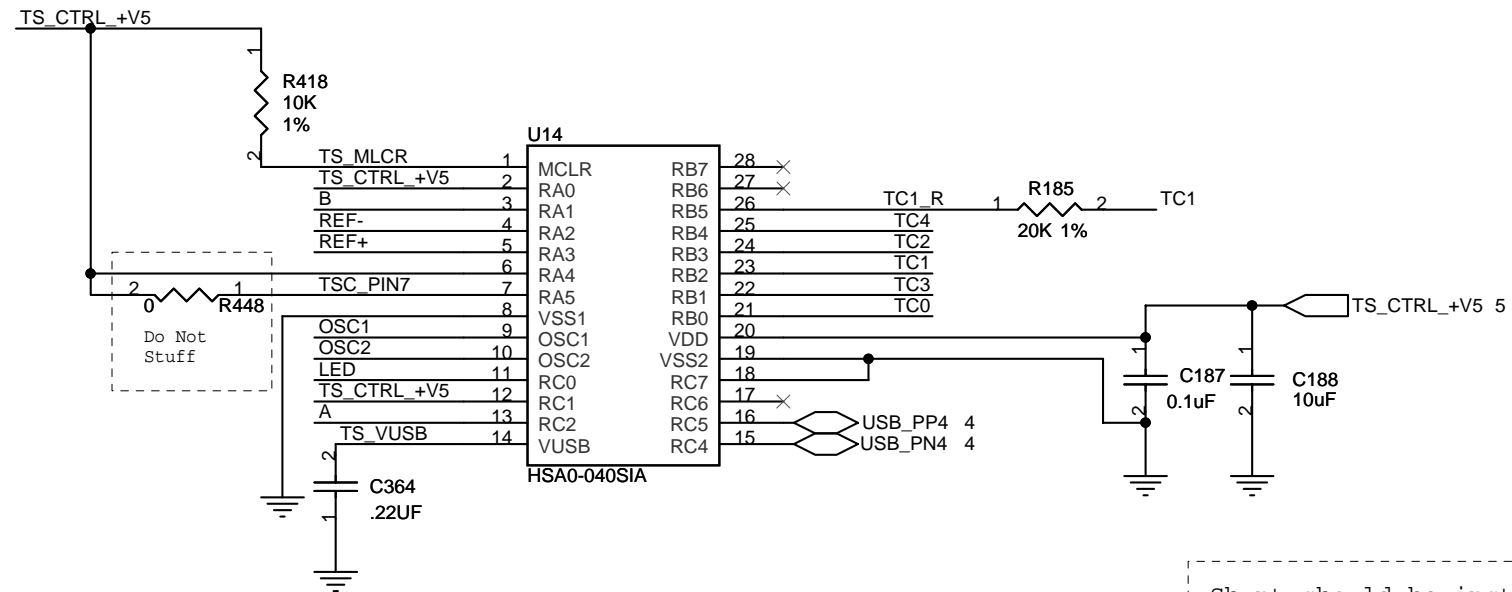
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Catalyst Carrier Board Mini-PCle Slots 1 & 2		10260 Old Columbia Rd, Suite G Columbia, MD 21046 1-800-541-2003	
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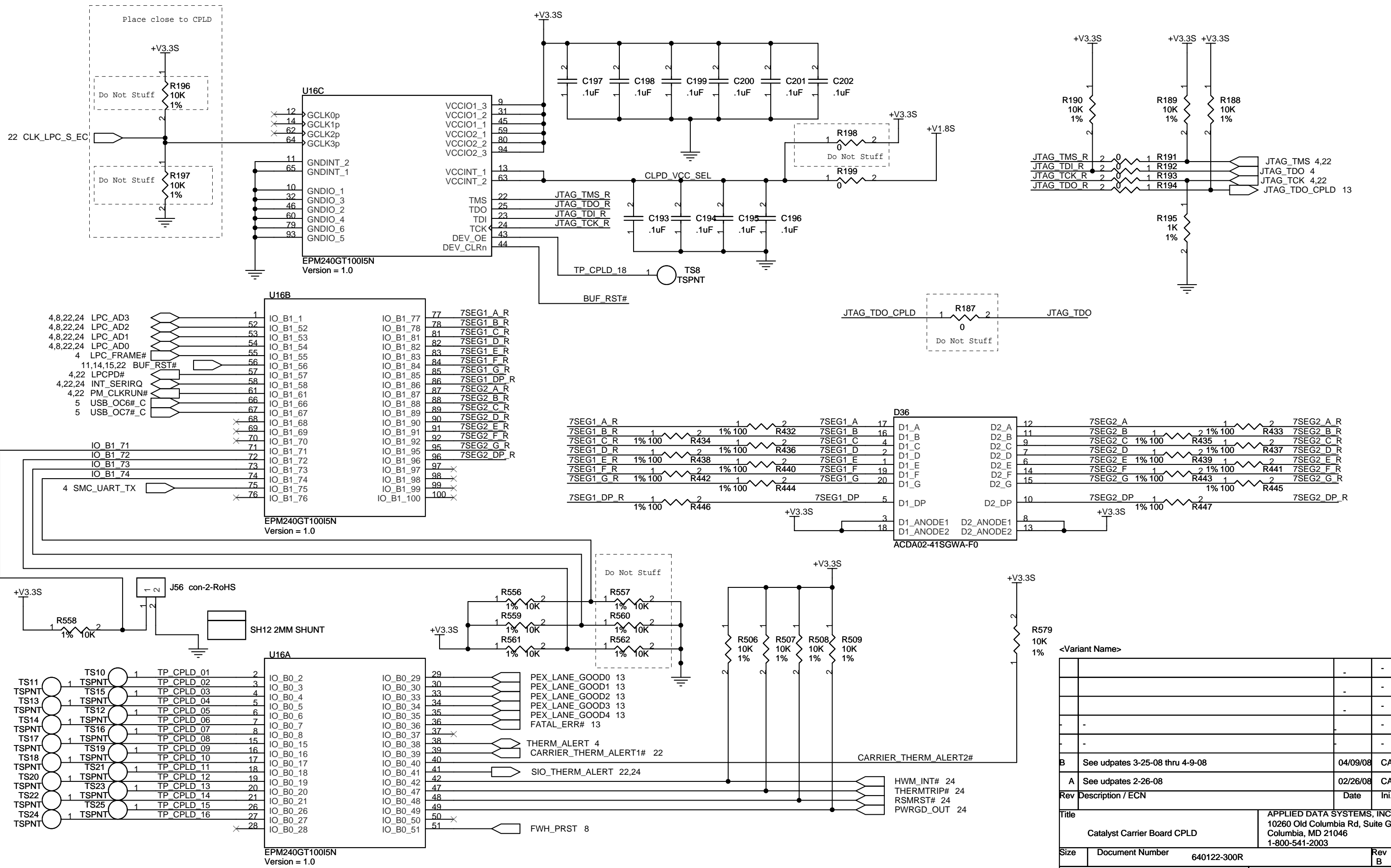


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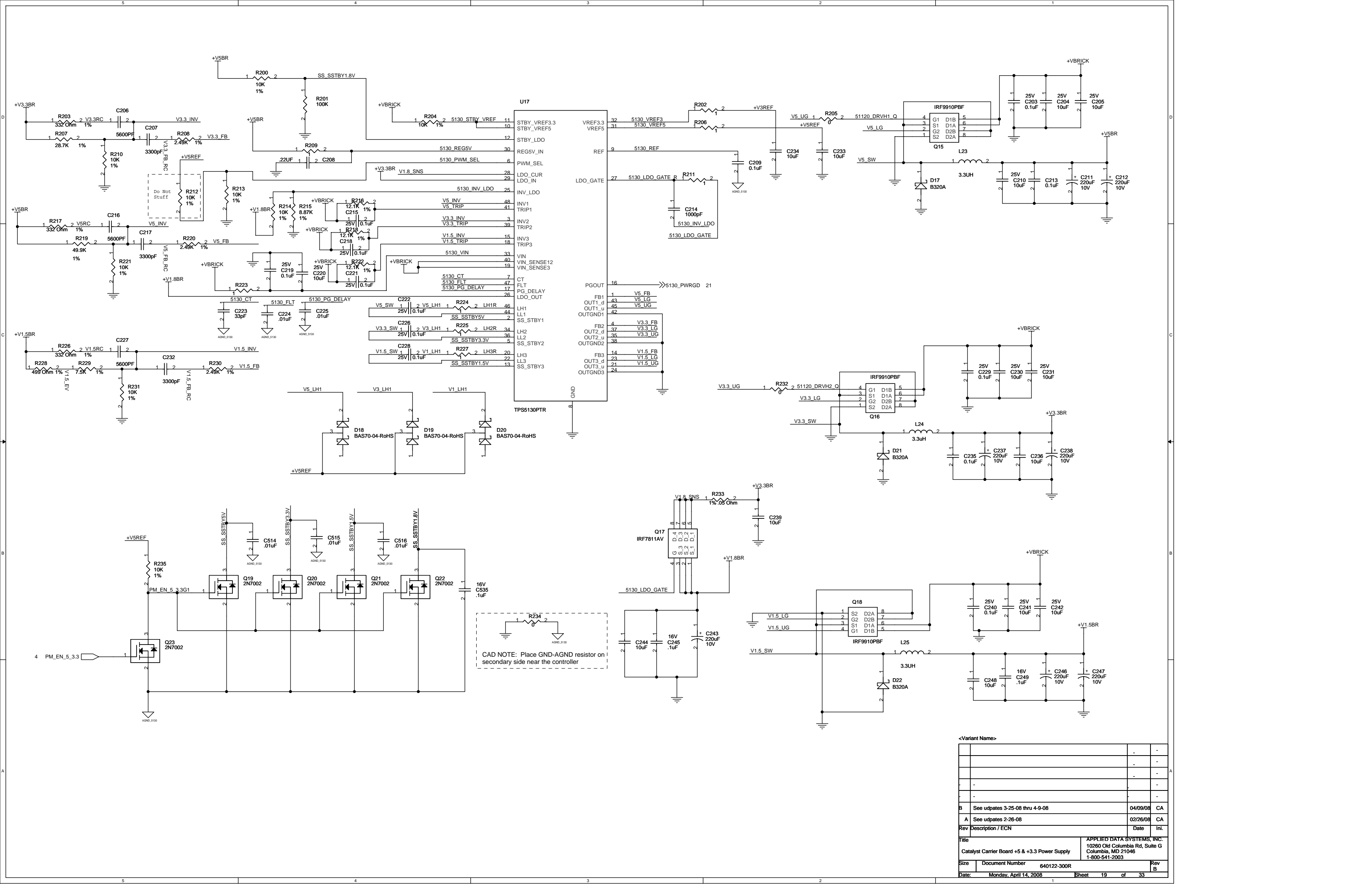
TS\_CTRL\_+V5 is output from LM3526 with +5 volt input.



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Catalyst Carrier Board Touch Screen Controller		10260 Old Columbia Rd, Suite G Columbia, MD 21046 1-800-541-2003
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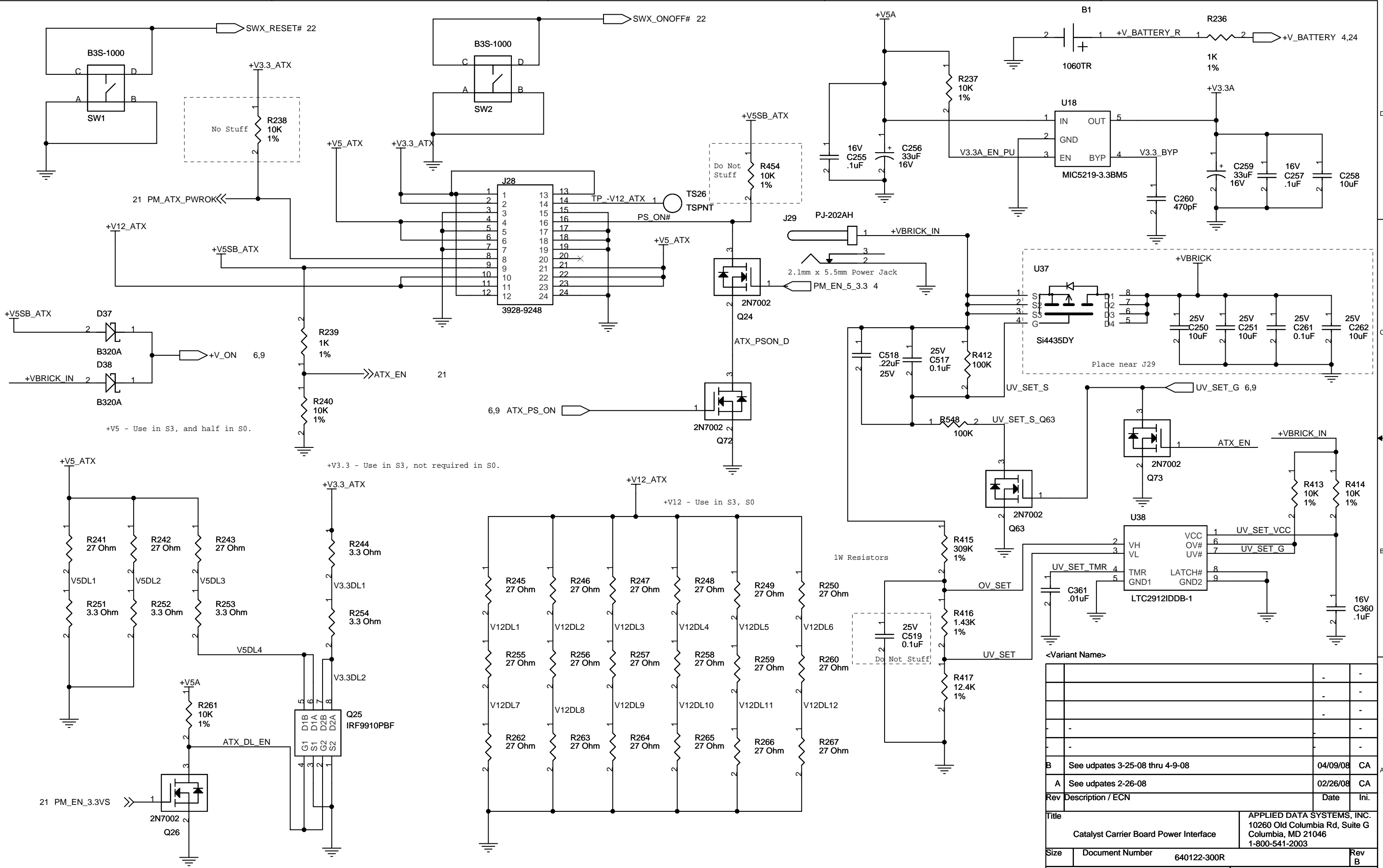


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CAD NOTE: Place GND-AGND resistor on secondary side near the controller

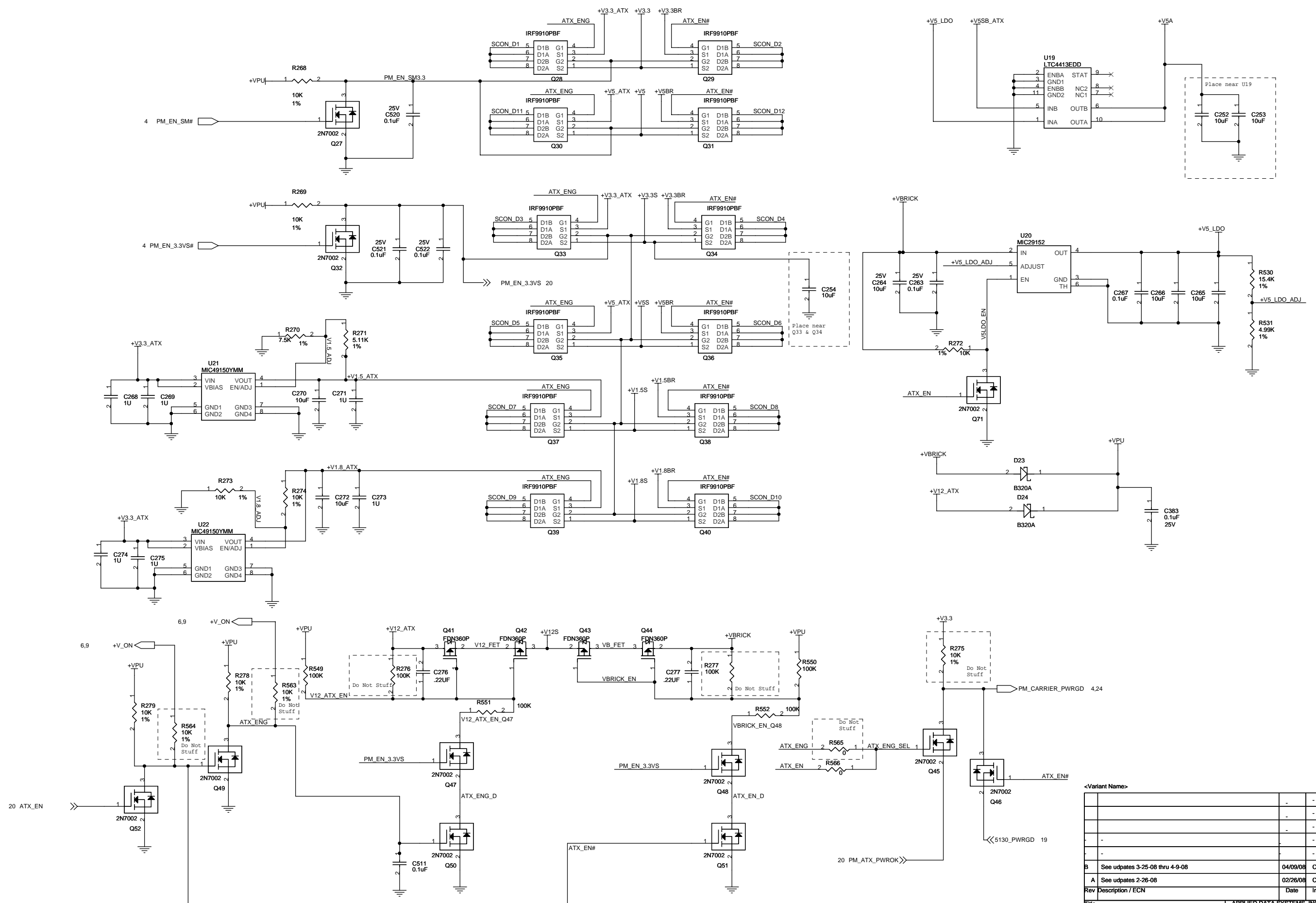
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Catalyst Carrier Board +5 & +3.3 Power Supply		APPLIED DATA SYSTEMS, INC. 10260 Old Columbia Rd, Suite G Columbia, MD 21046 1-800-541-2003
Size	Document Number	Rev
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Rev	Description / ECN	Date	Ini.
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A	See updates 2-26-08	02/26/08	CA
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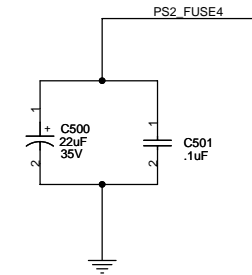
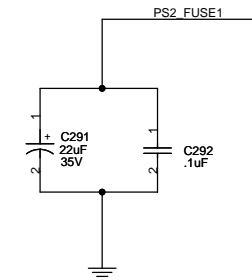
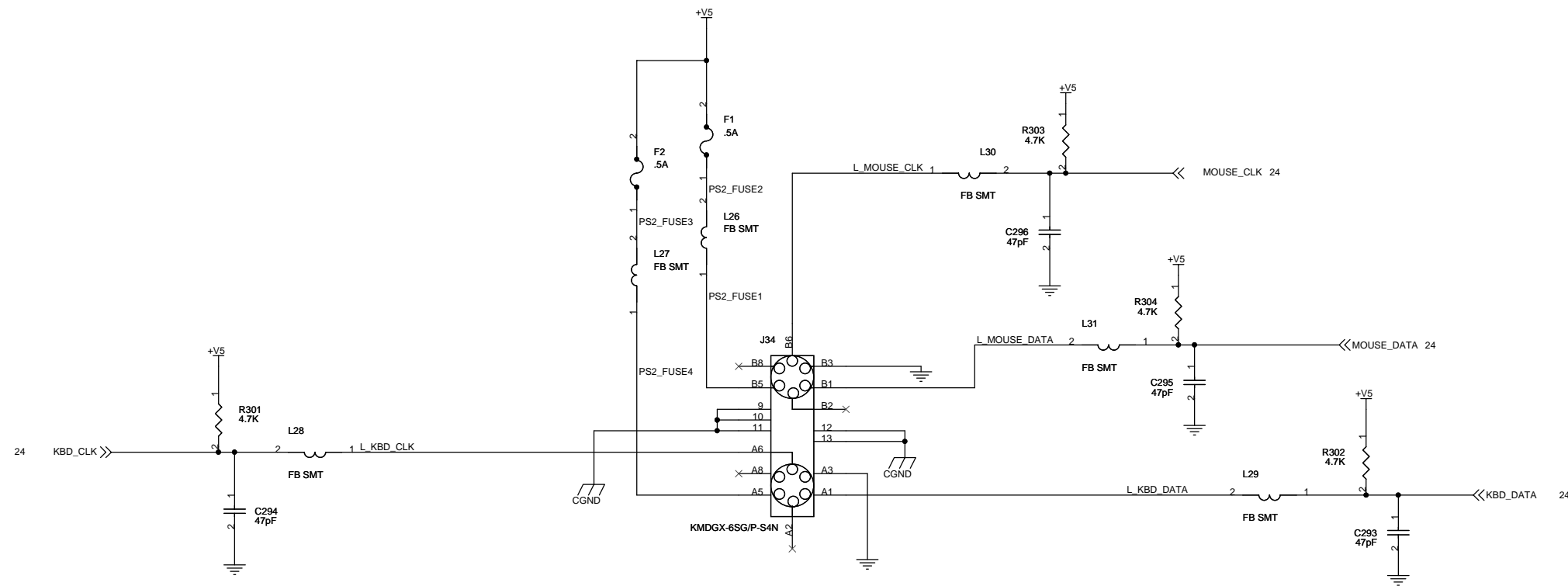
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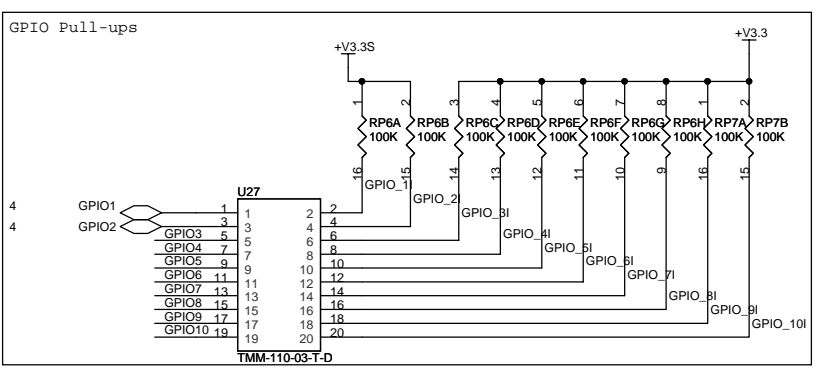
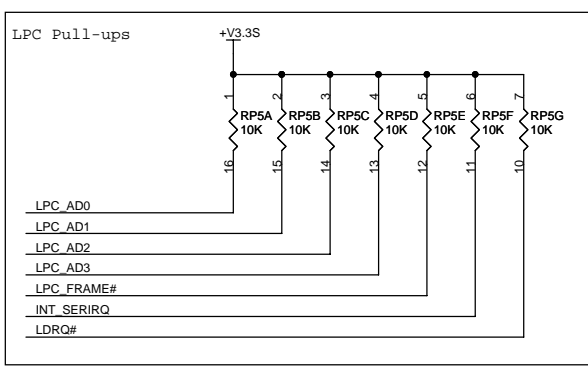
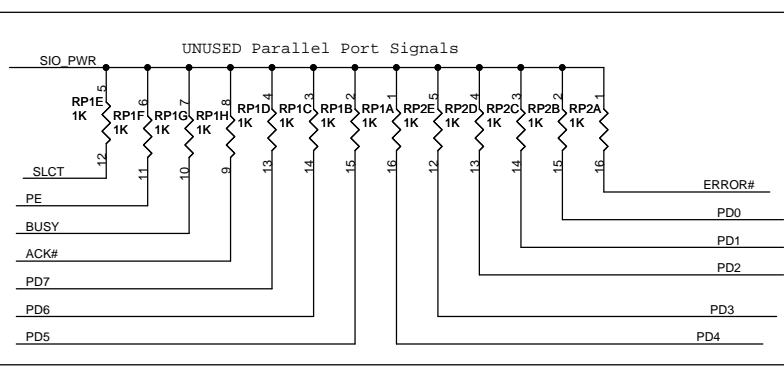
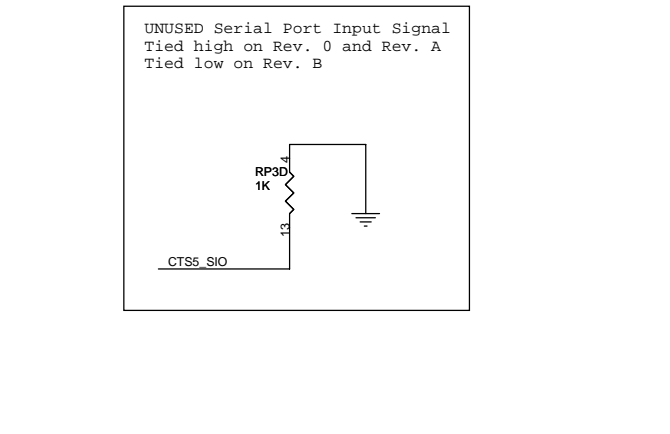
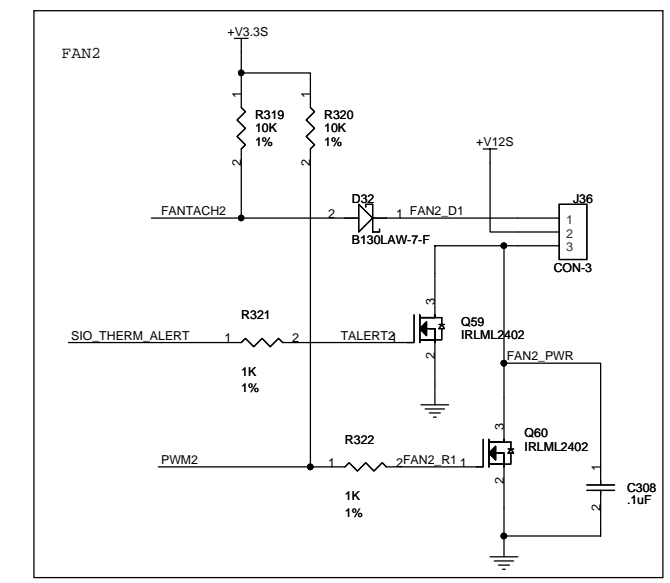
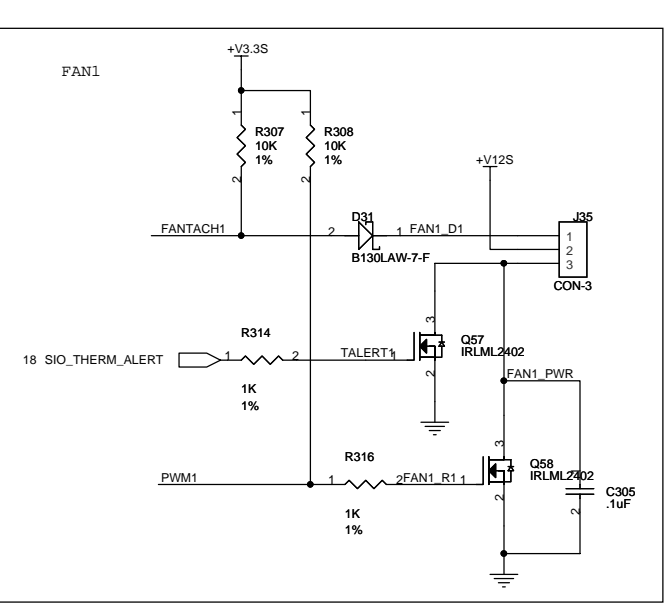
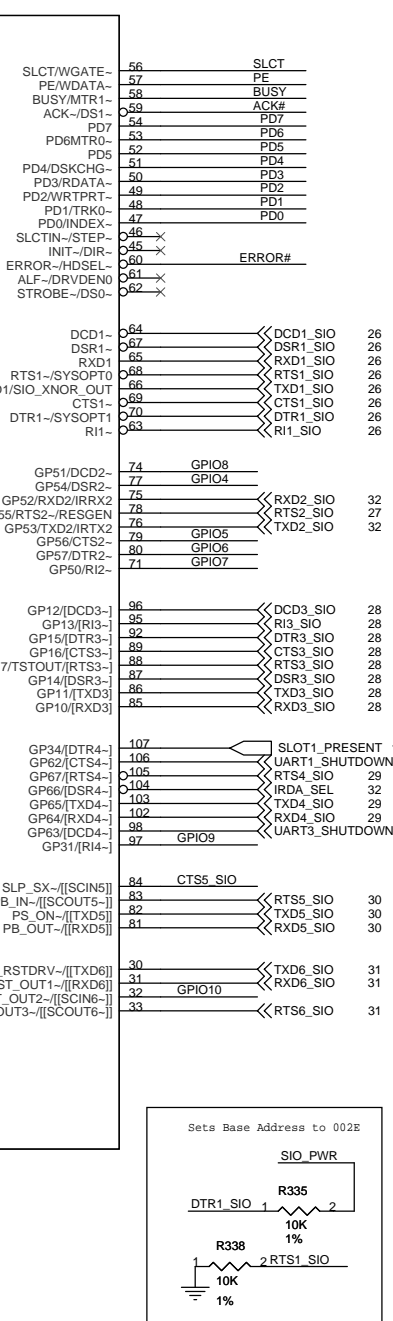
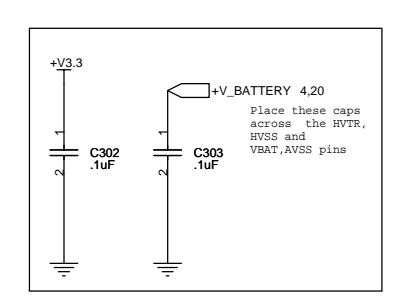
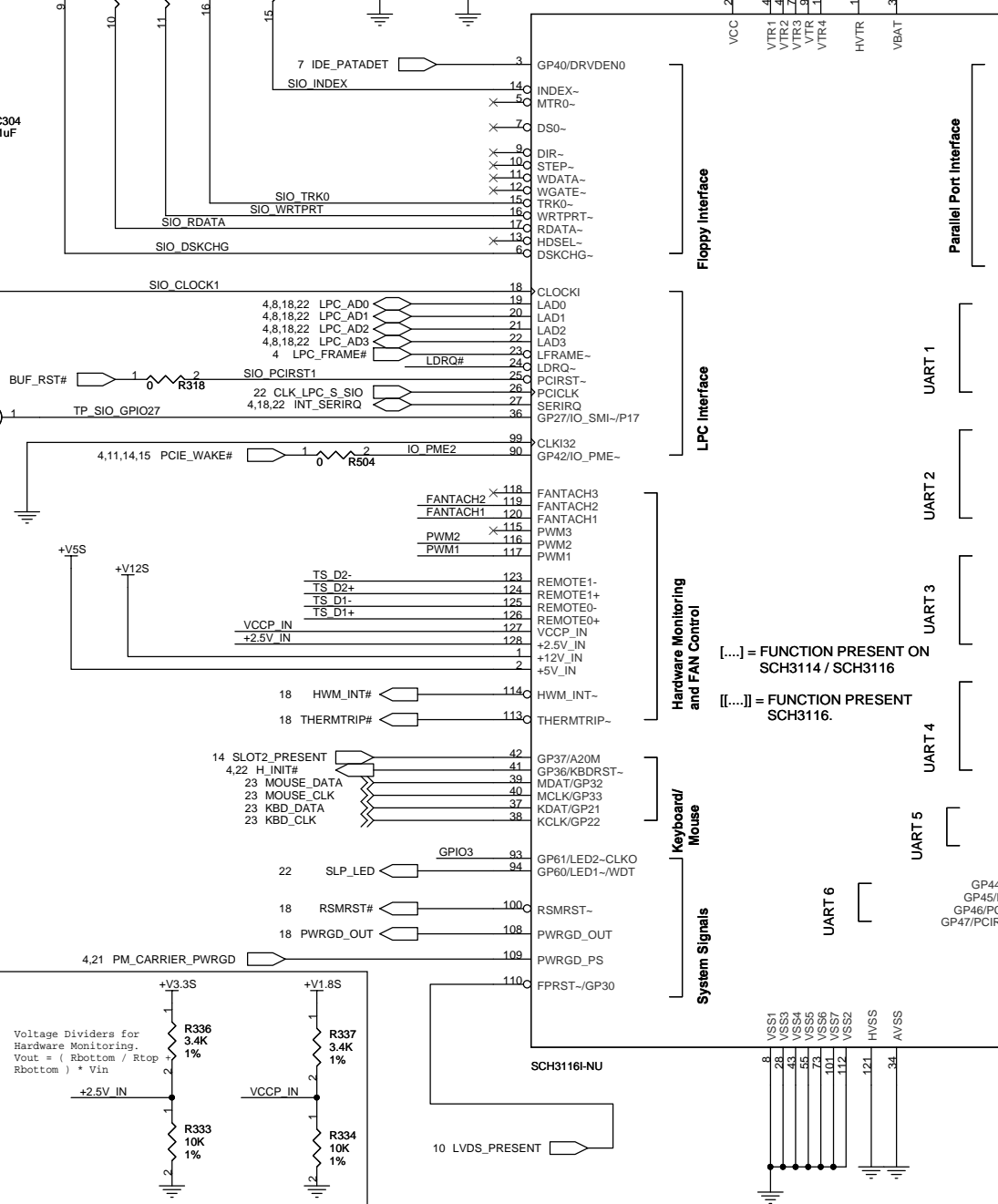
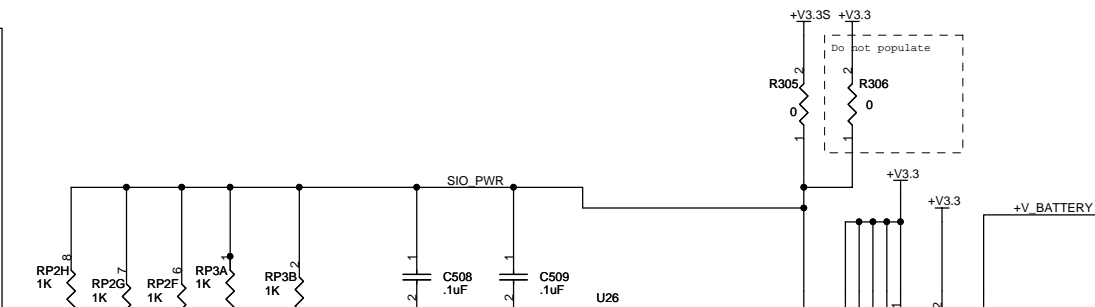
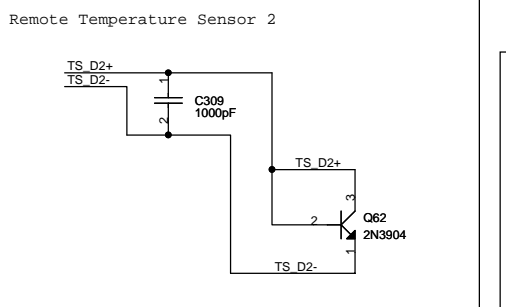
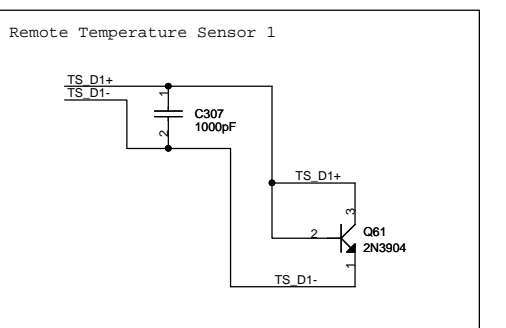
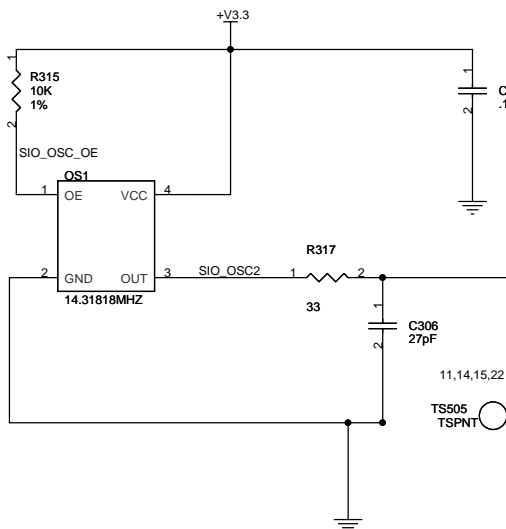
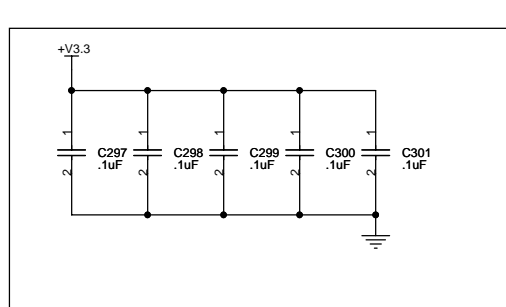
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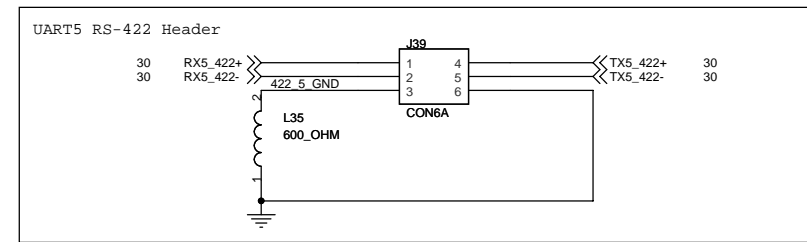
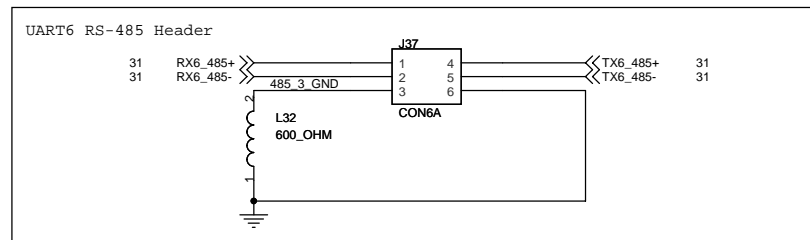
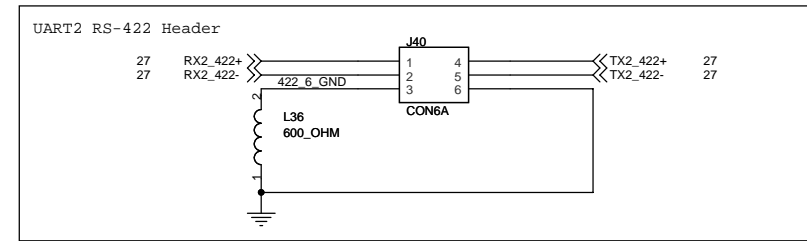
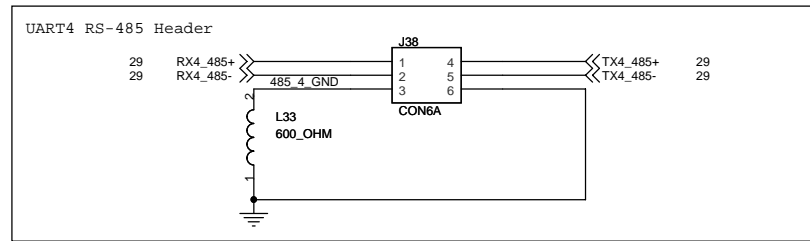
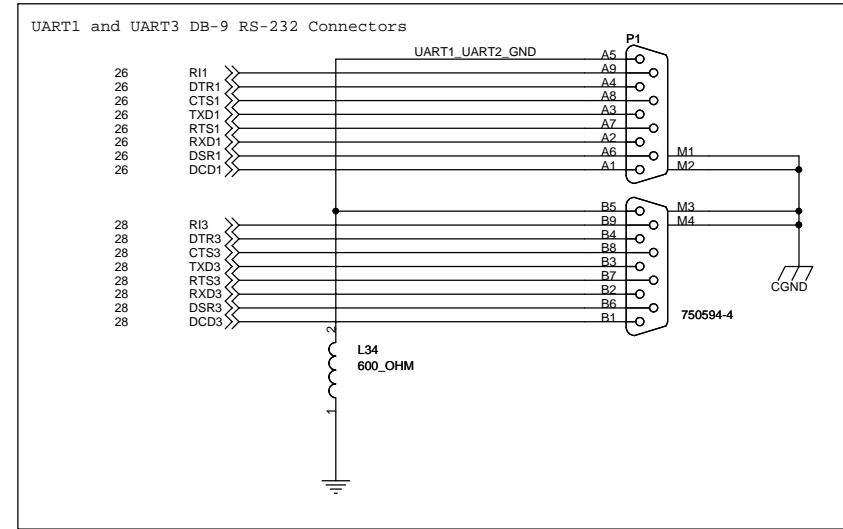
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A	See updates 2-26-08	02/26/08	CA
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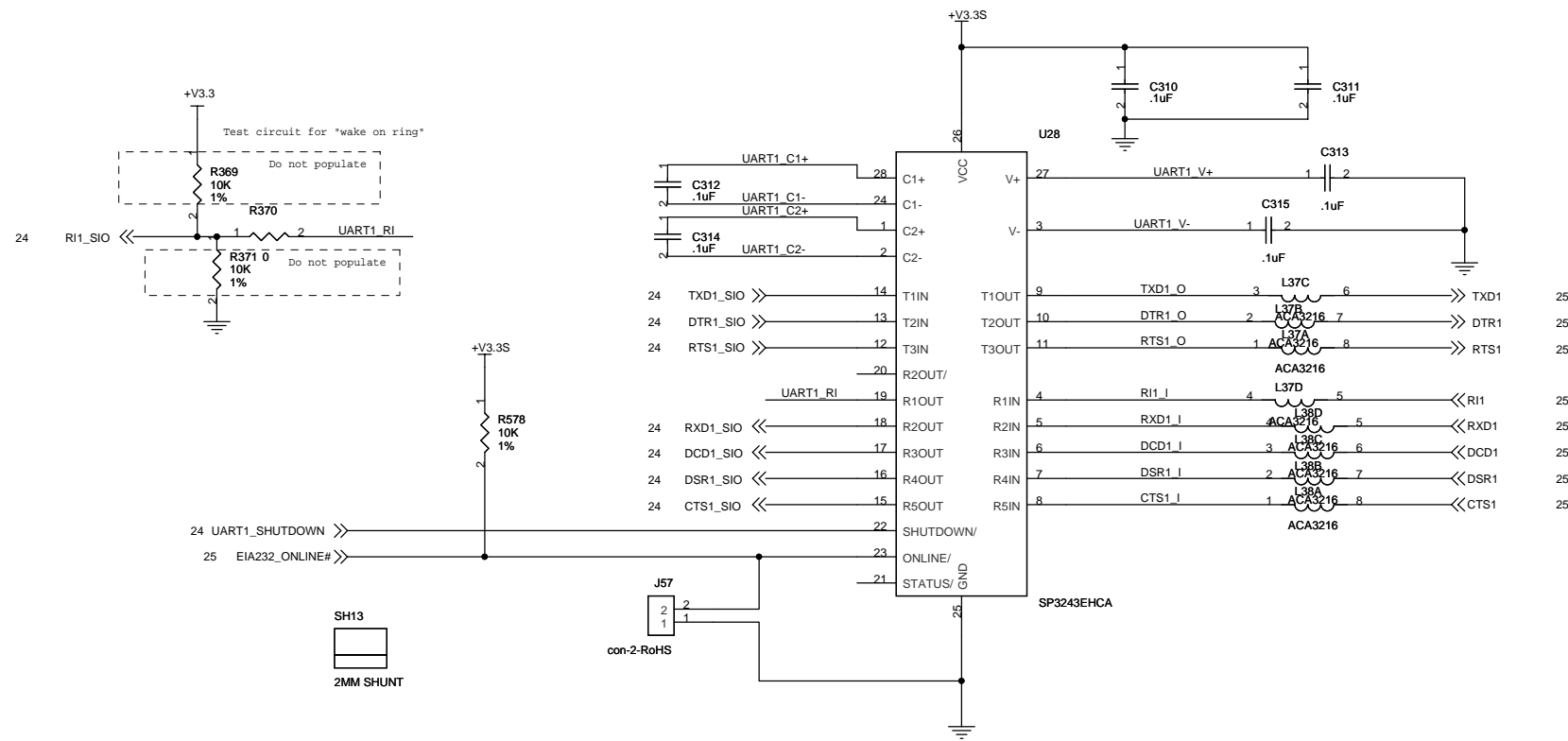
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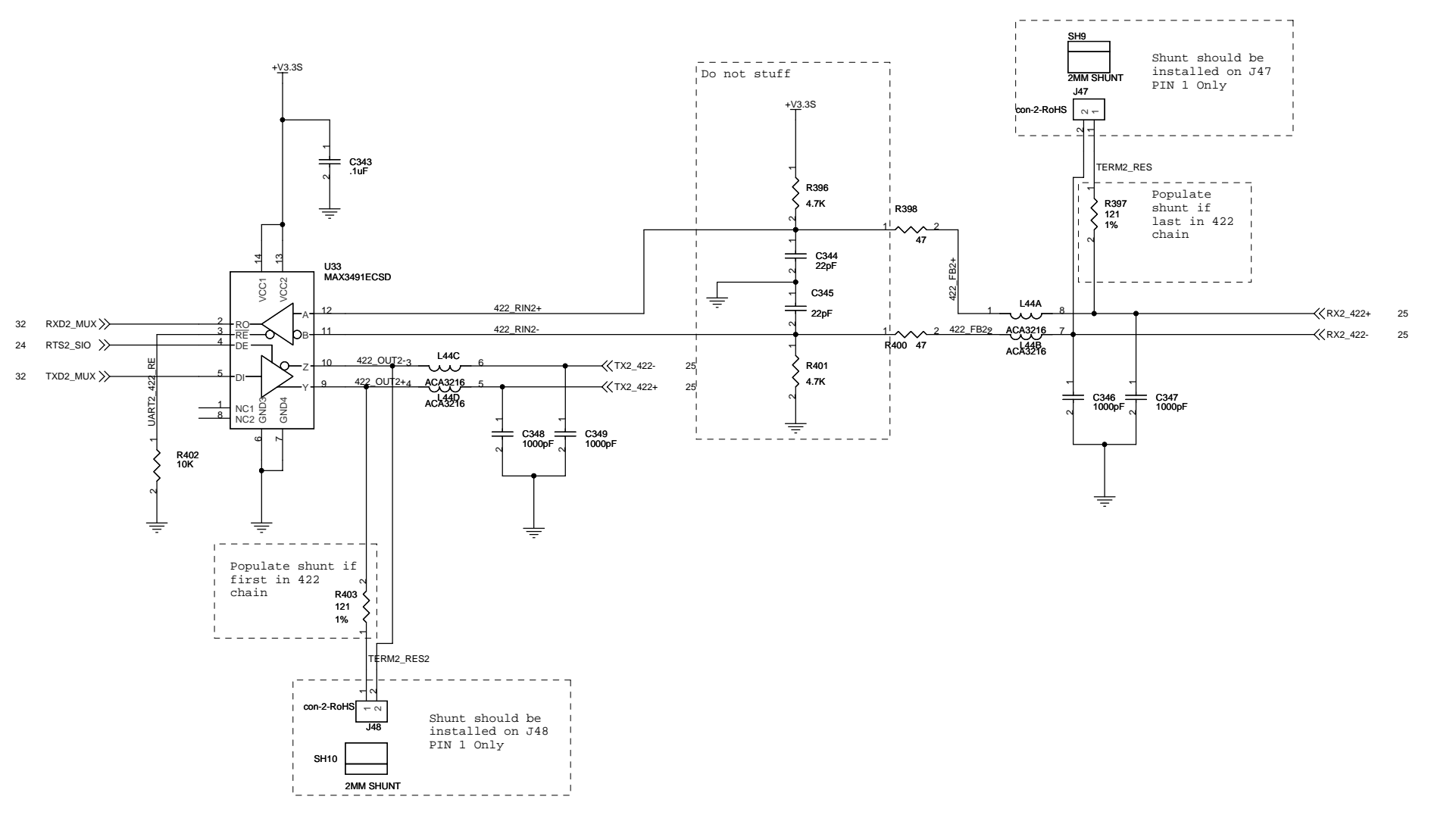
RS-232 driver



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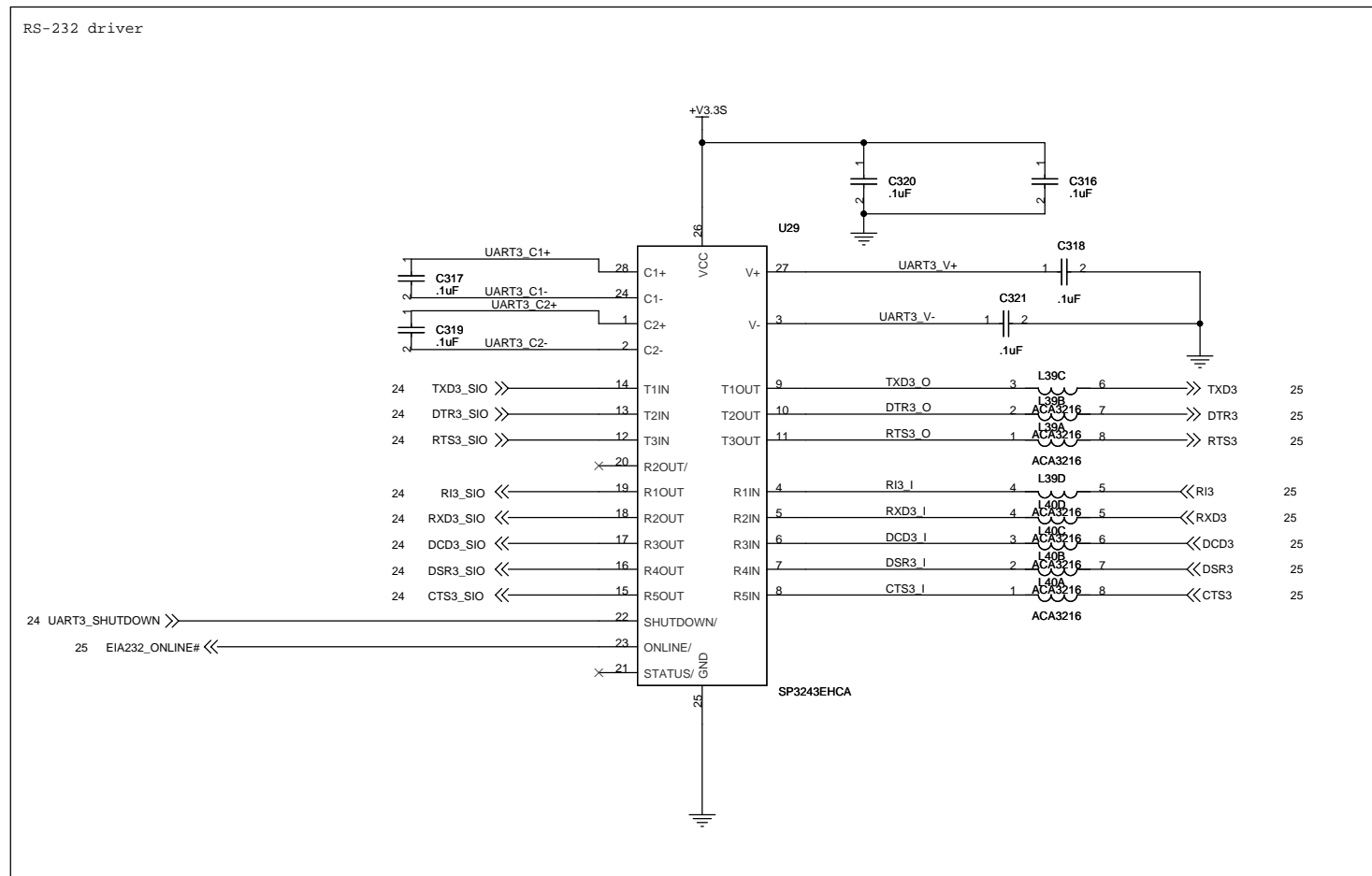
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RS-422 driver



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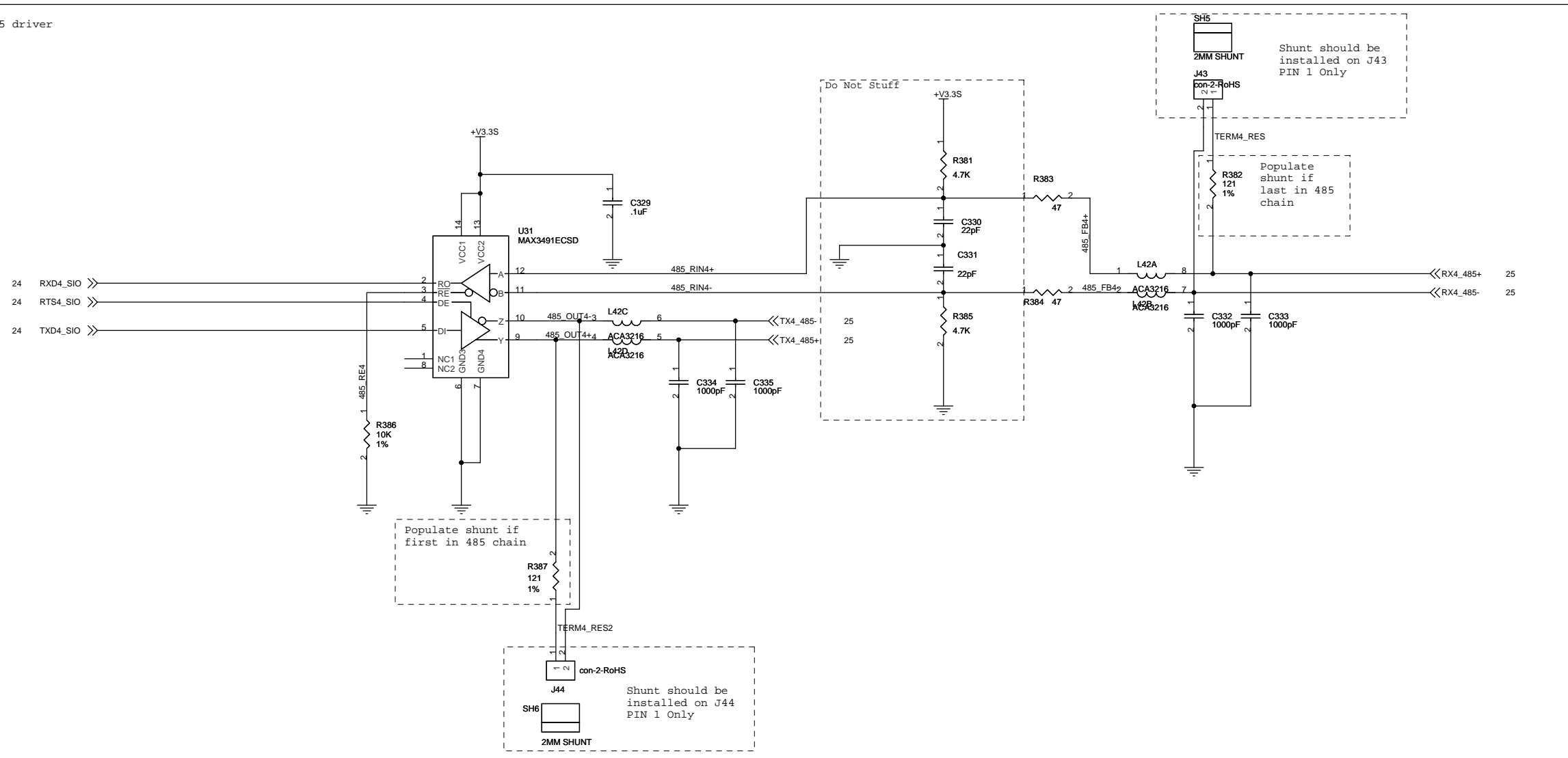
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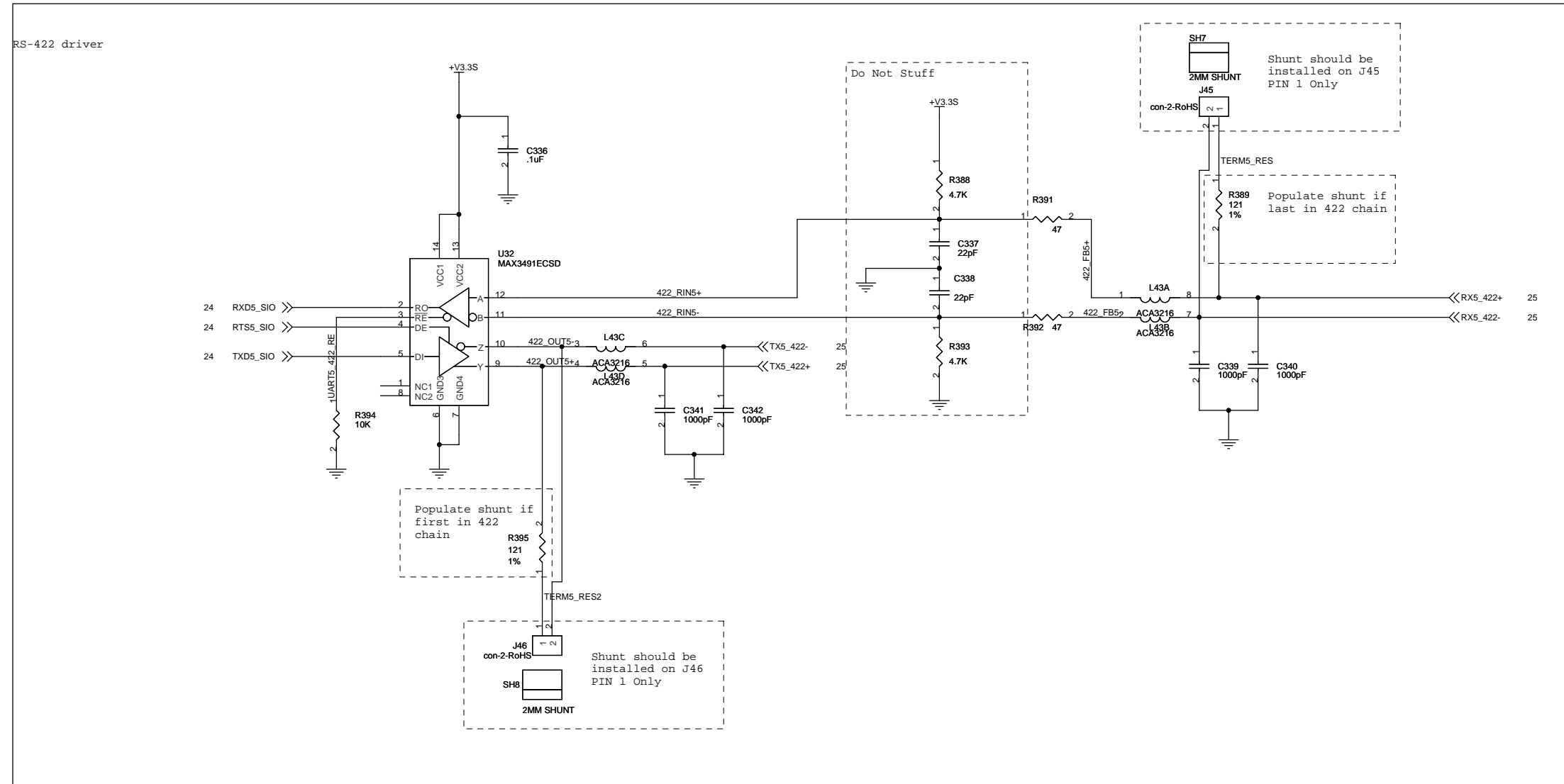
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RS-485 driver



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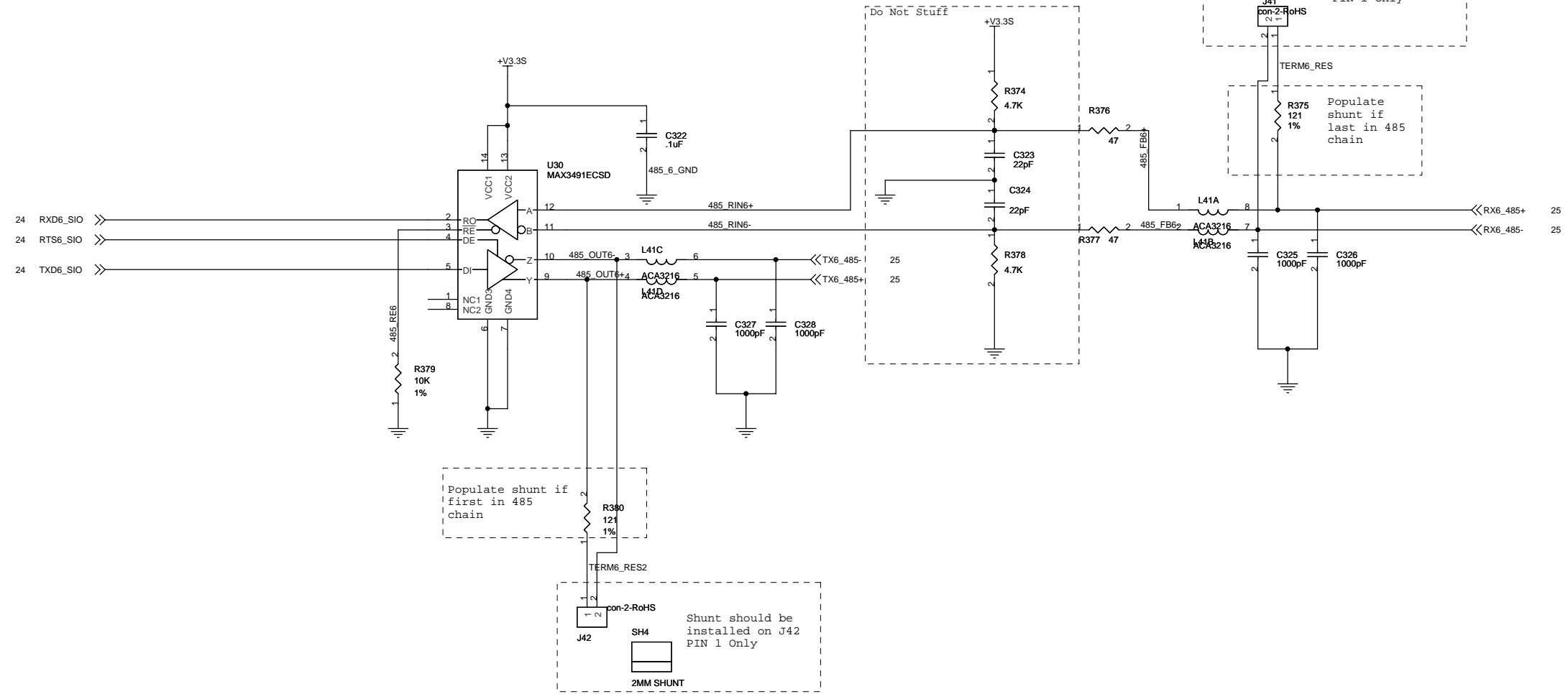
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RS-485 driver

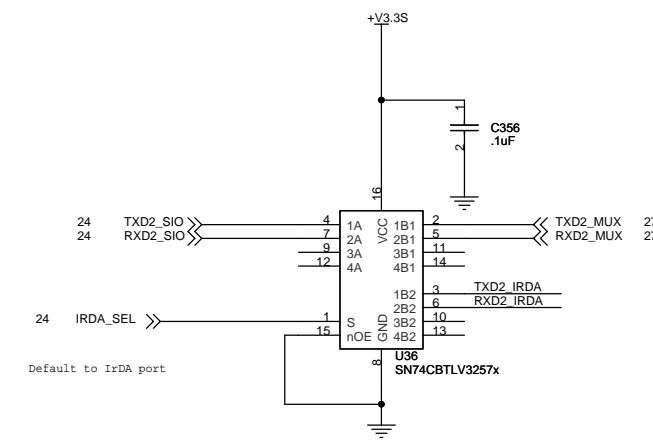
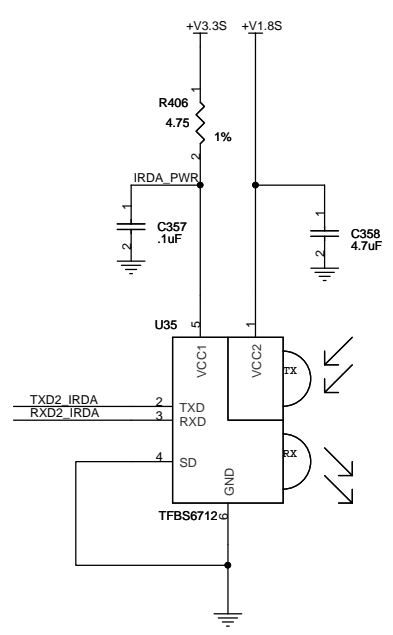
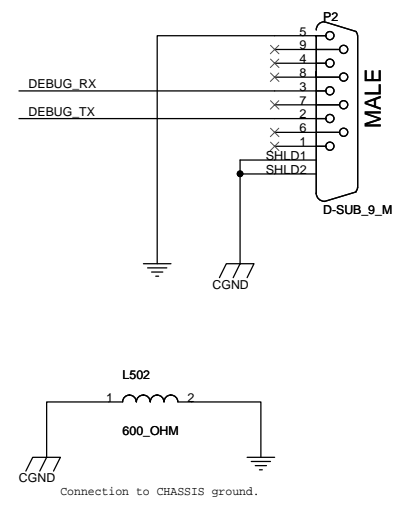
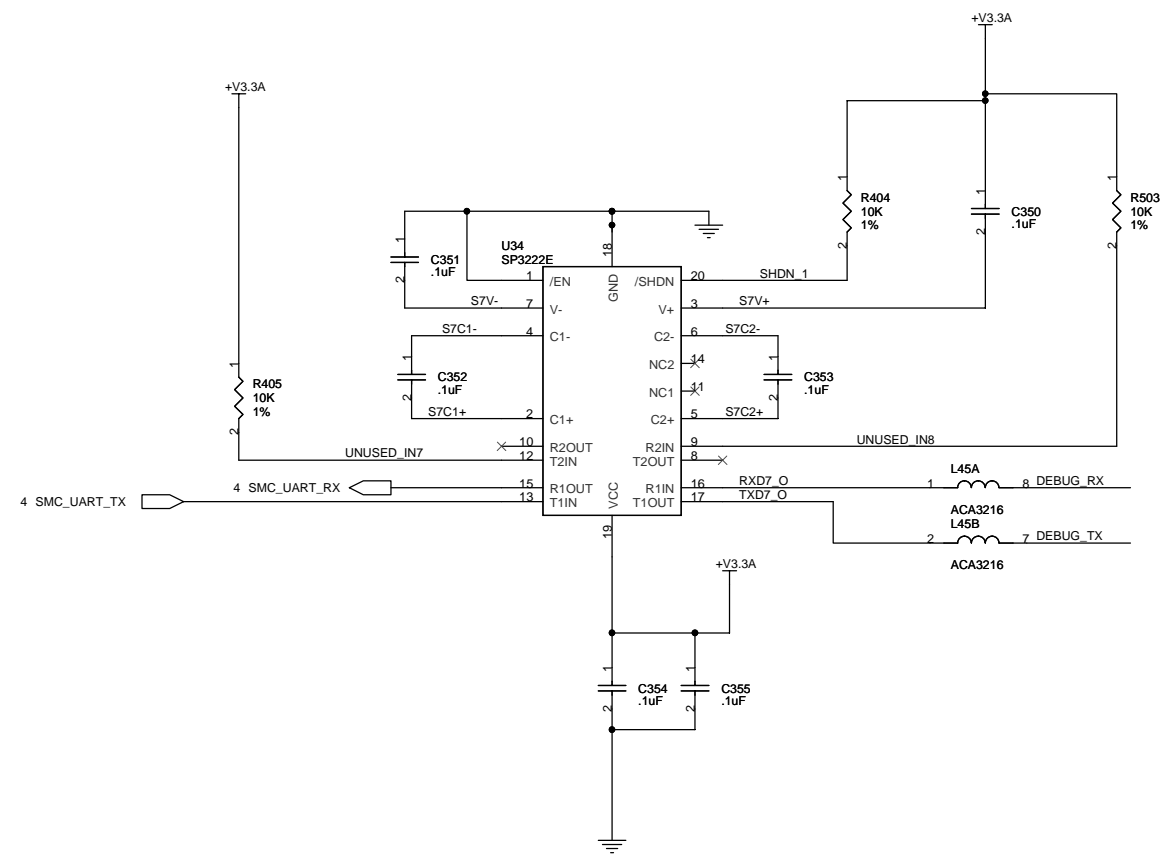


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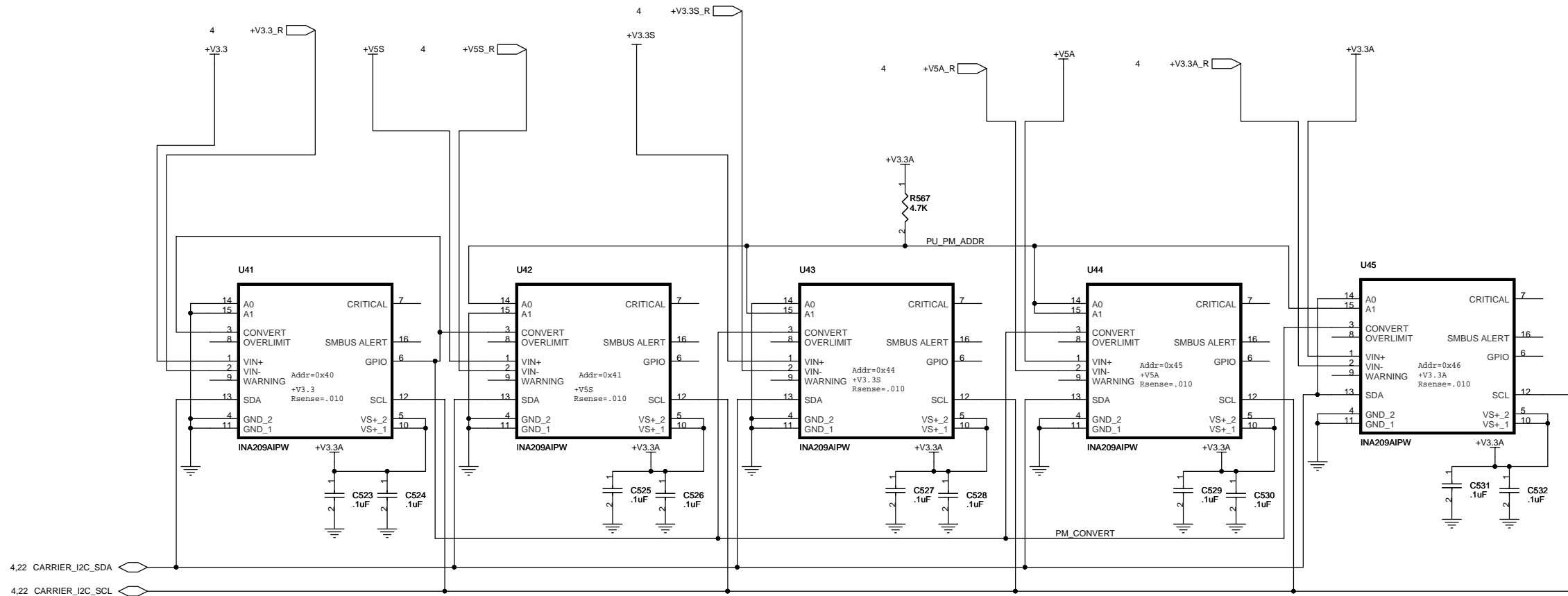


RS-232 driver



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