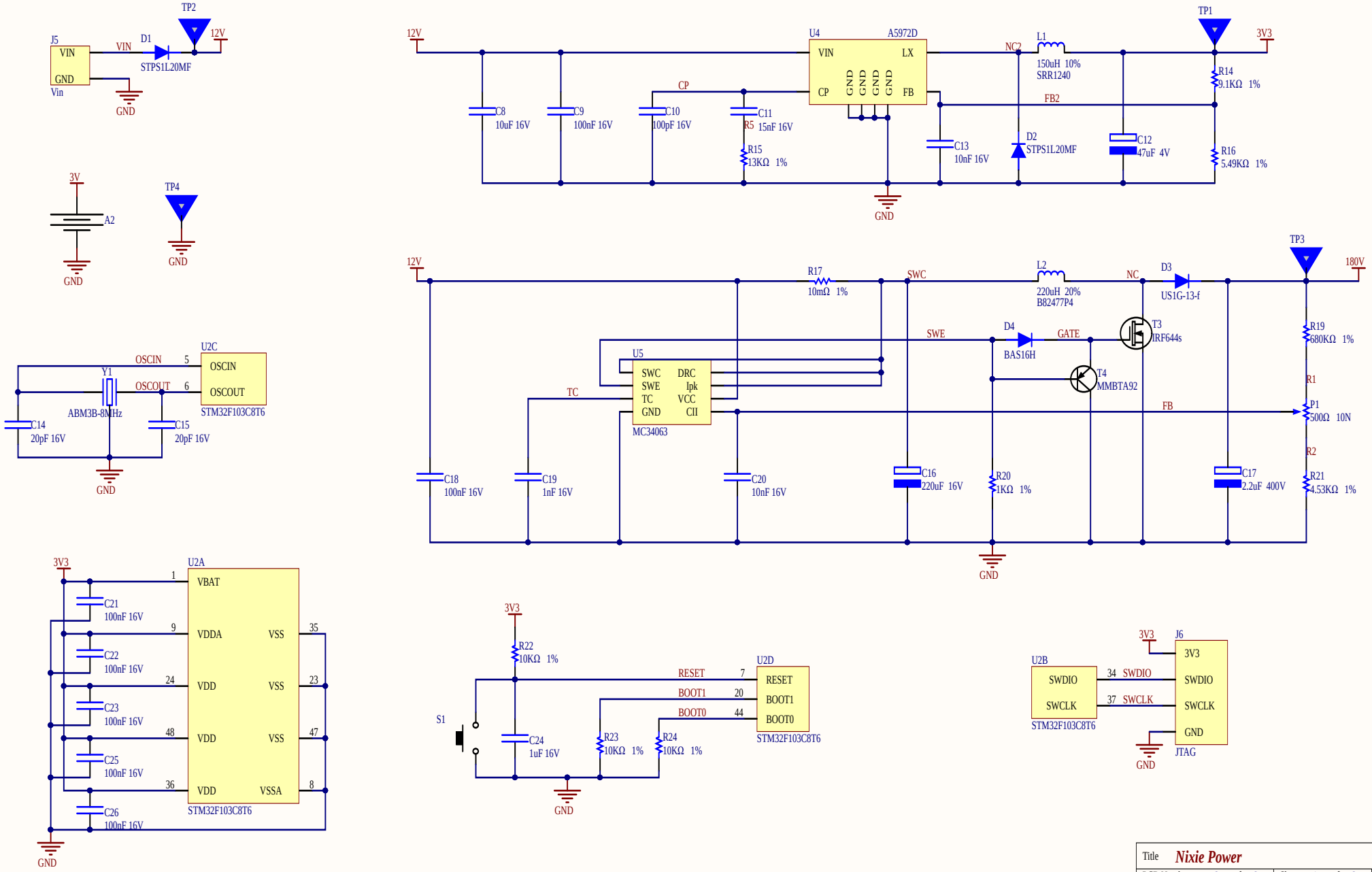
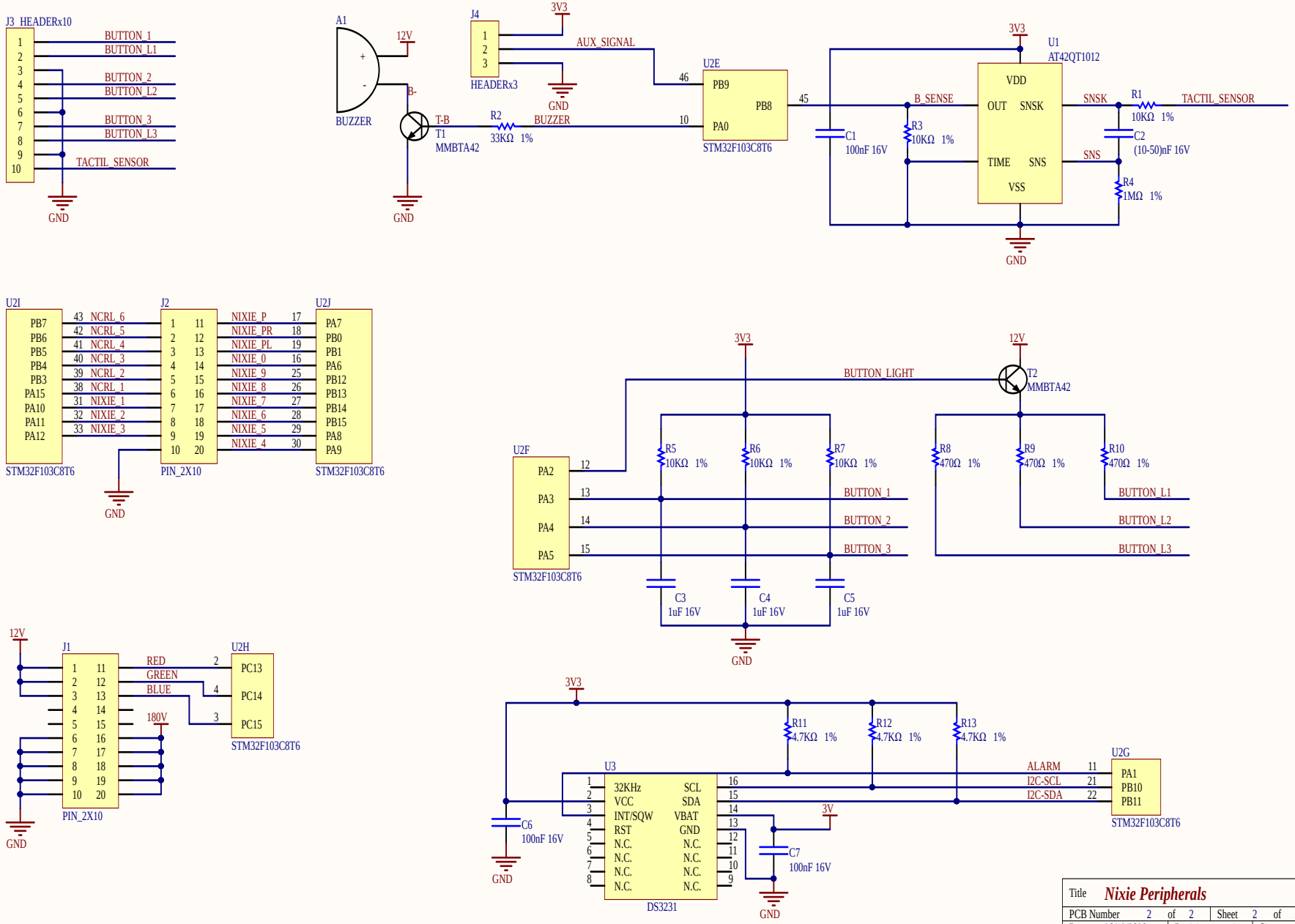
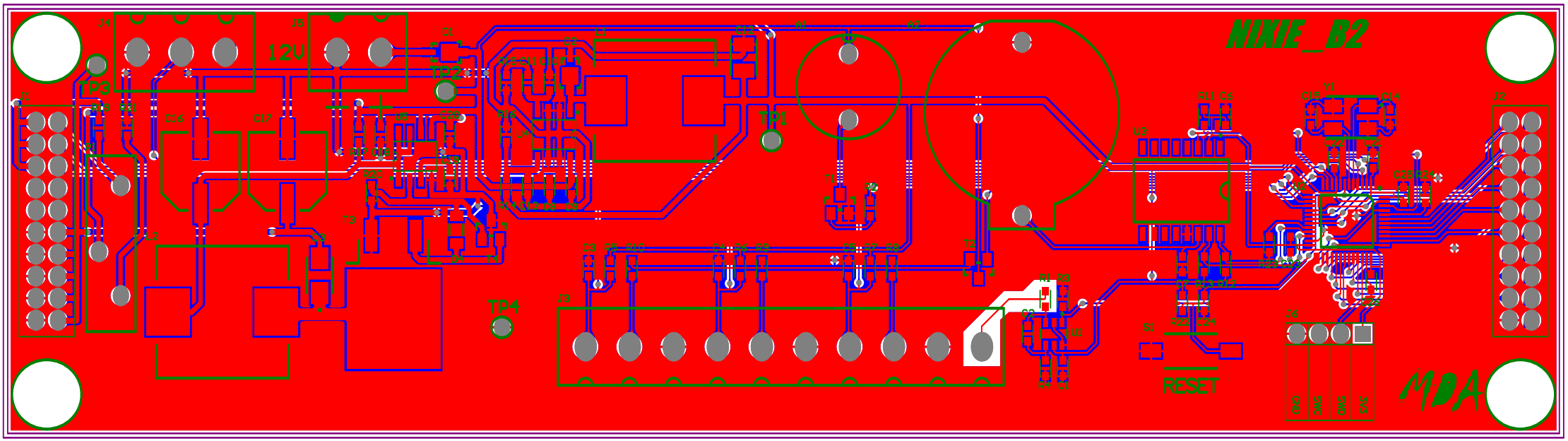

J5
VIN
GND
Vin
D1
STPS1L20MF
TP2
12V
GND
3V
A2
GND
TP4
GND
12V
U4
A5972D
VIN
LX
CP
FB
GND
NC2
L1
150uH 10%
SRR1240
TP1
3V3
R14
9.1KΩ 1%
FB2
C8
10uF 16V
C9
100nF 16V
C10
100pF 16V
CP
C11
15nF 16V
R5
R15
13KΩ 1%
C13
10nF 16V
D2
STPS1L20MF
C12
47uF 4V
R16
5.49KΩ 1%
GND
12V
R17
10mΩ 1%
SWC
L2
220uH 20%
B82477P4
NC
D3
US1G-13-f
TP3
180V
SWE
D4
BAS16H
GATE
T3
IRF644s
R19
680KΩ 1%
U5
SWC
SWE
TC
GND
DRC
Ipk
VCC
CII
MC34063
T4
MMBTA92
R1
TC
FB
P1
500Ω 10N
R2
C18
100nF 16V
C19
1nF 16V
C20
10nF 16V
C16
220uF 16V
R20
1KΩ 1%
C17
2.2uF 400V
R21
4.53KΩ 1%
GND
U2C
OSCIN
OSCOUT
Y1
ABM3B-8MHz
STM32F103C8T6
C14
20pF 16V
C15
20pF 16V
GND
3V3
U2A
VBAT
VDDA
VDD
VSS
VSSA
C21
100nF 16V
C22
100nF 16V
C23
100nF 16V
C25
100nF 16V
C26
100nF 16V
STM32F103C8T6
GND
3V3
R22
10KΩ 1%
RESET
BOOT1
BOOT0
U2D
STM32F103C8T6
S1
C24
1uF 16V
R23
10KΩ 1%
R24
10KΩ 1%
GND
U2B
SWDIO
SWCLK
STM32F103C8T6
3V3
J6
3V3
SWDIO
SWCLK
GND
JTAG
GND
Title
Nixie Power
PCB Number 2 of 2
Sheet 1 of 2
Date: 28/12/2020
Revision: 1
Size: A4
Author
Manuel Diaz Alonso
MDA



Title	*Nixie Peripherals*		
PCB Number	2 of 2	Sheet	2 of 2
Date:	28/12/2020	Revision:	1
Author	*Manuel Diaz Alonso*	Size:	A4

MDA


NIXIE_B2
12V
RESET
MBA

Item #	LibRef	Comment	Footprint	Quantity
1	BUZZER	BUZZER	BUZZER	1
2	BAT	3V	HOLDER-2032	1
3	CAP	100nF 16V	0603	10
4	CAP	(10-50)nF 16V	0603	1
5	CAP	1uF 16V	0603	4
6	CAP	10uF 16V	0603	1
7	CAP	100pF 16V	0603	1
8	CAP	15nF 16V	0603	1
9	CAP_pol	47uF 4V	AVX-B-CASE	1
10	CAP	10nF 16V	0603	2
11	CAP	20pF 16V	0603	2
12	CAP_pol	220uF 16V	CAP-SIZE-F	1
13	CAP_pol	2.2uF 400V	CAP-SIZE-F	1
14	CAP	1nF 16V	0603	1
15	DIO	STPS1L20MF	DO-222AA	2
16	DIO	US1G-13-f	SMA	1
17	DIO	BAS16H	SOD-123F	1
18	PIN_2X10	PIN_2X10	PIN_2X10_SKT	2
19	HEADERx10	HEADERx10	HEADERx10	1
20	HEADERx3	HEADERx3	HEADERx3	1
21	Vin	Vin	HEADERx2_POL	1
22	JTAG	JTAG	PIN_1X4_HDR_RA	1
23	IND	150uH 10%	SRR1240	1
24	IND	220uH 20%	12.5x12.5	1
25	POTE	500Ω 10N	3006P	1
26	RES	10KΩ 1%	0603	8
27	RES	33KΩ 1%	0603	1
28	RES	1MΩ 1%	0603	1
29	RES	470Ω 1%	0603	3
30	RES	4.7KΩ 1%	0603	3
31	RES	9.1KΩ 1%	0603	1
32	RES	13KΩ 1%	0603	1
33	RES	5.49KΩ 1%	0603	1
34	RES	10mΩ 1%	0603	1
35	RES	680KΩ 1%	0603	1
36	RES	1KΩ 1%	0603	1
37	RES	4.53KΩ 1%	0603	1
38	BUTTON	RESET	FSMSM	1
39	NPN	MMBTA42	SOT-23	2
40	N-MOS	IRF644s	TO263-3S	1
41	PNP	MMBTA92	SOT-23	1
42	TEST-POINT	TEST-POINT	Test_Point	4
43	AT42QT1012	AT42QT1012	SOT-23-6	1
44	STM32F103C8T6	STM32F103C8T6	LQFP48	1
45	DS3231	DS3231	SO16W	1
46	A5972D	A5972D	SOIC-8	1
47	MC34063	MC34063	SOIC-8	1
48	Cristal	ABM3B-8MHz	ABM3B	1