LATTICE-MACHX02-1200HC-4TG144C
IC1G$4

1_PL2A_IO
2_PL2B_IO
3_PL2C_IO
4_PL2D_IO
5_PL3A_IO
6_PL3B_IO
7_VCCIO31_PWR
8_GND1_PWR
9_PL3C_IO
10_PL3D_IO
11_PL4A_IO
12_PL4B_IO
13_PL4C_IO
14_PL4D_IO
15_NC1_PAS
16_VCCIO32_PWR
17_NC2_PAS
18_GND2_PWR
19_PL5A_IO
20_PL5B_IO
21_PL5C_IO
22_PL5D_IO
23_PL8A_IO
24_PL8B_IO
25_PL8C_IO
26_PL8D_IO
27_PL9A_IO
28_PL9B_IO
29_GND3_PWR
30_VCCIO33_PWR
31_NC3_PAS
32_PL10A_IO
33_PL10B_IO
34_PL10C_IO
35_PL10D_IO
36_VCC1_PWR

109_PT17D_IO
110_PT17C_IO
111_PT17B_IO
112_PT17A_IO
113_PT16D_IO
114_PT16C_IO
115_PT16B_IO
116_GND10_PWR
117_PT16A_IO
118_VCCIO01_PWR
119_PT15D_IO
120_PT15C_IO
121_PT15B_IO
122_PT15A_IO
123_VCCIO02_PWR
124_GND11_PWR
125_PT12D_IO
126_PT12C_IO
127_PT12B_IO
128_PT12A_IO
129_NC8_PAS
130_TMS_IN
131_TCK_IN
132_PT11B_IO
133_PT11A_IO
134_GND12_PWR
135_VCCIO03_PWR
136_TDI_IN
137_TDO_OUT
138_PT10B_IO
139_PT10A_IO
140_PT9D_IO
141_PT9C_IO
142_PT9B_IO
143_PT9A_IO
144_VCC4_PWR

73_PR10D_IO
74_PR10C_IO
75_PR10B_IO
76_PR10A_IO
77_PR9D_IO
78_PR9C_IO
79_VCCIO11_PWR
80_GND7_PWR
81_PR9B_IO
82_PR9A_IO
83_PR8D_IO
84_PR8C_IO
85_PR8B_IO
86_PR8A_IO
87_NC5_PAS
88_VCCIO2_PWR
89_NC6_PAS
90_GND8_PWR
91_PR5D_IO
92_PR5C_IO
93_PR5B_IO
94_PR5A_IO
95_PR4D_IO
96_PR4C_IO
97_PR4B_IO
98_PR4A_IO
99_PR3B_IO
100_PR3A_IO
101_GND9_PWR
102_VCCIO13_PWR
103_NC7_PAS
104_PR2D_IO
105_PR2C_IO
106_PR2B_IO
107_PR2A_IO
108_VCC3_PWR

37_VCCIO21_PWR
38_PB4A_IO
39_PB4B_IO
40_PB4C_IO
41_PB4D_IO
42_PB6A_IO
43_PB6B_IO
44_PB6C_IO
45_PB6D_IO
46_GND4_PWR
47_PB9C_IO
48_PB9D_IO
49_PB9A_IO
50_PB9B_IO
51_VCCIO22_PWR
52_PB11C_IO
53_GND5_PWR
54_PB11D_IO
55_PB11A_IO
56_PB11B_IO
57_PB15A_IO
58_PB15B_IO
59_PB15C_IO
60_PB15D_IO
61_PB18A_IO
62_PB18B_IO
63_NC4_PAS
64_GND6_PWR
65_PB18C_IO
66_VCCIO23_PWR
67_PB18D_IO
68_PB20A_IO
69_PB20B_IO
70_PB20C_IO
71_PB20D_IO
72_VCC2_PWR

C1 100n
C2 100n
C3 100n
C4 100n
C5 100n
C6 100n
C7 100n
C8 100n
C9 100n
C10 100n
C11 100n
C12 100n
C13 100n
C14 100n
C15 100n
C16 100n
GND

TMS
TDI
TDO
R2 5k1
R3 5k1
R5 5k1
+3V3
+3V3/2.1A
P$1 P$2 P$3 P$4 P$5 P$6
CN1
R8 2k2
GND/2.1D
TCK
GND

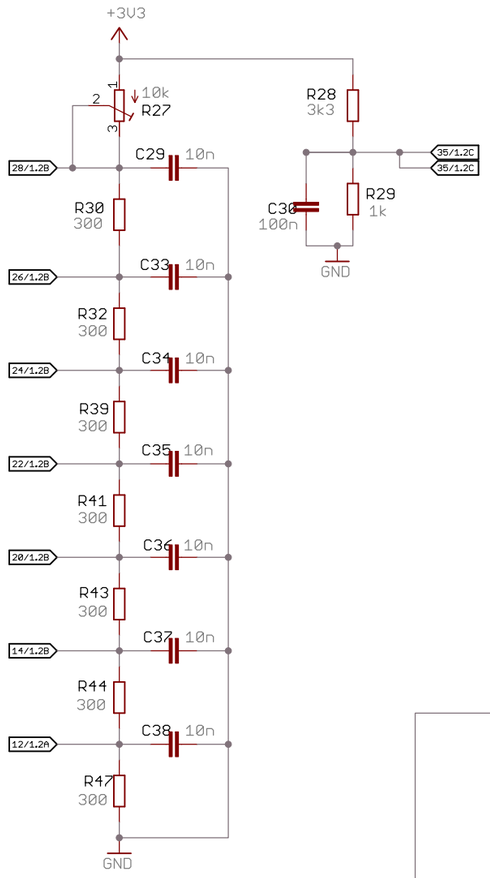
R1 R4 R6 R7 1

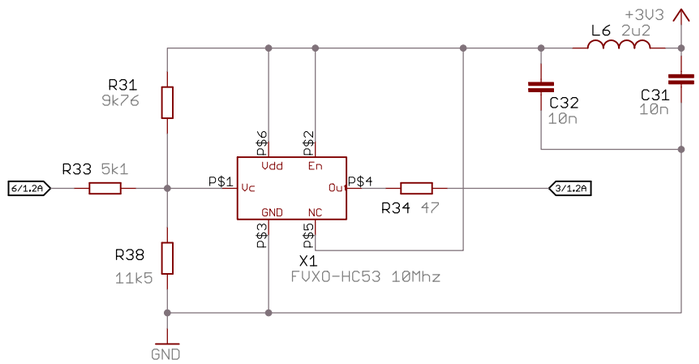
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LED-/3.3A
BLUE/2.7B
RED/2.7B
SEL2
SEL3
LCD-CLK
R9 R10 R11 R12 R13 R14 R15 R16 47
L1 L2 L3 L4 L5
BLM18BA750SN1D
VGL/3.4C
+3V3/2.1A
LED+/3.2A
DE
GREEN/2.7B
SEL1
GND/2.1D
VGH/3.7D
AVDD/3.7A
C17 nm
C18 22p
C19 nm
C20 22p
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C22 22p
C23 nm
C24 22p
GND

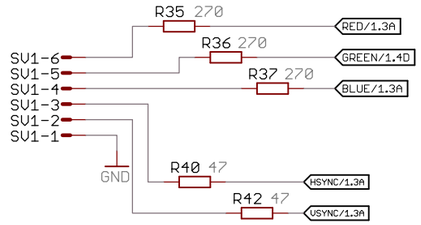
IC2 IC3
CYC1049DV33
P$1 P$2 P$3 P$4 P$5 P$6 P$7 P$8
A$0 A$1 A$2 A$3 A$4 A$5 A$6 A$7 A$8 A$9 A$10 A$11 A$12 A$13 A$14 A$15 A$16 A$17 A$18 A$19
D$0 D$1 D$2 D$3 D$4 D$5 D$6 D$7
CE OE WE
VCC1 VCC2 VSS1 VSS2
NC NC1 NC2 NC3 NC4 NC5 NC6 NC7 NC8
P$9 P$10 P$13 P$14 P$31 P$32 P$35 P$36 P$37 P$15 P$11 P$12 P$34
D3-1 D4-1 D5-1 D6-1 D7-1
D3-2 D4-2 D5-2 D6-2 D7-2
C25 C26 C27 C28 100n
+3V3/2.1A
GND

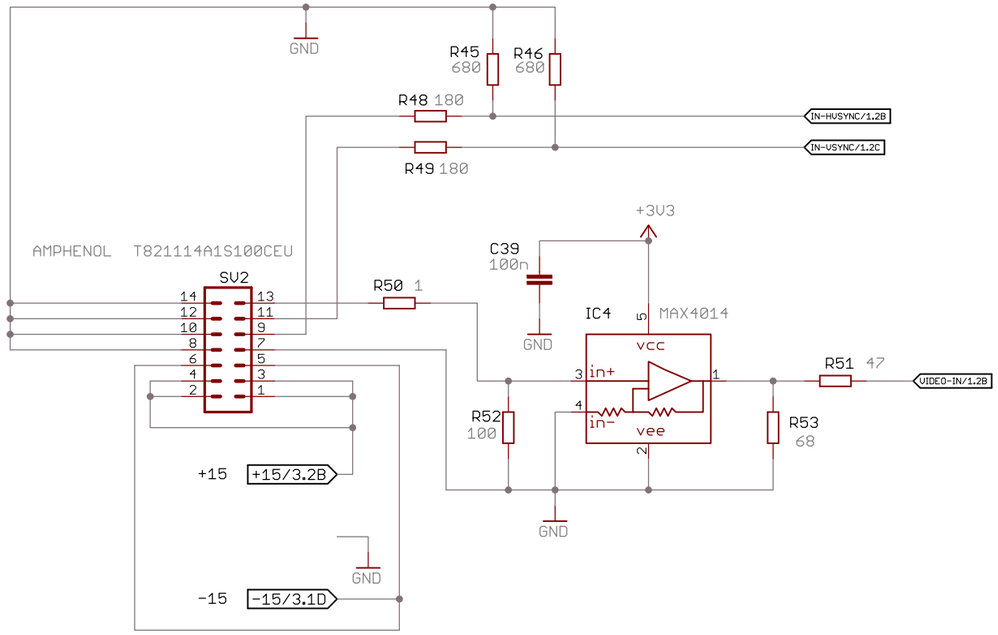
D3-1 D4-1 D5-1 D6-1 D7-1
R17 R19 R21 R23 R25 R18 R20 R22 R24 R26 1k
D3-2 D4-2 D5-2 D6-2 D7-2
GND

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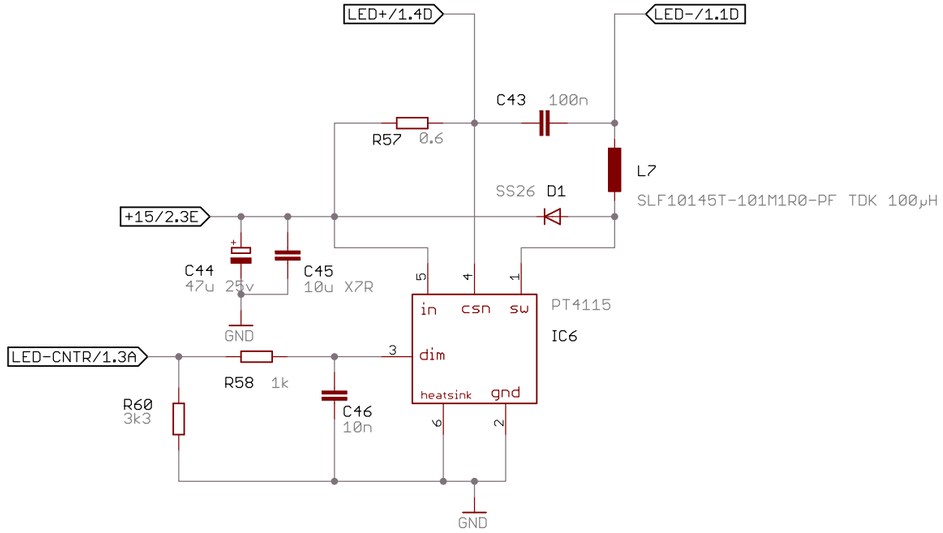


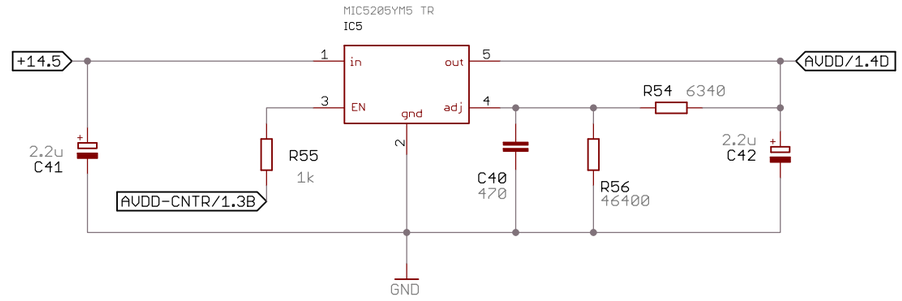


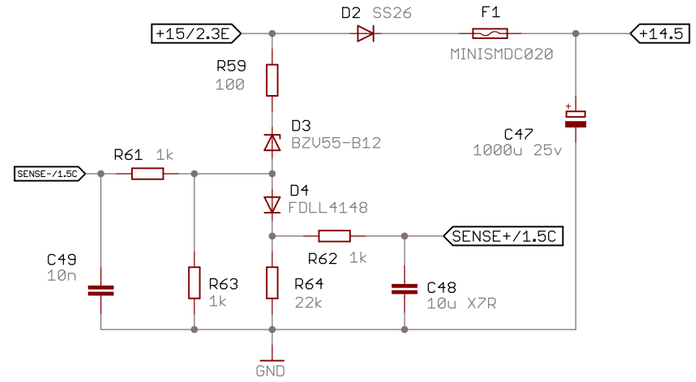


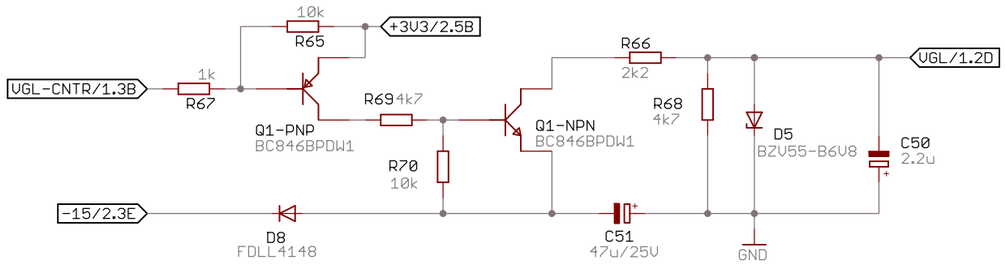


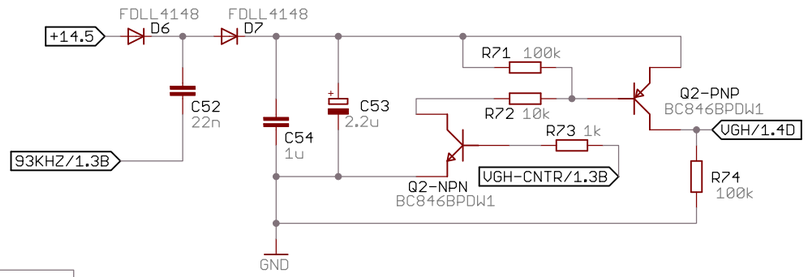
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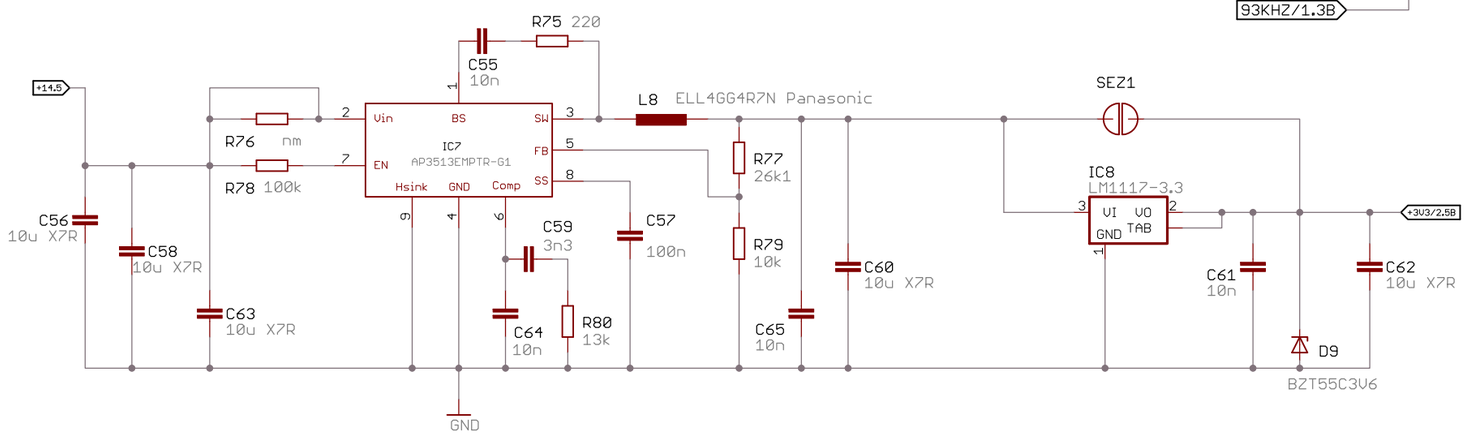




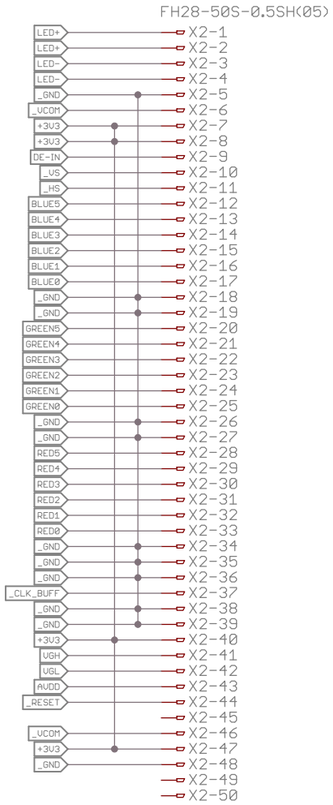


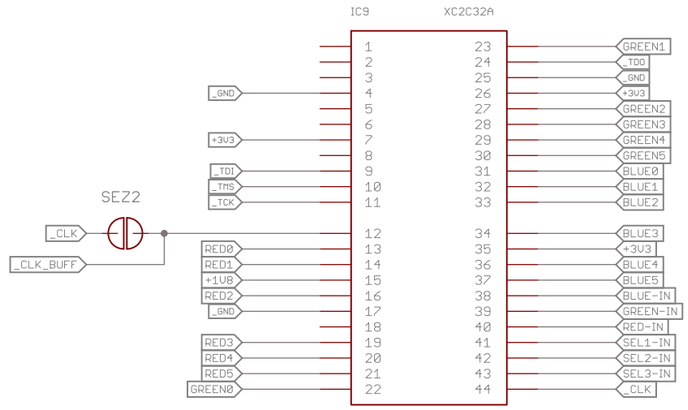


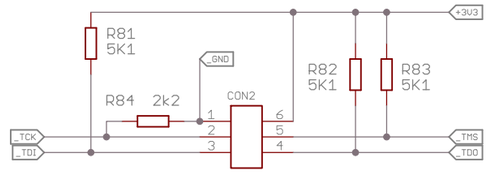


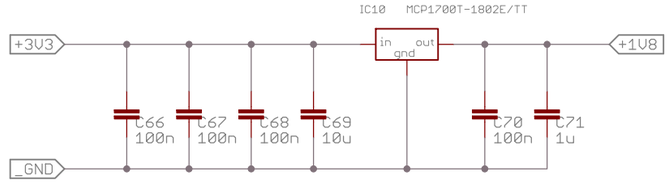


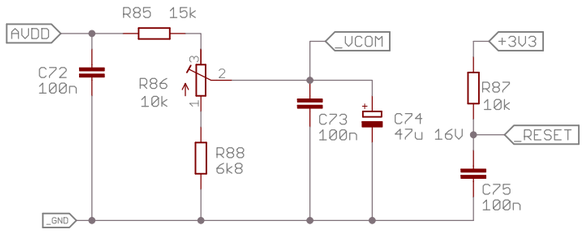
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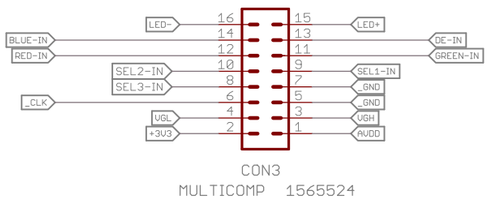




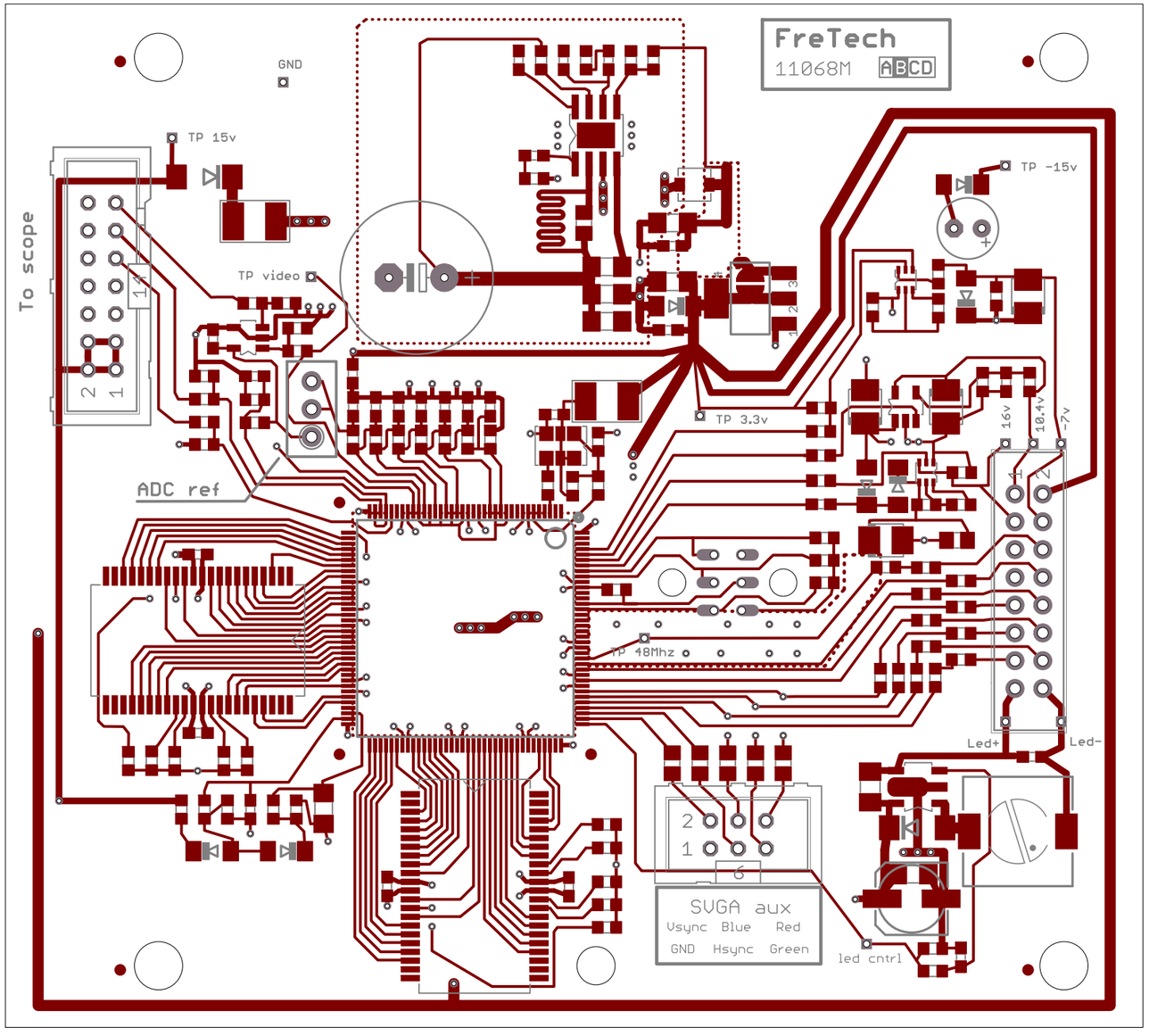


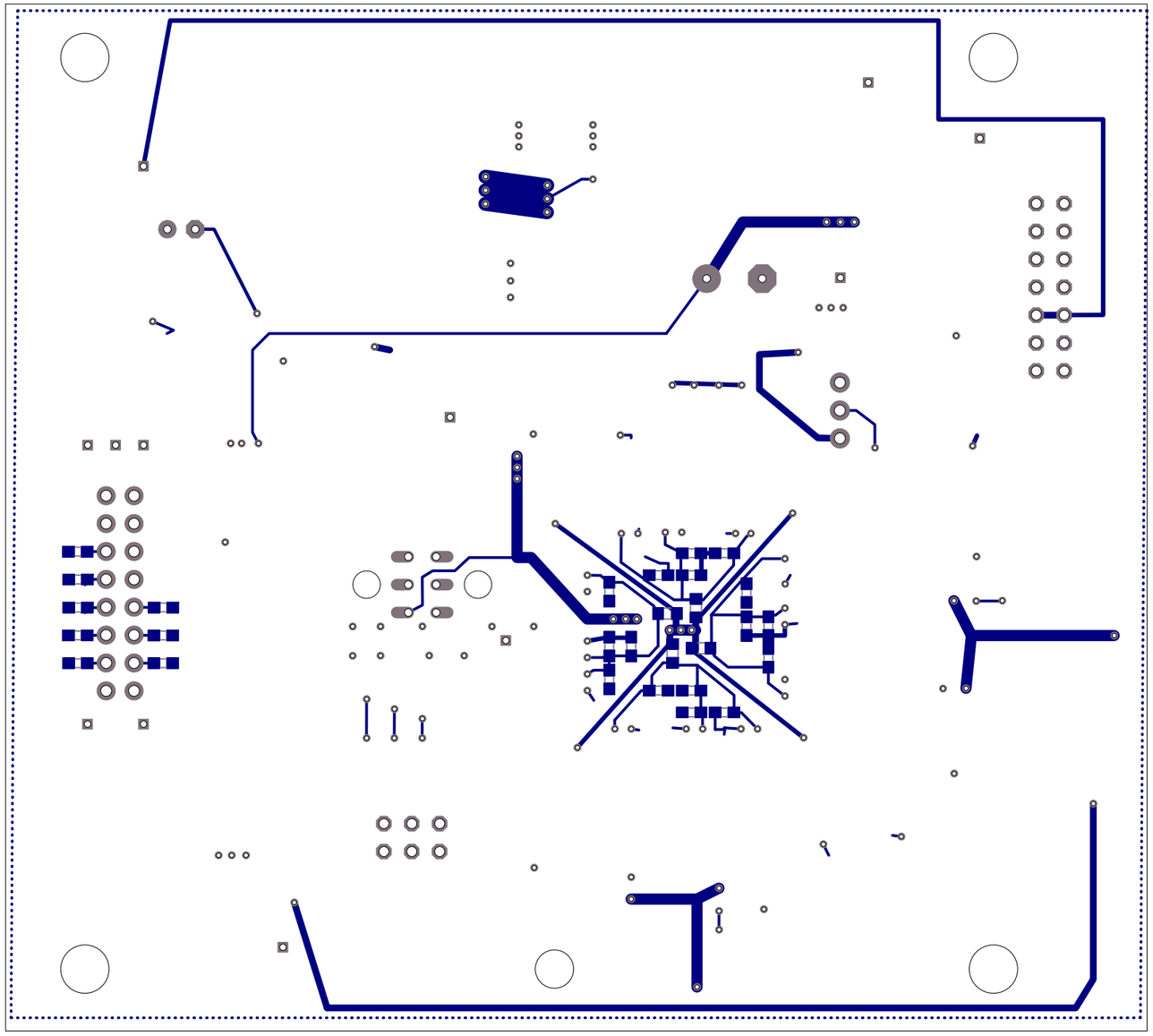


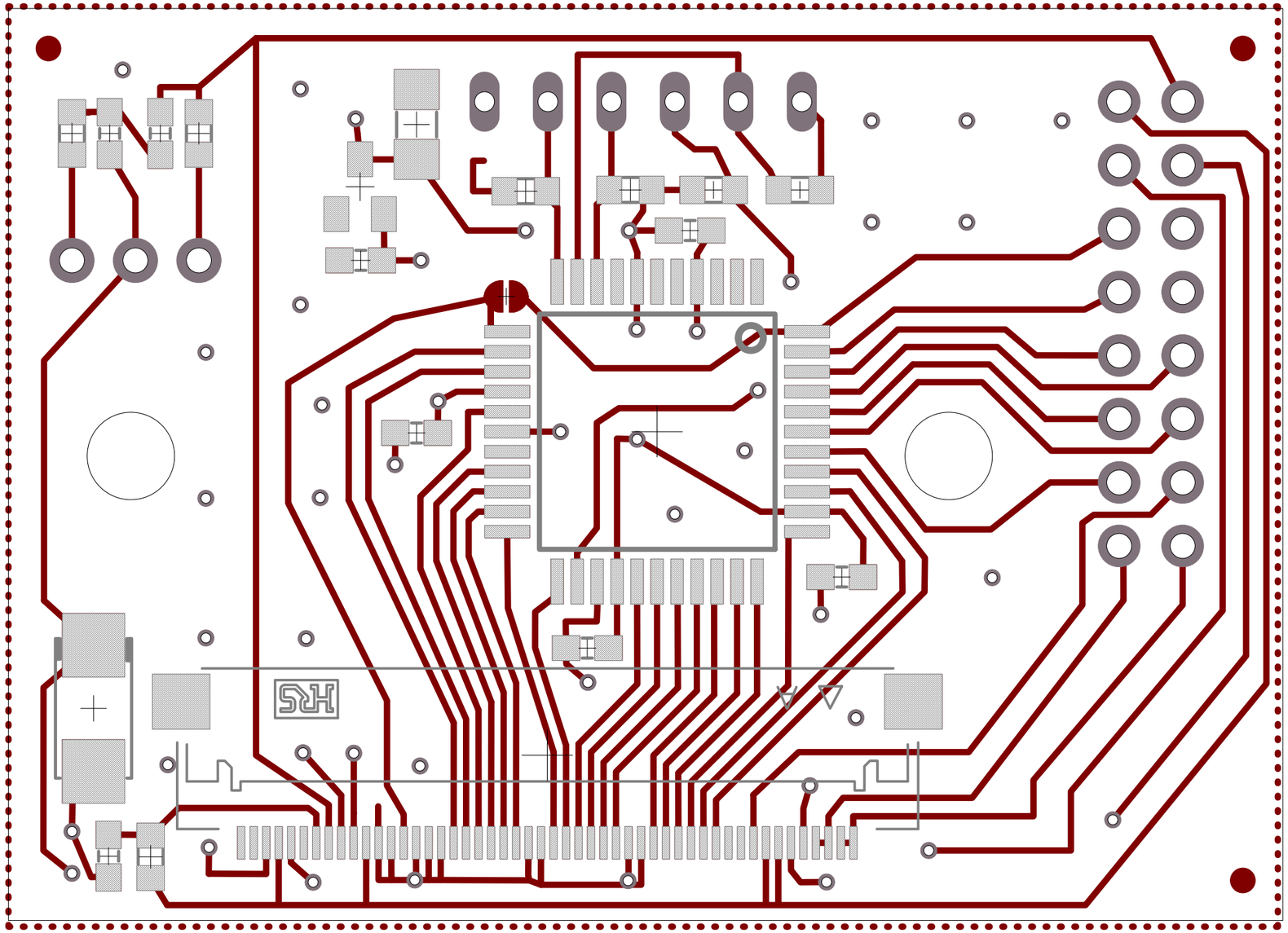


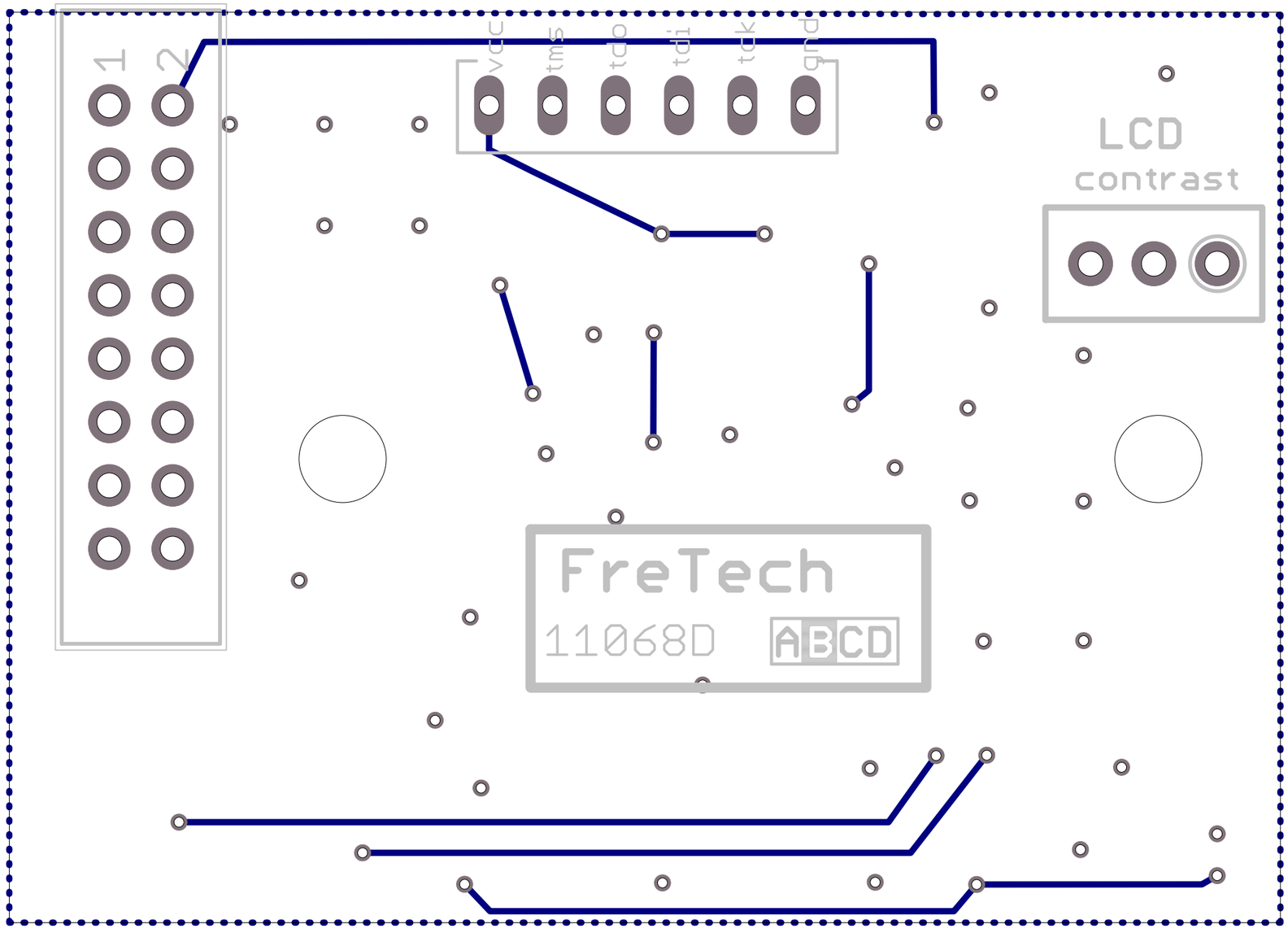


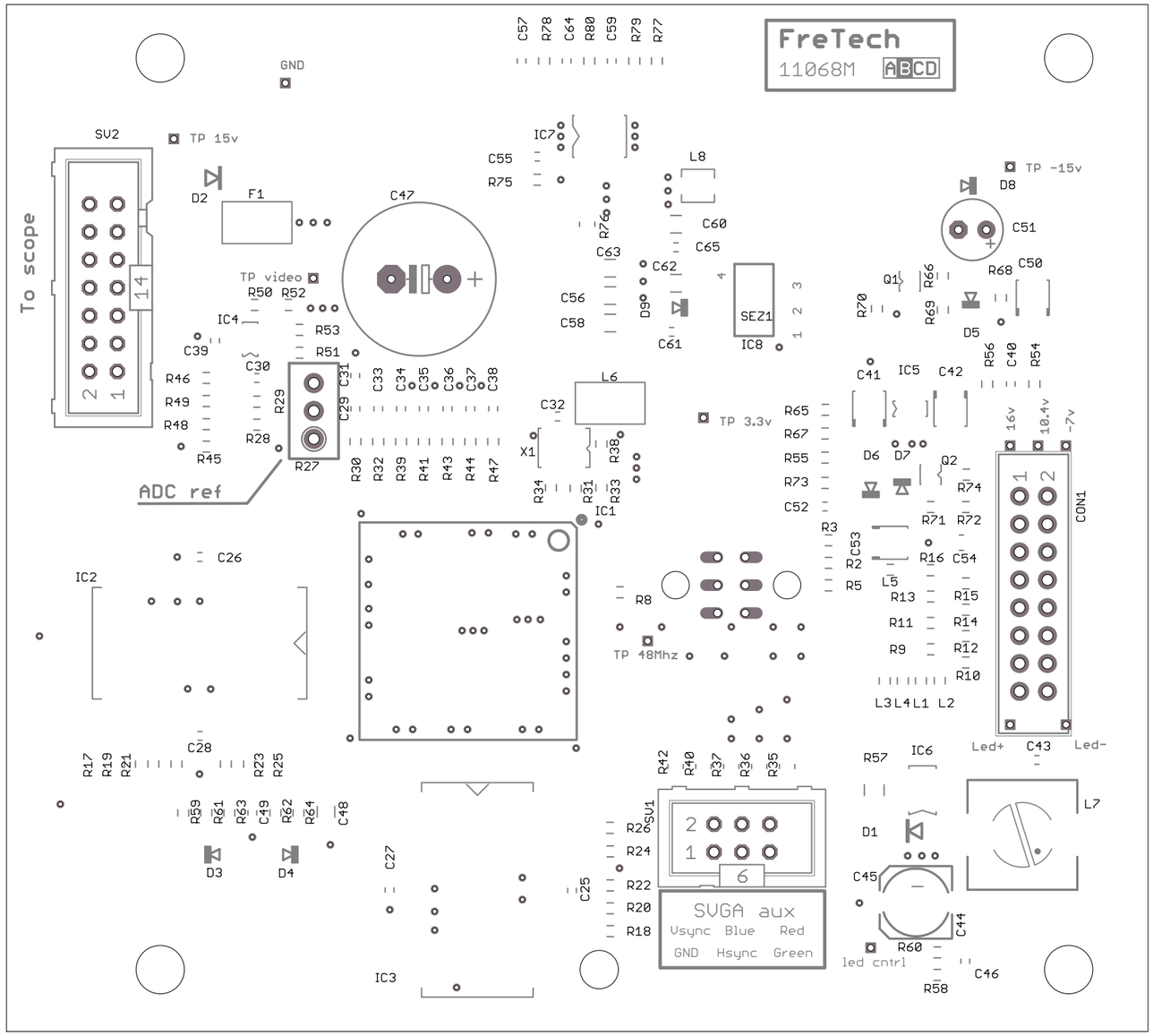
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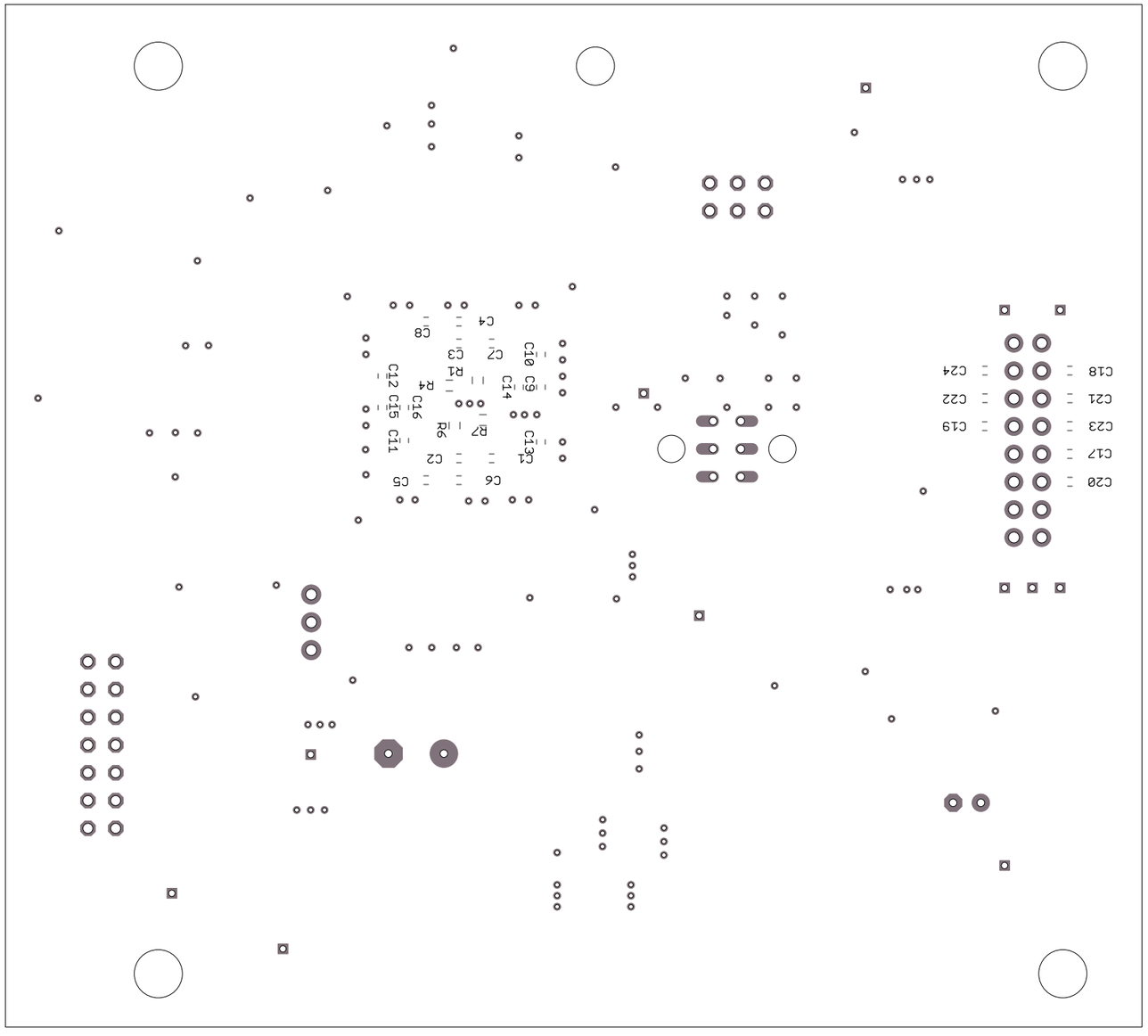

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11068M ABCD
GND
TP 15v
TP -15v
TP video
TP 3.3v
To scope
ADC ref
TP 48Mhz
16v
10.4v
-7v
Led+
Led-
SVGA aux
Vsync Blue Red
GND Hsync Green
led cntrl

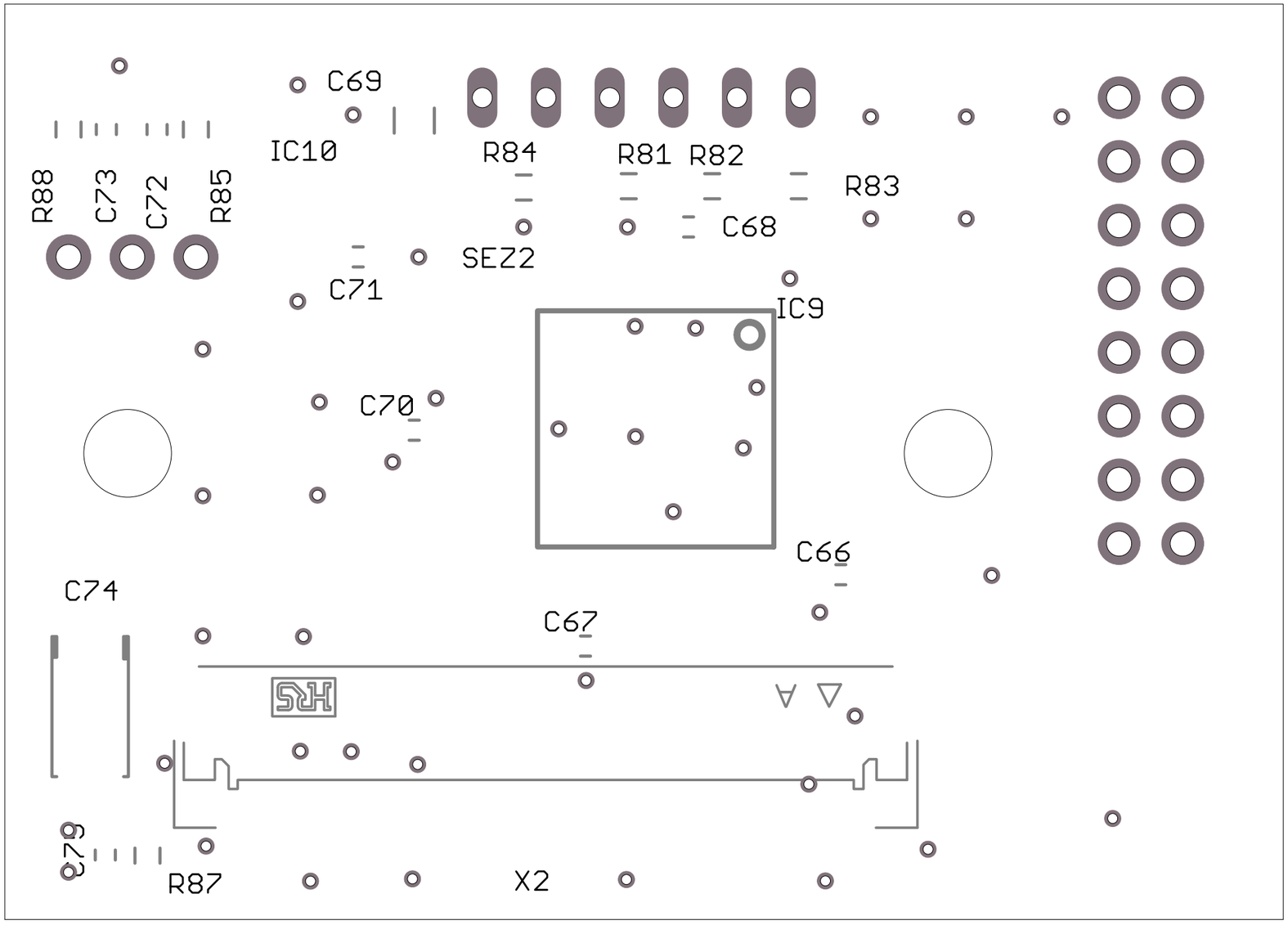


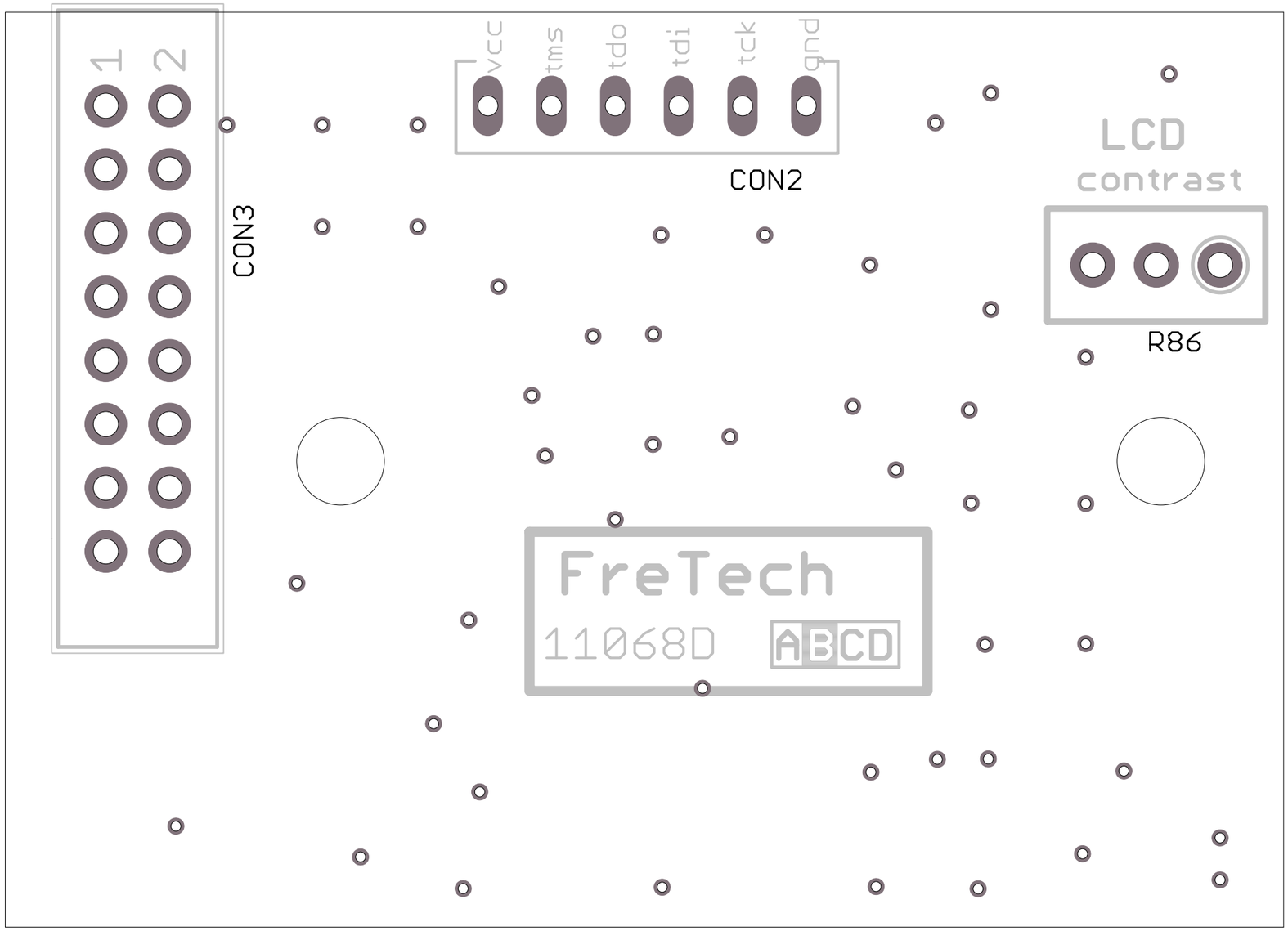



1
2
vcc
tms
tdo
tdi
tck
gnd
LCD
contrast
FreTech
11068D
ABCD


FreTech
11068M ABCD
GND
SV2
To scope
TP 15v
D2
F1
C47
TP video
R50 R52
IC4
R53
R51
C39
C30
R46
R49
R48
R45
R28
R27
R29
C29 C31
C33
C34
C35
C36
C37
C38
R30 R32 R39 R41 R43 R44 R47
ADC ref
C57 R78 C64 R80 C59 R79 R77
IC7
C55
R75
L8
R76
C60
C65
C63
C62
C56
C58
D9
C61
SEZ1
IC8
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L6
C32
X1
R38
R34
R31
R33
IC1
TP 3.3v
R65
R67
R55
R73
C52
R3
R53
R2
R5
L5
R8
TP 48Mhz
C26
IC2
C28
R17 R19 R21
R23 R25
R59 R61 R63 C49 R62 R64 C48
D3
D4
C27
C25
IC3
R42 R40 R37 R36 R35
SU1
R26
R24
R22
R20
R18
2
1
6
SVGA aux
Vsync Blue Red
GND Hsync Green
TP -15v
D8
C51
R68
C50
Q1
R66
R70
R69
D5
R56
C40
R54
C41
IC5
C42
16v
10.4v
-7v
D6
D7
Q2
R74
R71
R72
R16
C54
R13
R15
R11
R14
R9
R12
R10
L3L4L1 L2
CON1
Led+
C43
Led-
R57
IC6
L7
D1
C45
C44
R60
led cntrl
R58
C46


C4
C8
C2
C3
R1
C10
C9
C14
C13
C1
R7
R6
C6
C5
C2
R4
C16
C12
C15
C11
C18
C24
C21
C22
C23
C19
C17
C20


C69
IC10
R84
R81
R82
R83
R88
C73
C72
R85
C68
SEZ2
C71
IC9
C70
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C67
C79
R87
X2


1
2
CON3
vcc
tms
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tdi
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gnd
CON2
LCD
contrast
R86
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ABCD