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Revisions

Rev	Description	Date	Approved
X1	Initial	4-January-11	
X2	Revise	7-January-11	
X3	Revise	12-January-11	
X4A	Revise	14-January-11	
X5	Revise	17-January-11	
X6	Revise	18-January-11	
X7	Revise	19-January-11	
X8	Revise	20-January-11	
X9	Revise	24-January-11	
X10	Revise	27-January-11	
X11	Revise	28-January-11	
X12	Back Annotate	2-Feburary-11	
A	Release	10-Feburary-11	
A1	Revise	15-Feburary-11	
A2	Revise	16-Feburary-11	
A3	Revise	25-March-11	
A4	Revise	28-March-11	
A5	Revise	29-March-11	
A6	Revise	30-March-11	
A7	Revise	1-April-11	
A8	Revise	2-April-11	
A9	Revise	15-April-11	
B	Release	18-April-11	

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ICAP Classification: FCP: FIUO: X PUBI:

Designer: Michael Steffen	Drawing Title: **TWR-S08UNIV**	
Drawn by: Jun Qiao	Page Title: **TITLE PAGE**	
Approved: RA6329 & R80133	Size C / Document Number SCH-27005 PDF: SPF-27005	Rev B
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CHANGE NOTES
REV X1: Initial
REV X2:
1) Re-number the daughter card interface;
2) C13 is changed to 0.1uF;
3) Change the 12 net connections to the Daughter Card Interface FROM: ELEC_IN0 through ELEC_IN11 TO: ELEC_OUT0 through ELEC_OUT11;
4) Add I2C pull-up resistors (4.7k) to VDD on nets SDA, SCL;
5) Change the separate RED, GREEN, BLUE LEDS back to the original suggested RGB (OSRAM) LED;
6) Replace J3, J17, J19 with a 2-position DIP switch;
7) Replace U6 (TXB0108) IC with U7, U8 (SN74LVC1T45).
REV X3:
1) Use one J1 for daughter card interface;
2) Re-route ELEC_OUTx;
3) Use the net labels TXD_ELEV, RXD_ELEV;
4) Re-route DIP8 switch;
5) Insert one 0 ohm resistor from VDD to J1-33, 34;
6) Re-route 60 pin header;
7) Add pseudo DAC circuitry;
8) Re-route 8 pin header.
REV X4A:
1) Un-short 61, 62, 67 and change net color back to RED after their un-shorted;
2) Move R7 to pin J1-6 and J1-44;
4) Swap these two net names on J2-22(GPIO_AD_2) and J2-41(GPIO_KBI_TPM_AD_ACMP-);
5) Move GPIO5TPM to PIN J1-42, and GPIO4TPM to PIN J1-41;
6) Change "MCU USER INTERFACE" to "MCU USER CONNECTOR;
7) Remove net RSTO from J8,J9,J6;
8) Remove nets GPIO8,GPIO7 from J10;
9) Configure the TWRPI sockets with the level shifters.
REV X5: Change U9-4 net name to RXD_ELEV and U8-4 net name to TXD_ELEV.
REV X6: Change U5 into an adjustable regulator and add power rectifier to prevent draw-back current when 3.3V is supplied by user.
REV X7:
1) Remove net RSTO from J1-68 and Elevator;
2) Add net MCU_RESETB to J2-7;
3) Add (as needed) level shifters (TXS0108) for these signals (SDHC_CS0, SDHC_CS1, SPI_CS0, SPI_CS1) for the TWR J12A;
4) Add connections to ELE_MISO, ELE_MOSI, ELE_SCLK, ELE_SDA, ELE_SCL, ELE_ANA0, ELE_ANA1, ELE_ANA2, ELE_GPIO4TPM, ELE_GPIO5TPM;
5) Remove the unconnected signals from elevator;
6) Remove the useless signals for channel B of MIC2026.
REV X8: Remove MCU_RESETB from Elevator.
REV X9: Swap pins of J2 in order to match with J11: J2-12 swap with J2-3, J2-14 swap with J2-5, J2-16 swap with J2-7, J2-18 swap with J2-9, J2-20 swap with J2-11, J2-22 swap with J2-13, J2-24 swap with J2-15, J2-26 swap with J2-17
REV X10:
1) D7 is changed from LRTB_G6SG to HSMF-A341-A00J1;
2) Change resistors R38, R39 to 1% resistors;
3) Change R5 and R6 to 10k, 1% resistors;
4) Change C12 to 1uF capacitor;
5) Change R21 to 9.09k 1% resistor;
6) Change R27 to 1k 1% resistor;
7) Pin swaps on U17.
REV X11: Pin swaps on J11, J2, U15 and U16.
REV X12: Back Annotate.
REV A: Release
1) Add default setting for SW1 and SW2.
REV A1: Swap nets to the pins of J3: J3-25 swapped with J3-41, J3-24 swapped with J3-22, J3-22 swapped with J3-23, J3-20 swapped with J3-19, J3-26 swapped with J3-20
REV A2: Move GPIO4TPM to J3-67.
REV A3:
1) Add routing the output of the DAC to J12-6;
2) Add R52 and R53 to pull up I2C lines;
3) Change R36 to 287ohm.
REV A4:
1) Remove Q1 and R26, redraw the beeper circuit;
2) Add J13 (DNP) across R3;
3) Change label TP3 to DAC, change labels TP1,TP2,TP4 to GND;
4) Change the JM60 power supply 5V rails to be un-switched.
REV A5: Change the power rail for resistor on MCU_IDx.
REV A6: Add some black text next to these signals on the J3 and J12 Header.
REV A7:
1) Swap the nets on J12-45(GPIO_TPM_RSTO) and J12-57 (VCC5VSW);
2) Add GPIO_TPM_RSTO to Elevator PRIMARY A63.
REV A8: Connect VDDAD, VREFH nets after R3.
REV A9: BDM REV configuration (R11 to R16) is changed.
REV B: Release.

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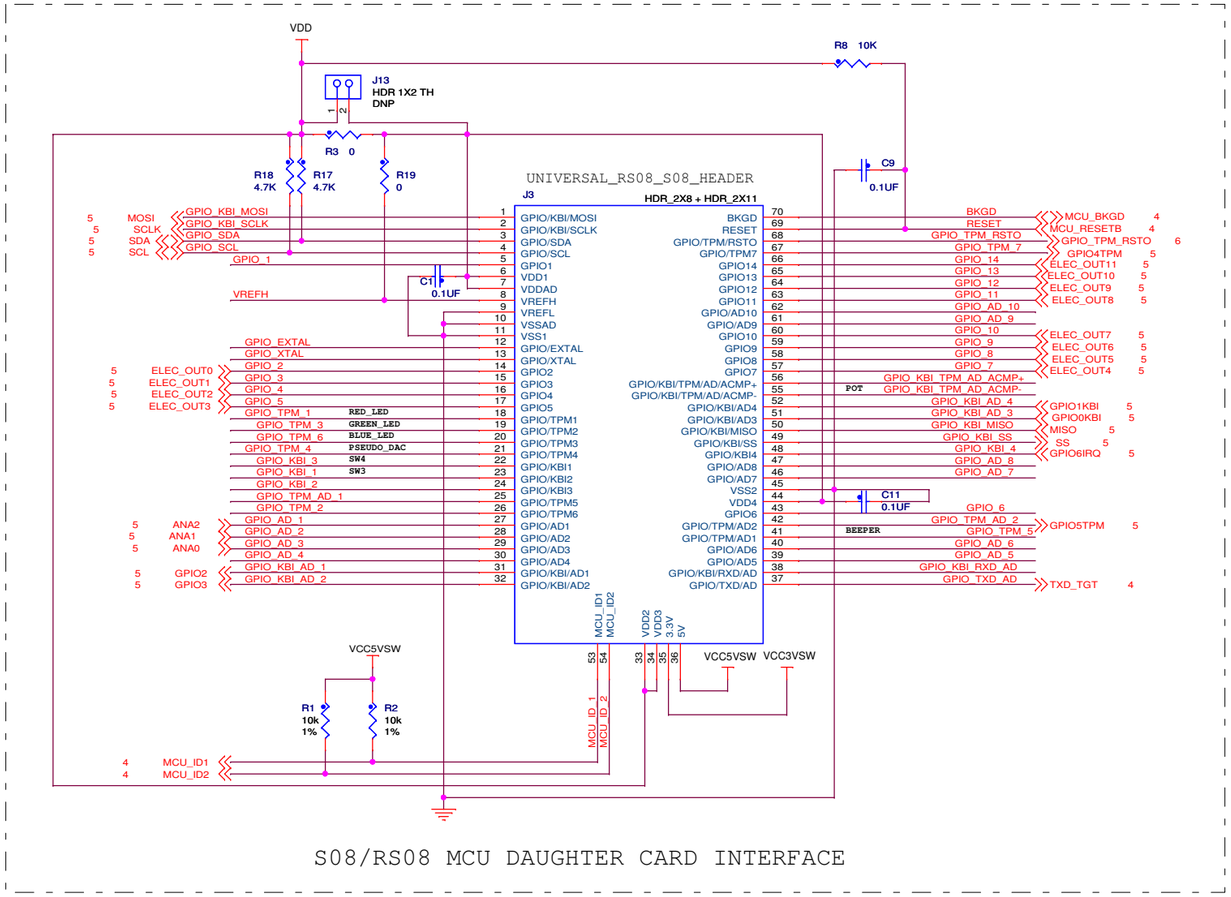

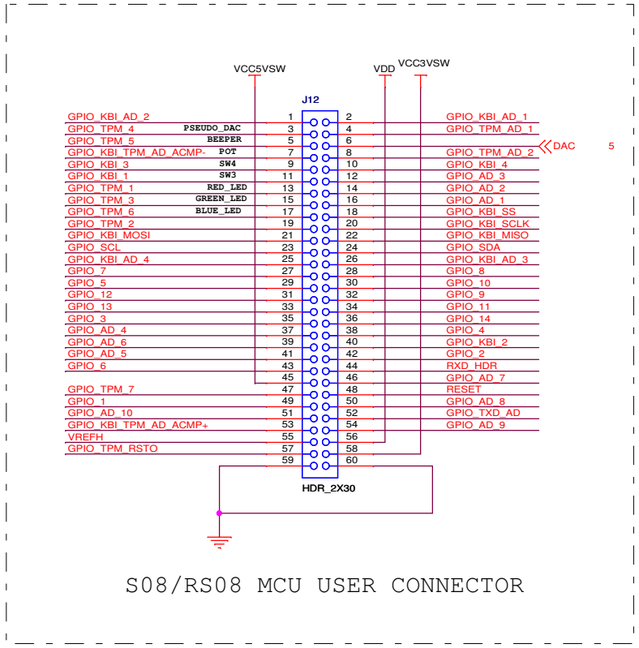

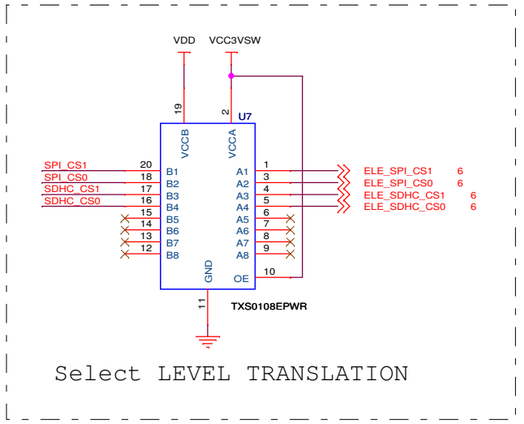

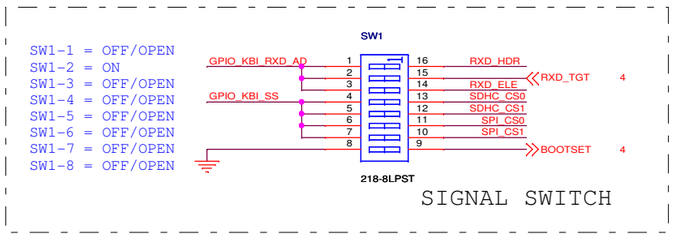

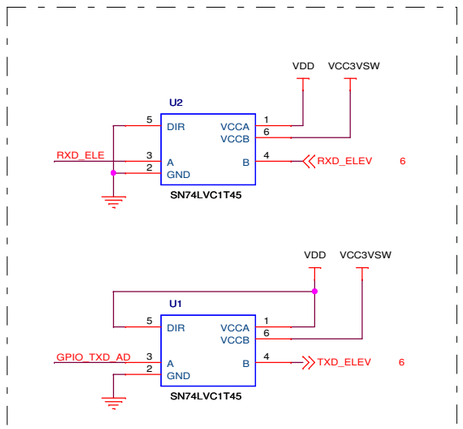

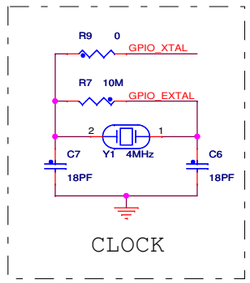

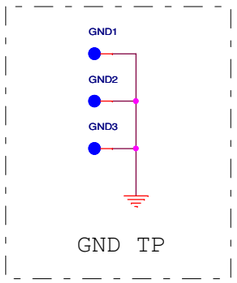

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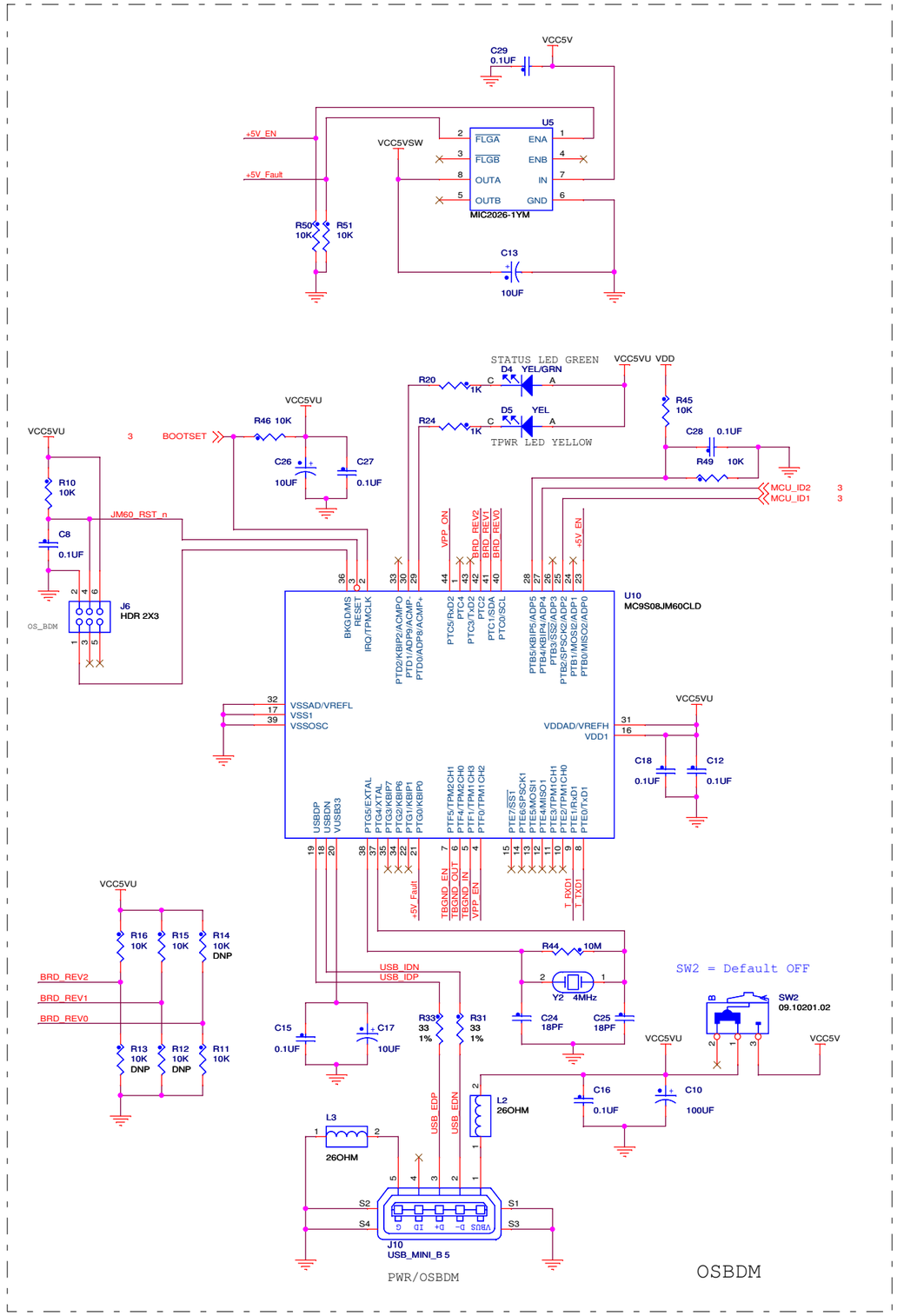

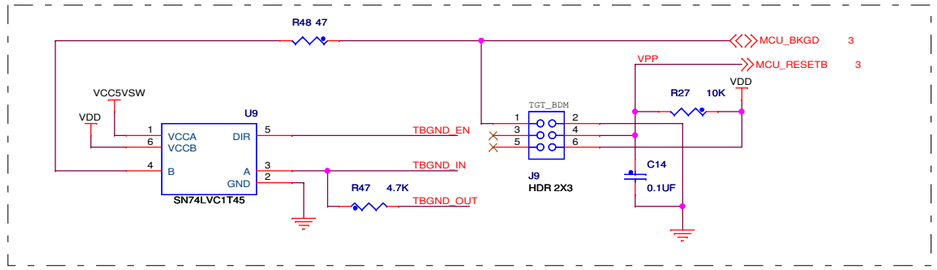

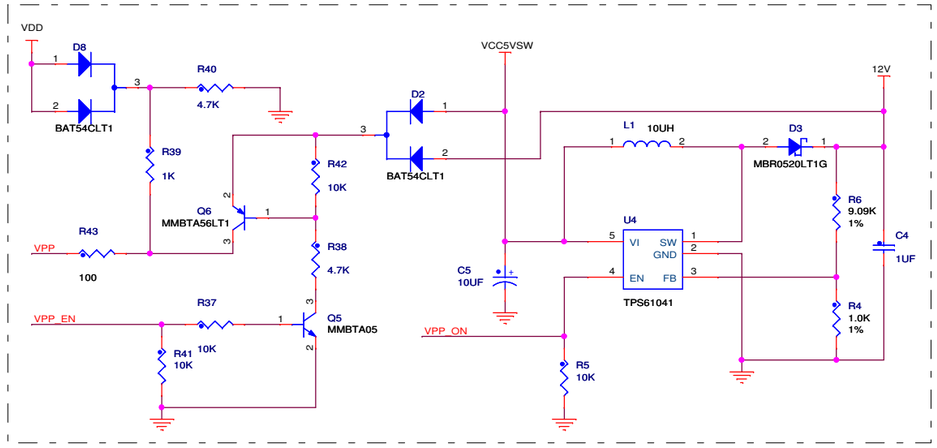

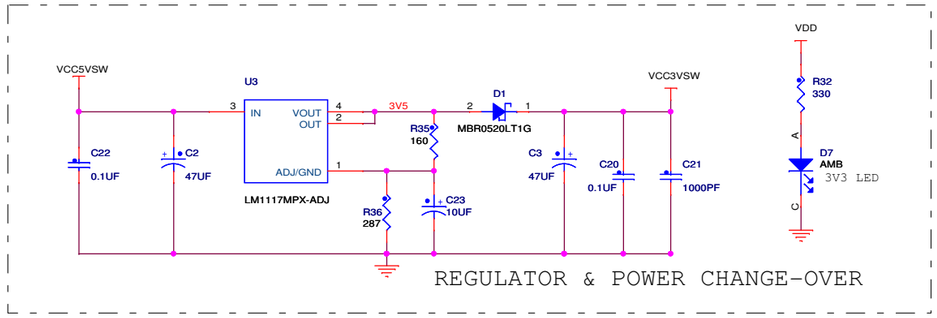

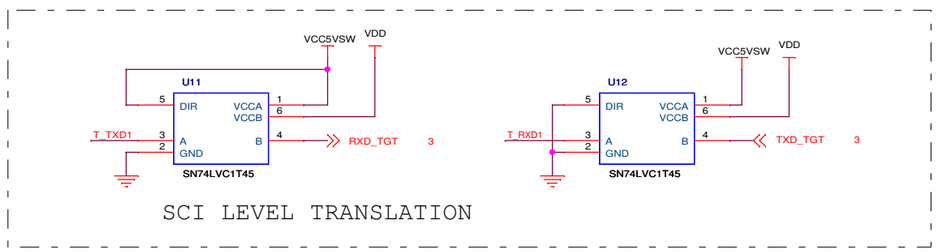

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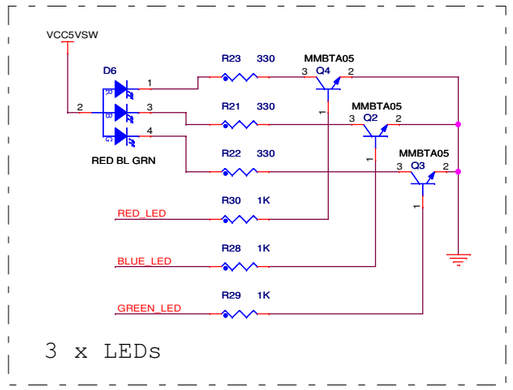

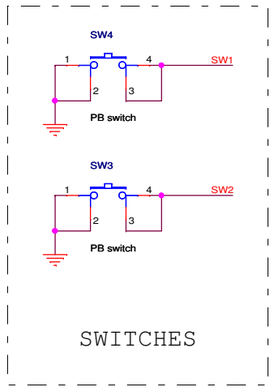

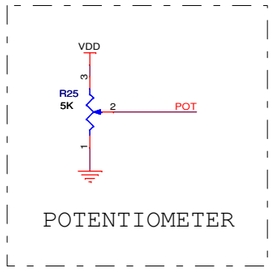

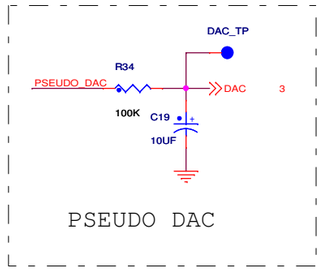

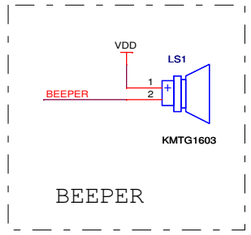

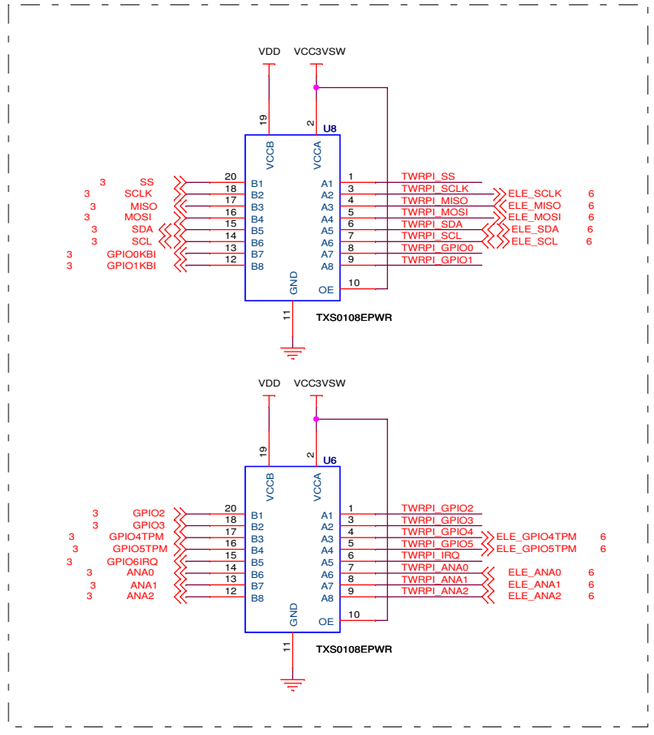

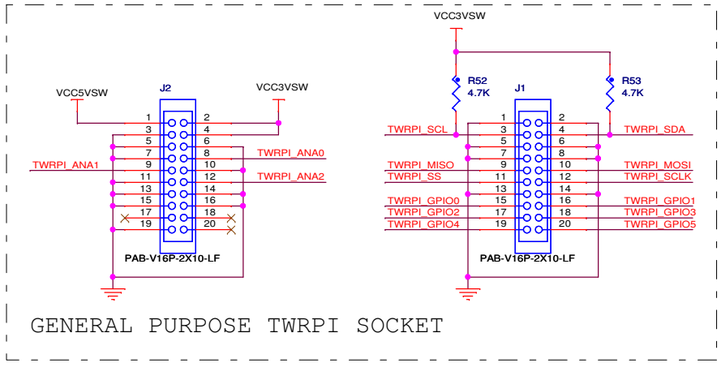

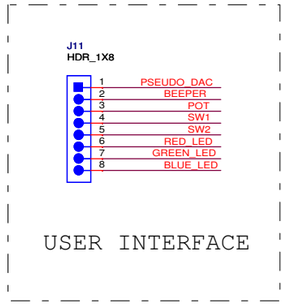

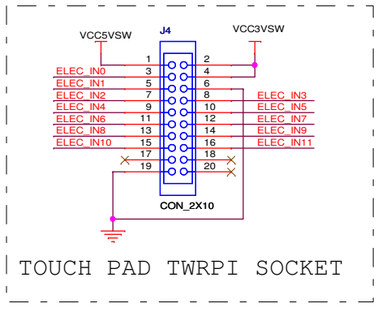

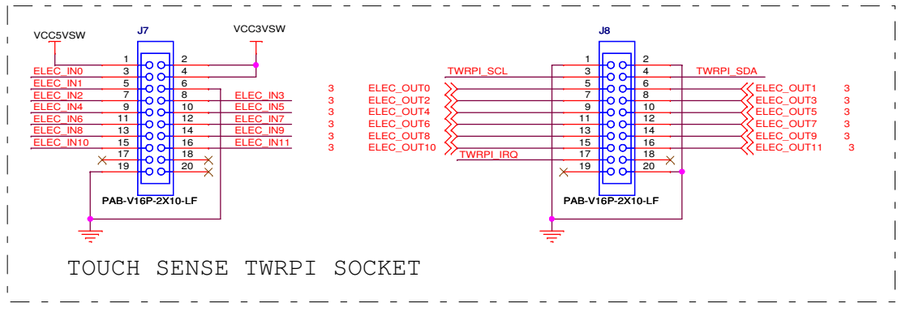

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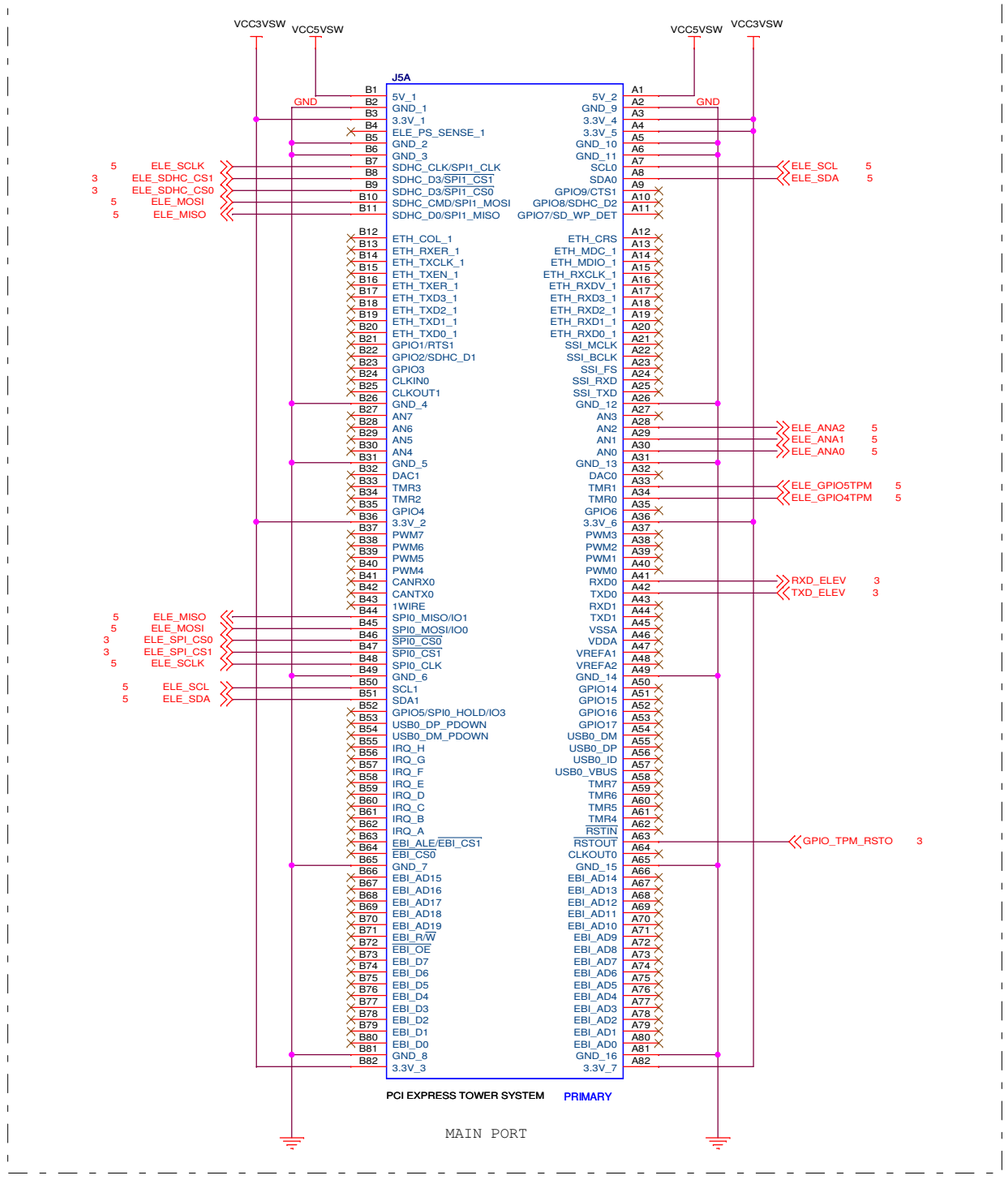

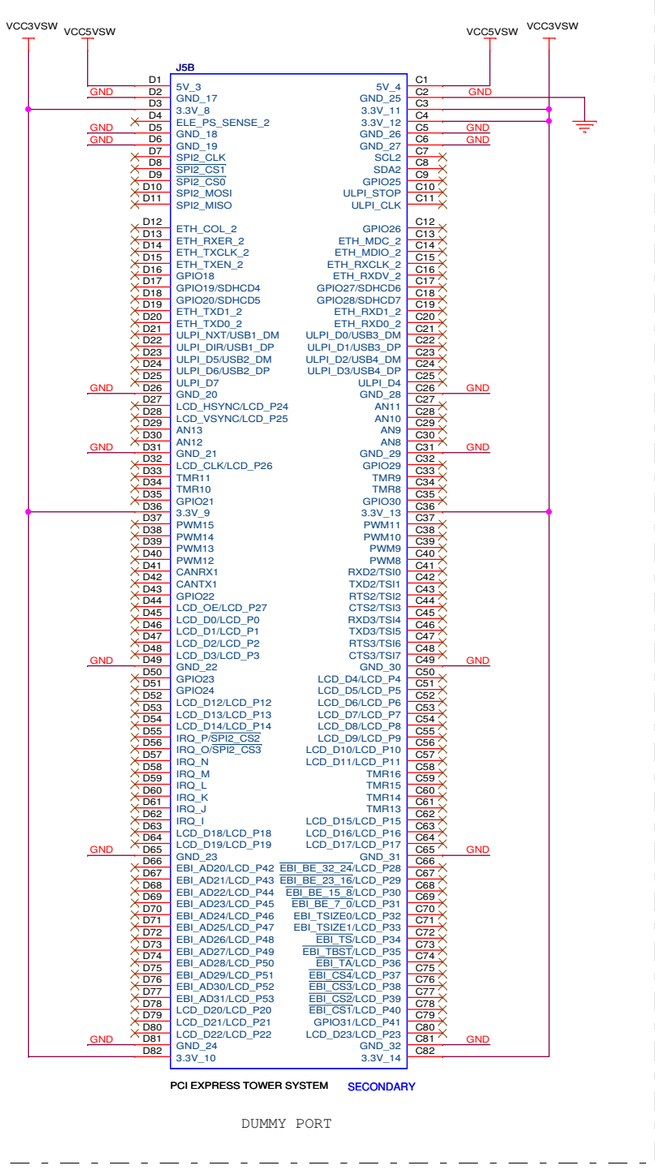

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