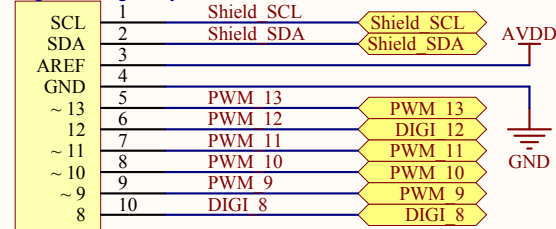


Arduino Hardware Compatible IO Breakout

Arduino Digital Higher Byte

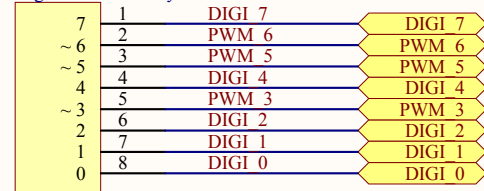
Digital IO Higher Byte1



Arduino Leonardo High Byte

Arduino Digital Lower Byte

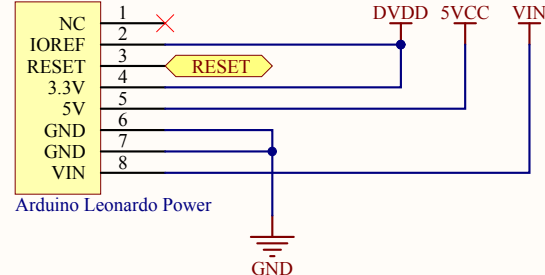
Digital IO Lower Byte1



Arduino Leonardo Low Byte

Arduino Power & Reset

Power & Reset1



Arduino Leonardo Power

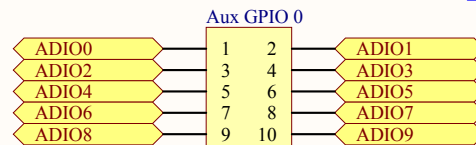
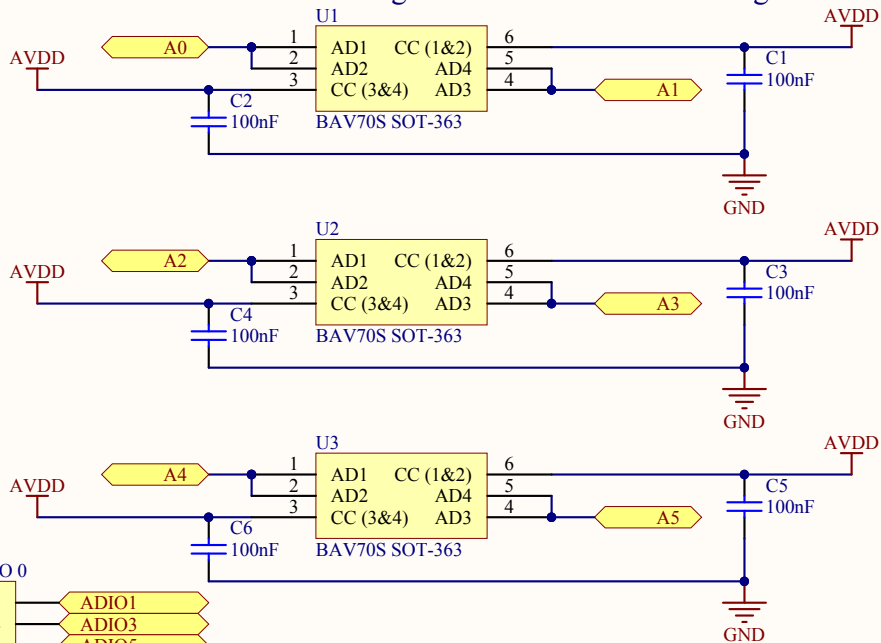
Arduino Analog Input

Analog Input1



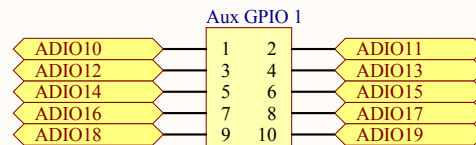
Arduino Leonardo Analog

Analog 5V Tolerance Level Shifting



Aux GPIO 0

Header 5X2

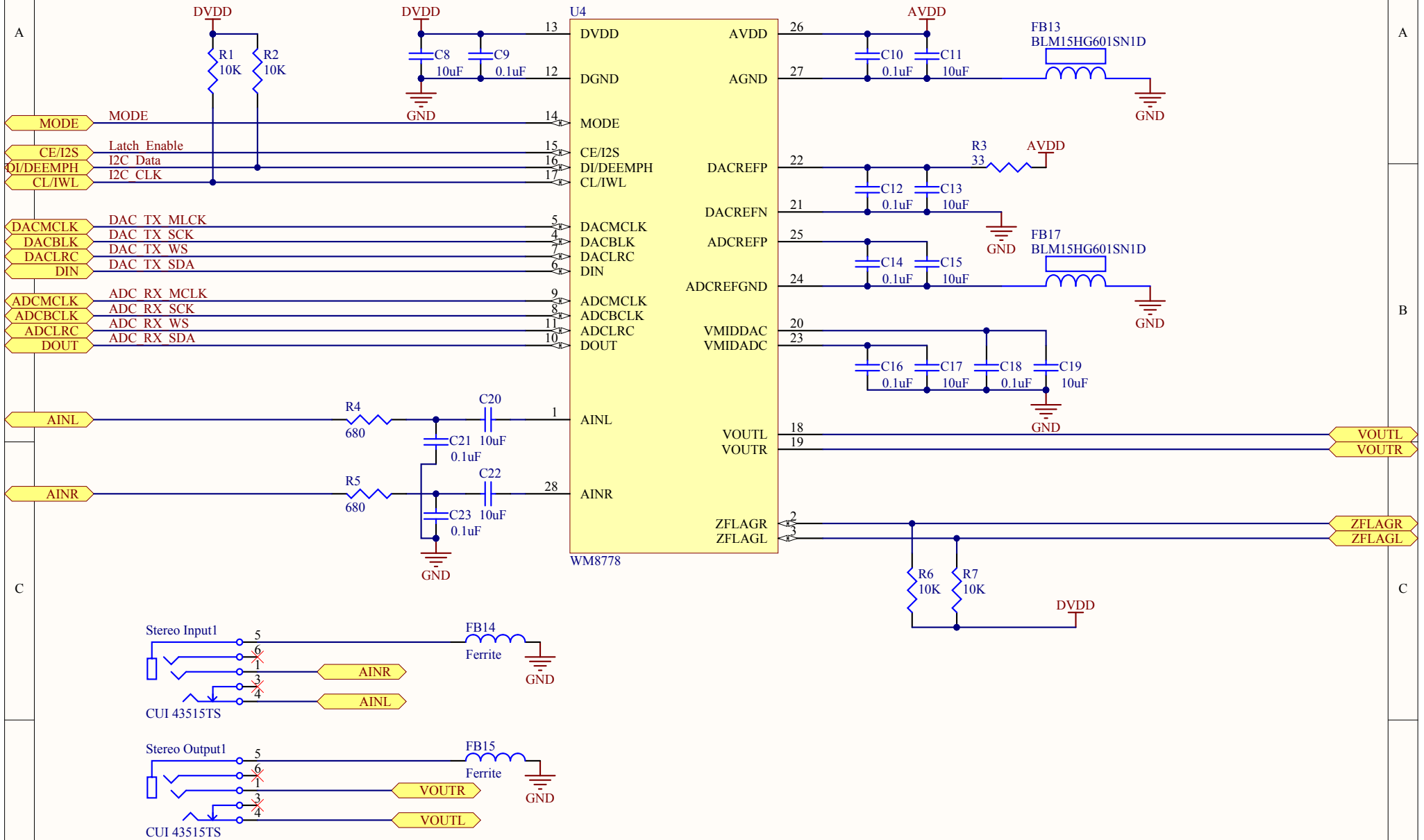


Aux GPIO 1

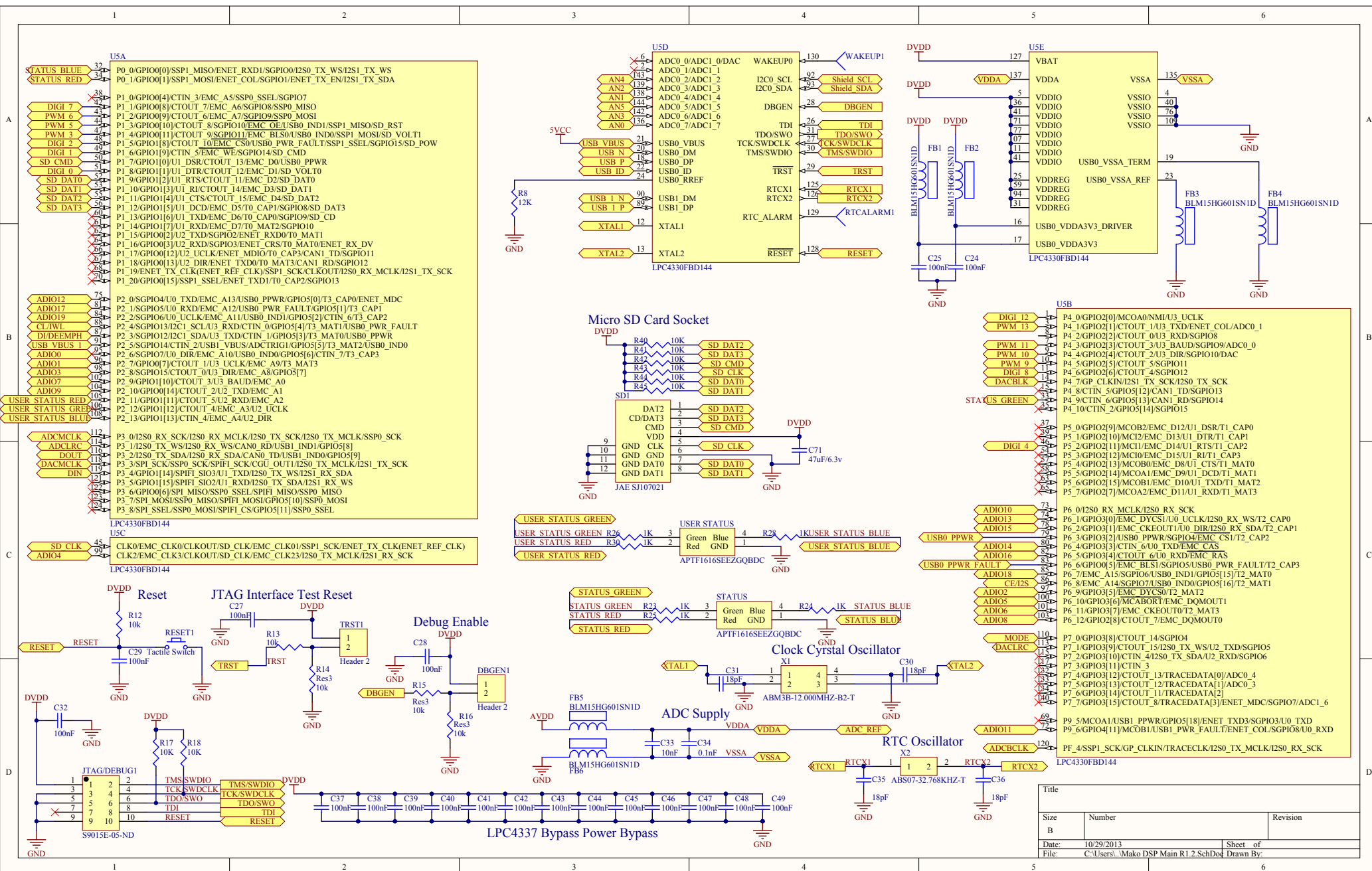
Header 5X2

Title		
Size	Number	Revision
A		
Date:	10/29/2013	Sheet of
File:	C:\Users\...\Mako DSP Arduino IO R1.2.Sch	Drawn By:

WM8778 Stereo Audio Codec I2S/I2C

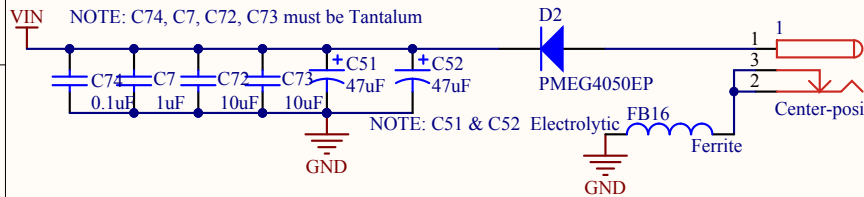


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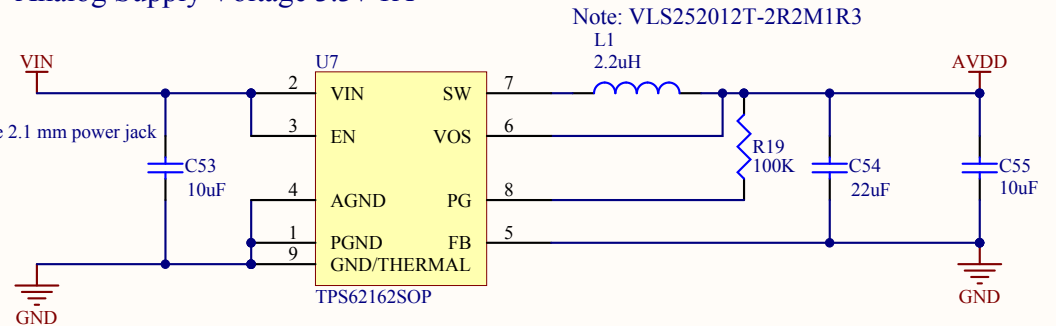


3.3V DVDD and 5V Supply DCDC Converters

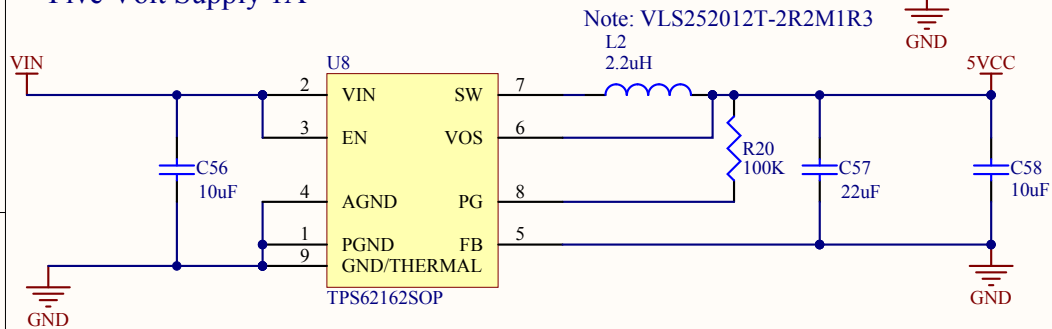
Input Power 12v w/ Schottky Protection & Filtering



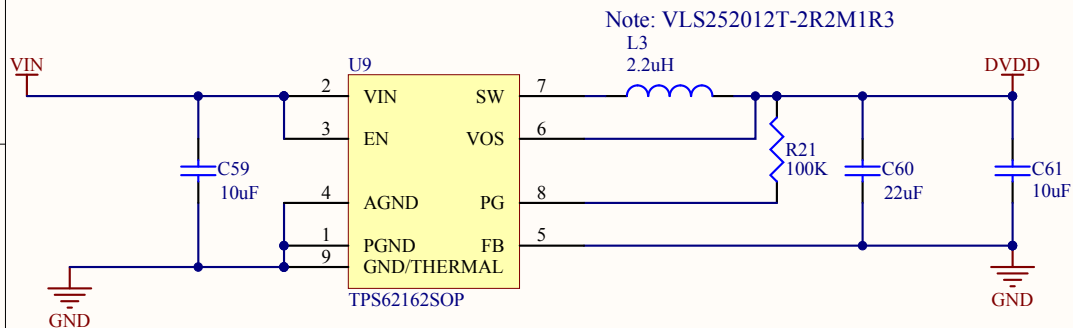
Analog Supply Voltage 3.3v 1A



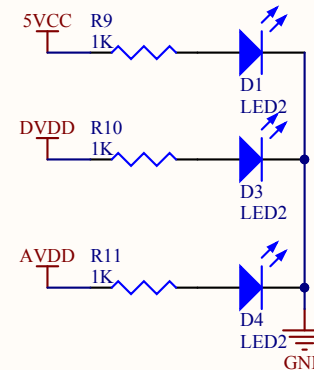
Five Volt Supply 1A



Digital Supply Voltage 3.3v 1A

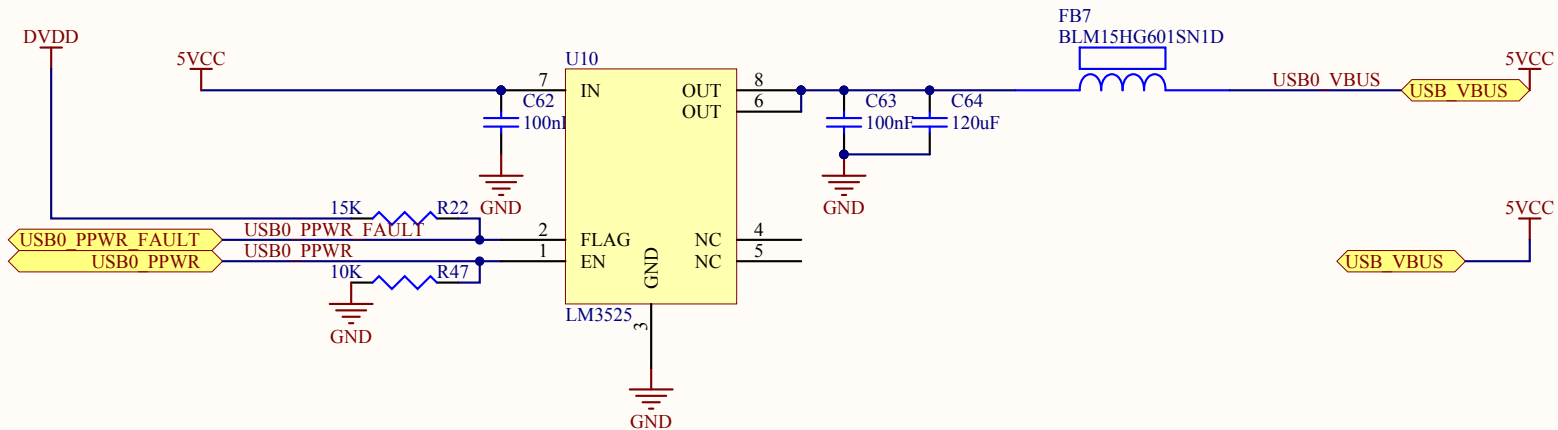


Supply Indicators

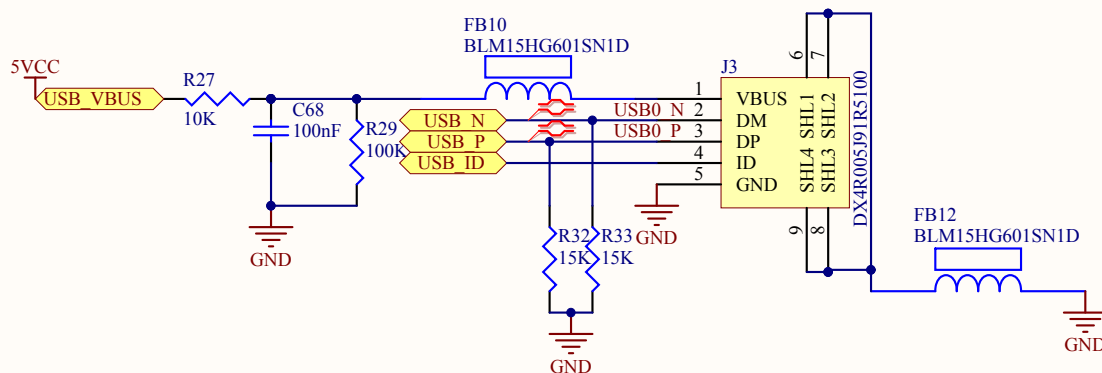


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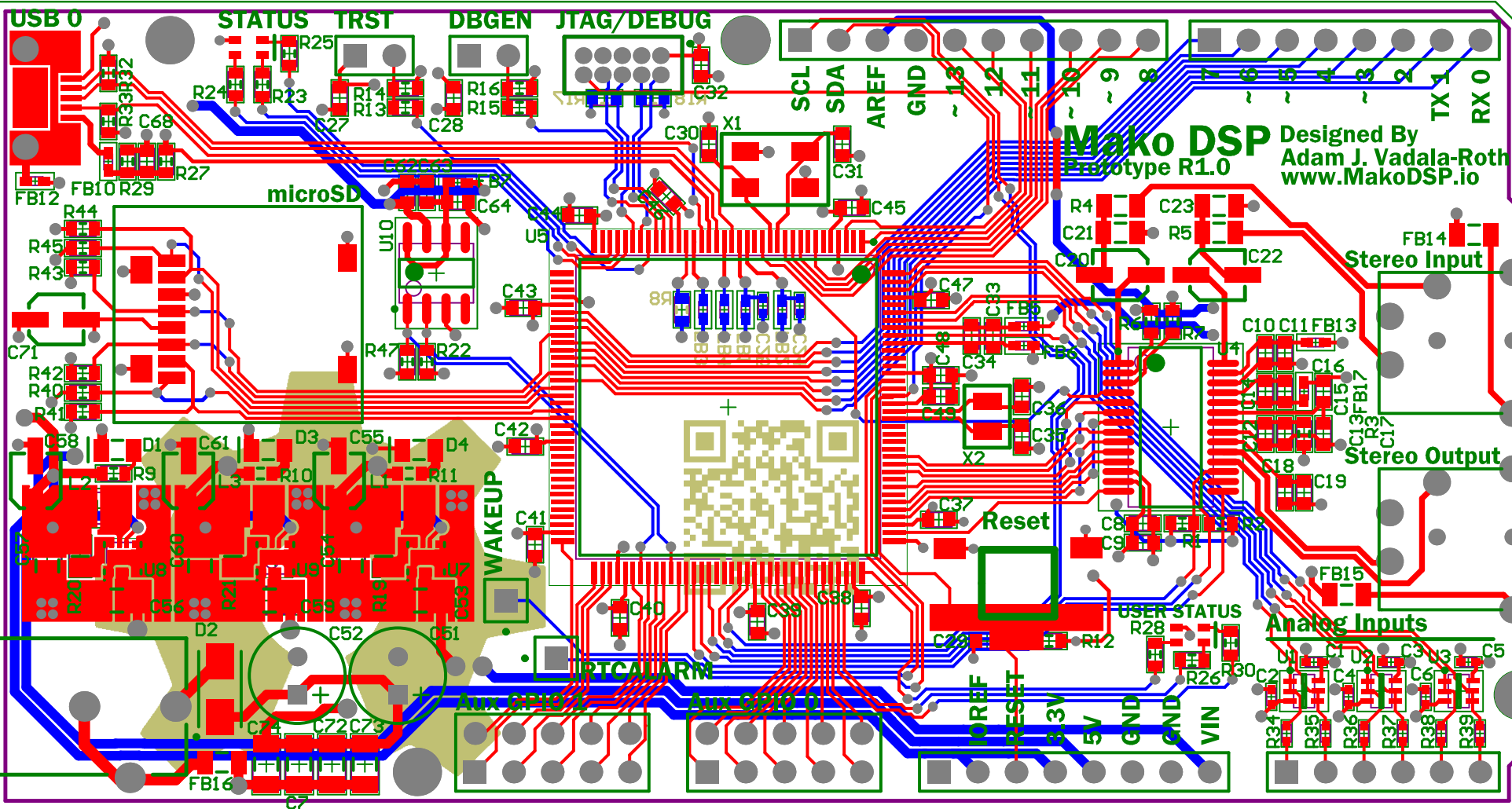
USB Ports



USB Module 0 Device/Host/OTG



Title			
Size A	Number		Revision
Date:	10/29/2013	Sheet of	
File:	C:\Users\...\Mako DSP USBR1.2.SchDoc	Drawn By:	



Bill of Materials

<Parameter Title not found>

Source Data From: Mako DSP.PrjPCB
Project: Mako DSP.PrjPCB
Variant: None

Creation Date: 10/29/2013 5:57:46 PM
Print Date: 41576 41576.74878

Footprint	Comment	LibRef	Designator	Description	Quantity
PJ-102AH	Center-positive 2.1 mm power jack	PWR2.5	1	Power jack	1
Arduino	Arduino	Arduino	Analog Input1		1
Leonardo	Leonardo	Leonardo			
Analog	Analog	Analog			
HDR2X5	Header 5X2	Header 5X2	Aux GPIO 0, Aux GPIO 1	Header, 5-Pin, Dual row	2
0402	Cap Semi	Cap Semi	C1, C2, C3, C4, C5, C6, C24, C25	Capacitor (Semiconductor SIM Model)	8
C1206	Cap Semi	Cap Semi	C7, C53, C54, C56, C57, C59, C60, C72, C73, C74	Capacitor (Semiconductor SIM Model)	10
1608[0603]	Cap Semi	Cap Semi	C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C30, C31, C33, C34, C35, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C46, C47, C48, C49, C62, C63, C64, C68	Capacitor (Semiconductor SIM Model)	35
Panasonic	Cap Semi	Cap Semi	C20, C22, C55, C58, C61, C71	Capacitor (Semiconductor SIM Model)	6
VS B	Cap Semi	Cap Semi	C21, C23	Capacitor (Semiconductor SIM Model)	2
SM 0805 - gap trimmed	Cap Semi	Cap Semi	C27, C28, C29, C32	Capacitor (Semiconductor SIM Model)	4
CAPC1608L	Cap Pol1	Cap Pol1	C51, C52	Polarized Capacitor (Radial)	2
CAPPR2.5- 6.3x5	LED2	LED2	D1, D3, D4	Typical RED, GREEN, YELLOW, AMBER	3
SM 0805 polarized	PMEG4050EP	Diode	D2	GaAs LED	1
PMEG4050EP	Header 2	Header 2	DBGEN1, TRST1	Header, 2-Pin	2
HDR1X2	Arduino	Arduino	Digital IO Higher Byte1		1
Arduino	Leonardo High Byte	Leonardo High Byte	Digital IO Lower Byte1		1
Leonardo	Leonardo Low Byte	Leonardo Low Byte	FB1, FB2, FB3, FB4, FB5, FB6, FB7, FB10, FB12, FB13, FB17	BLM15HG601SN1D	11
BLM18PG12	BLM15HG601S N1D	BLM15HG601S N1D	FB14, FB15, FB16	Inductor	3
1SND	Ferrite	Inductor			
SM 0805 - gap trimmed	DX4R005J91R51 00	Micro USB	J3	Micro USB Jack B	1
Micro USB	S9015E-05-ND	S9015E-05-ND	JTAG/DEBUG1		1
Circular	Inductor	Inductor	L1, L2, L3	Inductor	3
Holes Only	Arduino	Arduino	Power & Reset1		1
S9015E-05-ND	Leonardo Power	Leonardo Power	R1, R2, R3, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R22, R23, R24, R25, R26, R27, R28, R29, R30, R32, R33, R40, R41, R42, R43, R44, R45, R47	Resistor	34
VLS252012T- 2R2M1R3	Res3	Res3	R4, R5	Resistor	2
Arduino	Res3	Res3	R19, R20, R21	Resistor	3
Leonardo	Res3	Res3	R34, R35, R36, R37, R38, R39	Resistor	6
Power	Tactile Switch	Tactile Switch	RESET1		1
J1-0603	Socket	Socket	RTCALARM1, WAKEUP1	Socket	2
	JAE SJ107021	JAE SJ107021	SD1		1
	microSD Card	Socket			
	RGB LED	RGB LED	STATUS, USER STATUS	RGB LED	2
APTf1616SEEZ	QGBDC	APTf1616SEEZ			
QGBDC	CUI 43515TS	QGBDC	Stereo Input1, Stereo Output1		2
EZGQBDC	BAV70S SOT- 363	BAV70S SOT- 363	U1, U2, U3		3
CUI S-J- 43515TS	WM8778	WM8778	U4		1
BAV70S_SO	LPC4330FBD14 4	LPC4330FBD14 4	U5	32-bit ARM Cortex-M4 MCU, 264 kB SRAM, 2 HS USB with on-chip PHY, Ethernet, CAN, AES, SPIFI, SGPIO, SCT, 144-Pin LQFP	1
T363	TPS62162SOP	TPS62162SOP	U7, U8, U9		3
WM8778	LM3525	LM3525	U10	LM3525	1
SOT486-1_V	ABM3B- 12.000MHZ- B2-T	ABM3B- 12.000MHZ-B2- T	X1		1
	ABS07- 32.768KHZ-T	ABS07- 32.768KHZ-T	X2	ABS07-32.768KHZ-T RTC Crystal Oscillator	1
TPS62162SOP					163

Approved	Notes