

REVISION HISTORY

IF IN DOUBT ASK

23 August 2012

0. Initial Release

18 September 2012

1. New Hardware Revision, Colibri Evaluation Board V3.1

2. Unified Interface schematic page

- Swapped the designators of the resistors R89 and R90.

- Swapped the designators of the resistors R100 and R101.

28 September 2013

3. Schematic library and SD Card schematic page

- SD card image has been updated in the schematic library. SD card connector on the schematic page has been updated to reflect the library changes.

21 November 2013

4. USB schematic page

- The NOTE 1 has been added in the schematic page: "It is recommended to assemble 0R resistor instead of 22R for R102 and R103".

04 September 2014

5. All schematic pages

- Schematic page template has been updated.

- "Port Cross Reference" has been added to the project.

- Text comments for not assembled components (NA) have been removed.

- Schematic page numbering has been updated .

6. Revision history schematic page

- Revision history page has been added to the project.

7. Ethernet schematic pages

- The NOTE 2 has been added to the schematic page: "It is recommended to connect SODIMM 191 (ETH\_GND) pin directly to the GND".

04 September 2014

8. New Hardware Revision, Colibri Evaluation Board V3.2

9. Ethernet schematic page

- Jumper JP3 has been added to make Ethernet compatible with future voltage mode line drivers.

10. Camera interface schematic page

- Parallel Camera Interface connector X22 pin-out has been updated.

- The NOTE 3 has been added to the schematic page: "Connector X22 pin-out has been updated to maintain the compatibility with Apalis Evaluation Board".

11. Serial schematic page

- Jumpers JP20 and JP21 have been added to allow RTS and CTS signals of the FF UART to be routed to either connector X27 or connector X25.

- Pull-up resistors R177 and R178 have been added to the UART\_USB\_CTS and UART\_USB\_RXD signals.

12. GPIO schematic page

- Resistors R169 and R170 have been connected to connector X7 instead of connector X9.

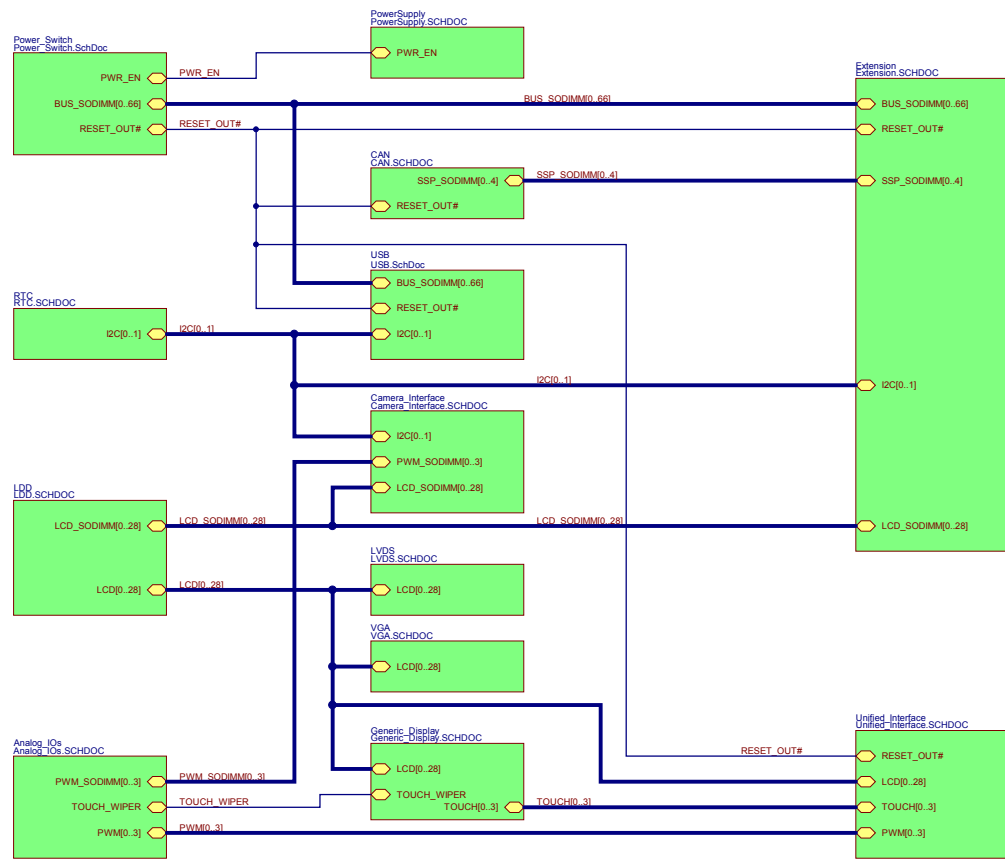
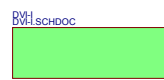
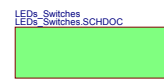
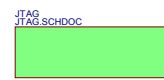
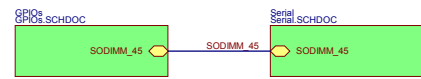
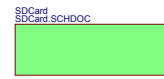
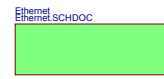
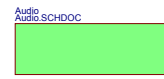
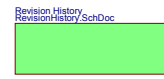
13. CAN schematic page

- Jumpers JP4 and JP5 have been added to allow user to connect or disconnect the CAN controller output signals to the CAN transceiver.

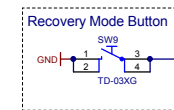
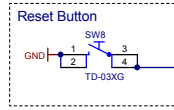
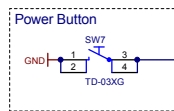
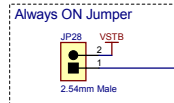
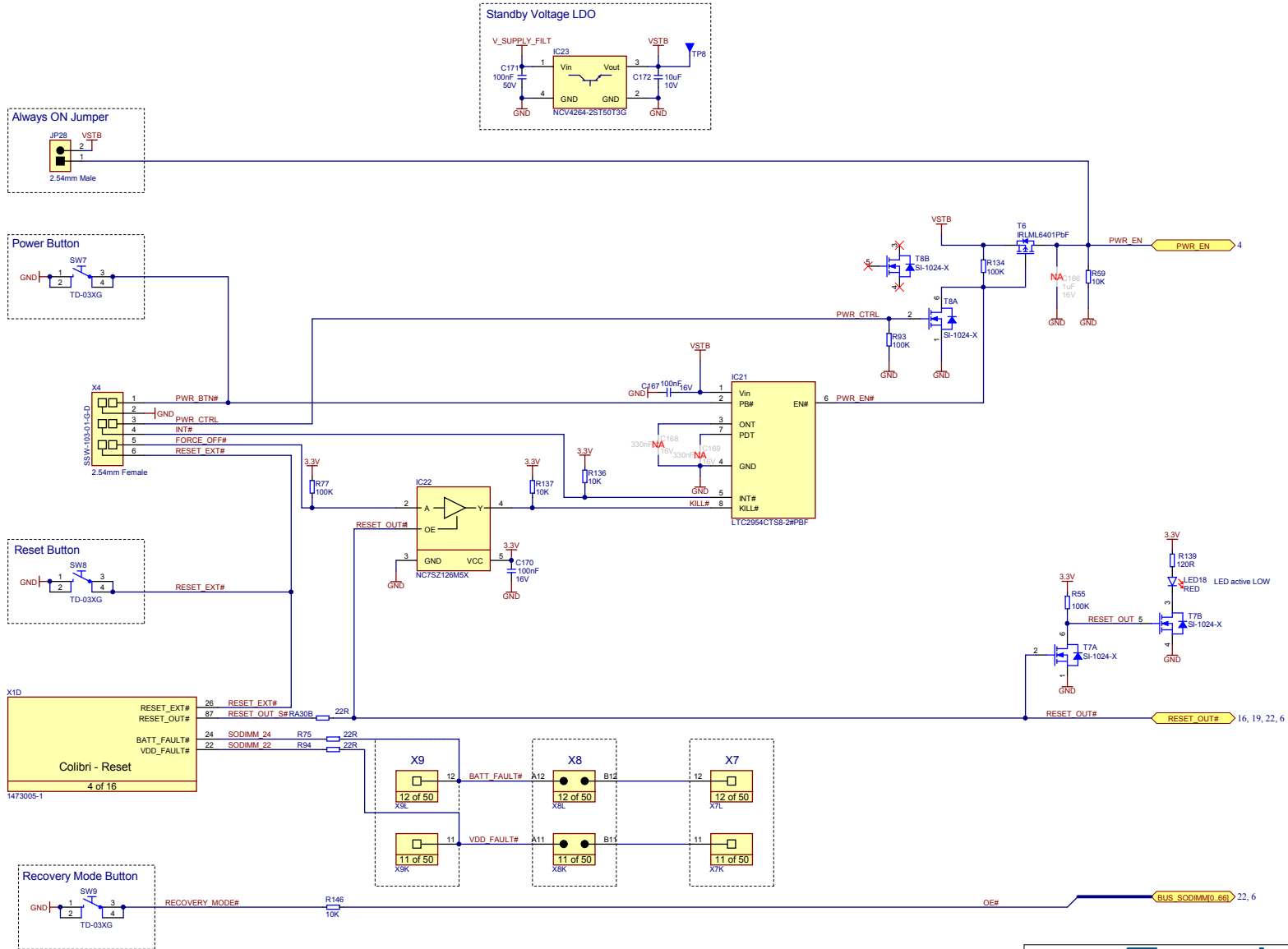
- Connector X38 has been added to the schematic page. It will facilitate user to evaluate/test on-module CAN interface.



Title <b>Evaluation Board 3.2</b>			Toradex AG Altsägenstrasse 5 Horn 6048 Switzerland
Size: A3	Number: 1.	Revision: V3.2	
Date: 9/5/2014	Time: 2:57:02 PM	Sheet 1 of 23	
File: RevisionHistory.SchDoc			



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File: Hardware Architecture.SchDoc			

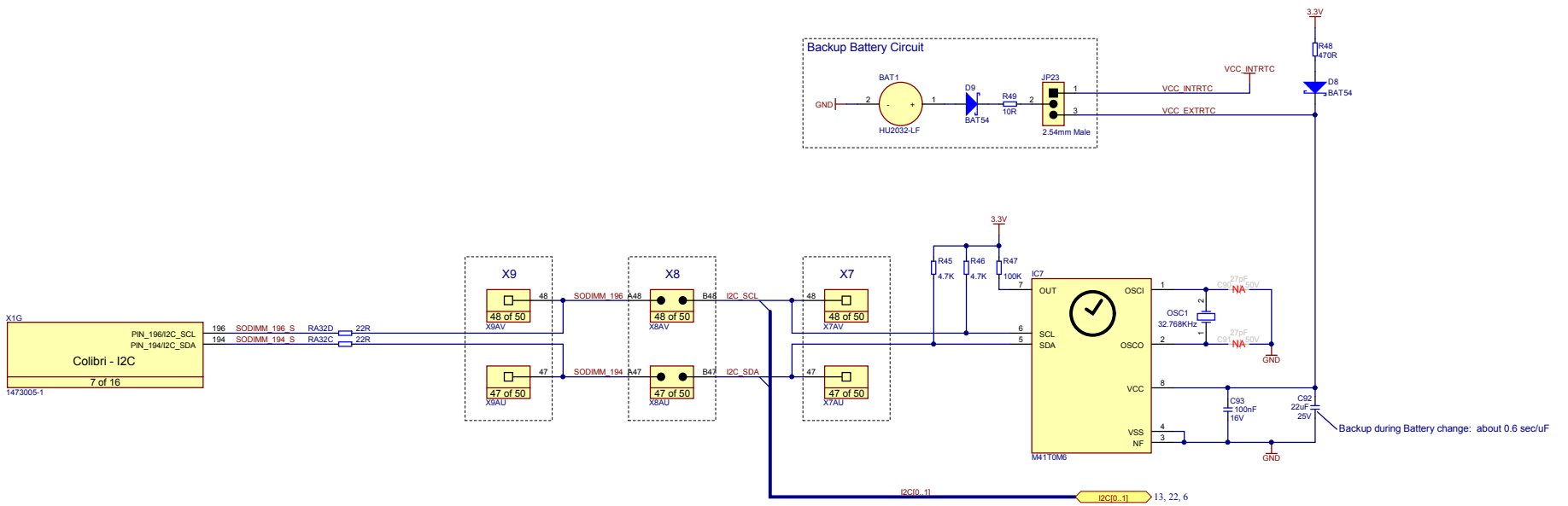


The Recovery Mode is only working with the Colibri T20 module

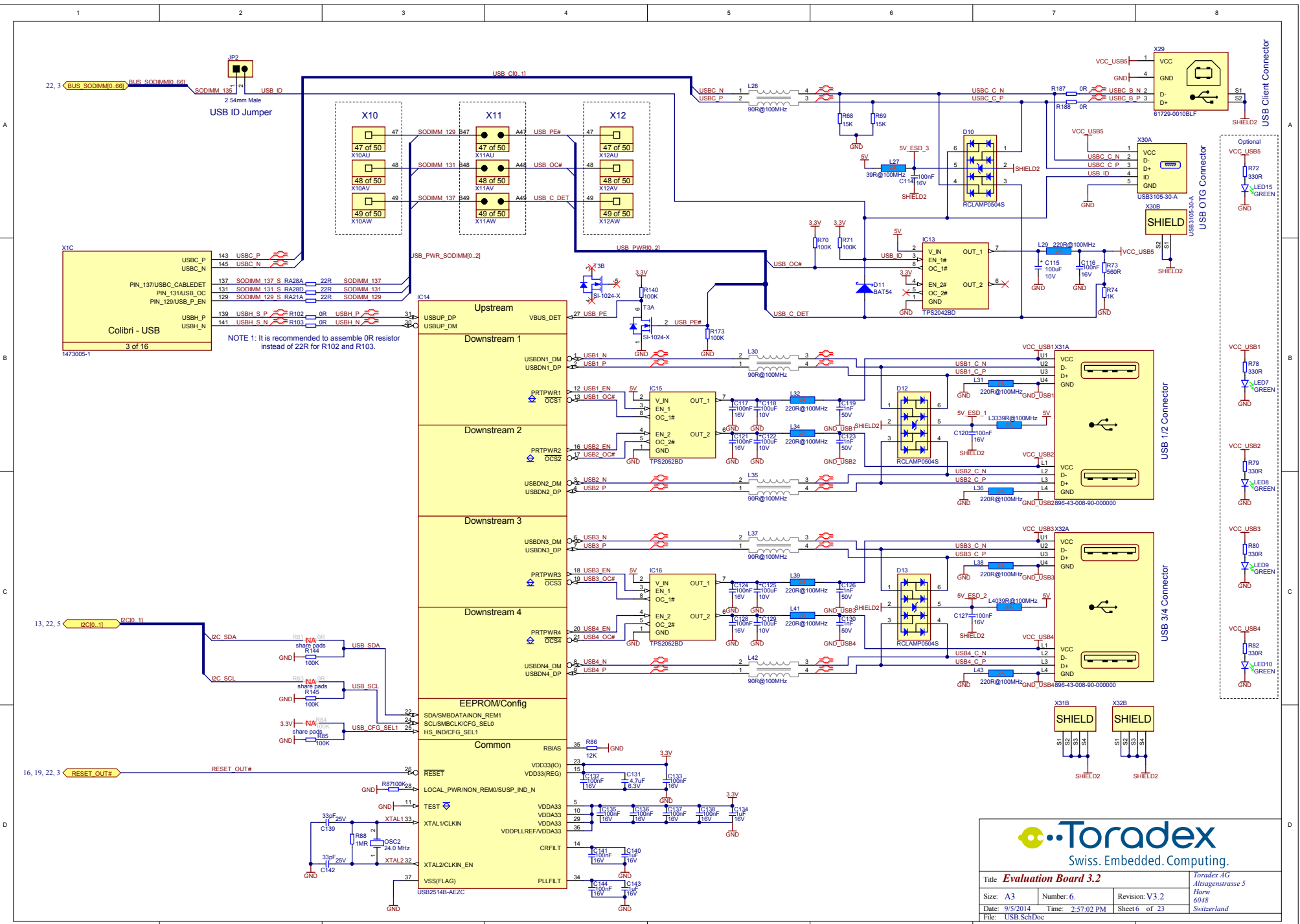
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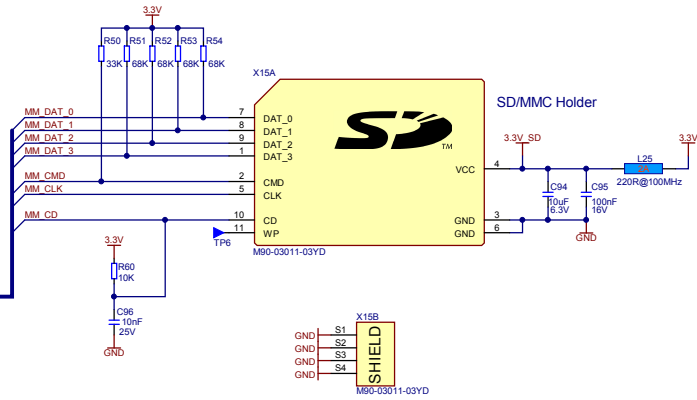
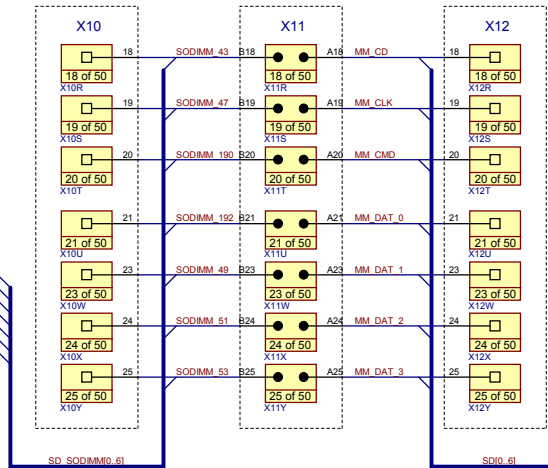
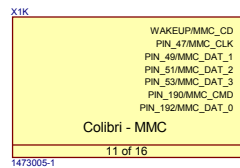


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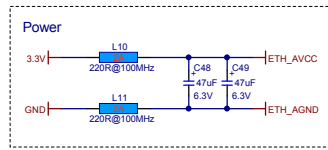
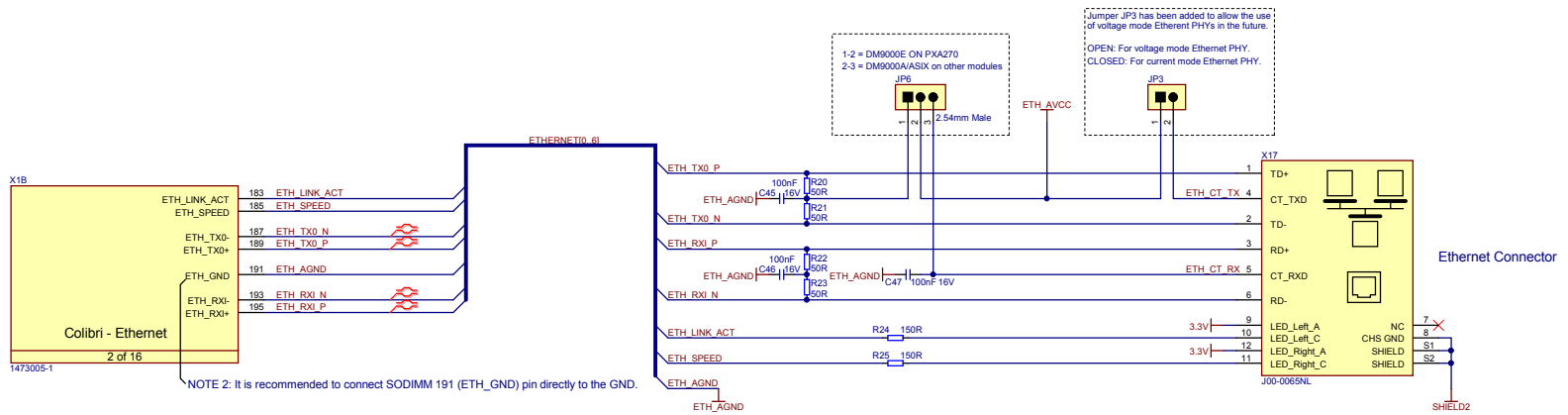


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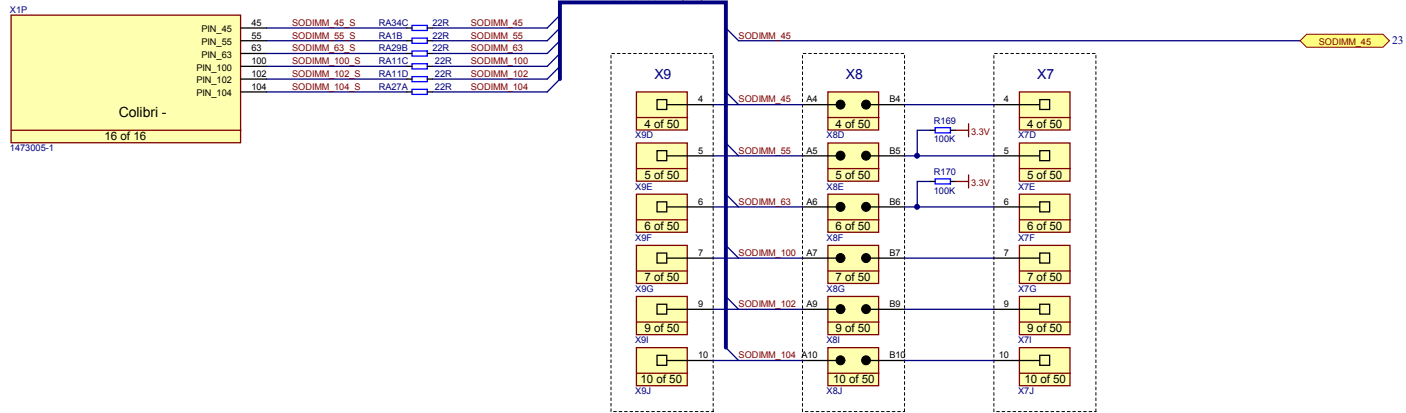


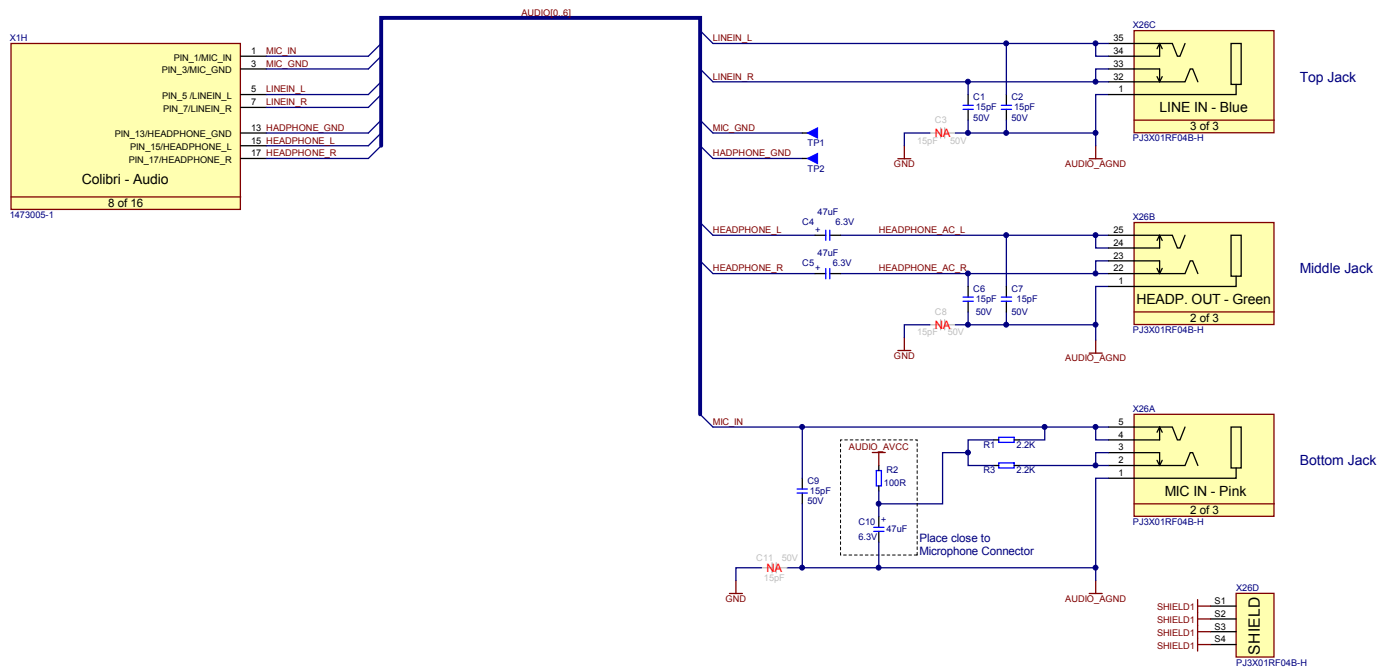
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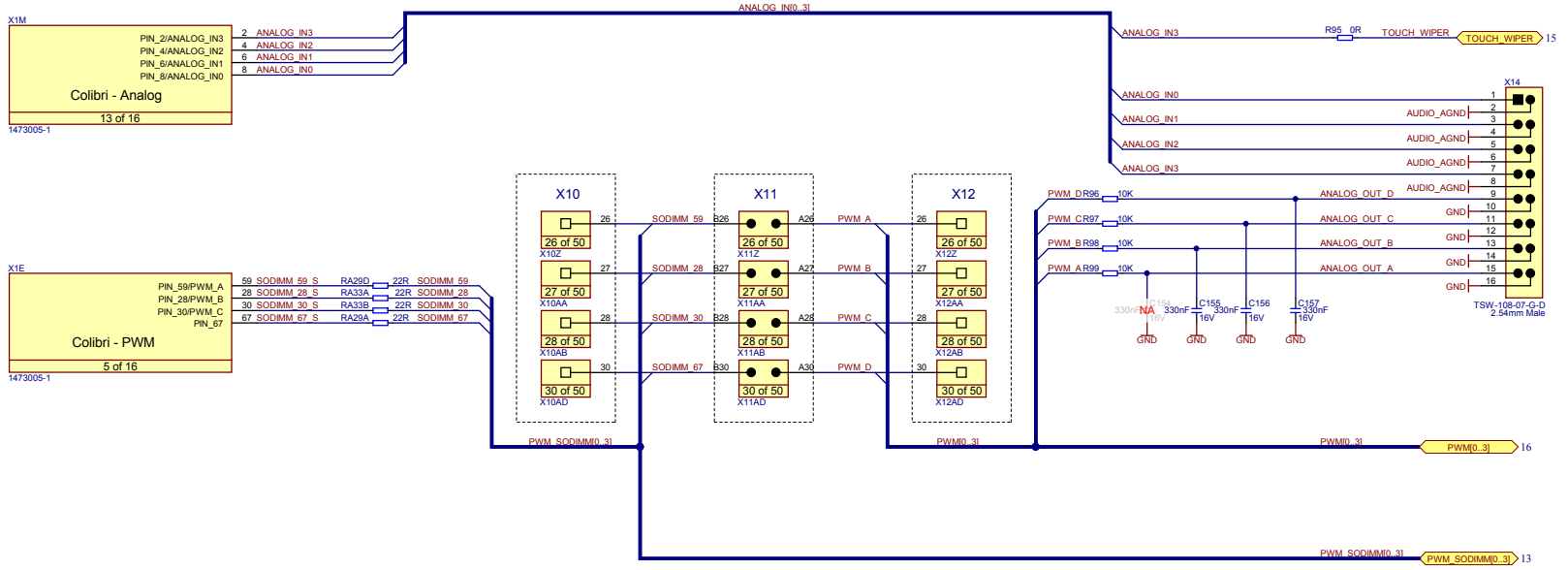


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File: Ethernet.SchDoc			







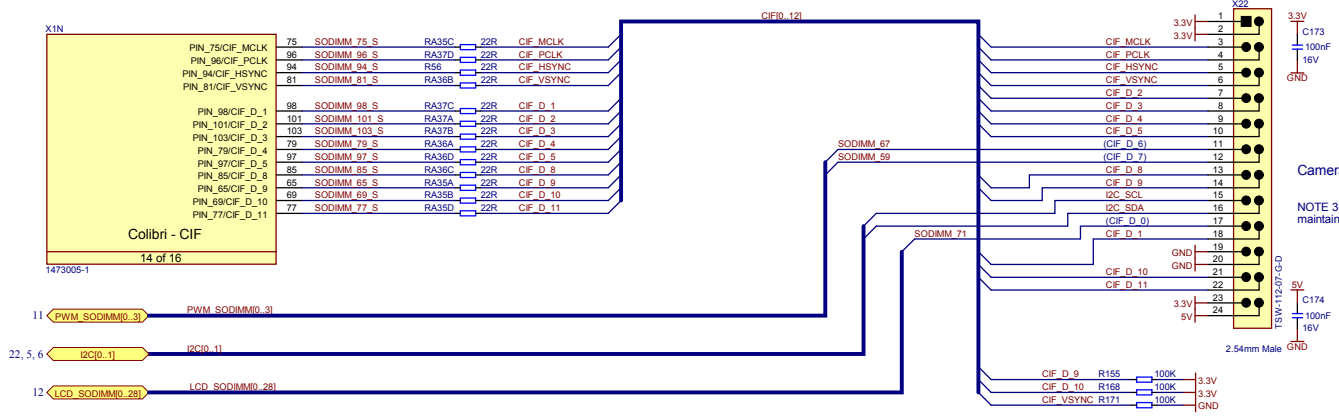


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File: Analog_IOs.SCHDOC			

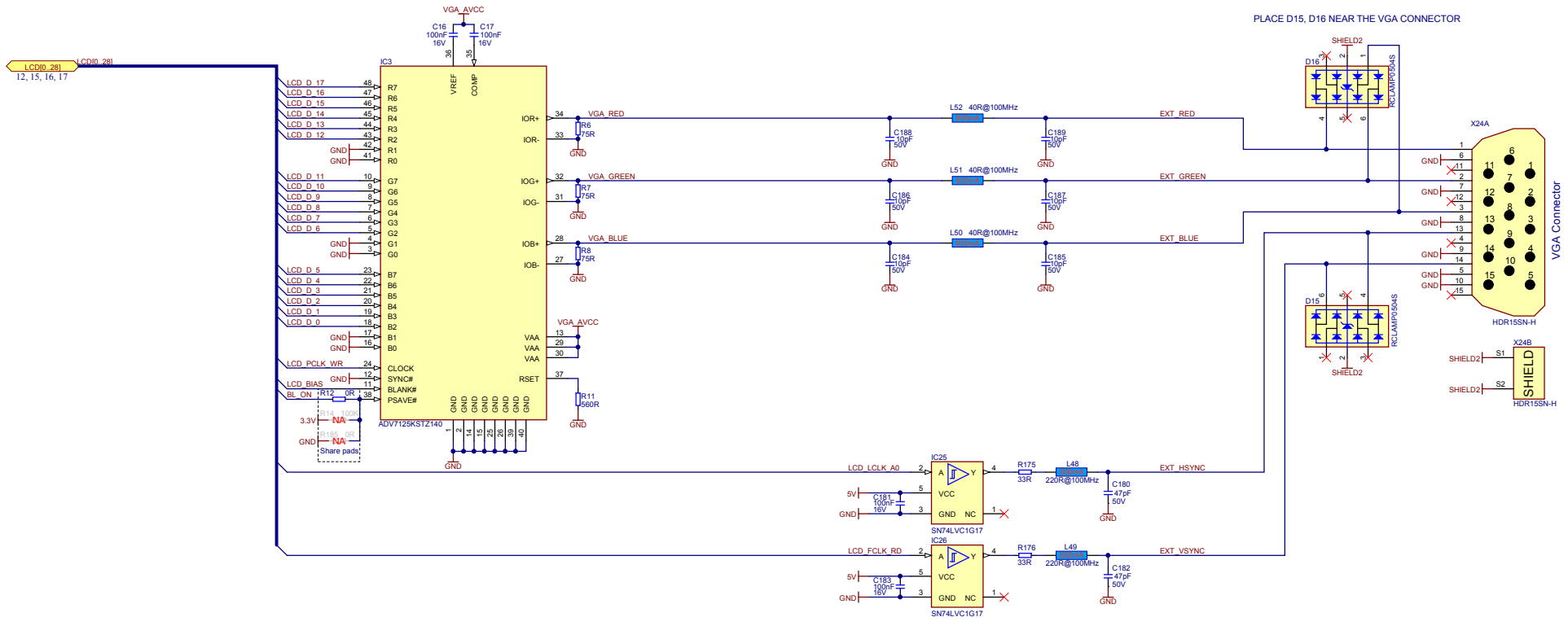
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PIN_44LDD_BIAS	44	SODIMM 44 S	RA4C	22R	SODIMM 44
PIN_46LDD_D_7	46	SODIMM 46 S	RA4D	22R	SODIMM 46
PIN_48LDD_D_9	48	SODIMM 48 S	RAS4	22R	SODIMM 48
PIN_50LDD_D_11	50	SODIMM 50 S	RASB	22R	SODIMM 50
PIN_52LDD_D_12	52	SODIMM 52 S	RAS6	22R	SODIMM 52
PIN_54LDD_D_13	54	SODIMM 54 S	RA5D	22R	SODIMM 54
PIN_56LDD_PCLK_WR	56	SODIMM 56 S	RAS4	22R	SODIMM 56
PIN_58LDD_D_3	58	SODIMM 58 S	RA6B	22R	SODIMM 58
PIN_60LDD_D_2	60	SODIMM 60 S	RA6C	22R	SODIMM 60
PIN_62LDD_D_8	62	SODIMM 62 S	RA6D	22R	SODIMM 62
PIN_64LDD_D_15	64	SODIMM 64 S	RA7A	22R	SODIMM 64
PIN_66LDD_D_14	66	SODIMM 66 S	RA7B	22R	SODIMM 66
PIN_68LDD_LCLK_A0	68	SODIMM 68 S	RAYC	22R	SODIMM 68
PIN_70LDD_D_1	70	SODIMM 70 S	RAYD	22R	SODIMM 70
PIN_72LDD_D_5	72	SODIMM 72 S	RABA	22R	SODIMM 72
PIN_74LDD_D_10	74	SODIMM 74 S	RASB	22R	SODIMM 74
PIN_76LDD_D_0	76	SODIMM 76 S	RABC	22R	SODIMM 76
PIN_78LDD_D_4	78	SODIMM 78 S	RABD	22R	SODIMM 78
PIN_80LDD_D_5	80	SODIMM 80 S	RABA	22R	SODIMM 80
PIN_82LDD_FCLK_RD	82	SODIMM 82 S	RA8B	22R	SODIMM 82
PIN_84LDD_D_16	84	SODIMM 84 S	RA1A	22R	SODIMM 84
PIN_86LDD_D_17	86	SODIMM 86 S	RA2C	22R	SODIMM 86
PIN_88LDD_D_19	88	SODIMM 88 S	RA3D	22R	SODIMM 88
PIN_90LDD_D_20	90	SODIMM 90 S	RA2D	22R	SODIMM 90
PIN_92LDD_D_21	92	SODIMM 92 S	RA1D	22R	SODIMM 92
PIN_94LDD_D_22	94	SODIMM 94 S	RA1C	22R	SODIMM 94
PIN_96LDD_D_23	96	SODIMM 96 S	RA1B	22R	SODIMM 96
Colibri - LDD					
1473005-1					
12 of 16					



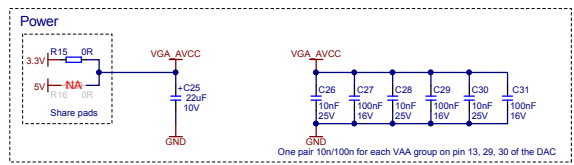
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Date: 9/5/2014	Time: 2:57:03 PM	Sheet 12 of 23			
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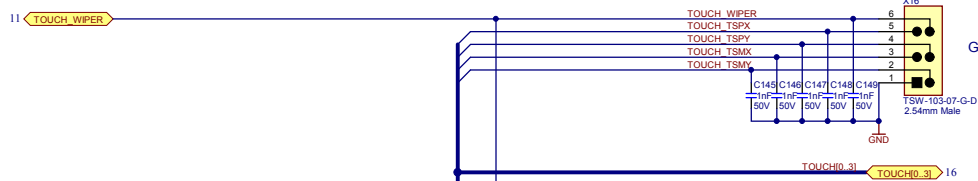
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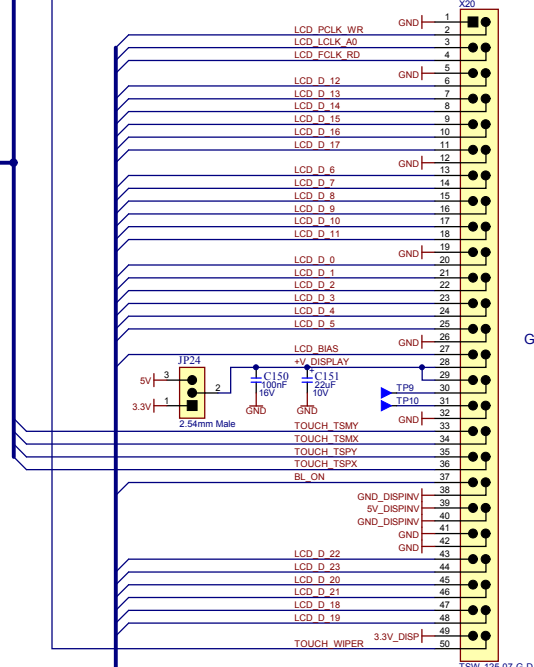
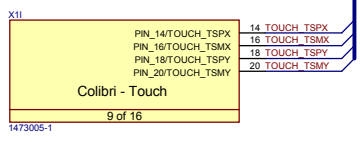
PLACE D15, D16 NEAR THE VGA CONNECTOR



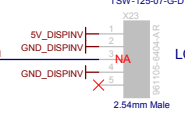
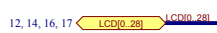
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File: VGA.SchDoc			



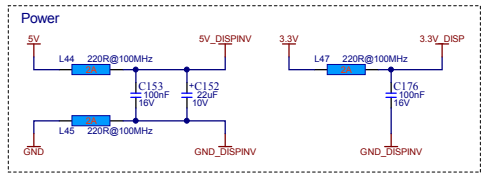
Generic Touch Connector



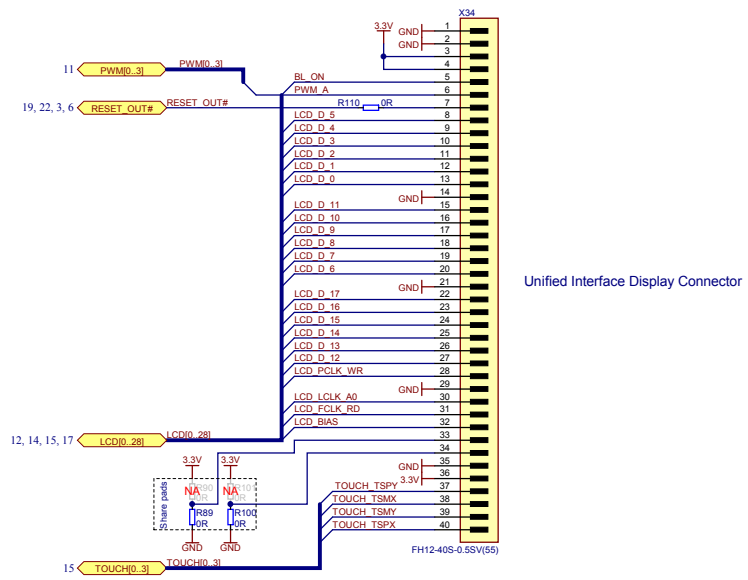
Generic Display Connector



LCD inverter (fits for GH025A(P1))



Title <b>Evaluation Board 3.2</b>		Toradex AG Altsagenstrasse 5 Harz 6048 Switzerland	
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Date: 9/5/2014	Time: 2:57:04 PM	Sheet 15 of 23	
File: Generic_Display_Sch1Dec			

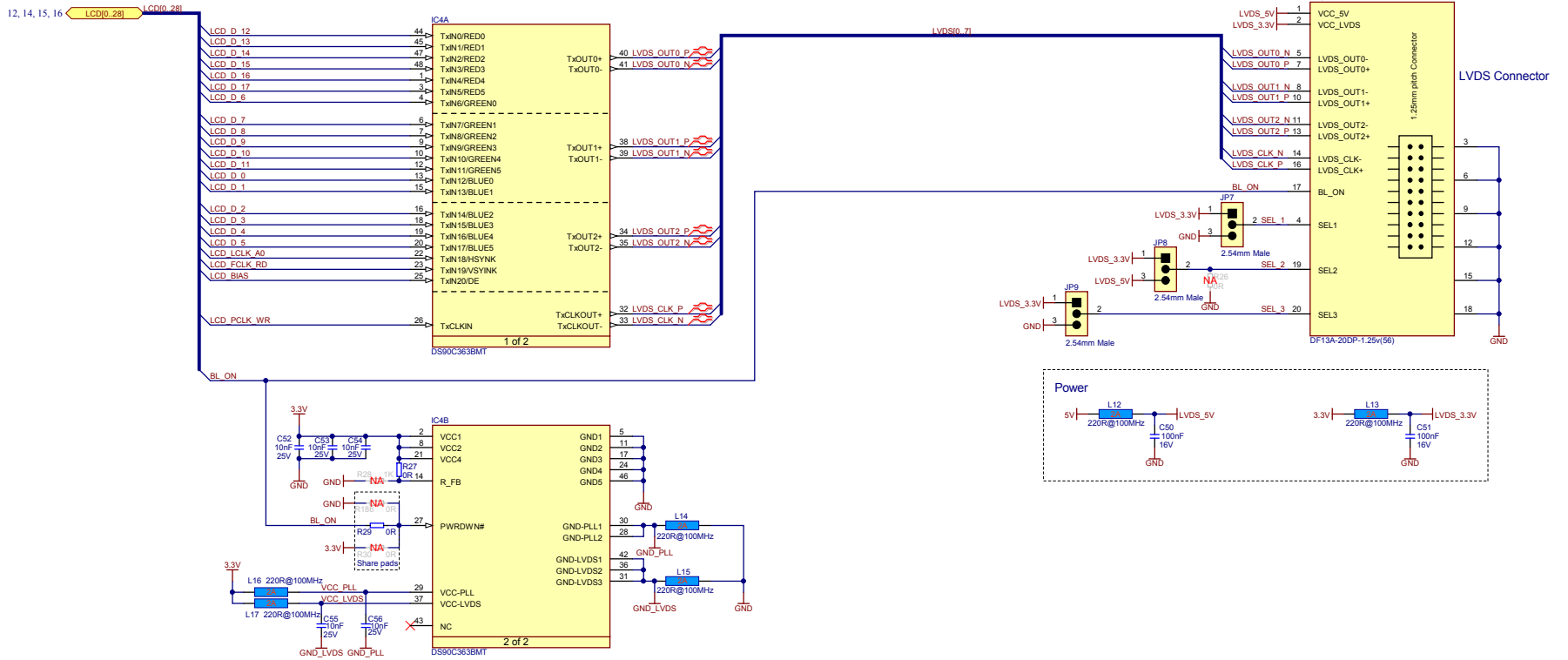


Unified Interface Display Connector



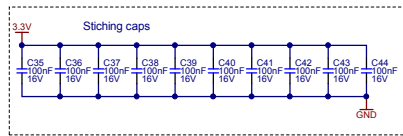
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Date: 9/5/2014	Time: 2:57:04 PM	Sheet 16 of 23	
File: Unified Interface.SchDoc			



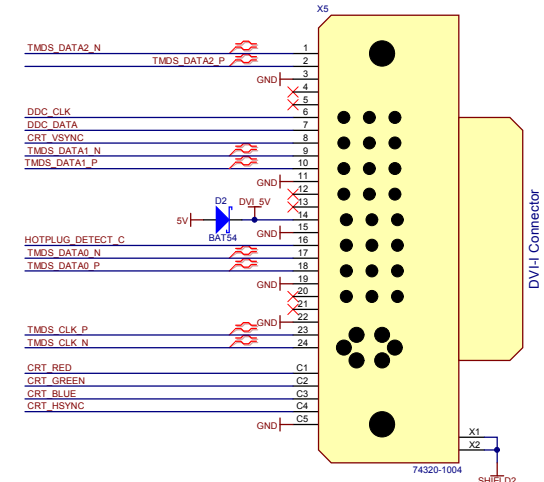


TEGRA DVI-I Connector

FH12-24S-0.5SV(55)

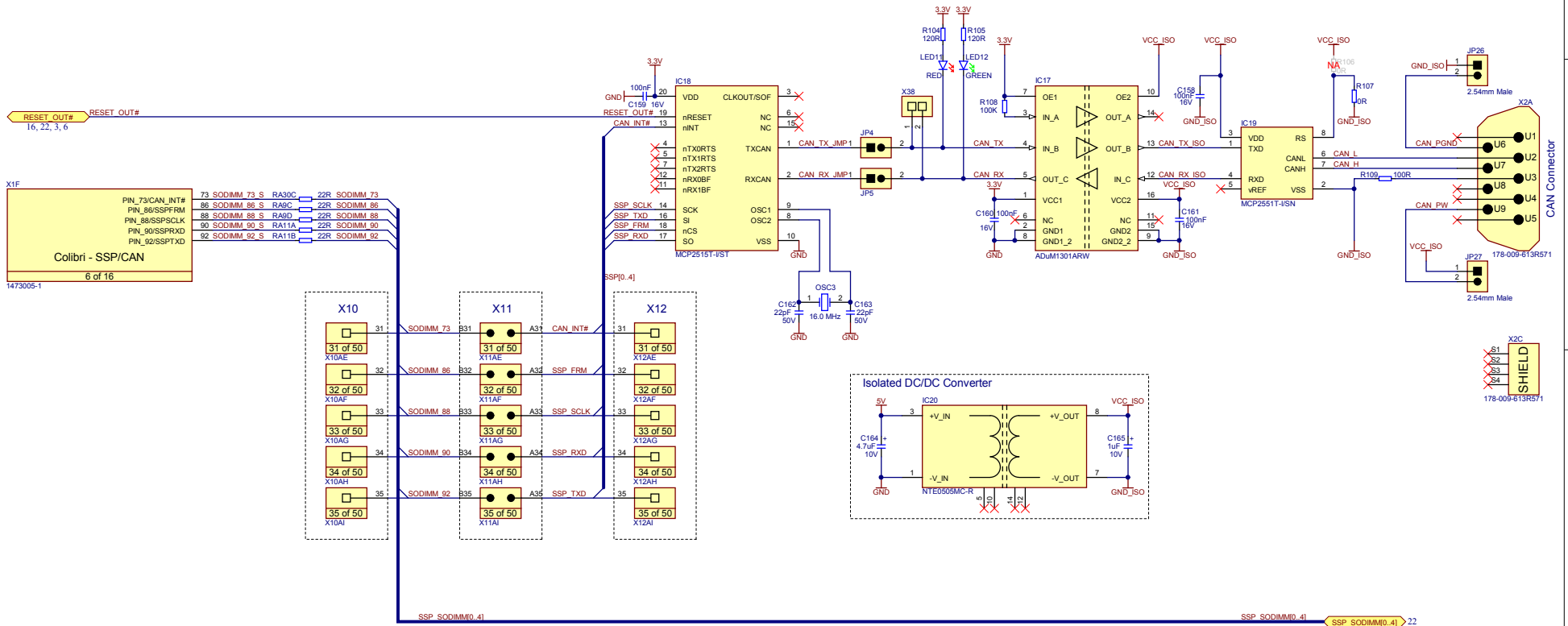


PLACE D1, D3, D4, D5 NEAR THE DVI-I CONNECTOR

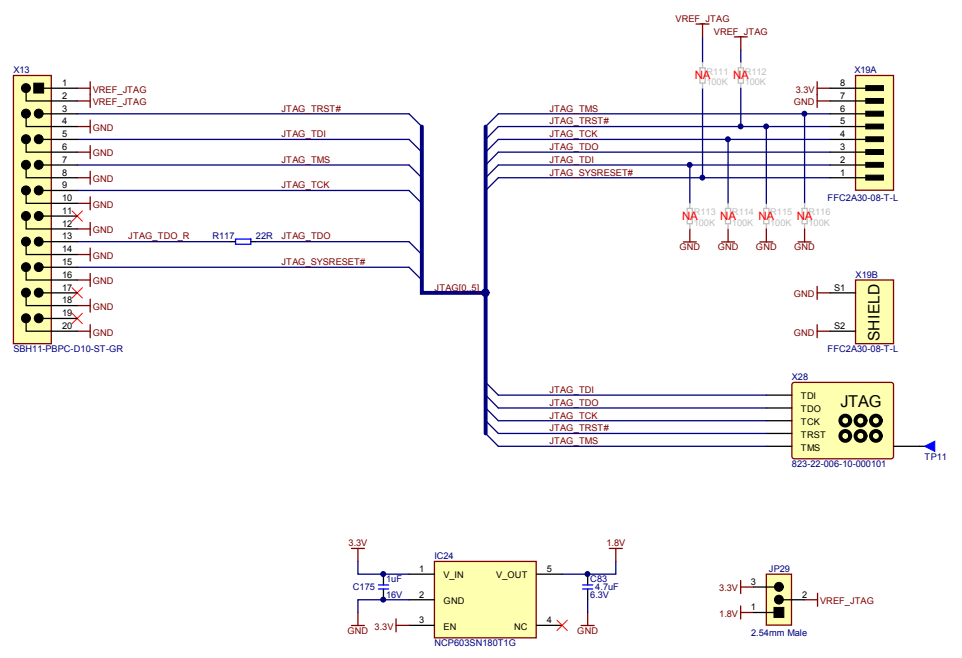


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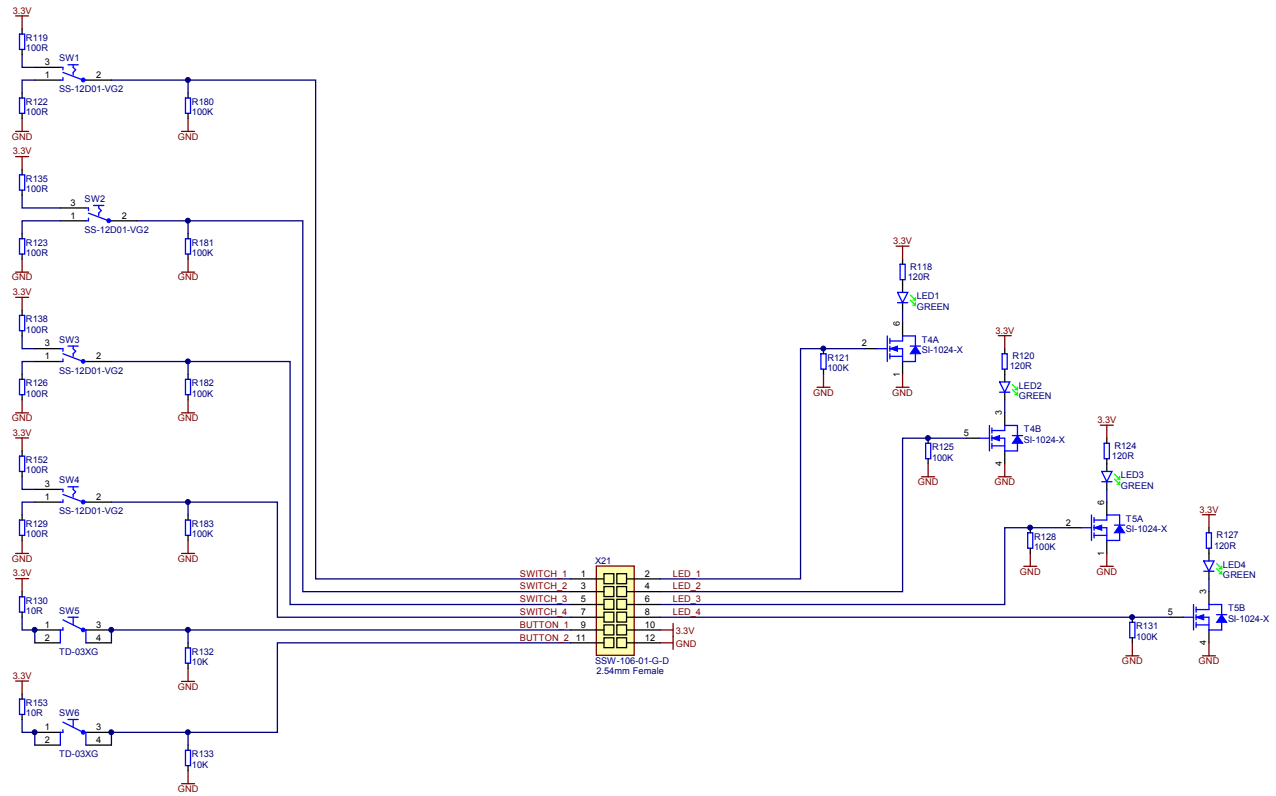


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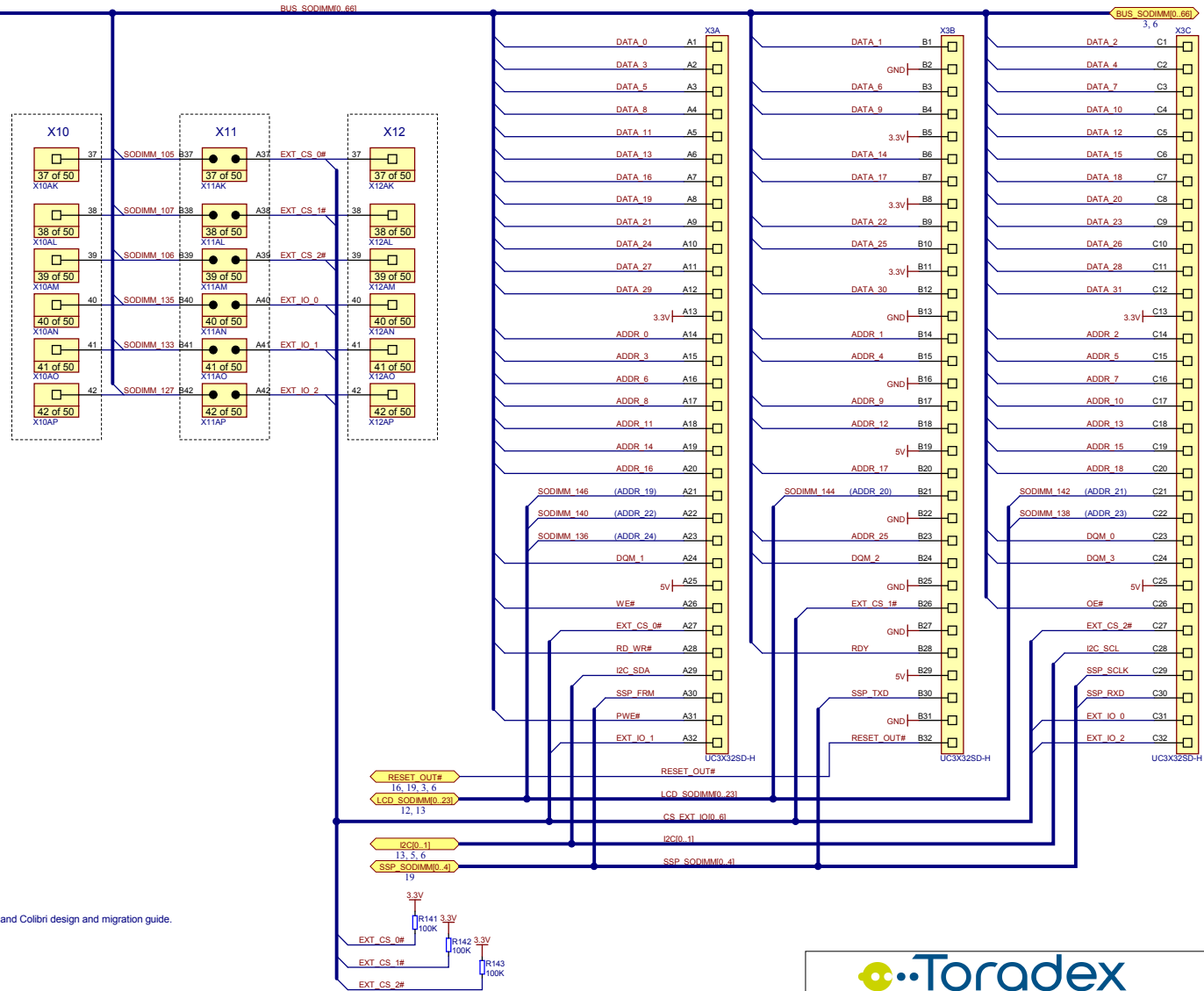


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Title <b>Evaluation Board 3.2</b>			Toradex AG Altsägenstrasse 5 Harv 6048 Switzerland
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Date: 9/5/2014	Time: 2:57:04 PM	Sheet 20 of 23	
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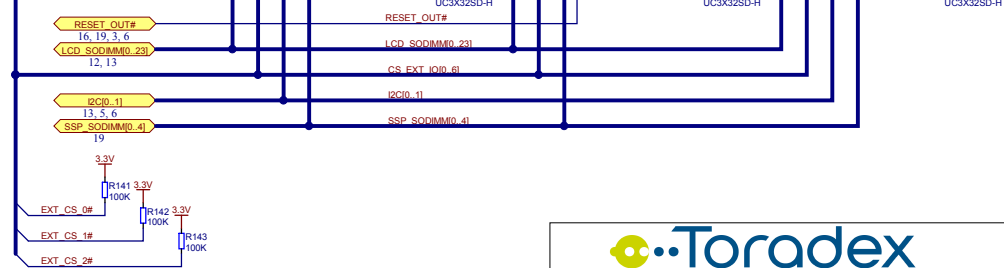


Colibri - BUS	
15 of 16	
DATA0	149 SODIMM 149 S RA12D 22R DATA 0
DATA1	151 SODIMM 151 S RA12C 22R DATA 1
DATA2	153 SODIMM 153 S RA12B 22R DATA 2
DATA3	155 SODIMM 155 S RA12A 22R DATA 3
DATA4	157 SODIMM 157 S RA13D 22R DATA 4
DATA5	159 SODIMM 159 S RA13C 22R DATA 5
DATA6	161 SODIMM 161 S RA13B 22R DATA 6
DATA7	163 SODIMM 163 S RA13A 22R DATA 7
DATA8	165 SODIMM 165 S RA14D 22R DATA 8
DATA9	167 SODIMM 167 S RA14C 22R DATA 9
DATA10	169 SODIMM 169 S RA14B 22R DATA 10
DATA11	171 SODIMM 171 S RA14A 22R DATA 11
DATA12	173 SODIMM 173 S RA15D 22R DATA 12
DATA13	175 SODIMM 175 S RA15C 22R DATA 13
DATA14	177 SODIMM 177 S RA15B 22R DATA 14
DATA15	179 SODIMM 179 S RA15A 22R DATA 15
DATA16	181 SODIMM 181 S RA16D 22R DATA 16
DATA17	183 SODIMM 183 S RA16C 22R DATA 17
DATA18	185 SODIMM 185 S RA16B 22R DATA 18
DATA19	187 SODIMM 187 S RA17A 22R DATA 19
DATA20	189 SODIMM 189 S RA17B 22R DATA 20
DATA21	191 SODIMM 191 S RA17C 22R DATA 21
DATA22	193 SODIMM 193 S RA17D 22R DATA 22
DATA23	195 SODIMM 195 S RA18A 22R DATA 23
DATA24	197 SODIMM 197 S RA18B 22R DATA 24
DATA25	199 SODIMM 199 S RA18C 22R DATA 25
DATA26	201 SODIMM 201 S RA18D 22R DATA 26
DATA27	203 SODIMM 203 S RA19A 22R DATA 27
DATA28	205 SODIMM 205 S RA19B 22R DATA 28
DATA29	207 SODIMM 207 S RA19C 22R DATA 29
DATA30	209 SODIMM 209 S RA19D 22R DATA 30
DATA31	211 SODIMM 211 S RA20A 22R DATA 31
ADDR0	111 SODIMM 111 S RA31B 22R ADDR 0
ADDR1	113 SODIMM 113 S RA31A 22R ADDR 1
ADDR2	115 SODIMM 115 S RA20D 22R ADDR 2
ADDR3	117 SODIMM 117 S RA20C 22R ADDR 3
ADDR4	119 SODIMM 119 S RA20B 22R ADDR 4
ADDR5	121 SODIMM 121 S RA20A 22R ADDR 5
ADDR6	123 SODIMM 123 S RA21D 22R ADDR 6
ADDR7	125 SODIMM 125 S RA21C 22R ADDR 7
ADDR8	127 SODIMM 127 S RA21B 22R ADDR 8
ADDR9	129 SODIMM 129 S RA21A 22R ADDR 9
ADDR10	131 SODIMM 131 S RA22D 22R ADDR 10
ADDR11	133 SODIMM 133 S RA22C 22R ADDR 11
ADDR12	135 SODIMM 135 S RA22B 22R ADDR 12
ADDR13	137 SODIMM 137 S RA22A 22R ADDR 13
ADDR14	139 SODIMM 139 S RA23A 22R ADDR 14
ADDR15	141 SODIMM 141 S RA23B 22R ADDR 15
ADDR16	143 SODIMM 143 S RA23C 22R ADDR 16
ADDR17	145 SODIMM 145 S RA23D 22R ADDR 17
ADDR18	147 SODIMM 147 S RA24A 22R ADDR 18
ADDR19	149 SODIMM 149 S RA24B 22R ADDR 19
ADDR20	151 SODIMM 151 S RA24C 22R ADDR 20
ADDR21	153 SODIMM 153 S RA24D 22R ADDR 21
ADDR22	155 SODIMM 155 S RA25A 22R ADDR 22
ADDR23	157 SODIMM 157 S RA25B 22R ADDR 23
ADDR24	159 SODIMM 159 S RA25C 22R ADDR 24
ADDR25	161 SODIMM 161 S RA25D 22R ADDR 25
CS0#	105 SODIMM 105 S RA31D 22R SODIMM 105
CS1#	107 SODIMM 107 S RA31C 22R SODIMM 107
CS2#	109 SODIMM 109 S RA27B 22R SODIMM 106
PIN_135/EXT_IO[0]	135 SODIMM 135 S RA28B 22R SODIMM 135
PIN_133/EXT_IO[1]	133 SODIMM 133 S RA28C 22R SODIMM 133
PIN_127/EXT_IO[2]	127 SODIMM 127 S RA31B 22R SODIMM 127
DF_WE#/DM3	132 SODIMM 132 S RA25B 22R DQM 3
DF_RE_OE#/DM2	130 SODIMM 130 S RA25A 22R DQM 2
BE1#/DM1	128 SODIMM 128 S RA23D 22R DQM 1
BE0#/DM0	126 SODIMM 126 S RA23C 22R DQM 0
WE#	89 SODIMM 89 S RA30A 22R WE#
OE#	91 SODIMM 91 S RA26D 22R OE#
PIN_93/RD_WR#	93 SODIMM 93 S RA28C 22R RD_WR#
PIN_95/RDY#	95 SODIMM 95 S RA28B 22R RDY
PIN_99/PWE#	99 SODIMM 99 S RA26A 22R PWE#

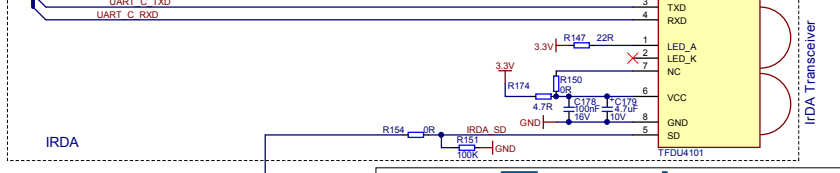
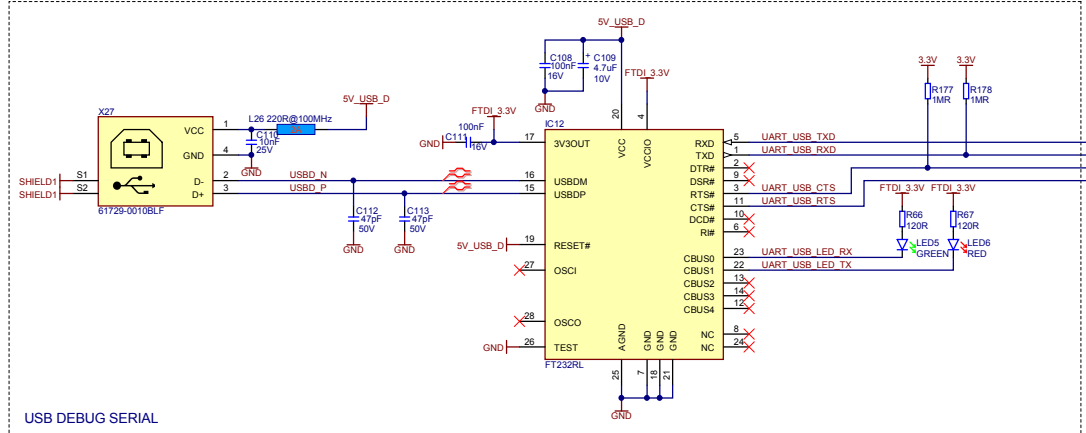
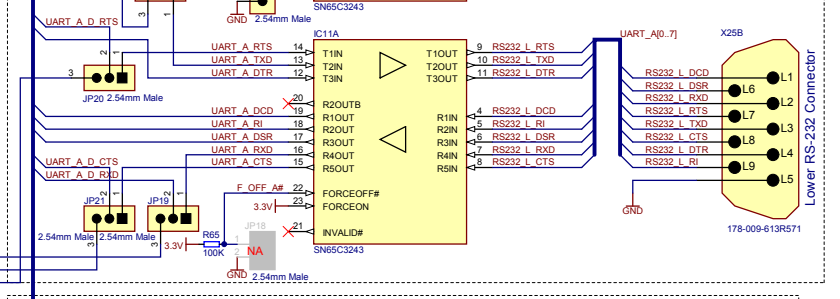
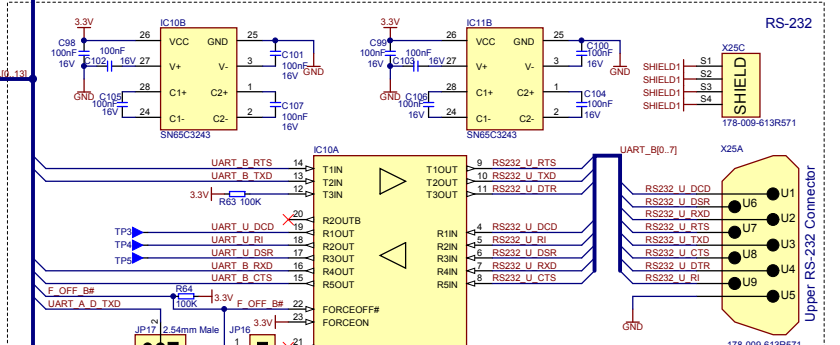
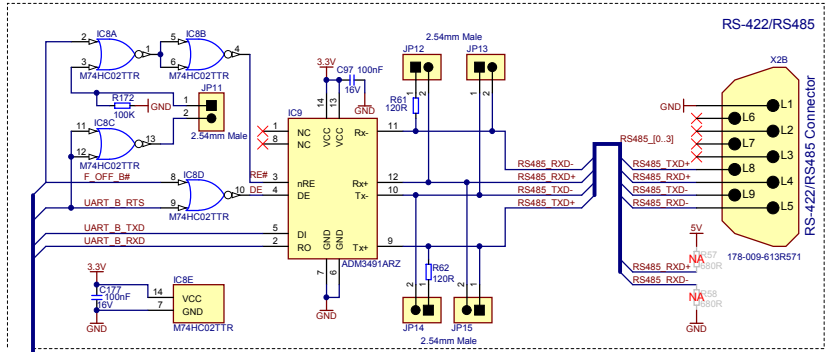
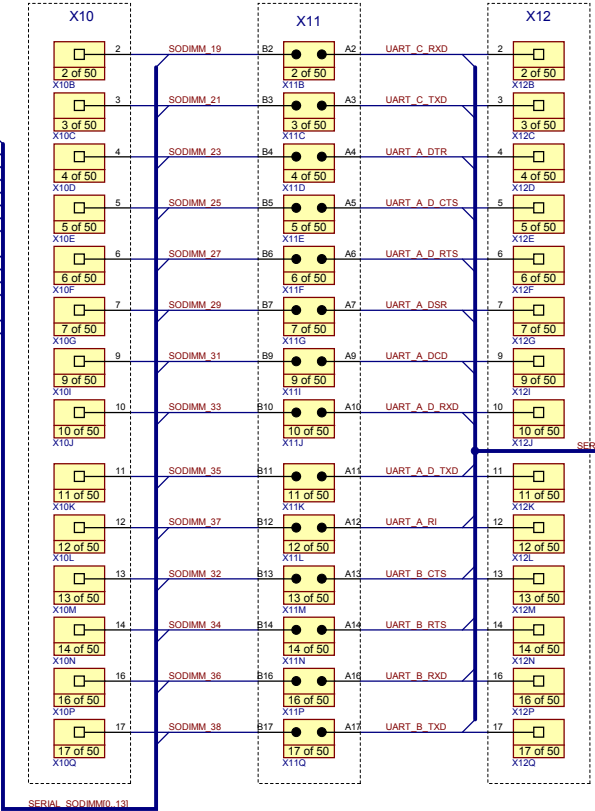
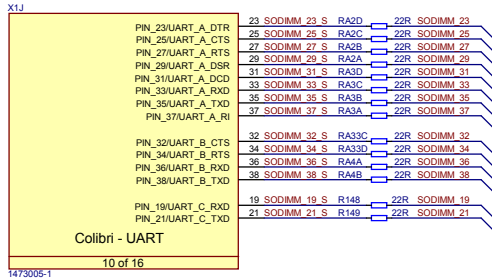


1473005-1

The function of the pins might be different in different modules. Please check the individual module datasheet and Colibri design and migration guide.



Title <b>Evaluation Board 3.2</b>		Toradex AG Allsagenstrasse 5 Horn 6048 Switzerland	
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File: Extension.SCHDOC			



Title <b>Evaluation Board 3.2</b>			Toradex AG Altsagenstrasse 5 Harv 6048 Switzerland
Size: A3	Number: 23.	Revision: V3.2	
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