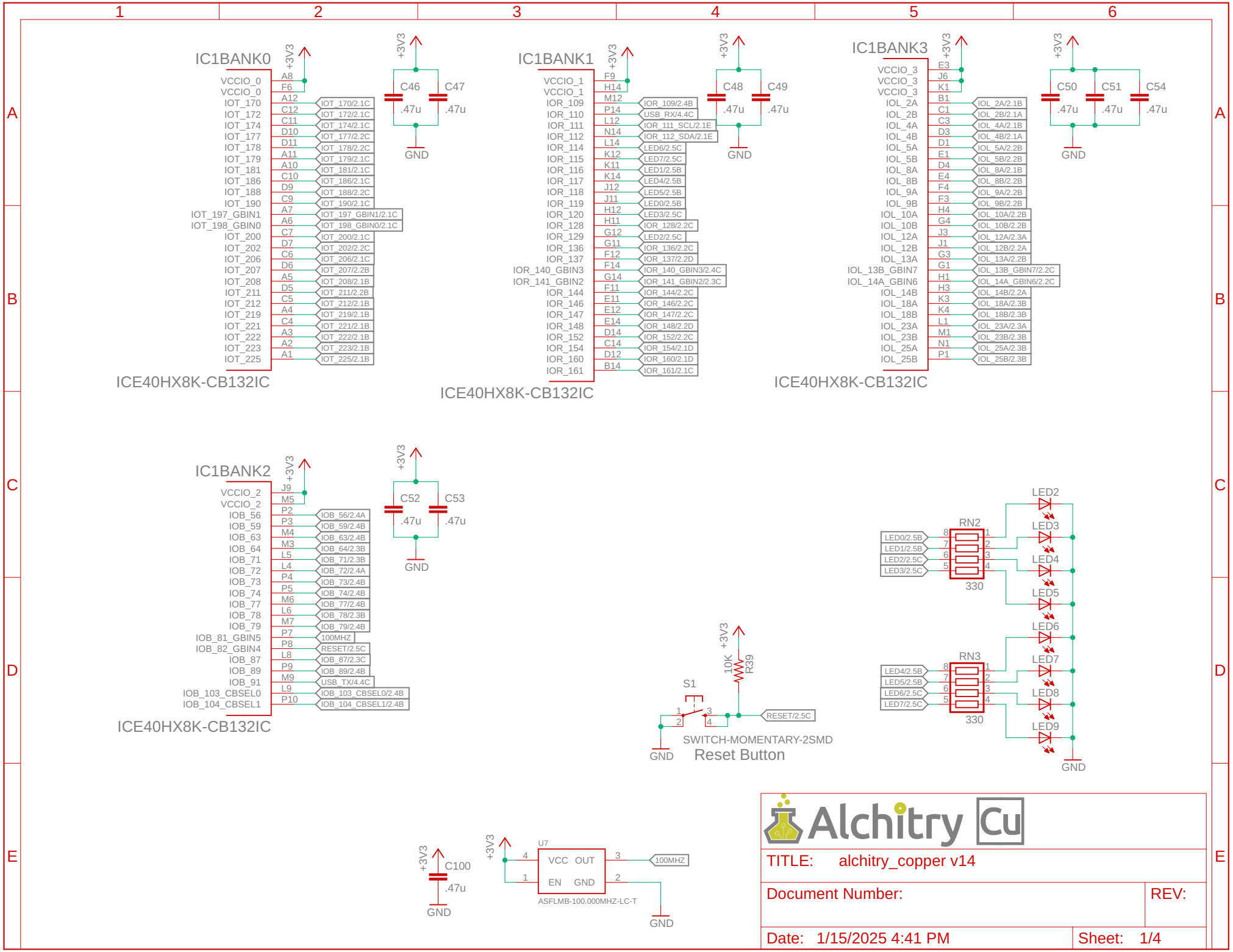
IC1BANK0
VCCIO_0 A8
VCCIO_0 F6
IOT_170 A12 IOT_170/2.1C
IOT_172 C12 IOT_172/2.1C
IOT_174 C11 IOT_174/2.1C
IOT_177 D10 IOT_177/2.2C
IOT_178 D11 IOT_178/2.2C
IOT_179 A11 IOT_179/2.1C
IOT_181 A10 IOT_181/2.1C
IOT_186 C10 IOT_186/2.1C
IOT_188 D9 IOT_188/2.2C
IOT_190 C9 IOT_190/2.1C
IOT_197_GBIN1 A7 IOT_197_GBIN1/2.1C
IOT_198_GBIN0 A6 IOT_198_GBIN0/2.1C
IOT_200 C7 IOT_200/2.1C
IOT_202 D7 IOT_202/2.2C
IOT_206 C6 IOT_206/2.1C
IOT_207 D6 IOT_207/2.2B
IOT_208 A5 IOT_208/2.1B
IOT_211 D5 IOT_211/2.2B
IOT_212 C5 IOT_212/2.1B
IOT_219 A4 IOT_219/2.1B
IOT_221 C4 IOT_221/2.1B
IOT_222 A3 IOT_222/2.1B
IOT_223 A2 IOT_223/2.1B
IOT_225 A1 IOT_225/2.1B
ICE40HX8K-CB132IC
+3V3
C46 .47u
C47 .47u
GND
IC1BANK1
VCCIO_1 F9
VCCIO_1 H14
IOR_109 M12 IOR_109/2.4B
IOR_110 P14 USB_RX/4.4C
IOR_111 L12 IOR_111_SCL/2.1E
IOR_112 N14 IOR_112_SDA/2.1E
IOR_114 L14 LED6/2.5C
IOR_115 K12 LED7/2.5C
IOR_116 K11 LED1/2.5B
IOR_117 K14 LED4/2.5B
IOR_118 J12 LED5/2.5B
IOR_119 J11 LED0/2.5B
IOR_120 H12 LED3/2.5C
IOR_128 H11 IOR_128/2.2C
IOR_129 G12 LED2/2.5C
IOR_136 G11 IOR_136/2.2C
IOR_137 F12 IOR_137/2.2D
IOR_140_GBIN3 F14 IOR_140_GBIN3/2.4C
IOR_141_GBIN2 G14 IOR_141_GBIN2/2.3C
IOR_144 F11 IOR_144/2.2C
IOR_146 E11 IOR_146/2.2C
IOR_147 E12 IOR_147/2.2C
IOR_148 E14 IOR_148/2.2D
IOR_152 D14 IOR_152/2.2C
IOR_154 C14 IOR_154/2.1D
IOR_160 D12 IOR_160/2.1D
IOR_161 B14 IOR_161/2.1C
ICE40HX8K-CB132IC
+3V3
C48 .47u
C49 .47u
GND
IC1BANK3
VCCIO_3 E3
VCCIO_3 J6
VCCIO_3 K1
IOL_2A B1 IOL_2A/2.1B
IOL_2B C1 IOL_2B/2.1A
IOL_4A C3 IOL_4A/2.1B
IOL_4B D3 IOL_4B/2.1A
IOL_5A D1 IOL_5A/2.2B
IOL_5B E1 IOL_5B/2.2B
IOL_8A D4 IOL_8A/2.1B
IOL_8B E4 IOL_8B/2.2B
IOL_9A F4 IOL_9A/2.2B
IOL_9B F3 IOL_9B/2.2B
IOL_10A H4 IOL_10A/2.2B
IOL_10B G4 IOL_10B/2.2B
IOL_12A J3 IOL_12A/2.3A
IOL_12B J1 IOL_12B/2.2A
IOL_13A G3 IOL_13A/2.2B
IOL_13B_GBIN7 G1 IOL_13B_GBIN7/2.2C
IOL_14A_GBIN6 H1 IOL_14A_GBIN6/2.2C
IOL_14B H3 IOL_14B/2.2A
IOL_18A K3 IOL_18A/2.3B
IOL_18B K4 IOL_18B/2.3B
IOL_23A L1 IOL_23A/2.3A
IOL_23B M1 IOL_23B/2.3B
IOL_25A N1 IOL_25A/2.3B
IOL_25B P1 IOL_25B/2.3B
ICE40HX8K-CB132IC
+3V3
C50 .47u
C51 .47u
C54 .47u
GND
IC1BANK2
VCCIO_2 J9
VCCIO_2 M5
IOB_56 P2 IOB_56/2.4A
IOB_59 P3 IOB_59/2.4B
IOB_63 M4 IOB_63/2.4B
IOB_64 M3 IOB_64/2.3B
IOB_71 L5 IOB_71/2.3B
IOB_72 L4 IOB_72/2.4A
IOB_73 P4 IOB_73/2.4B
IOB_74 P5 IOB_74/2.4B
IOB_77 M6 IOB_77/2.4B
IOB_78 L6 IOB_78/2.3B
IOB_79 M7 IOB_79/2.4B
IOB_81_GBIN5 P7 100MHZ
IOB_82_GBIN4 P8 RESET/2.5C
IOB_87 L8 IOB_87/2.3C
IOB_89 P9 IOB_89/2.4B
IOB_91 M9 USB_TX/4.4C
IOB_103_CBSEL0 L9 IOB_103_CBSEL0/2.4B
IOB_104_CBSEL1 P10 IOB_104_CBSEL1/2.4B
ICE40HX8K-CB132IC
+3V3
C52 .47u
C53 .47u
GND
S1
10K R39
+3V3
RESET/2.5C
SWITCH-MOMENTARY-2SMD
GND
Reset Button
RN2
LED0/2.5B
LED1/2.5B
LED2/2.5C
LED3/2.5C
330
LED2
LED3
LED4
LED5
RN3
LED4/2.5B
LED5/2.5B
LED6/2.5C
LED7/2.5C
330
LED6
LED7
LED8
LED9
GND
+3V3
C100 .47u
GND
U7
VCC OUT
EN GND
ASFLMB-100.000MHZ-LC-T
100MHZ
GND
Alchitry Cu
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Document Number:
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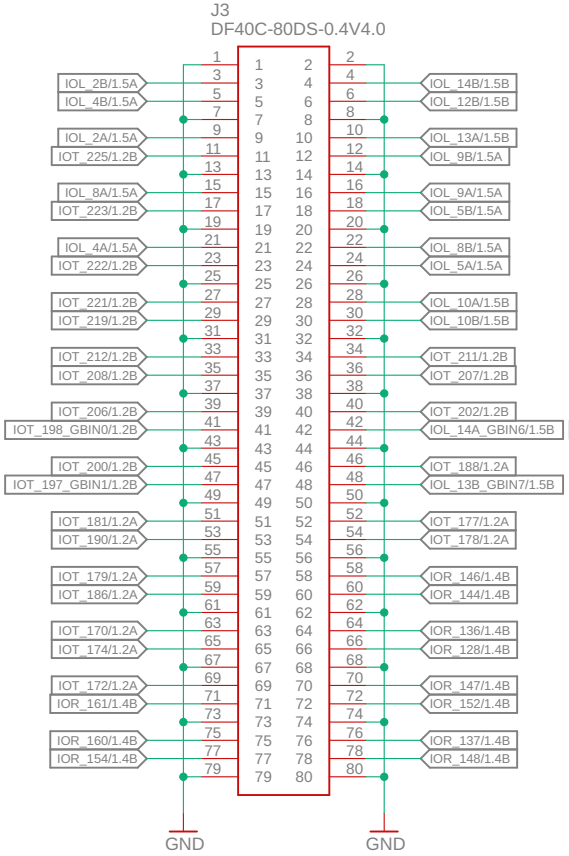
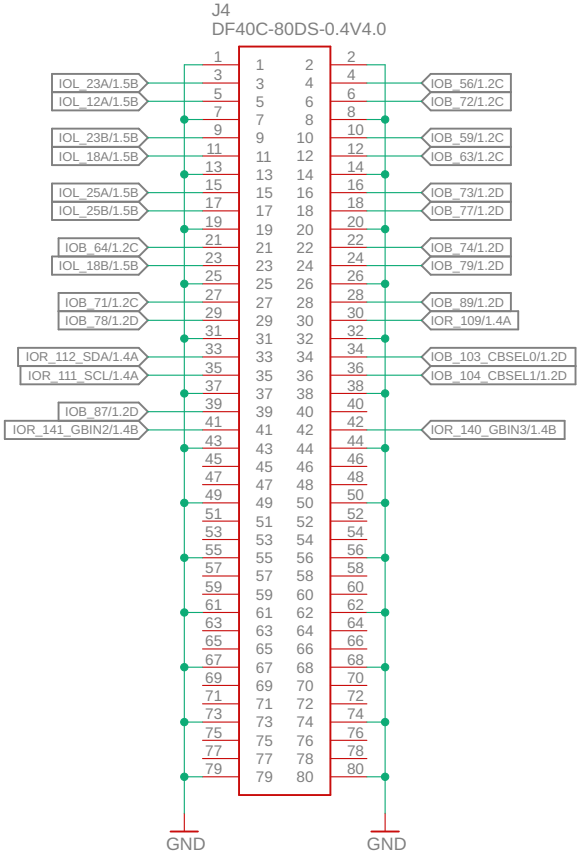
Date: 1/15/2025 4:41 PM
Sheet: 1/4

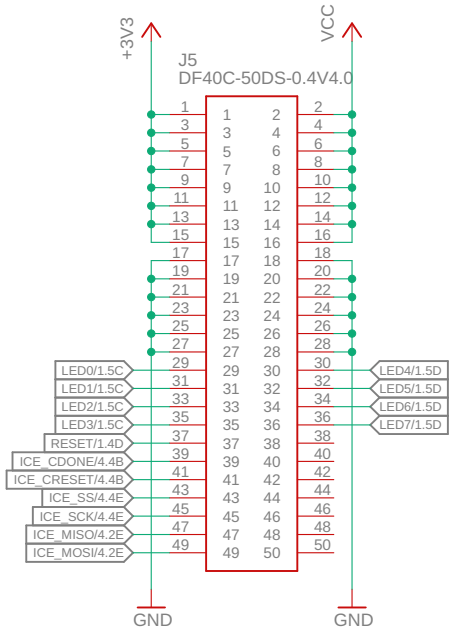
Bank A

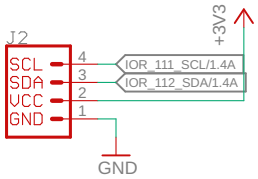


Bank B



Power/Control





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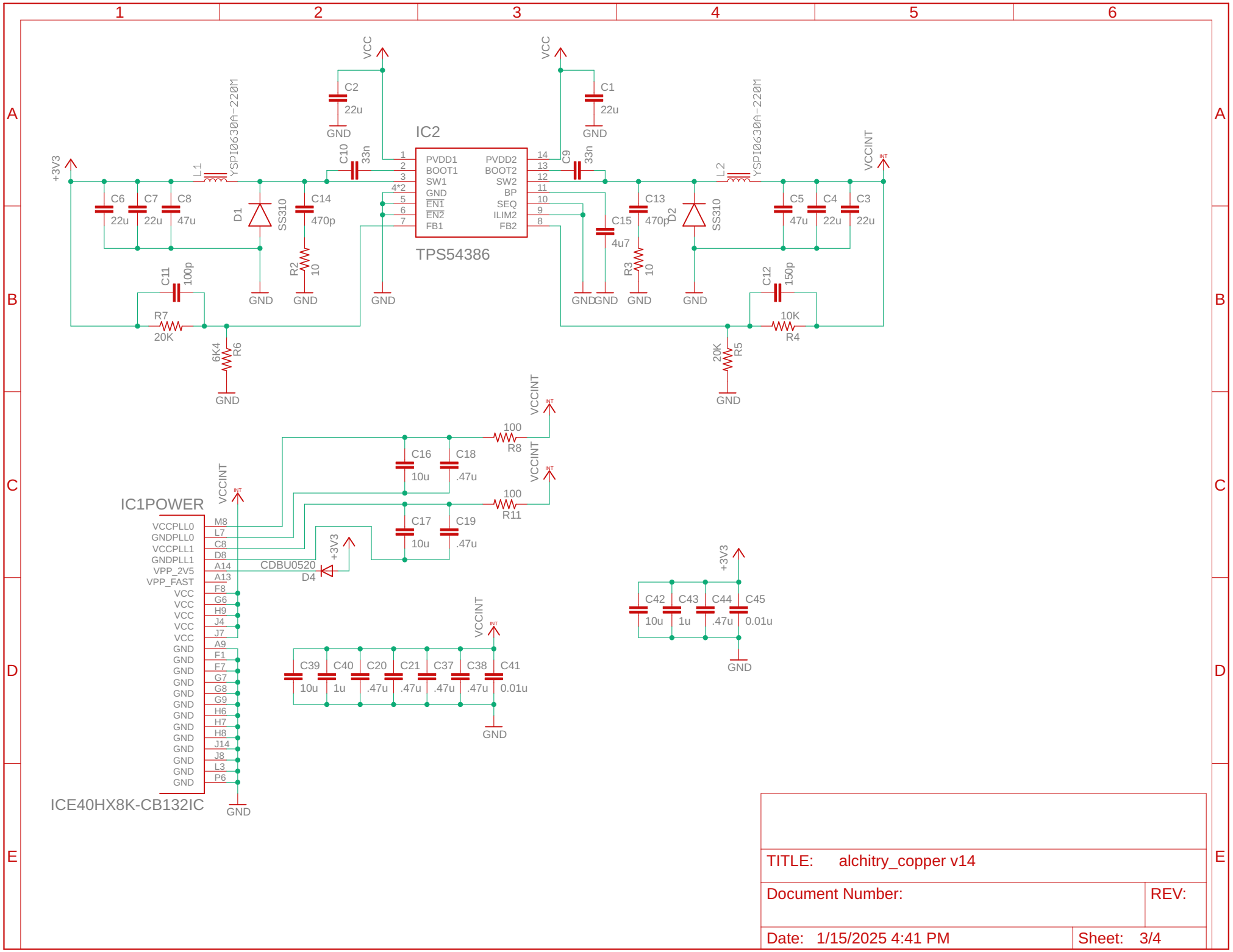
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SW1
GND
EN1
EN2
FB1
PVDD2
BOOT2
SW2
BP
SEQ
ILIM2
FB2
VCC
VCCINT
+3V3
GND
L1
L2
YSPI0630A-220M
D1
D2
SS310
C1
C2
C3
C4
C5
C6
C7
C8
C9
C10
C11
C12
C13
C14
C15
C16
C17
C18
C19
C20
C21
C37
C38
C39
C40
C41
C42
C43
C44
C45
R2
R3
R4
R5
R6
R7
R8
R11
D4
CDBU0520
IC1POWER
ICE40HX8K-CB132IC
VCCPLL0
GNDPLL0
VCCPLL1
GNDPLL1
VPP_2V5
VPP_FAST
VCC
GND
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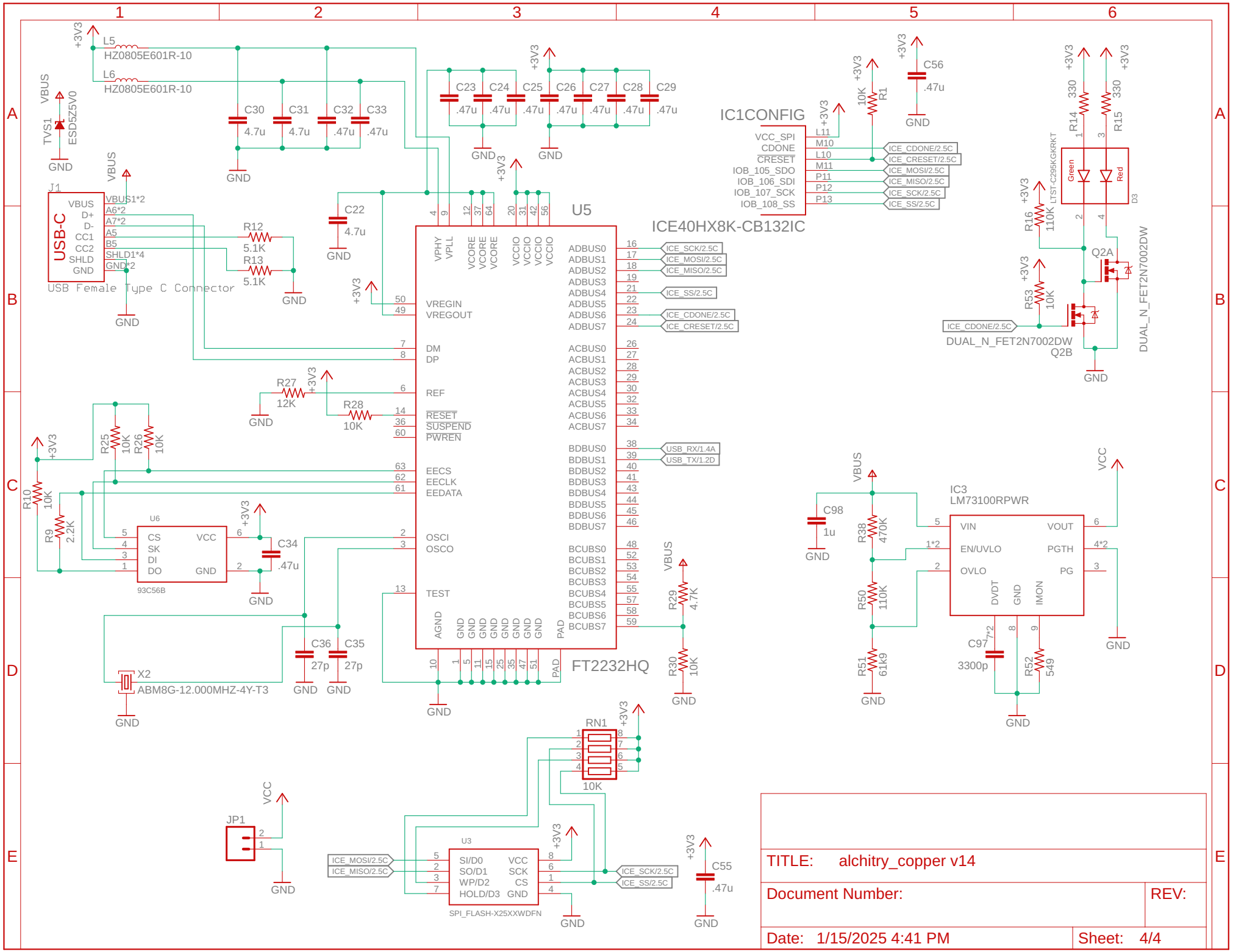
L5
HZ0805E601R-10
L6
HZ0805E601R-10
TVS1
ESD5Z5V0
J1
USB-C
USB Female Type C Connector
U5
ICE40HX8K-CB132IC
FT2232HQ
IC1CONFIG
U6
93C56B
X2
ABM8G-12.000MHZ-4Y-T3
Q2A
Q2B
DUAL_N_FET2N7002DW
IC3
LM73100RPWR
RN1
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U3
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