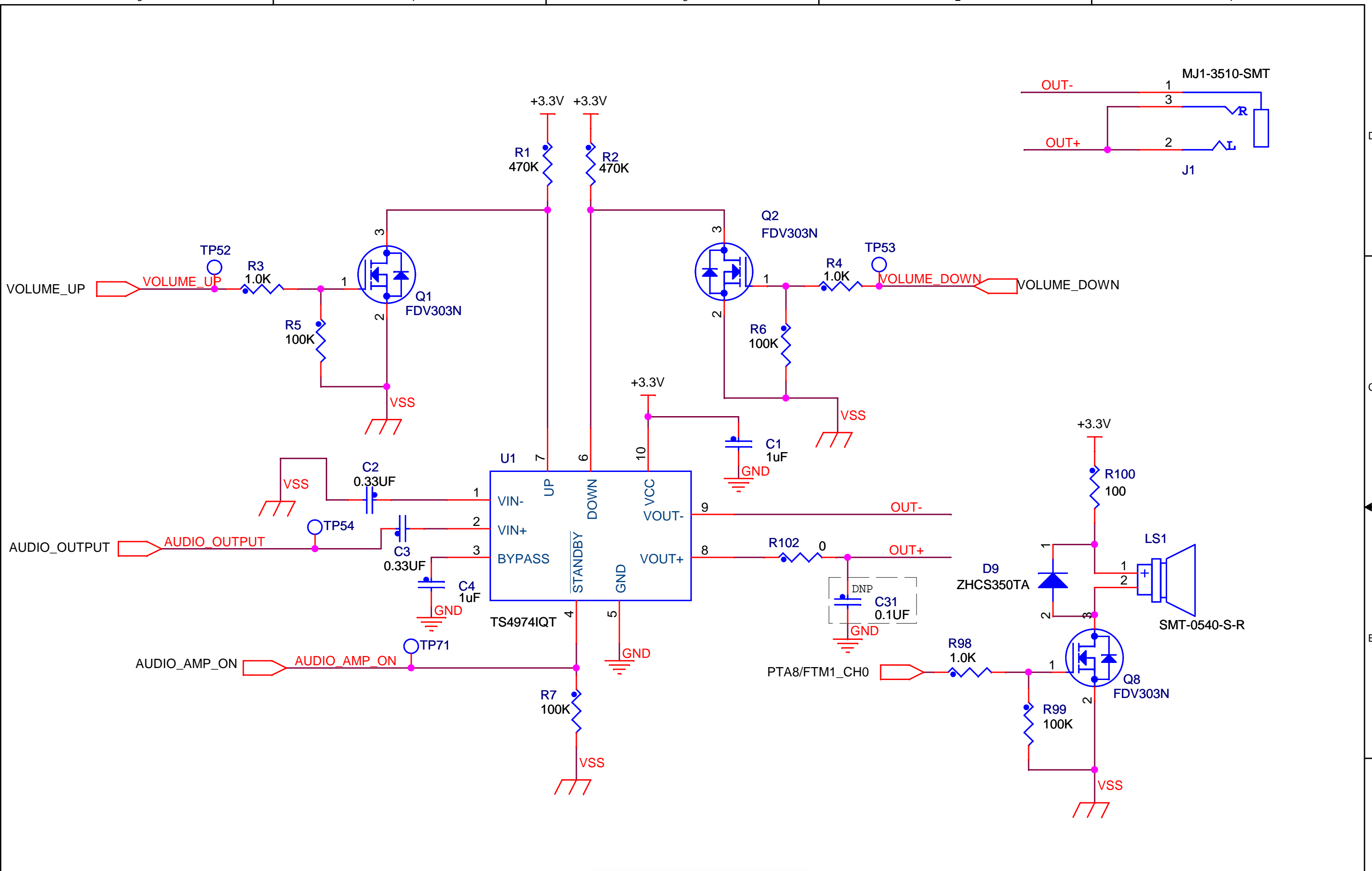


## Power & Ground Nets

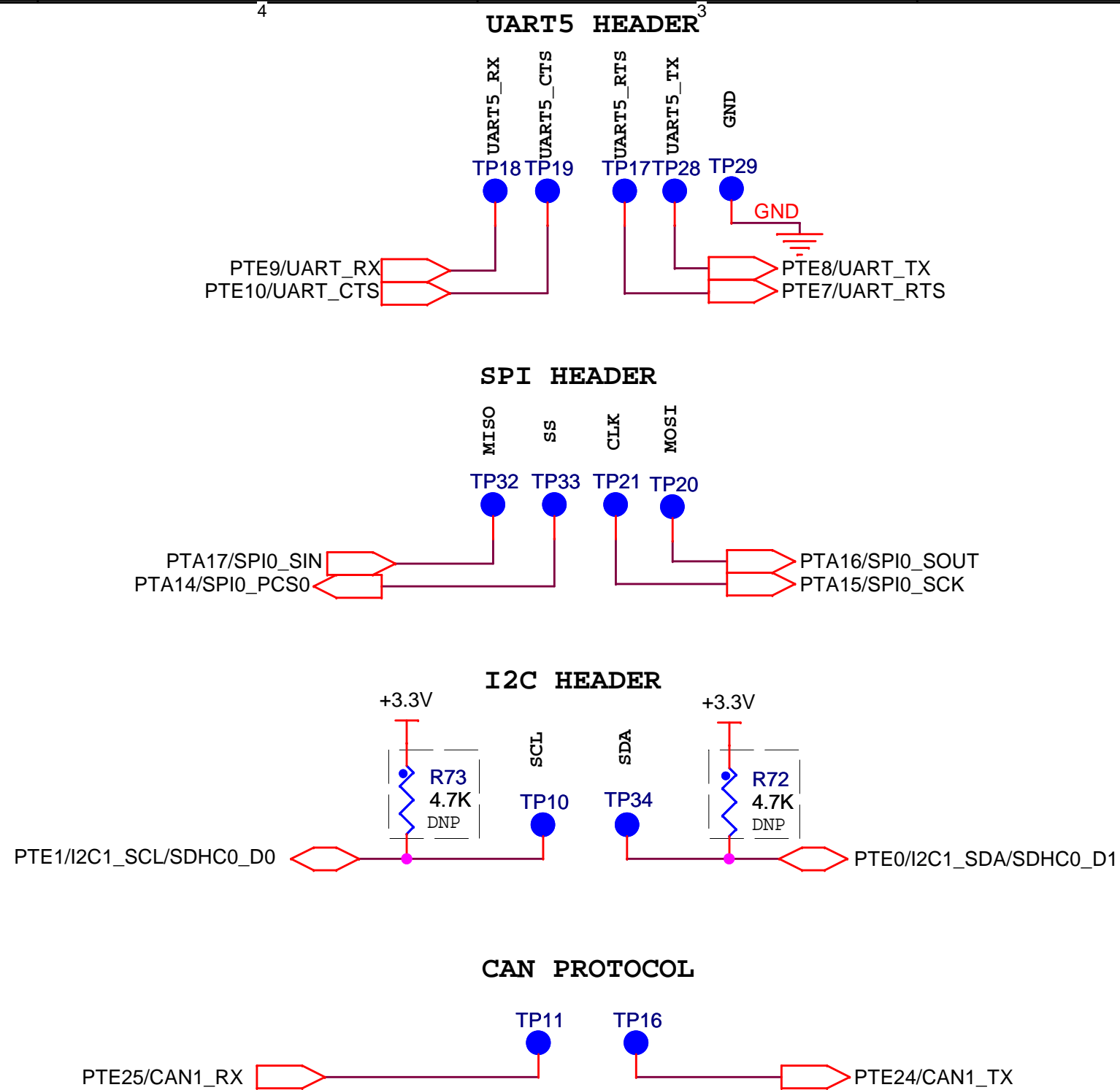
NET	VOLTAGE	DESCRIPTION
BAT+	3.0V Rated	Primary input power. Discharged Battery positive electrode.
+3.3V	3.3V	Battery voltage in full charge after protection diode (D3) and switch transistor (Q6)
+3.3V	3.3V	Output of voltage regulator using USB power input
+5V_USB	5V	USB power Input
+3.3VDD	3.3V	Digital power. Filtered from +3.3V
VREFH	3.3V	Upper reference voltage for ADC on the MCU. Filtered from +3.3VDD.
+3.3V_SWITCH	3.3V	Input power to switch ON/OFF, output switching regulator
+3.3VDDMCU	3.3V	Main MCU K40 voltage
GND	0V	Digital Ground.
VSS	0V	VSS power for MCU and analog circuits. Filtered from GND.
VREFL	0V	Lower reference voltage for ADC on the MCU. Filtered from VSS.
JTAG_VSS	0V	VSS power for JTAG connector to program external MCU devices, switched by VSS.
EXT_VDD	3.3V	External input power. Only for programming external JTAG devices.
+3.3VDD_JLINK	3.3V	Digital power. Filtered from +3.3V. Power supply J-LINK (JM128)



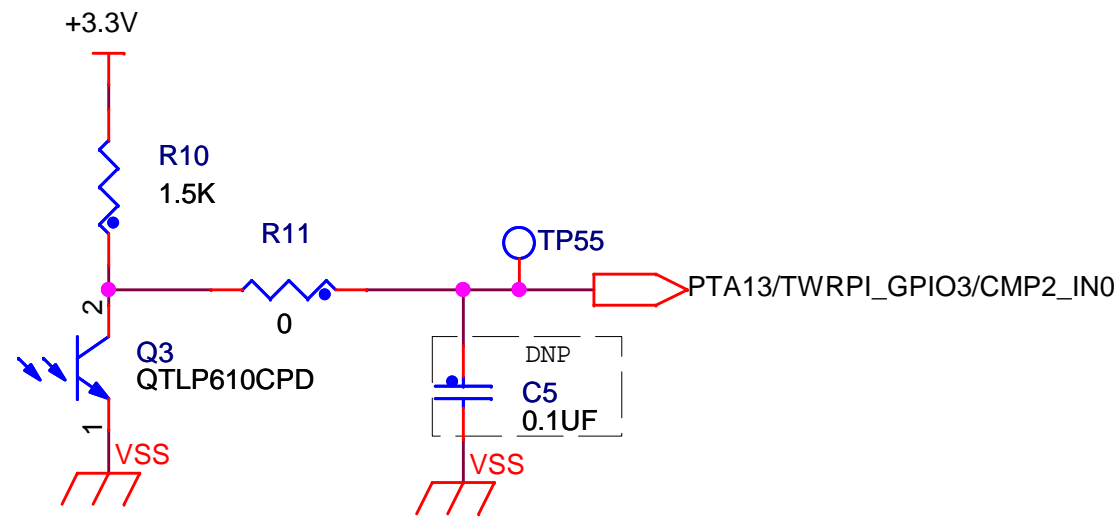
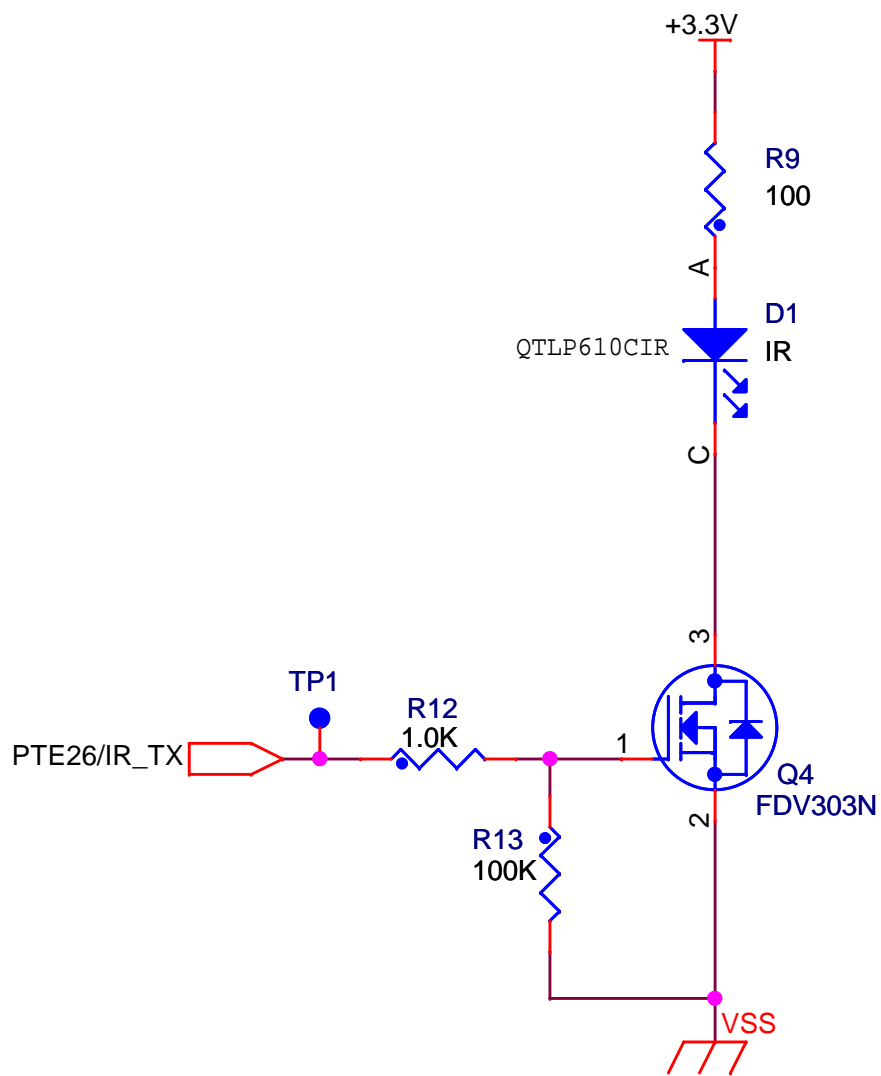
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Size C	Document Number <b>SCH-20110427_HYDRA_v5</b>	Rev 5
Date: Wednesday, April 27, 2011	Sheet 1	of 14



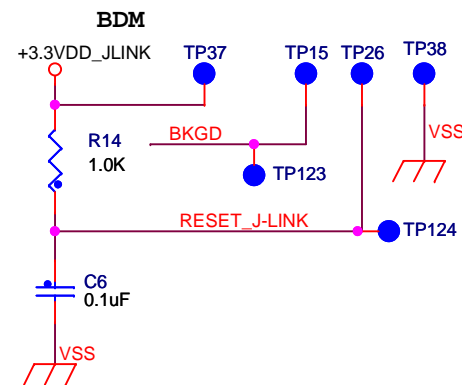
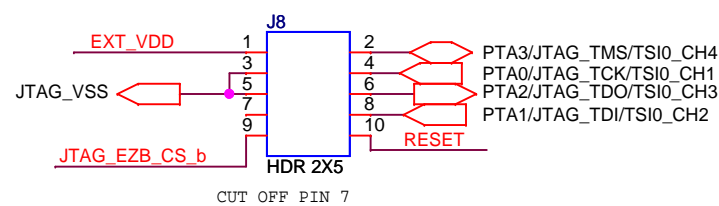
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Size	Document Number				Rev
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Date:	Tuesday, April 12, 2011		Sheet	2	of 14



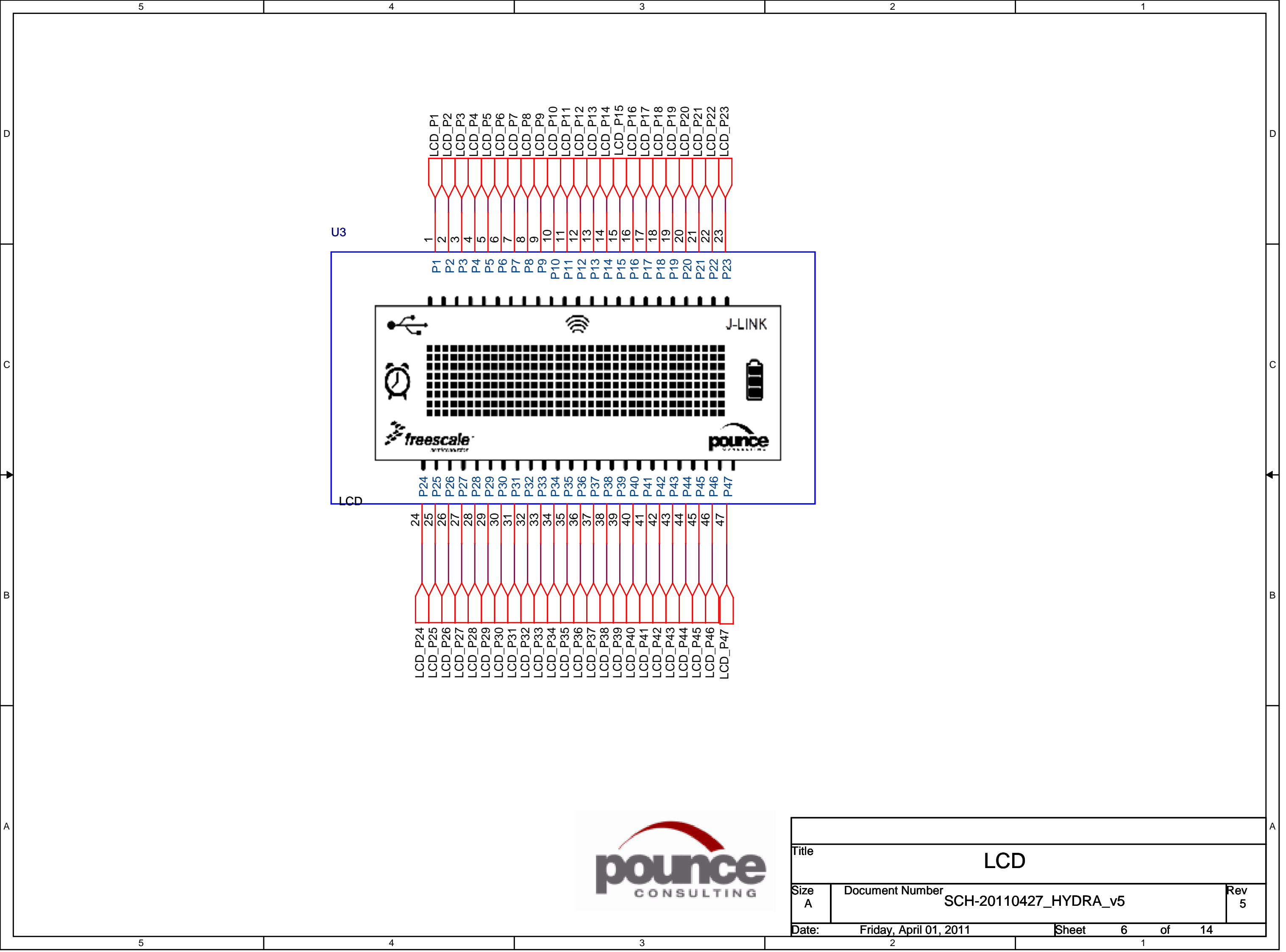
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Size A	Document Number SCH-20110427_HYDRA_v5	Rev 5
Date:	Wednesday, April 27, 2011	Sheet 3 of 14



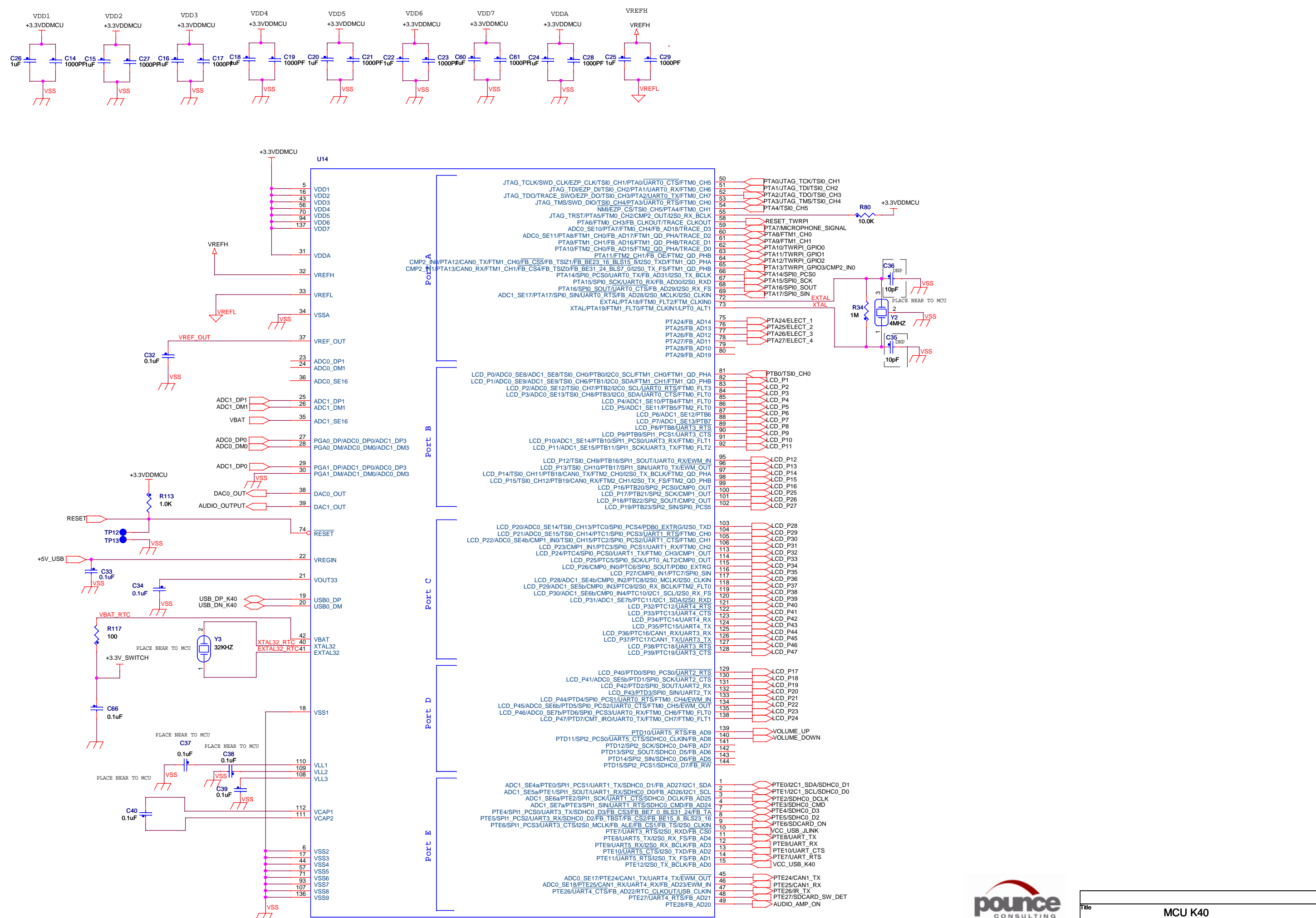
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Size A	Document Number SCH-20110427_HYDRA_v5				Rev 5
Date:	Wednesday, April 27, 2011		Sheet	4 of 14	



Title				
J-LINK INTERFACE				
Size B	Document Number SCH-20110427_HYDRA_v5			Rev 5
Date:	Tuesday, April 12, 2011		Sheet	5 of 14



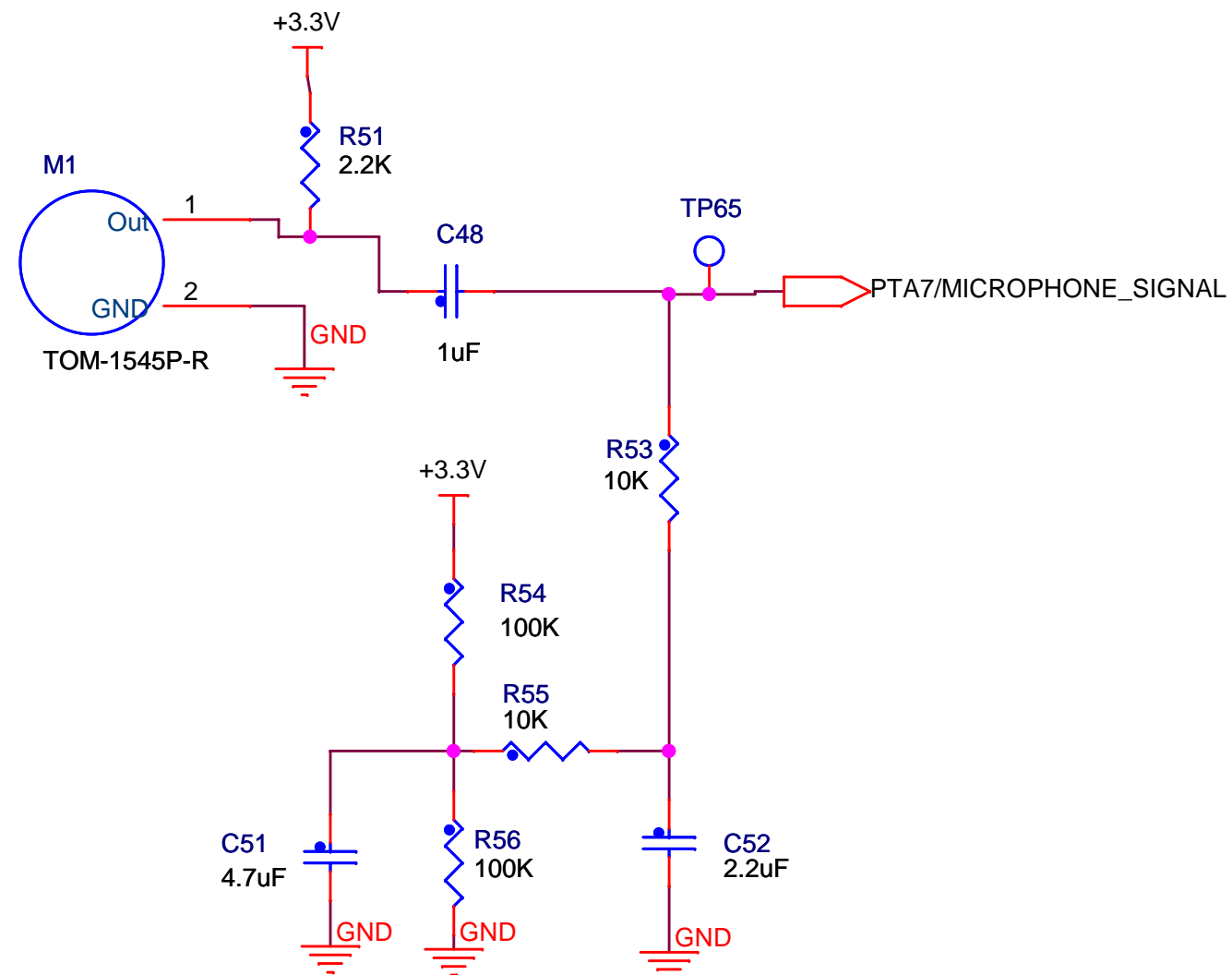
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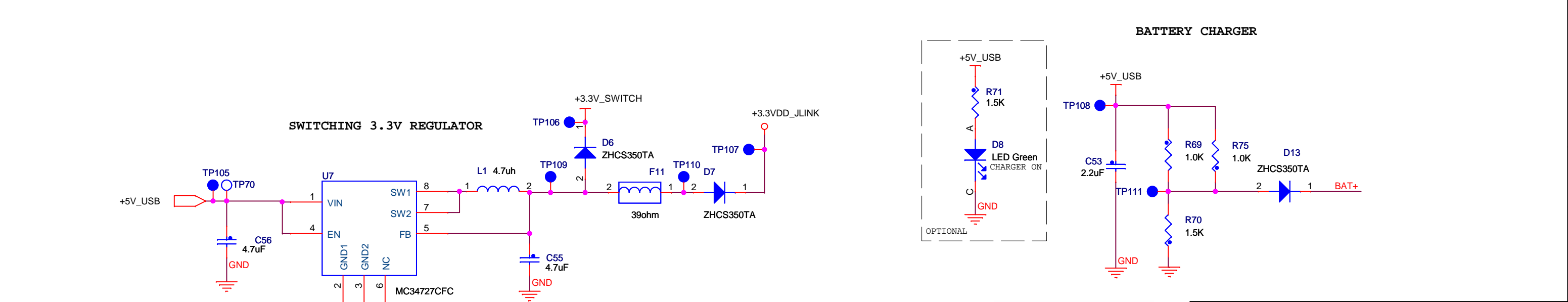
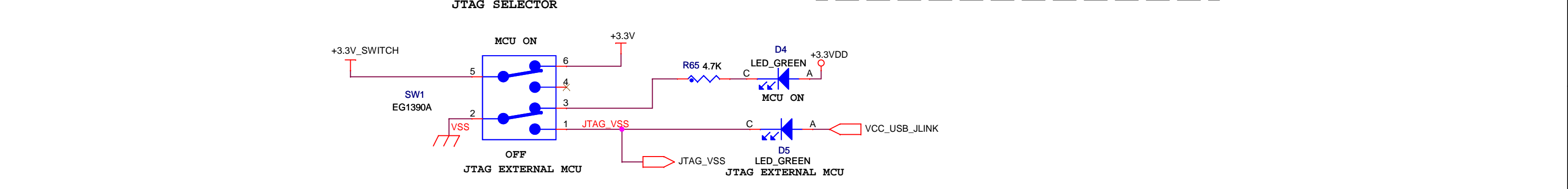
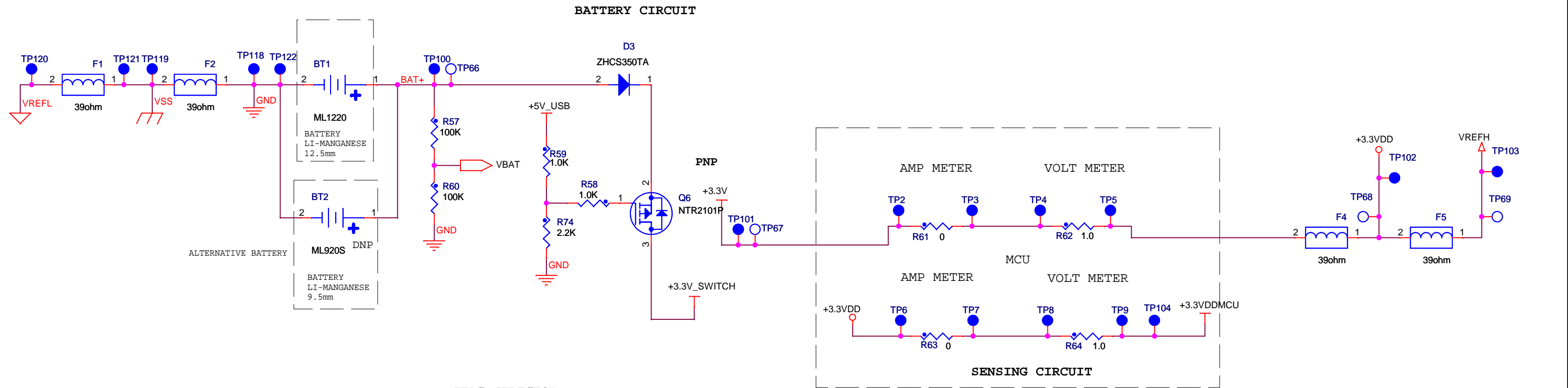
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Size C	Document Number				Rev 5
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Date:	Thursday, April 28, 2011			Sheet	7 of 14

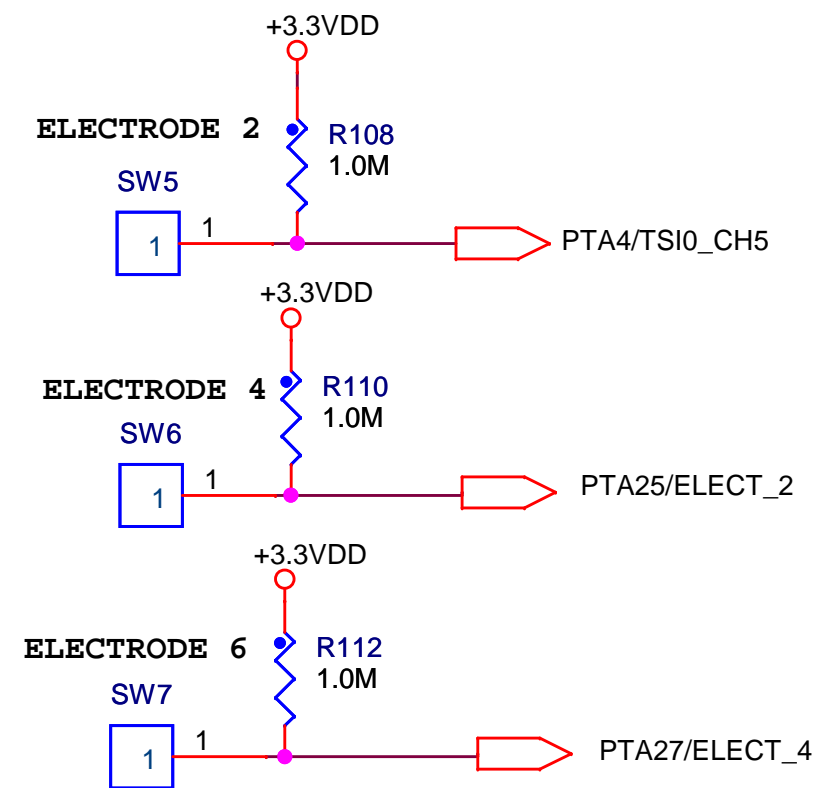
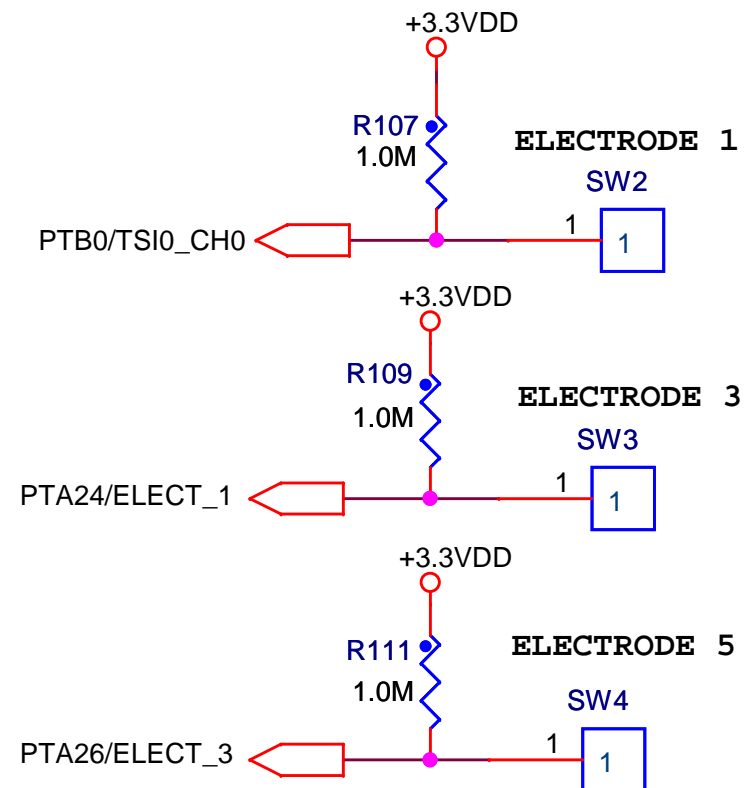




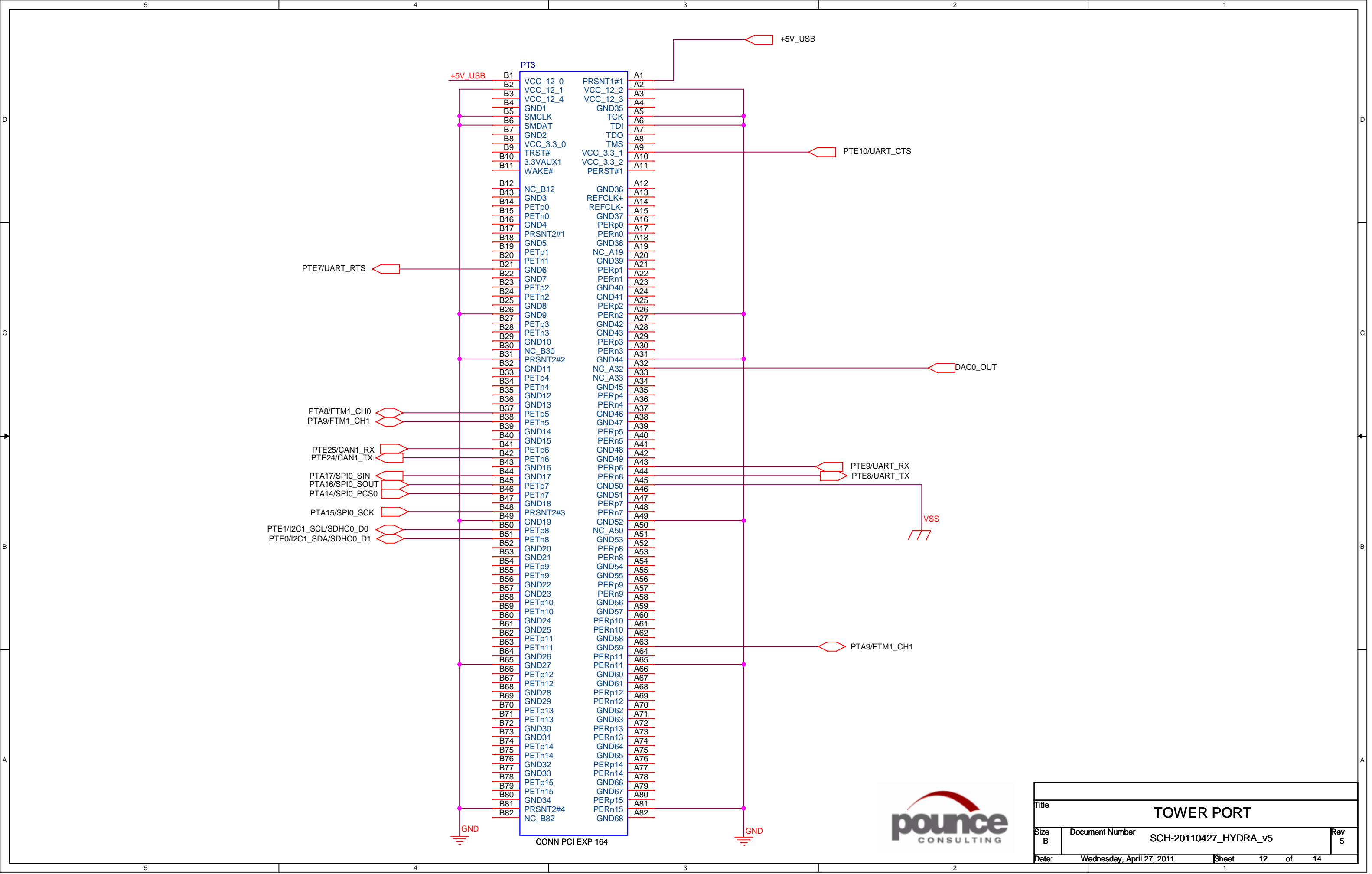


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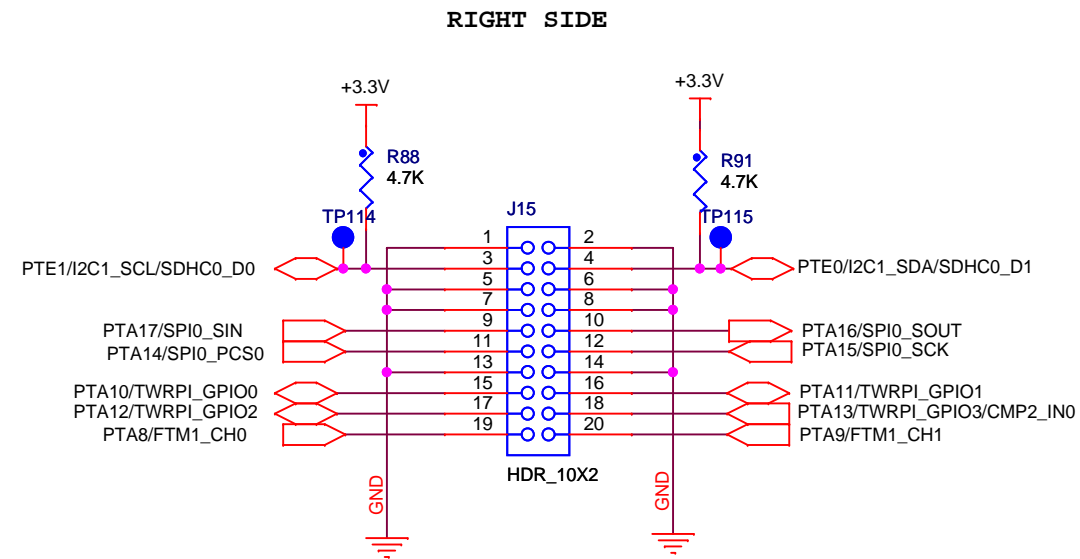
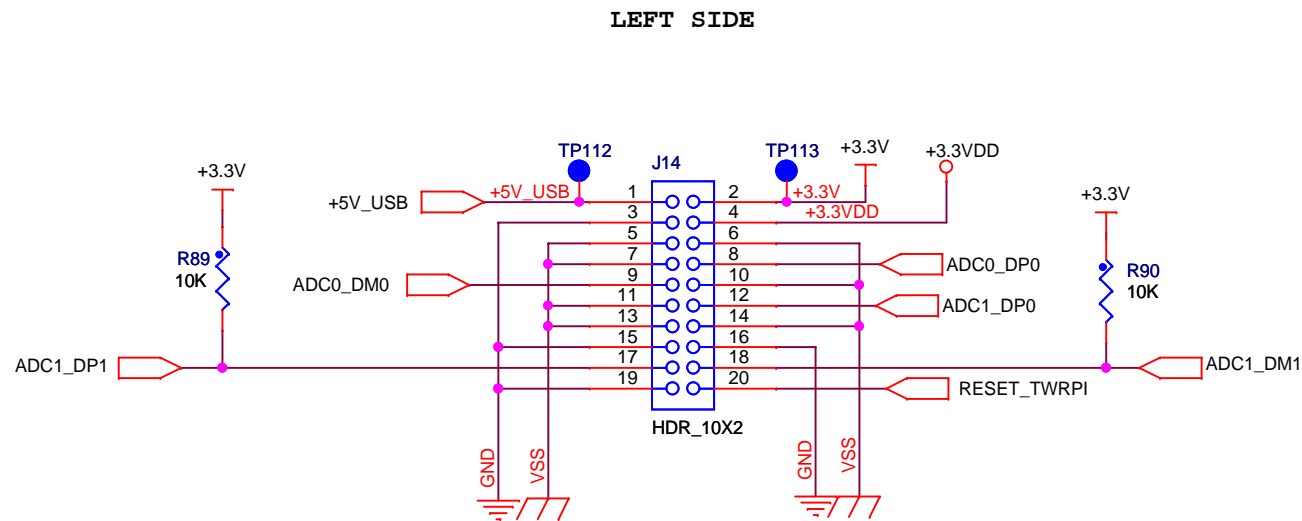




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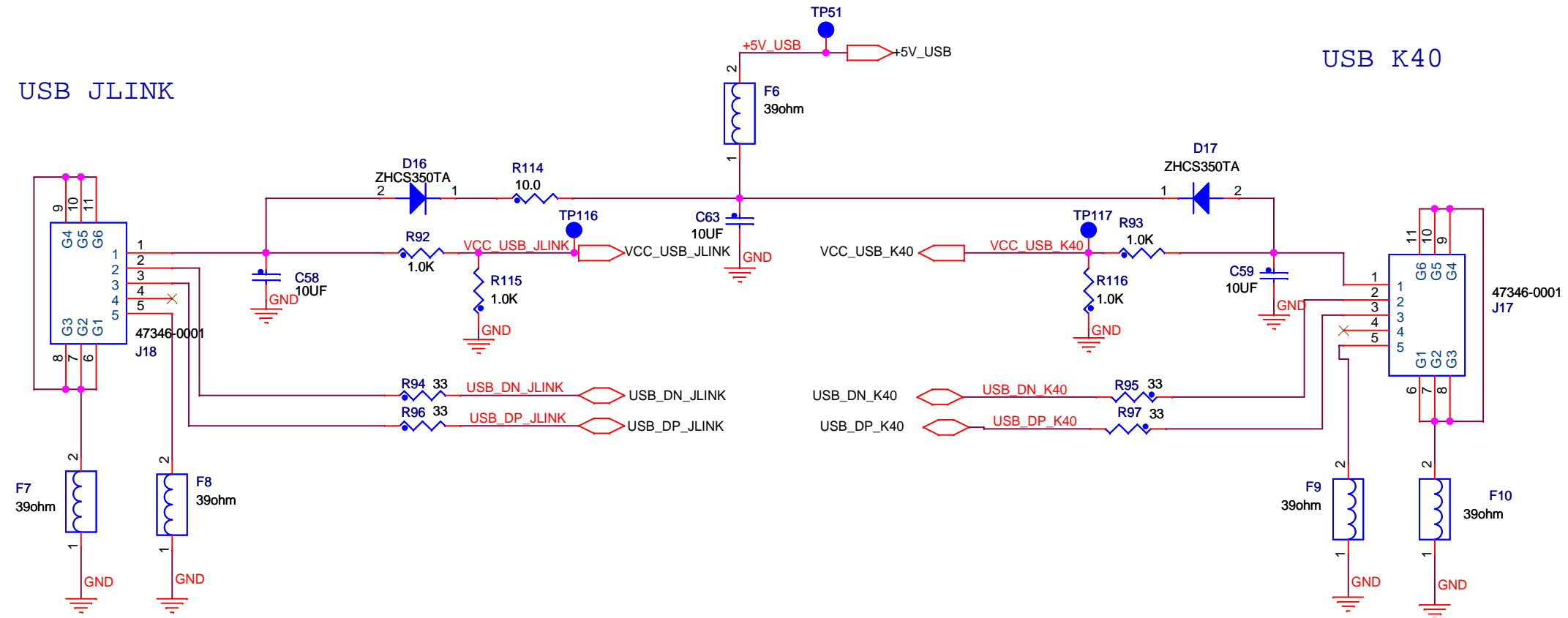
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Title			TWRPI SOCKETS		
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USB JLINK

USB K40



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