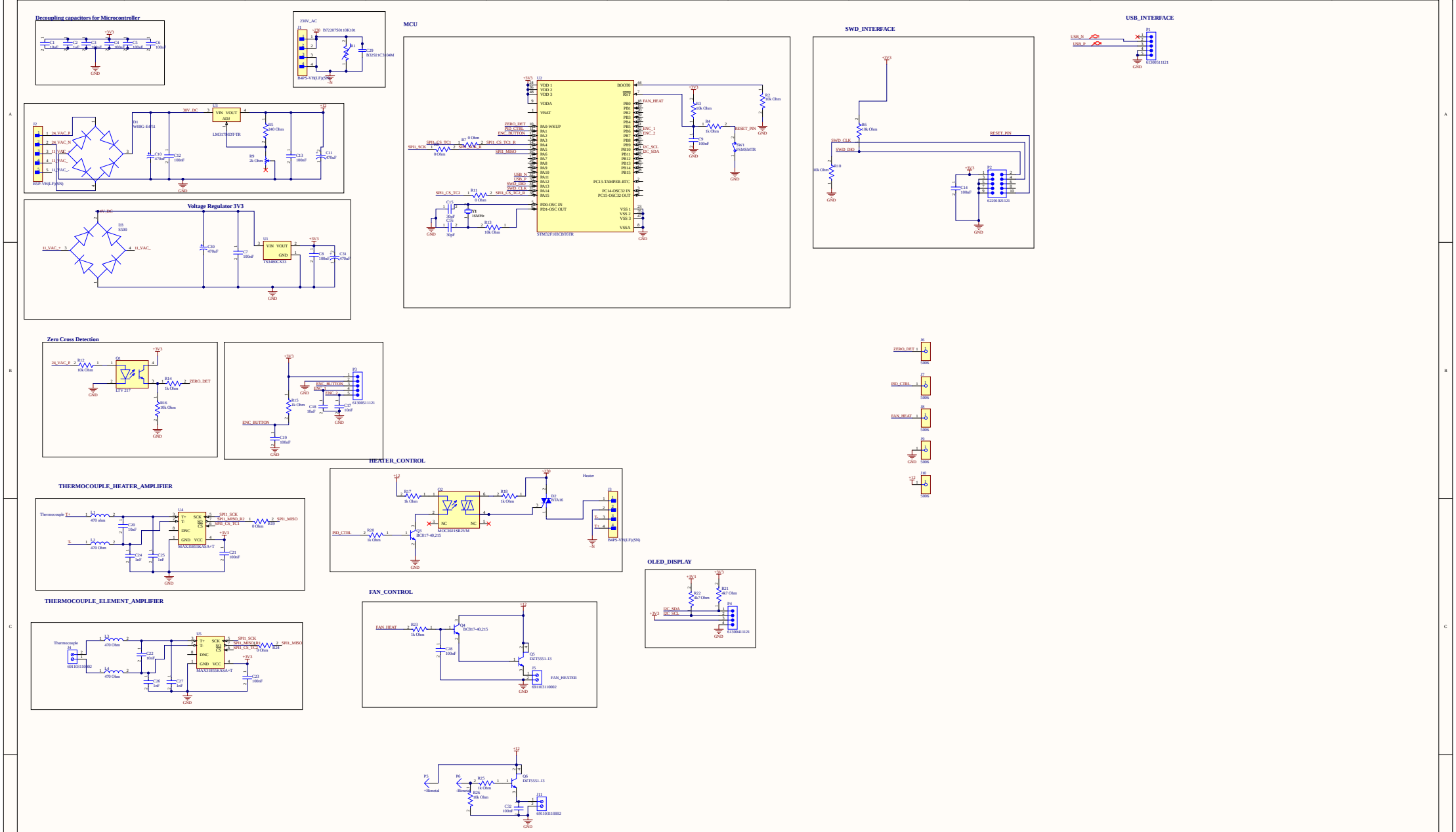
Decoupling capacitors for Microcontroller
MCU
SWD_INTERFACE
USB_INTERFACE
Voltage Regulator 3V3
Zero Cross Detection
THERMOCOUPLE_HEATER_AMPLIFIER
THERMOCOUPLE_ELEMENT_AMPLIFIER
HEATER_CONTROL
FAN_CONTROL
OLED_DISPLAY
STM32F103CB/T6TR
LM317HDT-TR
TS3480CX33
MAX31855KASA+T
MOC3021SR2VM
B4PS-VH(LF)(SN)
B72207S0110K101
B32521C3104M
61300511121
62201021121
61301011102
61301311002
61301411121
Title
PID Heater upgrade
Size
A1
Number
Revision
V2.0
Date
7.06.2025
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1
File
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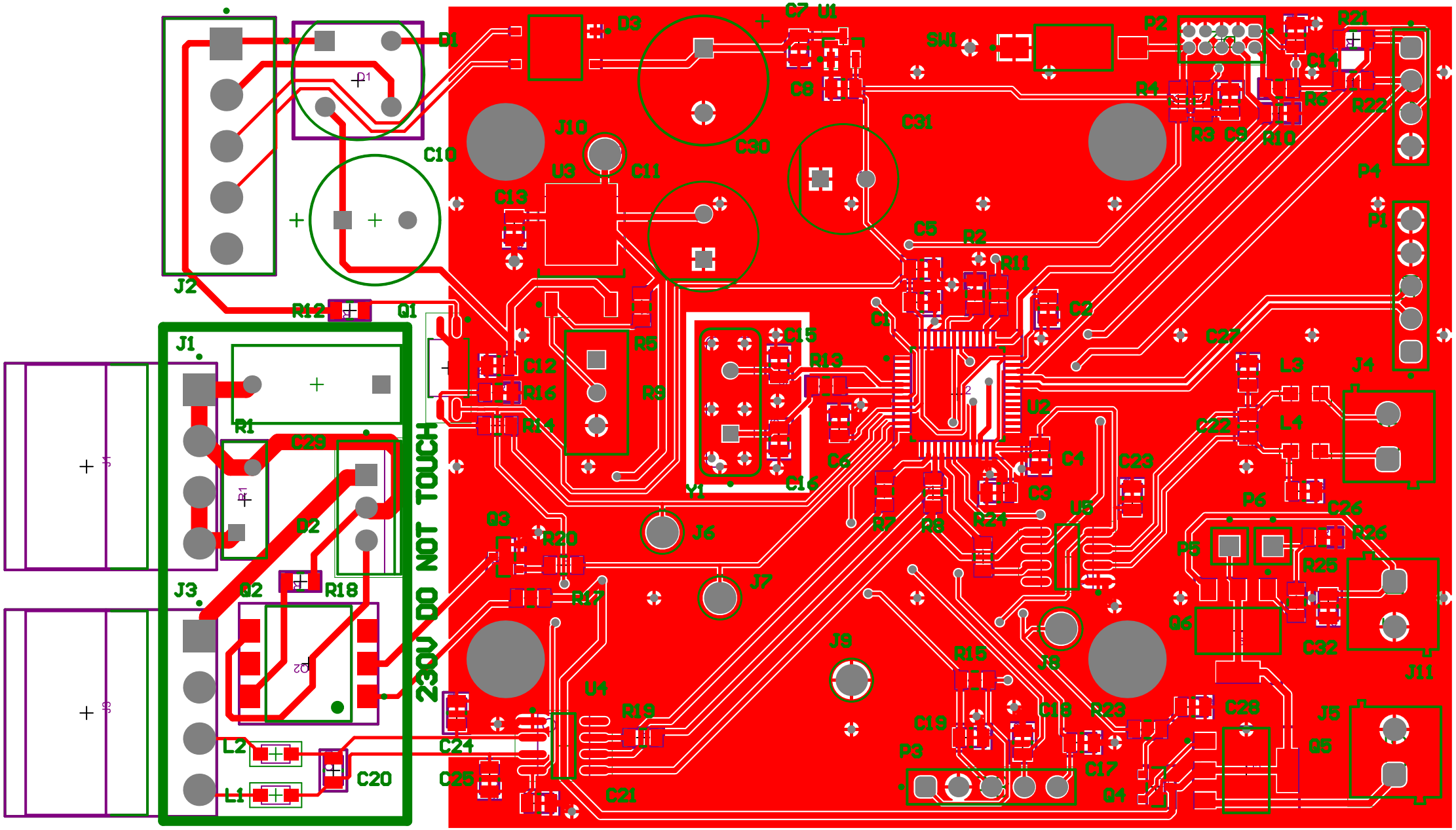
Drawn By:
Grzegorz Jabłoński


230V DO NOT TOUCH
D1
D3
C7
U1
SW1
P2
R21
C14
R4
R6
R22
R3
C9
R10
C8
C31
C30
J10
U3
C11
C10
C13
P4
P1
C5
R2
R11
J2
R12
Q1
C2
C1
C27
R5
C15
R13
L3
J4
C12
R16
R9
R14
U2
L4
R1
C29
C22
C6
C4
C23
C16
C3
Y1
P6
C26
Q3
R20
J6
R7
R8
R24
U5
R26
D2
P5
R25
J3
Q2
R18
J7
R17
Q6
C32
J9
R15
J8
J11
U4
R19
C19
C18
R23
C28
J5
C24
P3
C17
Q5
L2
C20
C25
C21
Q4
L1

230V DO NOT TOUCH
DANGER
HIGH VOLTAGE
J1
J2
J3
D1
D2
D3
Q1
Q2
Q3
Q4
Q5
Q6
R1
R2
R3
R4
R5
R6
R7
R8
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R25
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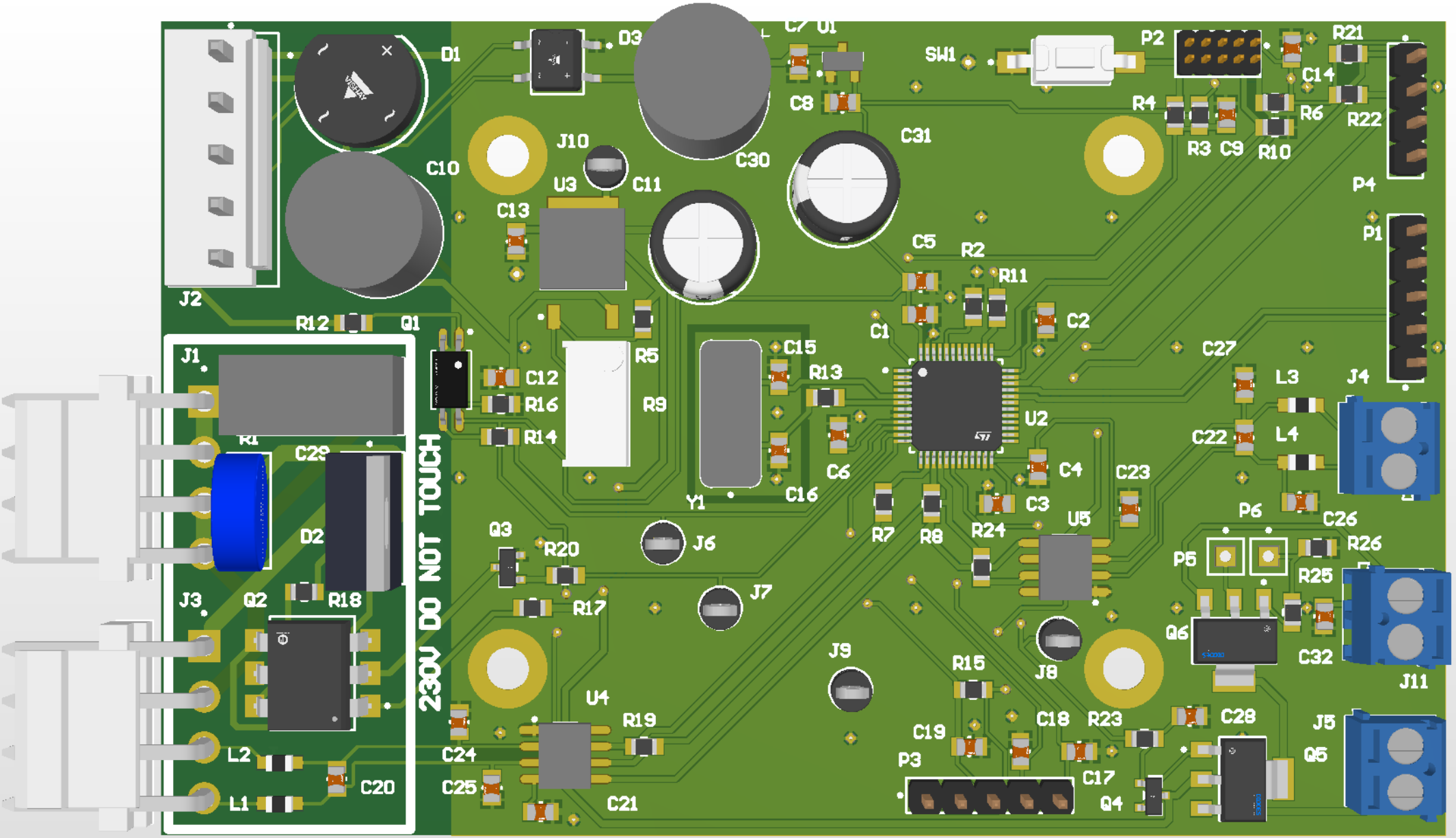
L2
L3
L4
Y1
J4
J5
J6
J7
J8
J9
J10
J11
P1
P2
P3
P4
P5
P6
SW1
+T
-T
USB_P
USB_N
GND
FAN_HEAT
ENC_TUB
ENC_T
ENC_B
ENC_A
ENC_SCL
ENC_SDA
SWDIO/TMS
SWCLK/TCK
SWO/TDO
TDI
NRST
Vtrgt
NC


230V DO NOT TOUCH
D1
D3
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SW1
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C14
R22
C8
R4
R6
R3
C9
R10
C31
C30
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U3
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P4
P1
C5
R2
R11
C1
C2
J2
R12
Q1
J1
R5
C12
R16
R14
R9
C15
R13
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J4
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J8
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C19
C18
R23
C28
J5
C24
P3
Q5
L2
C25
C21
C17
Q4
L1
C20