



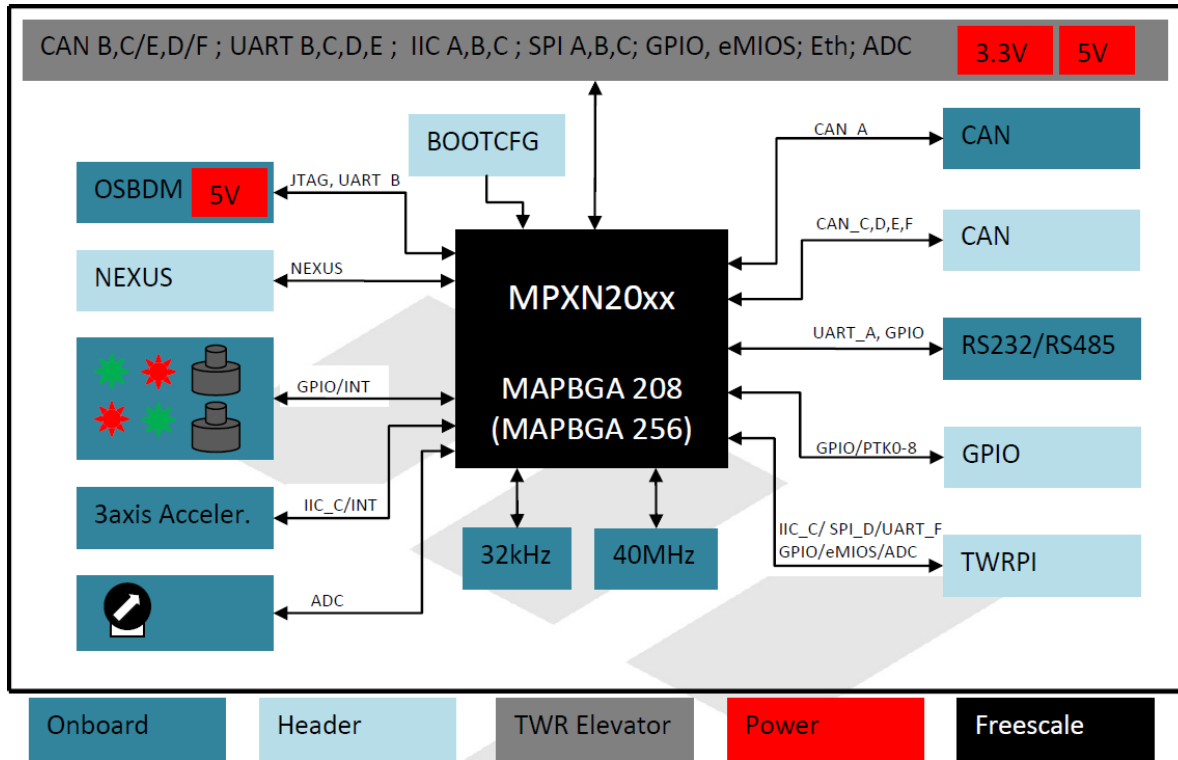
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6	MCU Power 1
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8	USB OSJTAG JTAG
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10	I/O BUTTONS LEDs ACCEL. TWRPI
11	Clock
12	Elevator Connectors

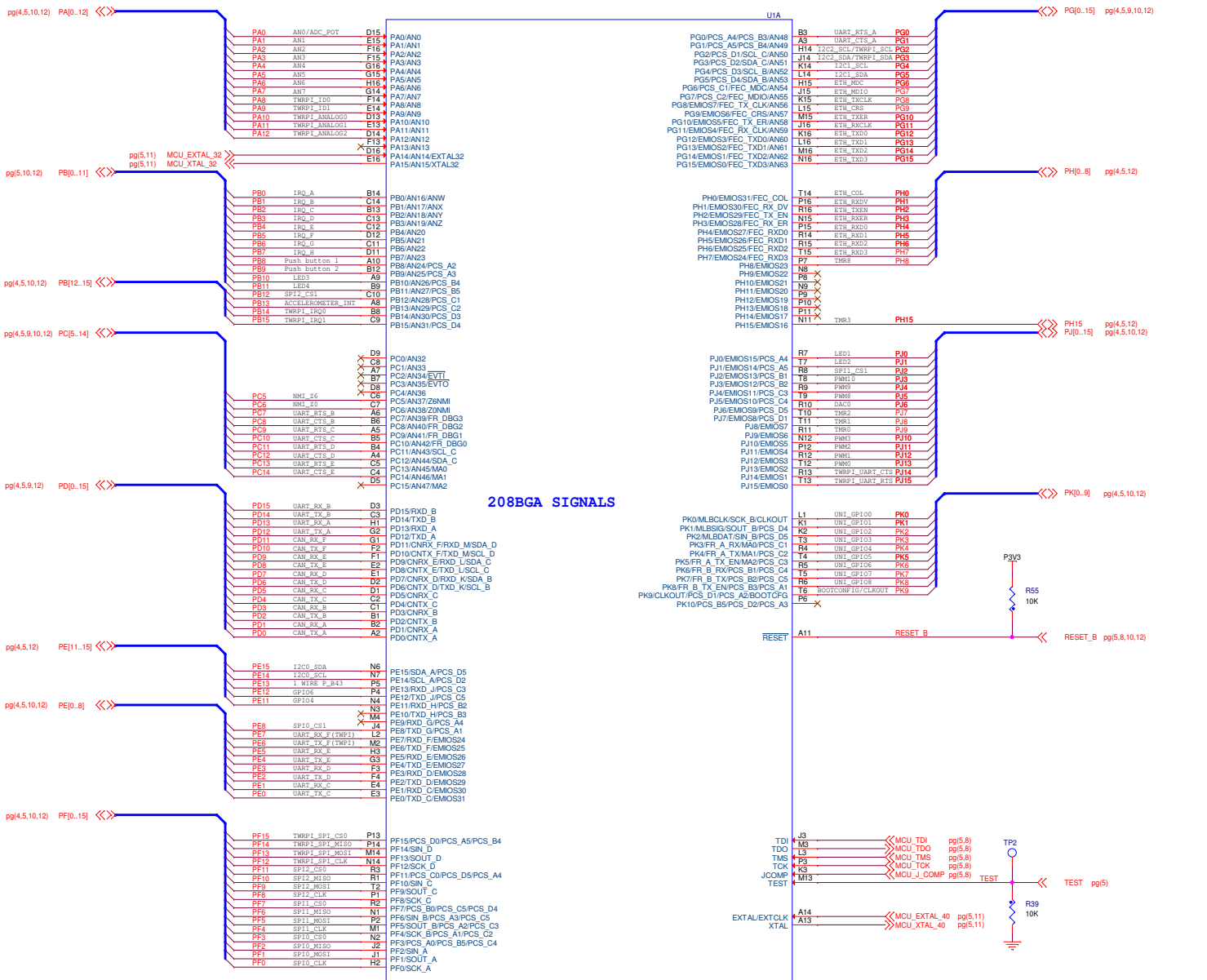
Revision	Date	Revision History Description	Approved
X1	09/26/2011	Initial Draft/A070 Release	Vikas
X2	09/27/2011	1. Power Flow updated. 2. J49 Added in the design.	Vikas
X3	09/29/2011	Power Flow Updated	Vikas
X4	09/30/2011	0 E added in the Power Flow	Vikas
X5	09/29/2011	Power Flow Updated	Vikas
X6	04.10.2011	Power Flow, unused pins, move parts between sheets	Jiri
X7	06.10.2011	UART, RS485 pin numbers , LED0<->LED1	Jiri
X8	10/07/2011	Capacitors for 1.2 V is changed, All headers 2X3 changed to through hole except J28	Sudhasha
X9	10/10/2011	VSSSYN net connected to 40 MHz crystal and 0 ohms added to VSSSYN to GND	Sudhasha
X10	10/12/2011	VSSA Ground is changed to AGND for TWRPI connector	Sudhasha
X11	10/18/2011	Nexus pin connection added, U3 IC is updated with new part	Sudhasha
X12	10/21/2011	Schematics back annotated. VRH and VRL net added to J14A	Sudhasha
X13	10/27/2011	Both 256 BGA and 208 BGA package added in the schematics	Sudhasha
X14	10/31/2011	Decaps added to the Nexus power pin VDDN(256 BGA)	Sudhasha
X15	31.10.2011	Descriptions and general appearance	Jiri
A	11/2/2011	Prototype Release	Sudhasha
B	12.03.2012	Four LEDs, VddA, GNDA, and /RESET to elevator, RS485 pull resistors, References, AD and DA filter	Jiri Alberto

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Designer: Kotzian Jiri	Drawing Title: <b>TWR-PXN20</b>		
Drawn by: Sudhasha, Jiri, Alberto	Page Title: <b>Table of Contents/Revisions</b>		
Approved: Ruiz Jose/Kotzian Jiri	Size C	Document Number SCH-27309 PDF: SPF-27309	Rev B
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Net	Description
GND	Digital Ground
P5V_USB	Module Power Supply from USB (5V)
P5V_SW	OSBDM Power (5V)
P5V_TRG_USB	Module Power Supply from USB (5V)
P5V_ELEV	Main 5V (Elevator or USB Supply)
P3V3	Main 3.3V (Elevator or On Board Voltage Regulator Supply)
VRC	MCU Voltage Regulator Control Voltage (3.3V default / optional 5V)
VRCSEL	MCU Voltage Regulator Select (0V default / optional 5V)
VRCCTL	MCU Voltage Regulator Control Output
1V2	MCU Internal Logic Power (1.2V)
P3V3_MCU	MCU External I/O Power (3.3V)
VDD	MCU I/O Power (3.3V)
VDDN	MCU NEXUS Power (3.3V)
VDDMLB	MCU Media Local Bus Power (3.3V default / optional 2.5V)
VDDE1-4	MCU External I/O Power (3.3V default / optional 5V)
VSSYNC	MCU Clock Synthesizer Ground
VDDSYN	MCU Clock Synthesizer Power (3.3V)
AGND	MCU Analog Ground
VDDA	MCU Analog Power (3.3V default / optional 5V)
VRL	MCU Analog Low Voltage Reference
VRH	MCU Analog High Voltage Reference (3.3V default / optional 5V)

	
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208BGA SIGNALS

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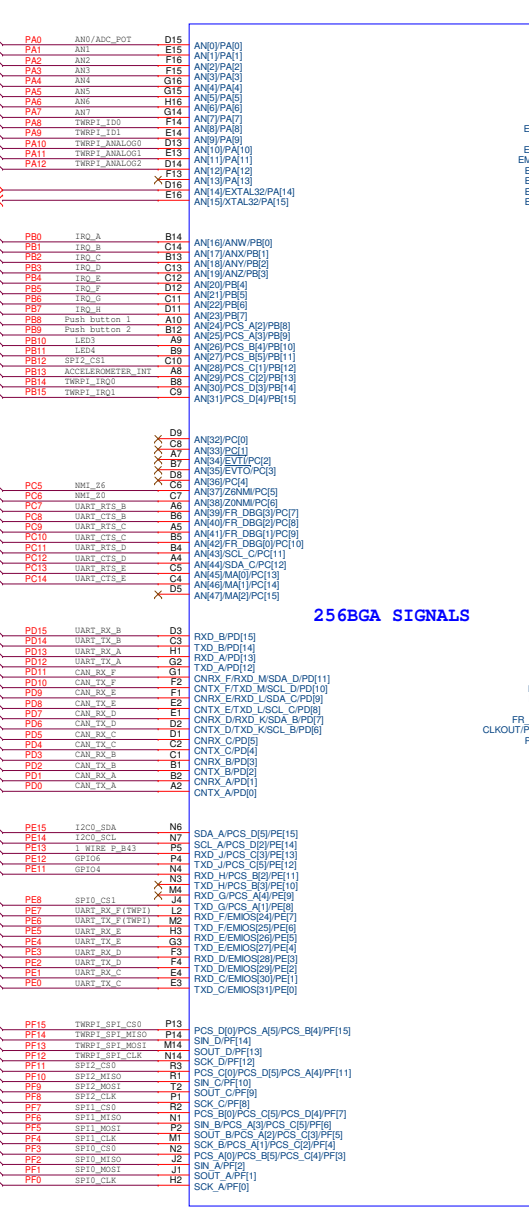
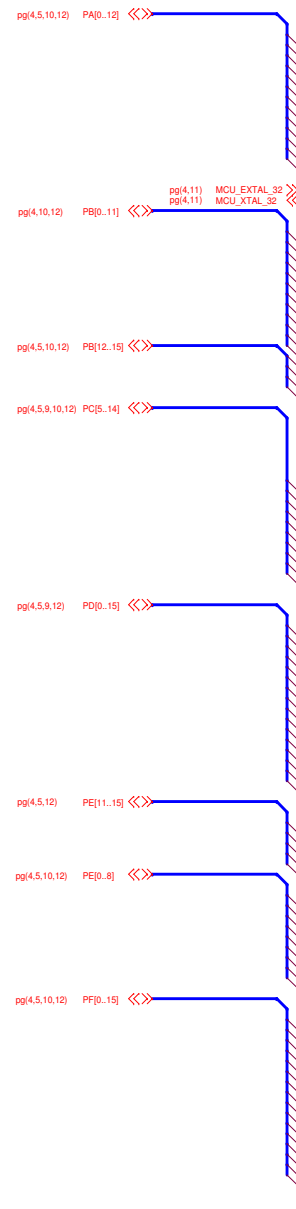
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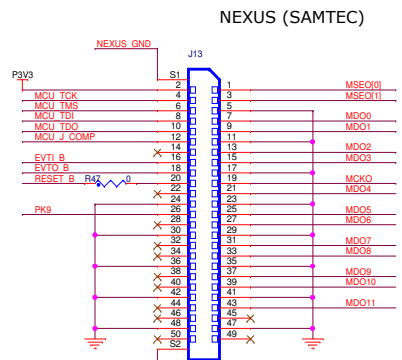
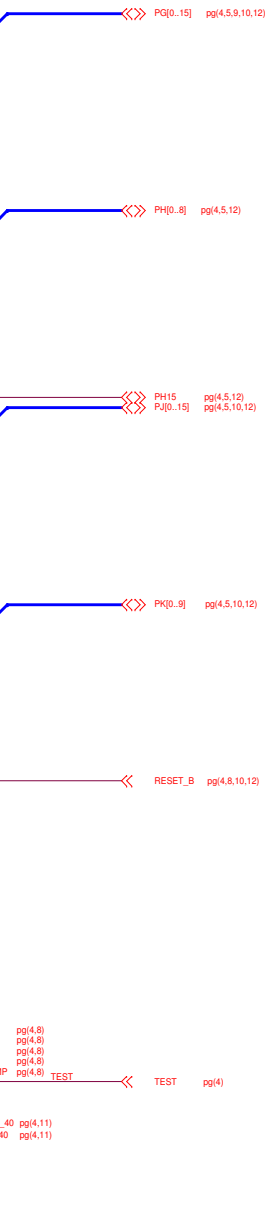
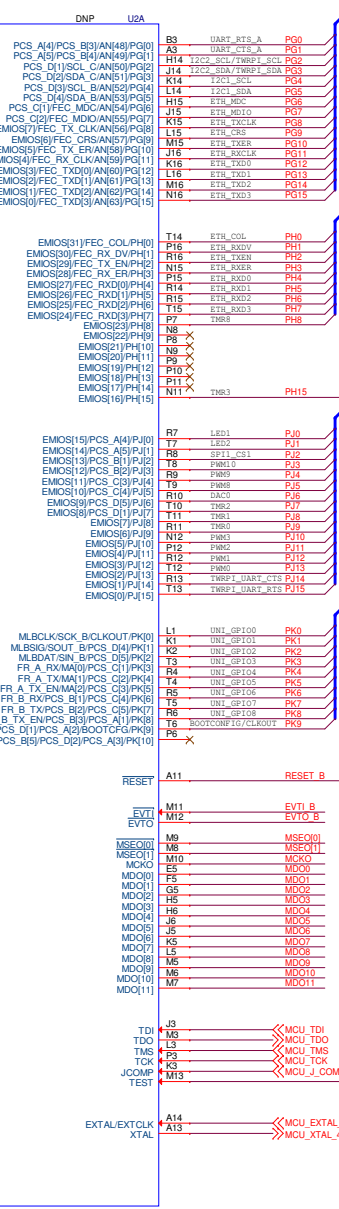
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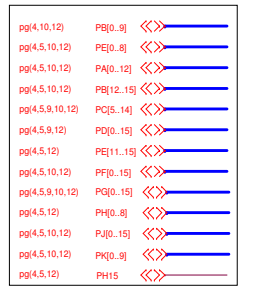
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256BGA SIGNALS



Intersheet References



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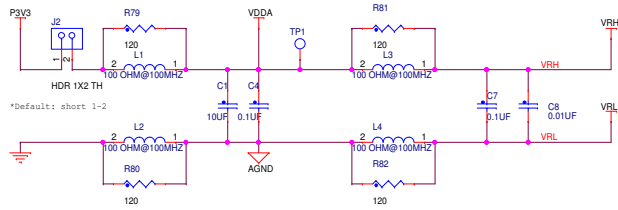
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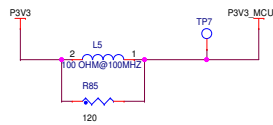
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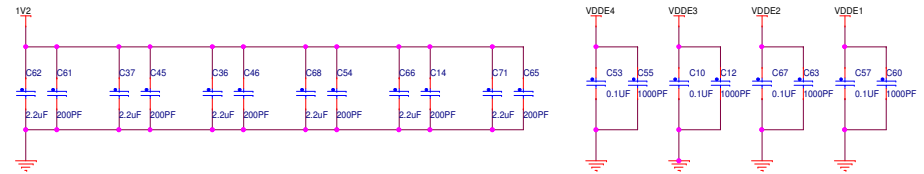
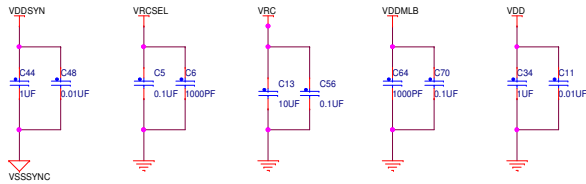
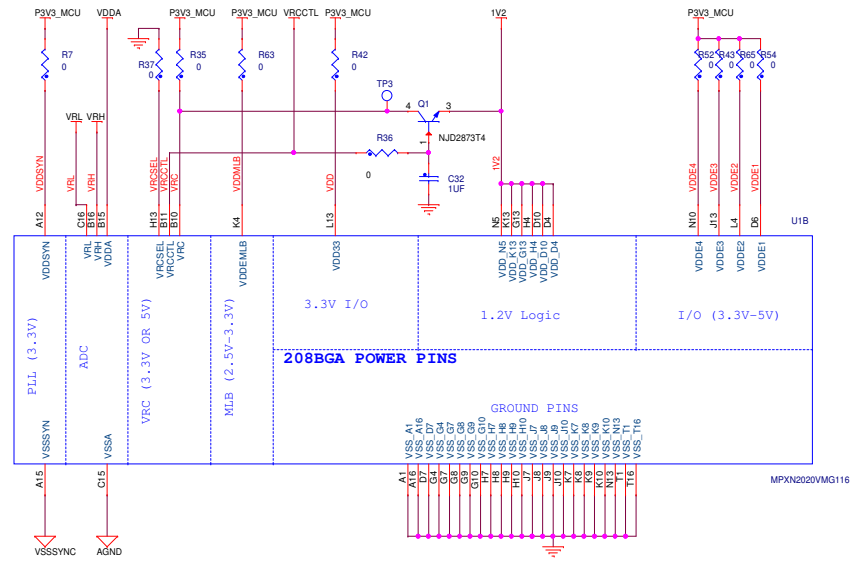
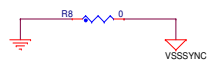
Analog Voltage "VDDA" Generation



Supply Voltage for MCU



Digital Ground



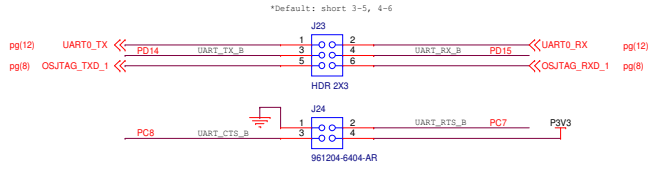




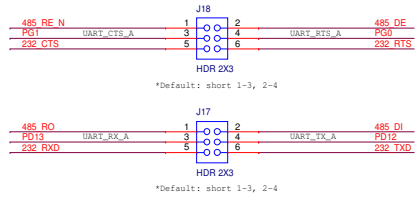




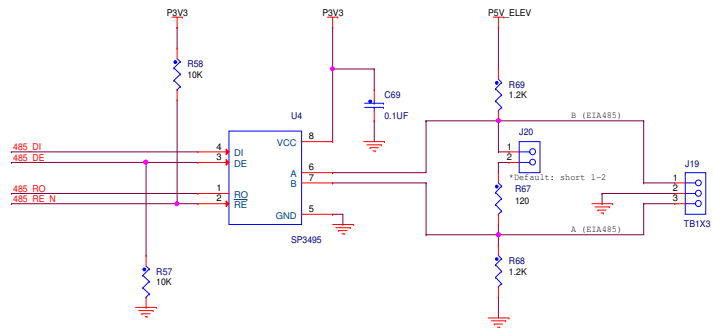
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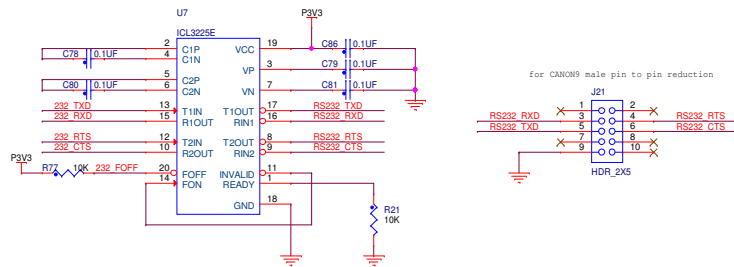
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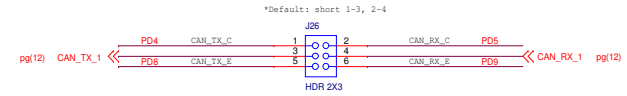
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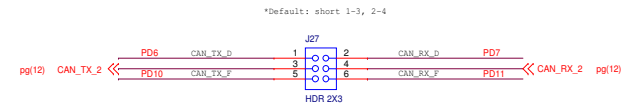
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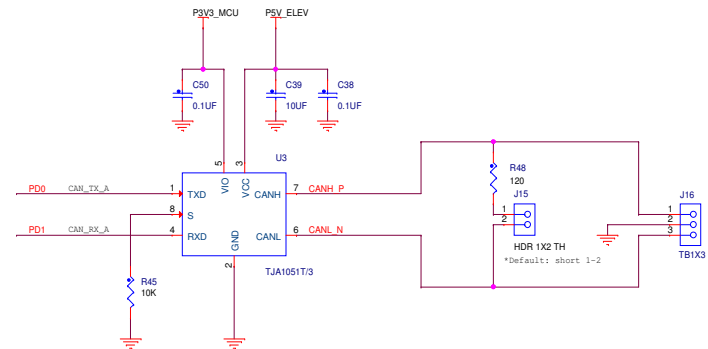
### CAN C, CAN E



### CAN D, CAN F



### CAN A / CAN

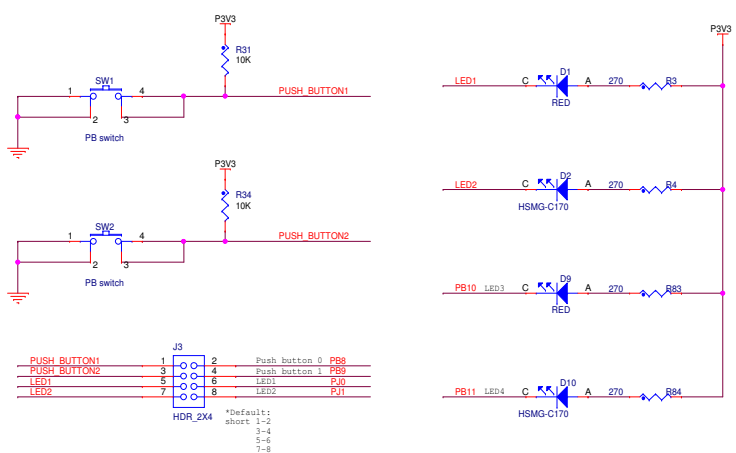


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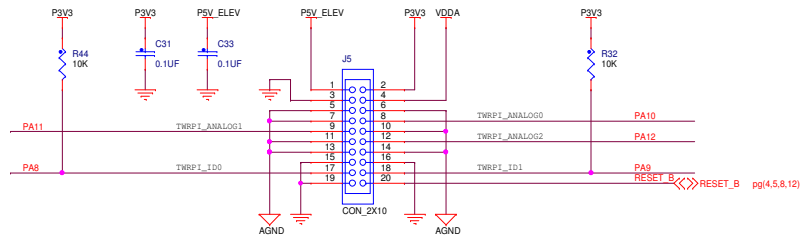
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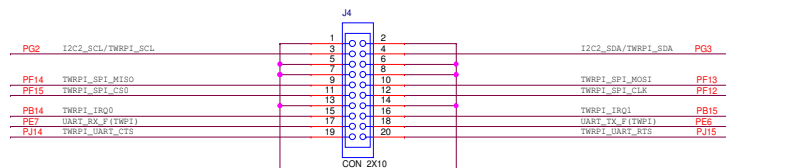
### Buttons / LEDs



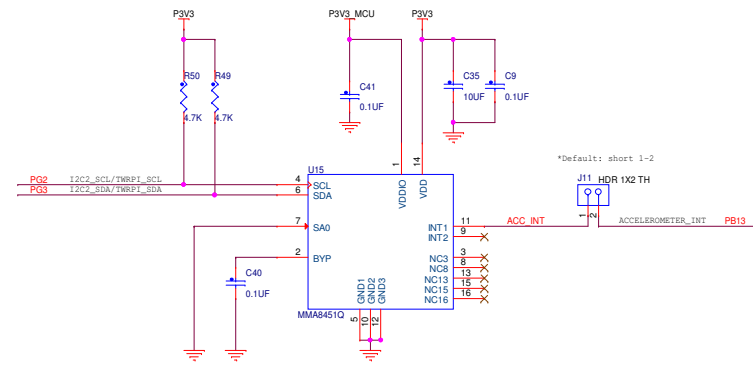
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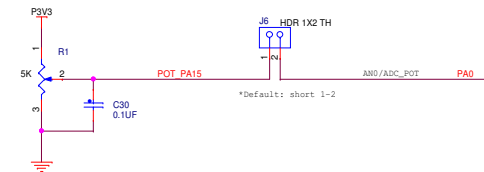
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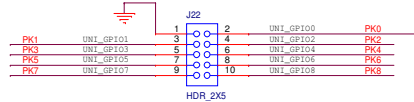
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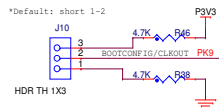
### Potentiometer



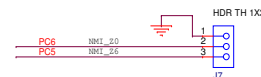
### Universal Header



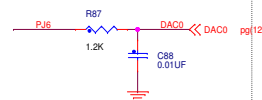
### Boot Config



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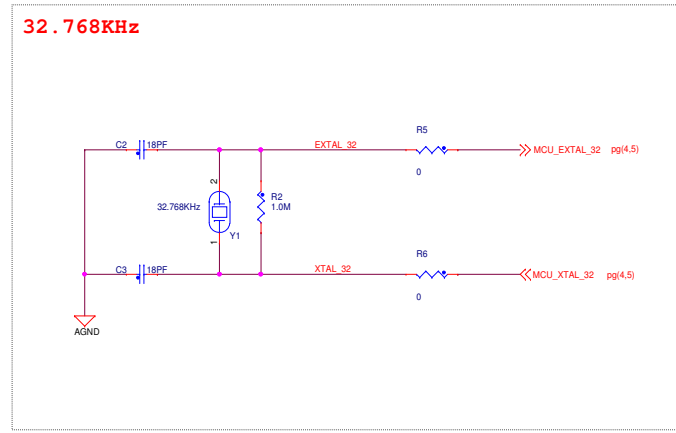
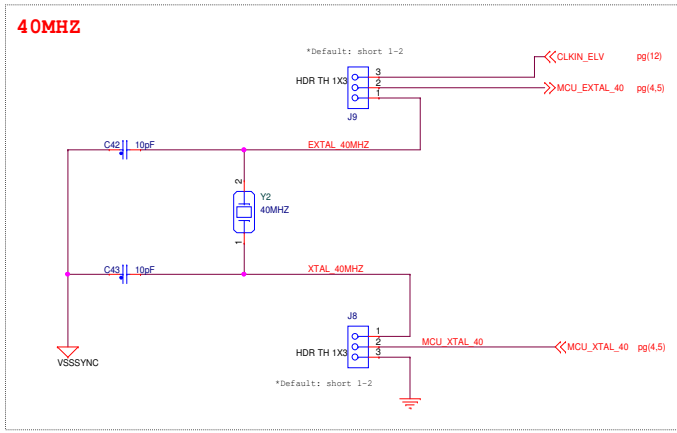


### DAC filter PWM



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