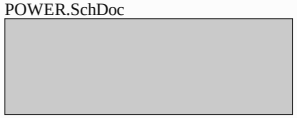
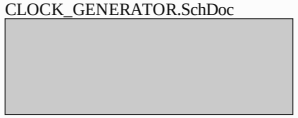
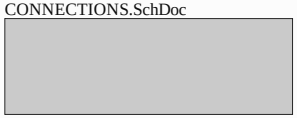
U_POWER
POWER.SchDoc



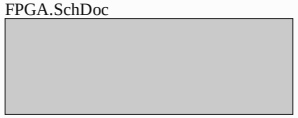
U_CLOCK_GENERATOR
CLOCK_GENERATOR.SchDoc



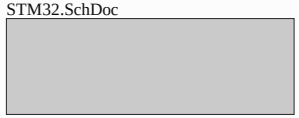
U_CONNECTIONS
CONNECTIONS.SchDoc



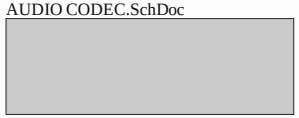
U_FPGA
FPGA.SchDoc



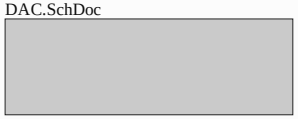
U_STM32
STM32.SchDoc



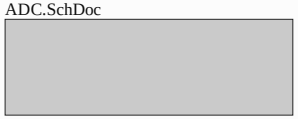
U_AUDIO CODEC
AUDIO CODEC.SchDoc



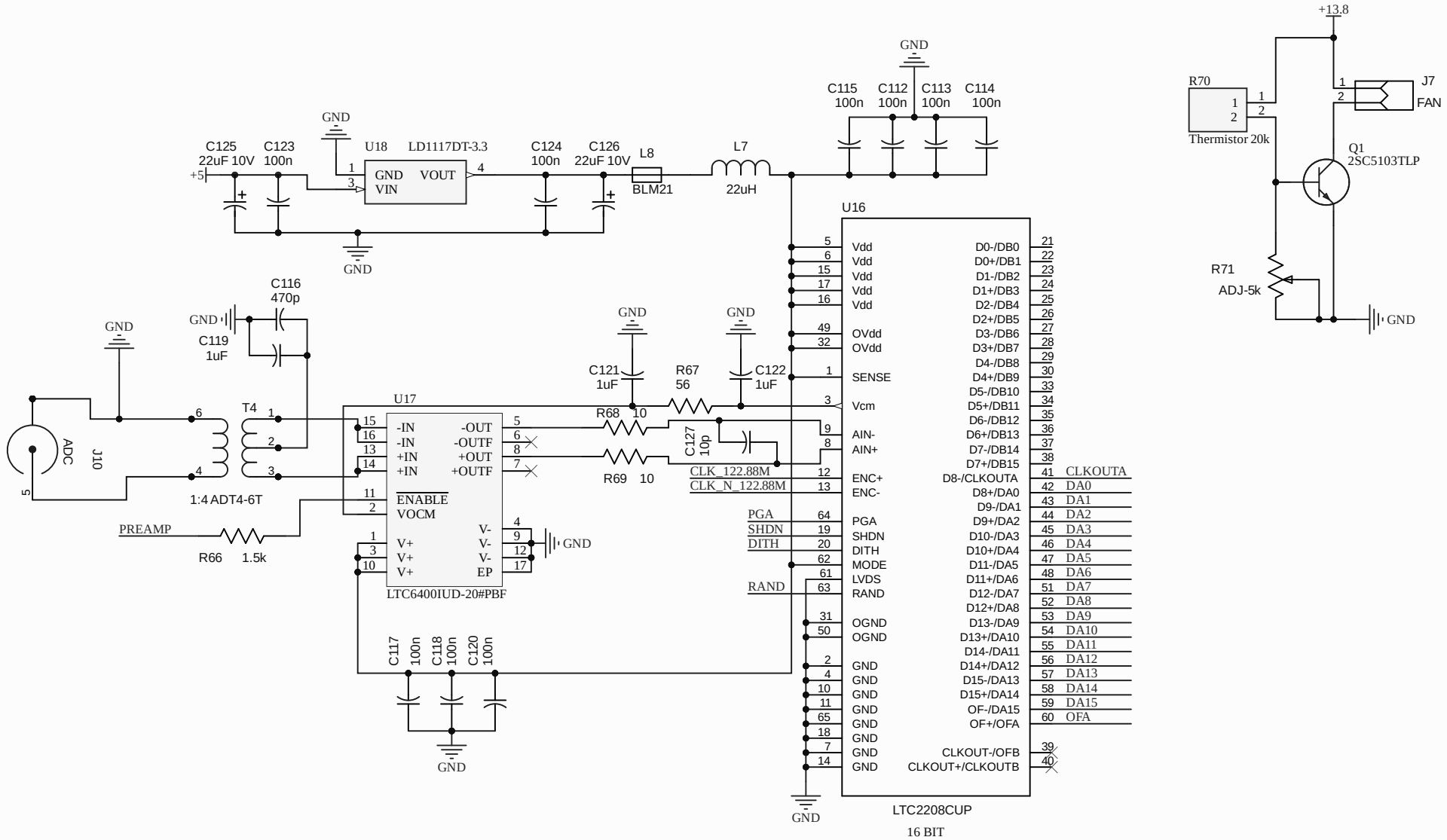
U_DAC
DAC.SchDoc



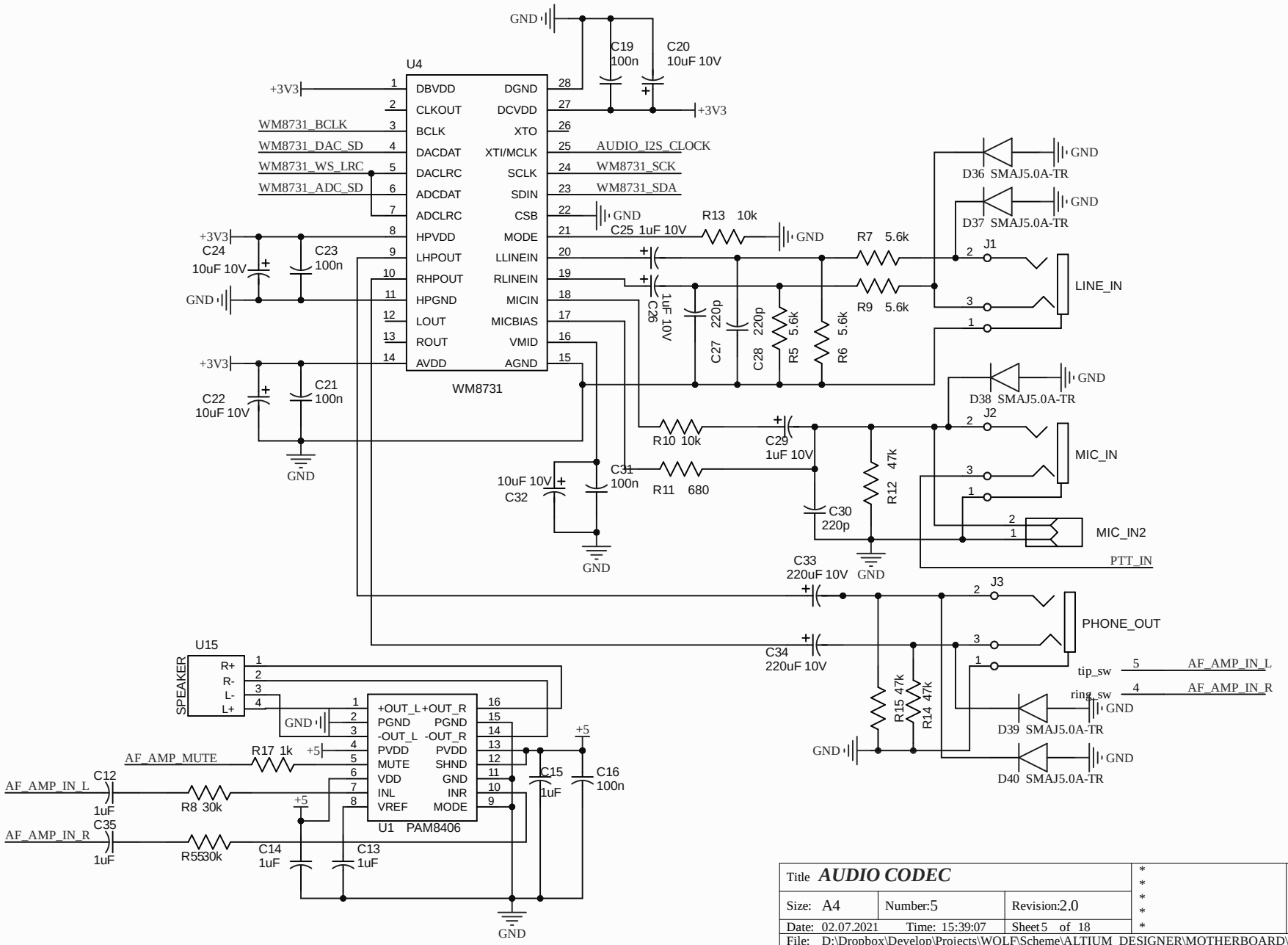
U_ADC
ADC.SchDoc



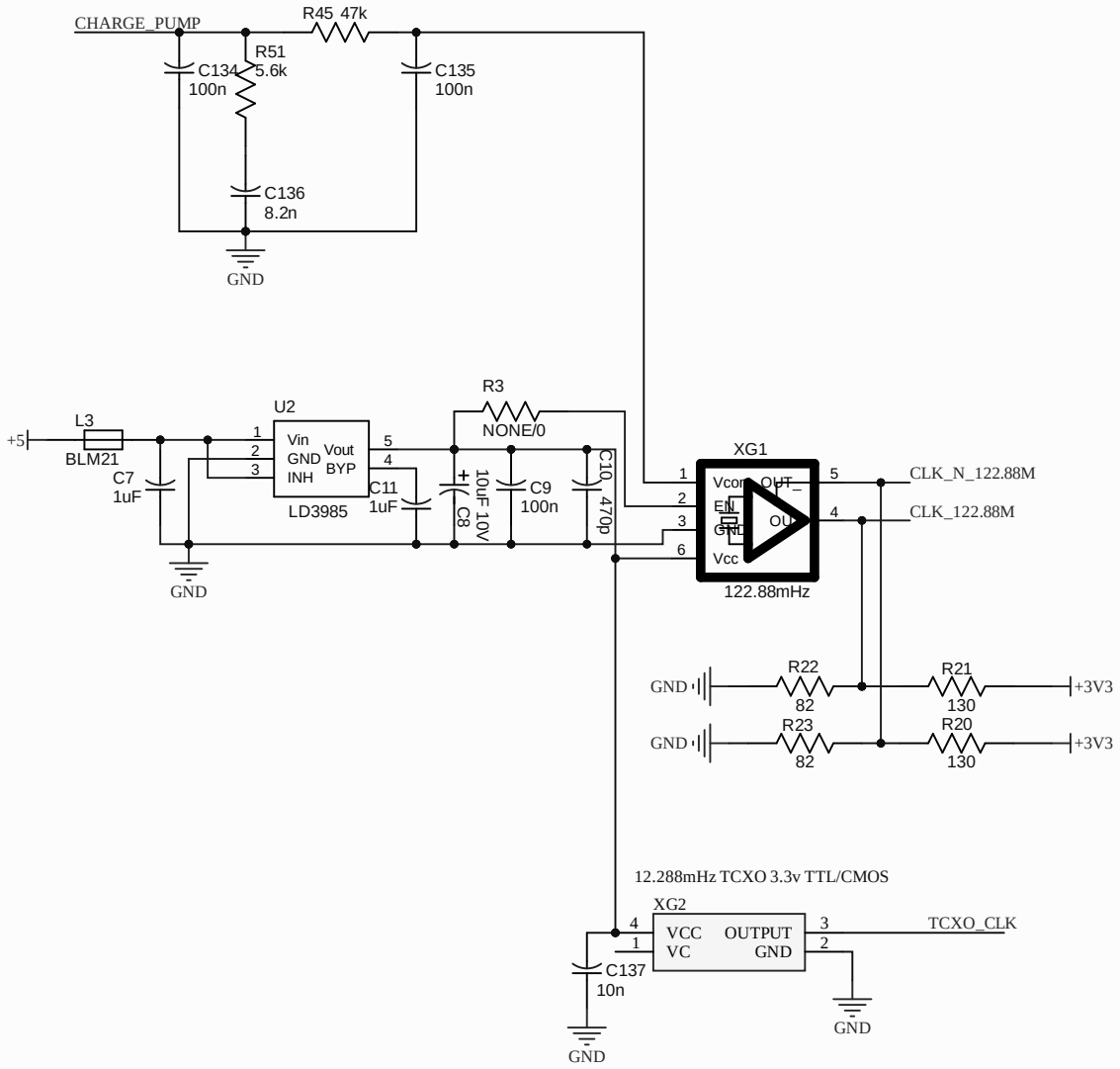
Title	***MOTHERBOARD***		
Size: A4	Number:2	Revision:2.0	
Date: 02.07.2021	Time: 15:39:07	Sheet 2 of 18	
File: D:\Dropbox\Develop\Projects\WOLF\Scheme\ALTIUM_DESIGNER\MOTHERBOARD\MOTHERBOARD.SCHDOC			



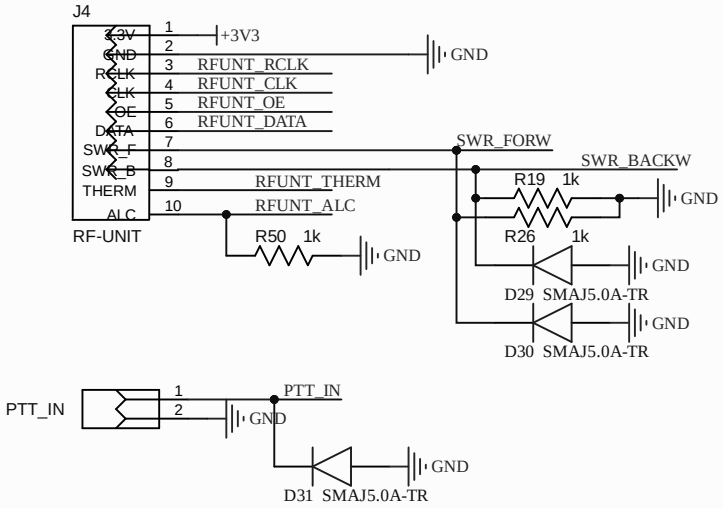
Title	***ADC***		
Size: A4	Number:3	Revision:2.0	
Date: 02.07.2021	Time: 15:39:07	Sheet 3 of 18	
File: D:\Dropbox\Develop\Projects\WOLF\Scheme\ALTIUM_DESIGNER\MOTHERBOARD\ADC.SchDoc			

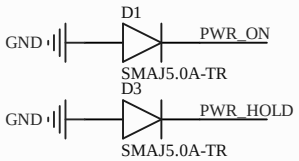


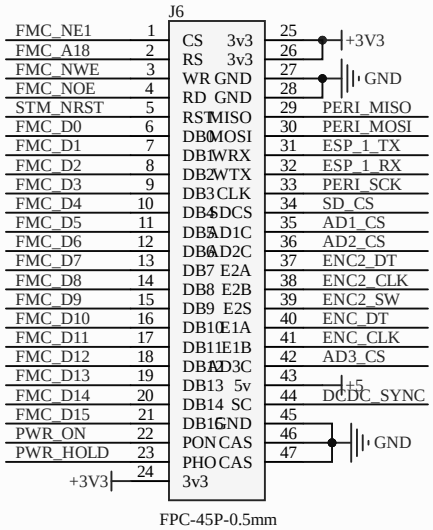
Title	***AUDIO CODEC***		
Size: A4	Number:5	Revision:2.0	
Date: 02.07.2021	Time: 15:39:07	Sheet 5 of 18	
File: D:\Dropbox\Develop\Projects\WOLF\Scheme\ALTIUM_DESIGNER\MOTHERBOARD\AUDIO CODEC.SchDoc			

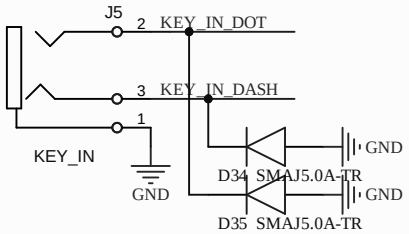


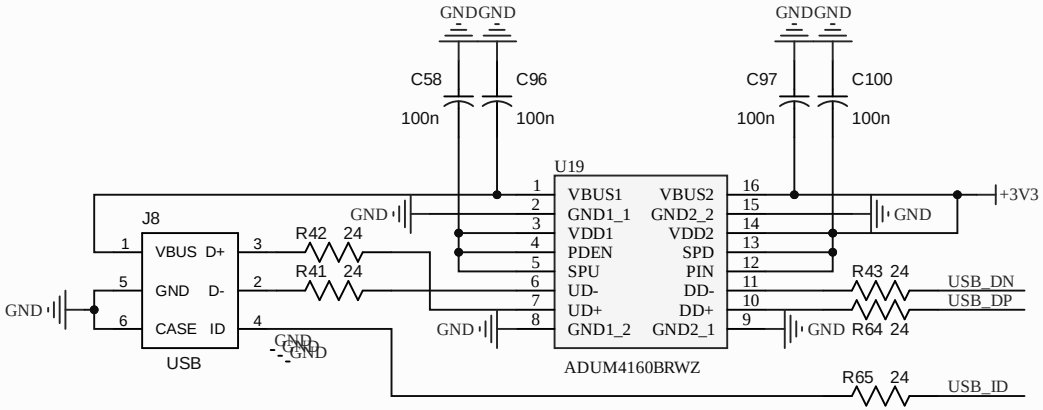
Title	***CLOCK_GENERATOR***		
Size: A4	Number:6	Revision:2.0	
Date: 02.07.2021	Time: 15:39:07	Sheet 6 of 18	
File:	D:\Dropbox\Develop\Projects\WOLF\Scheme\ALTIUM_DESIGNER\MOTHERBOARD\CLOCK_GENERATOR.SchDoc		



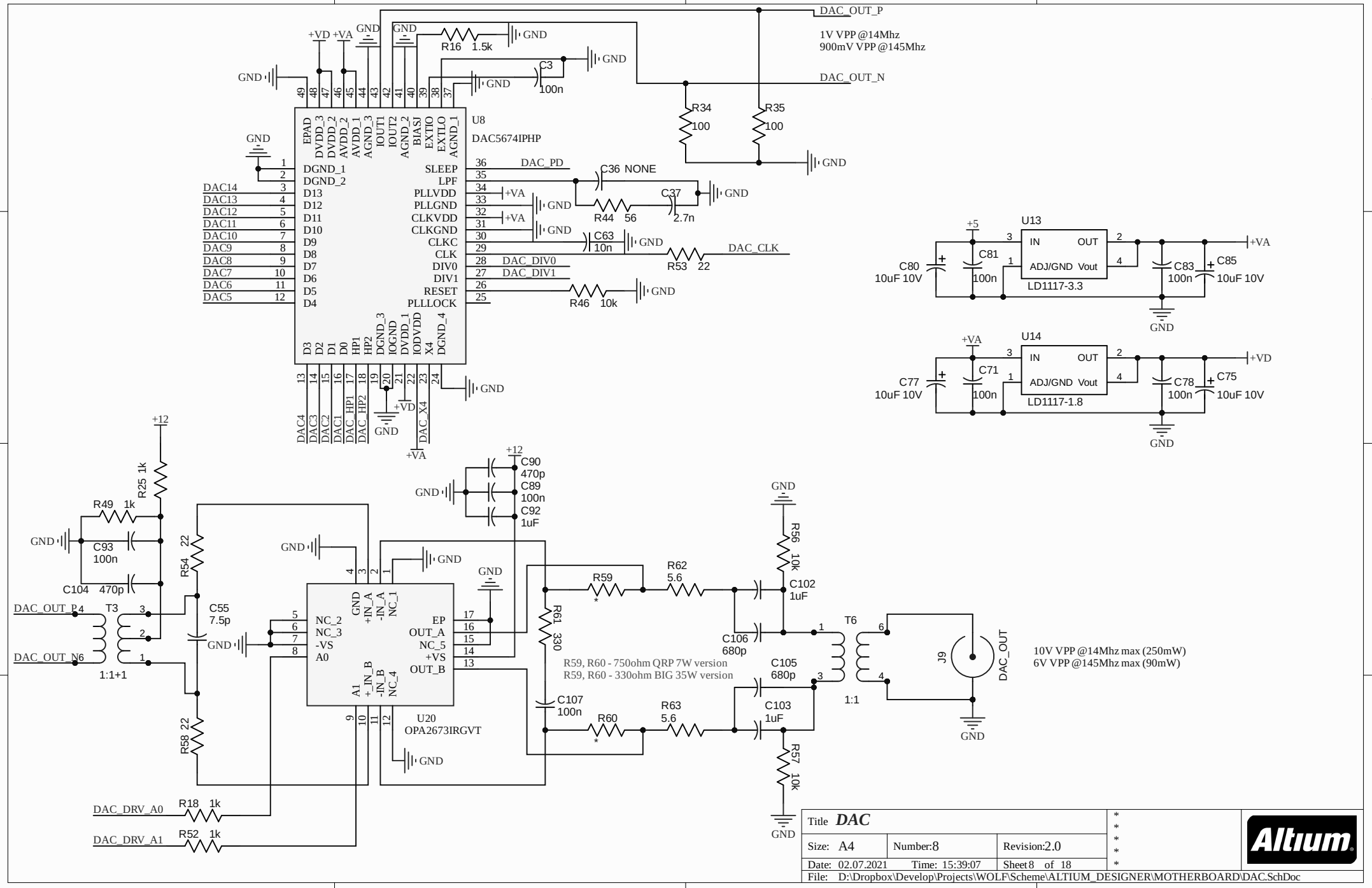


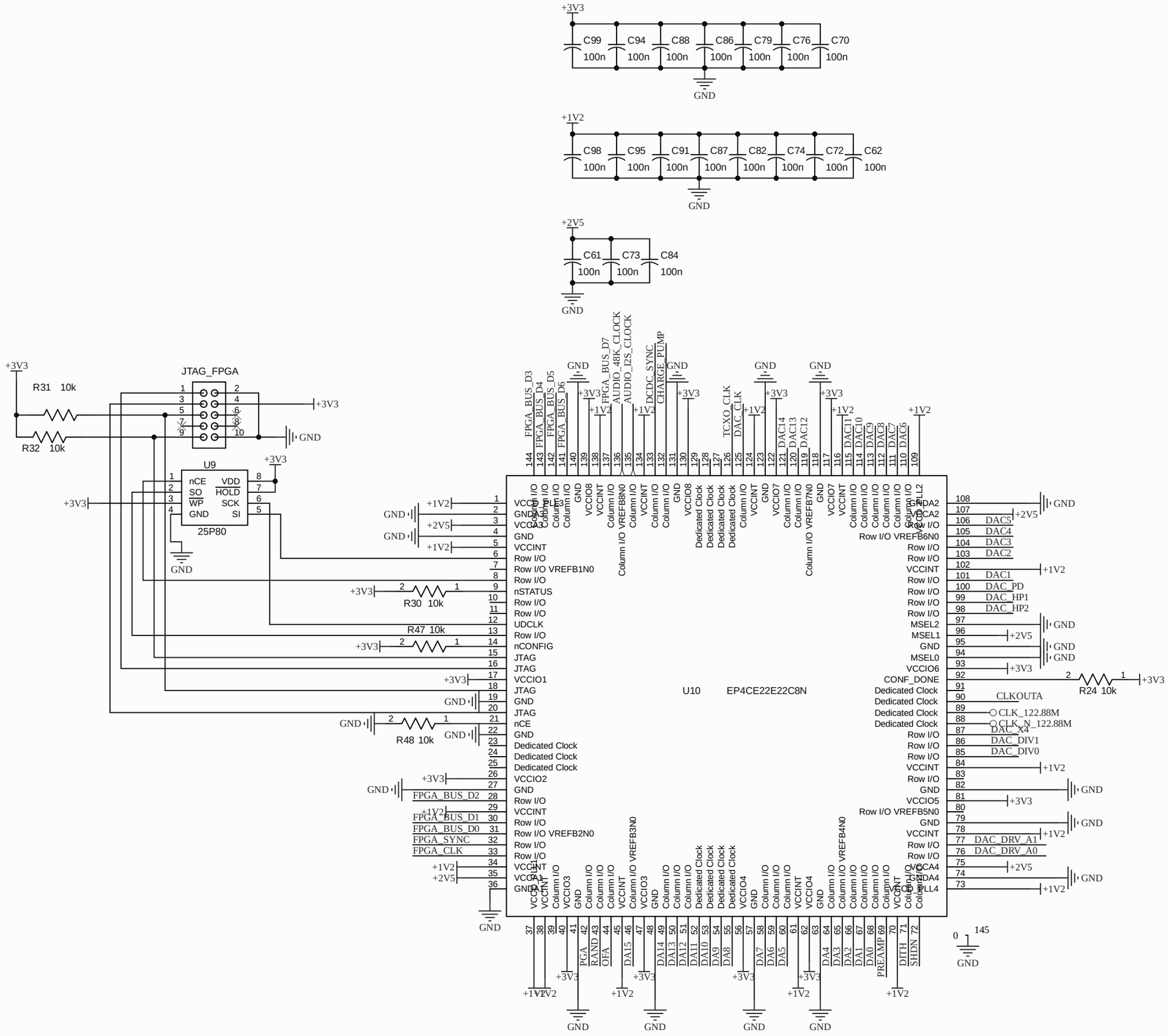




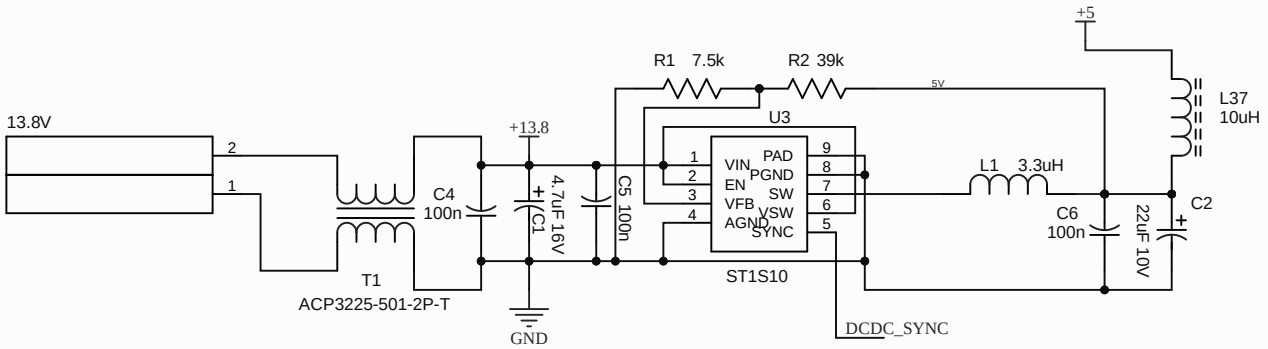


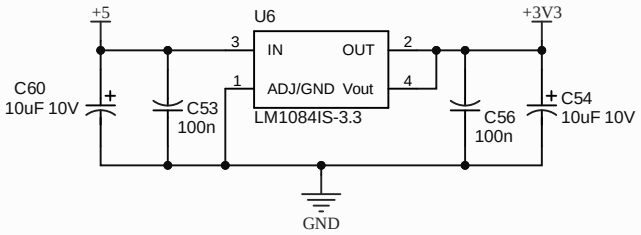
Title	***CONNECTIONS***		
Size: A4	Number:7	Revision:2.0	
Date: 02.07.2021	Time: 15:39:07	Sheet 7 of 18	
File: D:\Dropbox\Develop\Projects\WOLF\Scheme\ALTIUM_DESIGNER\MOTHERBOARD\CONNECTIONS.SchDoc			

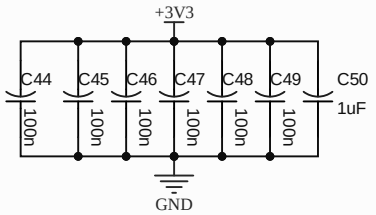

DAC_OUT_P
1V VPP @14Mhz
900mV VPP @145Mhz
DAC_OUT_N
U8
DAC5674IPHP
DAC_PD
DAC_CLK
DAC_DIV0
DAC_DIV1
U13
LD1117-3.3
U14
LD1117-1.8
U20
OPA2673IRGVT
R59, R60 - 750ohm QRP 7W version
R59, R60 - 330ohm BIG 35W version
10V VPP @14Mhz max (250mW)
6V VPP @145Mhz max (90mW)
DAC_DRV_A0
DAC_DRV_A1
Title DAC
Size: A4
Number:8
Revision:2.0
Date: 02.07.2021
Time: 15:39:07
Sheet 8 of 18
File: D:\Dropbox\Develop\Projects\WOLF\Scheme\ALTIUM_DESIGNER\MOTHERBOARD\DAC.SchDoc

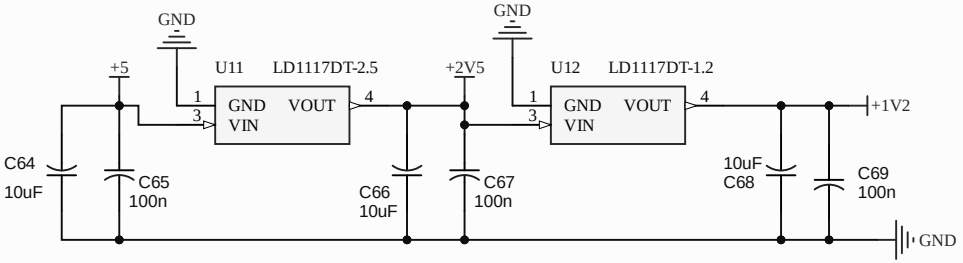


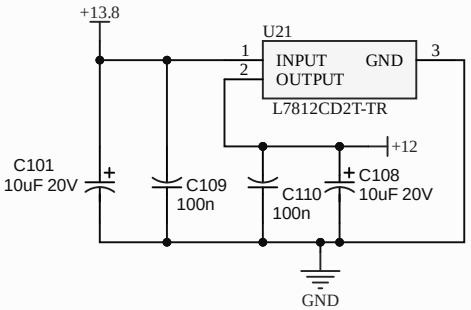
Title	***FPGA***		
Size: A3	Number:9	Revision:2.0	
Date: 02.07.2021	Time: 15:39:07	Sheet 9 of 18	
File: D:\Dropbox\Develop\Projects\WOLF\Scheme\ALTIUM_DESIGNER\MOTHERBOARD\FPGA.SchDoc			





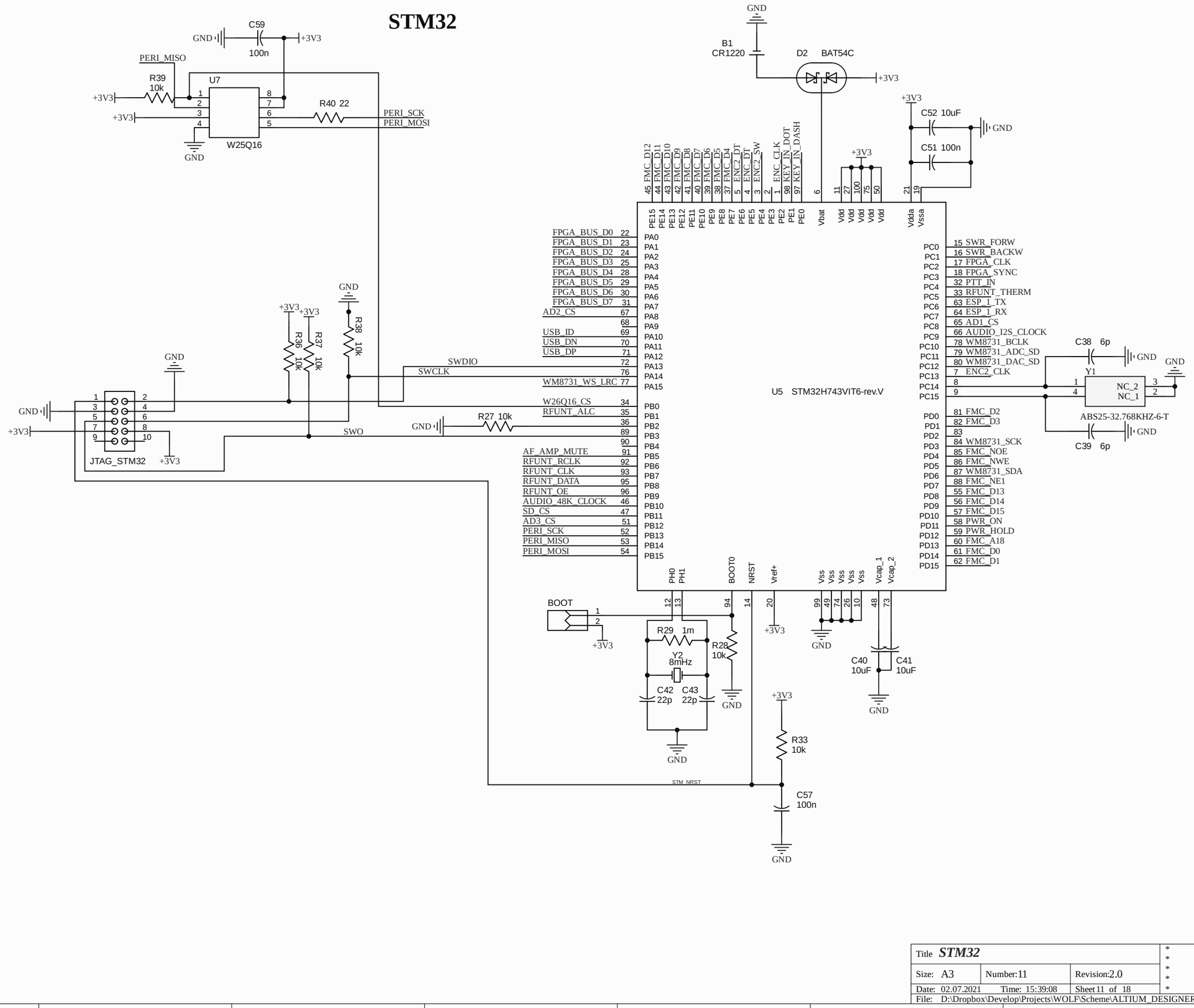






Title **POWER**			
Size: A4	Number:10	Revision:2.0	
Date: 02.07.2021	Time: 15:39:08	Sheet 10 of 18	
File: D:\Dropbox\Develop\Projects\WOLF\Scheme\ALTIUM_DESIGNER\MOTHERBOARD\POWER.SchDoc			

STM32



Title	***STM32***		
Size: A3	Number: 11	Revision: 2.0	
Date: 02.07.2021	Time: 15:39:08	Sheet 11 of 18	
File:	D:\Dropbox\Develop\Projects\WOLF\Scheme\ALTIUM_DESIGNER\MOTHERBOARD\STM32.SchDoc		

Comment	Description	Designator	Footprint	Quantity
	2 Pin	BOOT	S1022-0200	1
	2*5 Pin	JTAG_FPGA, JTAG_STM32	IDC10	2
	RES_0805	R59, R60	RES_0805	2
0/NONE	By used crystal	R3	RES_0805	1
1:1	Transformer	T6	TRANSF_ACORE	1
1:1+1	Transformer	T3	TRANSF_ACORE2	1
1:4 ADT4-6T	Transformer	T4	TRANSF_ACORE2	1
1k	RES_0805	R17, R18, R19, R25, R26, R49, R50, R52	RES_0805	8
1m	RES_0805	R29	RES_0805	1
1uF	CAP_0805	C7, C11, C12, C13, C14, C15, C35, C92, C119, C121, C122	CAP_0805	11
1uF	CAP_1206	C102, C103	CAP_1206	2
1uF 10V	CAPAE_4.3x4.3h5.4	C25, C26, C29	CAPAE_4.3x4.3h5.4	3
1.5k	RES_0805	R16, R66	RES_0805	2
2SC5103TLP	Transistor BJT NPN	Q1	2SC5103TLQ	1
2.7n	CAP_0805	C37	CAP_0805	1
3.3uH	IND_1812	L1	IND_1812	1
4.7uF 16V	CAPAE_6.6x6.6h5.4	C1	CAPAE_6.6x6.6h5.4	1
5.6	RES_1206	R62, R63	RES_1206	2
5.6k	RES_0805	R5, R6, R7, R9, R51	RES_0805	5
9p	CAP_0805	C38, C39	CAP_0805	2
7.5k	RES_0805	R1	RES_0805	1
7.5p	CAP_0805	C55	CAP_0805	1
8mHz	ECS-200-20-1	Y2	ECS-200-20-1	1
8.2n	CAP_0805	C136	CAP_0805	1
10	RES_0603	R68, R69	RES_0603	2
10k	RES_0805	R10, R13, R24, R27, R28, R30, R31, R32, R33, R36, R37, R38, R39, R46, R47, R48, R56, R57	RES_0805	18
10n	CAP_0805	C63, C137	CAP_0805	2
10p	CAP_0805	C127	CAP_0805	1
10uF	CAP_0805	C40, C41, C50, C52, C64, C66, C68	CAP_0805	7
10uF 10V	CAPAE_4.3x4.3h5.4	C9, C20, C22, C24, C32, C54, C60, C75, C77, C80, C85	CAPAE_4.3x4.3h5.4	11
10uF 20V	CAPAE_4.3x4.3h5.4	C101, C108	CAPAE_4.3x4.3h5.4	2
10uH	Inductor	L37	IND_FERRITE_CORE	1
12.288mHz TCXO 3.3v TTL/CMOS	Crystal or Oscillator	XG2	5811.200X2ITT	1
22	RES_0805	R40, R53, R54, R58	RES_0805	4
22p	CAP_0805	C42, C43	CAP_0805	2
22uF 10V	CAPAE_4.3x4.3h5.4, {NoValue}, EEFC_sizeB	C2, C125, C126	CAPAE_4.3x4.3h5.4	3
22uH	IND_1206	L7	14-1210	1
24	RES_0805	R41, R42, R43, R64, R65	RES_0805	5
25P80	25P80	U9	25P80	1
30k	RES_0805	R8, R55	RES_0805	2
39k	RES_0805	R2	RES_0805	1
47k	RES_0805	R12, R14, R15, R45	RES_0805	4
56	RES_0805	R44, R67	RES_0805	2
82	RES_0805	R22, R23	RES_0805	2
100	RES_0805	R34, R35	RES_0805	2
100n	CAP_0805	C3, C4, C5, C6, C9, C16, C19, C21, C23, C31, C44, C45, C46, C47, C48, C49, C51, C53, C56, C57, C58, C59, C61, C62, C65, C67, C69, C70, C71, C72, C73, C74, C76, C78, C79, C81, C82, C83, C84, C86, C87, C88, C89, C91, C93, C94, C95, C96, C97, C98, C99, C100, C107, C109, C110, C112, C113, C114, C115, C117, C118, C120, C123, C124, C134, C135	CAP_0805	66
122.88mHz	NV7050SA VG-4513CA-122.8800M-GGCT3	XG1	NV7050SA	1
130	RES_0805	R20, R21	RES_0805	2
220p	CAP_0805	C27, C28, C30	CAP_0805	3
220uF 10V	CAPAE_4.3x4.3h5.4	C33, C34	EEEFC_sizeC	2
330	RES_0805	R61	RES_0805	1
470p	CAP_0805	C10, C90, C104, C116	CAP_0805	4
680	RES_0805	R11	RES_0805	1
680p	CAP_1206	C105, C106	CAP_1206	2
ABS25-32.768KHZ-6-T	Crystal or Oscillator	Y1	ABS25	1
ACP3225-501-2P-T	Transformer	T1	TRANSF_ICORE	1
ADC	SMA	J10	31-5431	1
ADJ-5k	3061	R71	3061	1
ADUM4160BRWZ	Integrated Circuit	U19	SOIC127P1032X265-16N	1
BAT54C	BAT54C	D2	BAT54C	1
BLM21	BLM21	L3, L8	CAP_0805	2
CR1220	BR1632A/FA	B1	KLS5-CR1220-01	1
DAC5674IPHP	Integrated Circuit	U8	QFP50P900X900X100-48N	1
DAC_OUT	SMA	J9	31-5431	1
EP4CE22E22C8N	EP4CE22E22C8N	U10	QFP144-20-2222A	1
FAN	S1022-0200	J7	S1022-0200	1
FPC-4SP-0.5mm	Connector	J6	FH12S45S05SH60	1
GX2	GX2	13.8V	GX2	1
LT612CD2T-TR	Integrated Circuit	U21	LT612CD2TTR	1
LD1117-1.8	LT1117CST-1.8	U14	LT1117CST-3.3	1
LD1117-3.3	LT1117CST-3.3	U13	LT1117CST-3.3	1
LD1117DT-1.2	LD1117DT-1.2 DPAK	U12	TO228P991X238-3N	1
LD1117DT-2.5	LD1117DT-2.5 DPAK	U11	TO228P991X238-3N	1
LD1117DT-3.3	LD1117DT33 DPAK	U18	TO228P991X238-3N	1
L03985	L03985	U2	L03985	1
LM1084IS-3.3	LM1084IS-3.3	U6	LM1085-3.3	1
LTC2208CUP	LTC2208CUP	U16	LTC2208CUP	1
LTC6400IUD-20#PBF	Single Channel, Low Noise, Low Distortion Differential ADC Driver for 300 MHz IF, 1800 MHz Typical GBW, 4500 V/us Typical SR, 2.85 to 3.5 V, 16-Pin QFN (UD-16), Industrial, Pb-Free	U17	LT-UD-16_N	1
MIC_IN2	2 Pin	MIC_IN2	S1022-0200	1
NONE	CAP_0805	C36	CAP_0805	1
OPA2673IRGVT	Integrated Circuit	U20	QFN65P400X400X100-17N-D	1
PAM8406	PAM8406	U1	PAM8403	1
PTT_IN	S1022-0200	PTT_IN	S1022-0200	1
RF-UNIT	2*5 Pin	J4	90131-0126	1
S1I-3525NG	S1I-3525NG	J1, J2, J3, J5	S1I-3525NG	4
SMAJ5.0A-TR	Diode	D1, D3, D29, D30, D31, D34, D35, D36, D37, D38, D39, D40	SMBJ36CATR	12
SPEAKER	4 pins conn	U15	speaker conn	1
ST1510	ST1510	U3	ST1510	1
STM32H743VIT6-rev.V	STM32H743VIT6	U5	STM32H743VIT6	1
Thermistor 20k	Thermistor	R70	MF52A103F3950A1	1
U5B	2-1734035-3	JB	2-1734035-3	1
W25Q16	W25Q16	U7	W25Q16	1
WM8731	WM8731	U4	WM8731	1