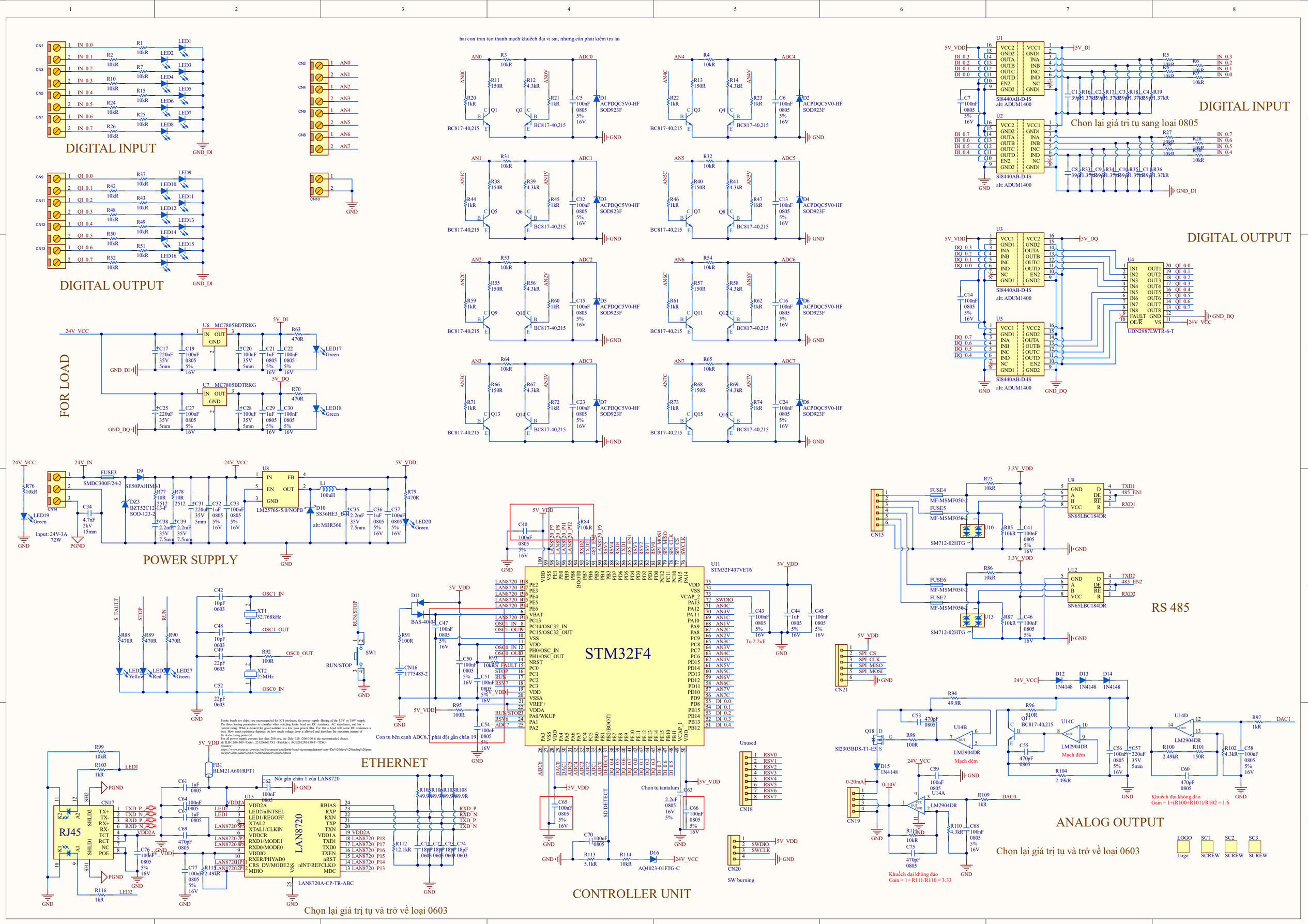
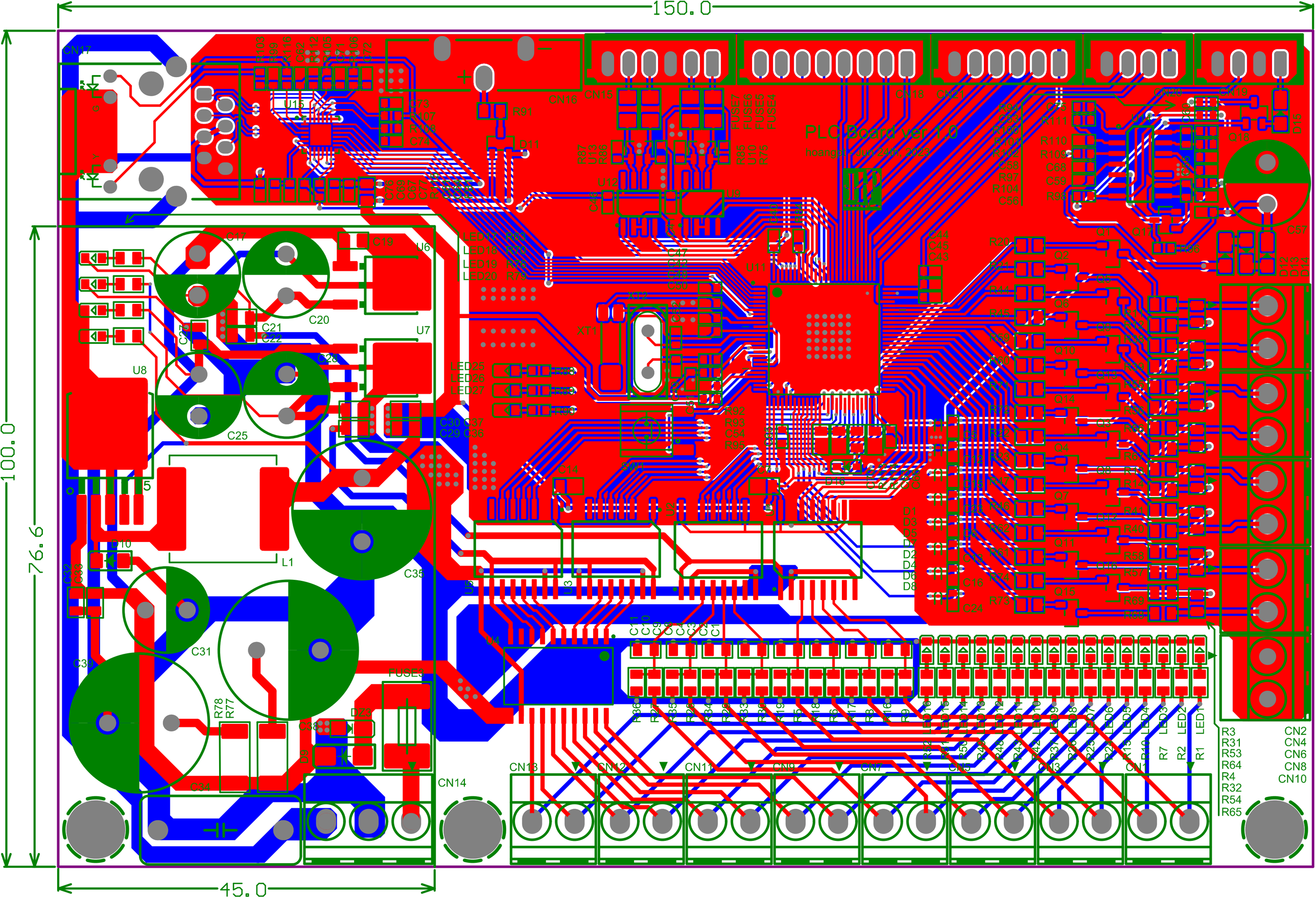

hai con tran tạo thanh mạch khuếch đại vi sai, nhưng cần phải kiểm tra lại
DIGITAL INPUT
DIGITAL OUTPUT
FOR LOAD
POWER SUPPLY
ETHERNET
CONTROLLER UNIT
STM32F4
DIGITAL INPUT
Chọn lại giá trị tụ sang loại 0805
DIGITAL OUTPUT
RS 485
ANALOG OUTPUT
Chọn lại giá trị tụ và trở về loại 0603
Chọn lại giá trị tụ và trở về loại 0603
Con tụ bên cạnh ADC6,7 phải đặt gần chân 19
Nối gần chân 1 của LAN8720
Tụ 2.2uF
Chọn tụ tantalum
Mạch đệm
Mạch đệm
Khuếch đại không đảo
Gain = 1+(R100+R101)/R102 = 1.6
Khuếch đại không đảo
Gain = 1+ R111/R110 = 3.33
SW burning
Unused
Input: 24V-3A
72W
LM2576S-5.0/NOPB
LAN8720A-CP-TR-ABC
RJ45
STM32F4
UDN2987LWTR-6-T
SI8440AB-D-IS
alt: ADUM1400
BC817-40,215
ACPDQC5V0-HF
SOD923F
SN65LBC184DR
SM712-02HTG
AQ4023-01FTG-C
LM2904DR
BC817-40,215
SI2303BDS-T1-E3
Ferrite beads (or chips) are recommended for ICS products, for power supply filtering of the 3.3V or 5.0V supply.
The three leading parameters to consider when selecting ferrite bead are DC resistance, AC impedance, and bia s current rating. What is desired for good isolation is a low pass power filter. For that a bead with some DC resistance is best. How much resistance depends on how much voltage drop is allowed and therefore the maximum current of the device being powered.
For all power supply currents less than 200 mA, the Dale ILB-1206-300 is the recommended choice.
alt: ILB-1206-300 <Dale>; 2512066017X1 <Fastfar>; ACB2012H-150-T <TDK>
resource:
https://www.renesas.com/us/en/document/apn/ferrite-bead-recommendations#:text=The%20tiny%20leading%20parameters%20to,some%20DC%20resistance%20is%20best.


150.0
100.0
76.6
45.0
PLC Board ver 1.0
CN17
CN16
CN15
CN18
CN14
CN13
CN12
CN11
CN9
CN7
CN2
CN4
CN6
CN8
CN10
U6
U7
U8
U9
U11
U12
U15
XT1
L1
C20
C21
C22
C25
C31
C35
C39
C57
FUSE3
DZ3
R78
R77
R3
R31
R53
R64
R4
R32
R54
R65
LED1
LED2
LED3
LED4
LED5
LED6
LED7
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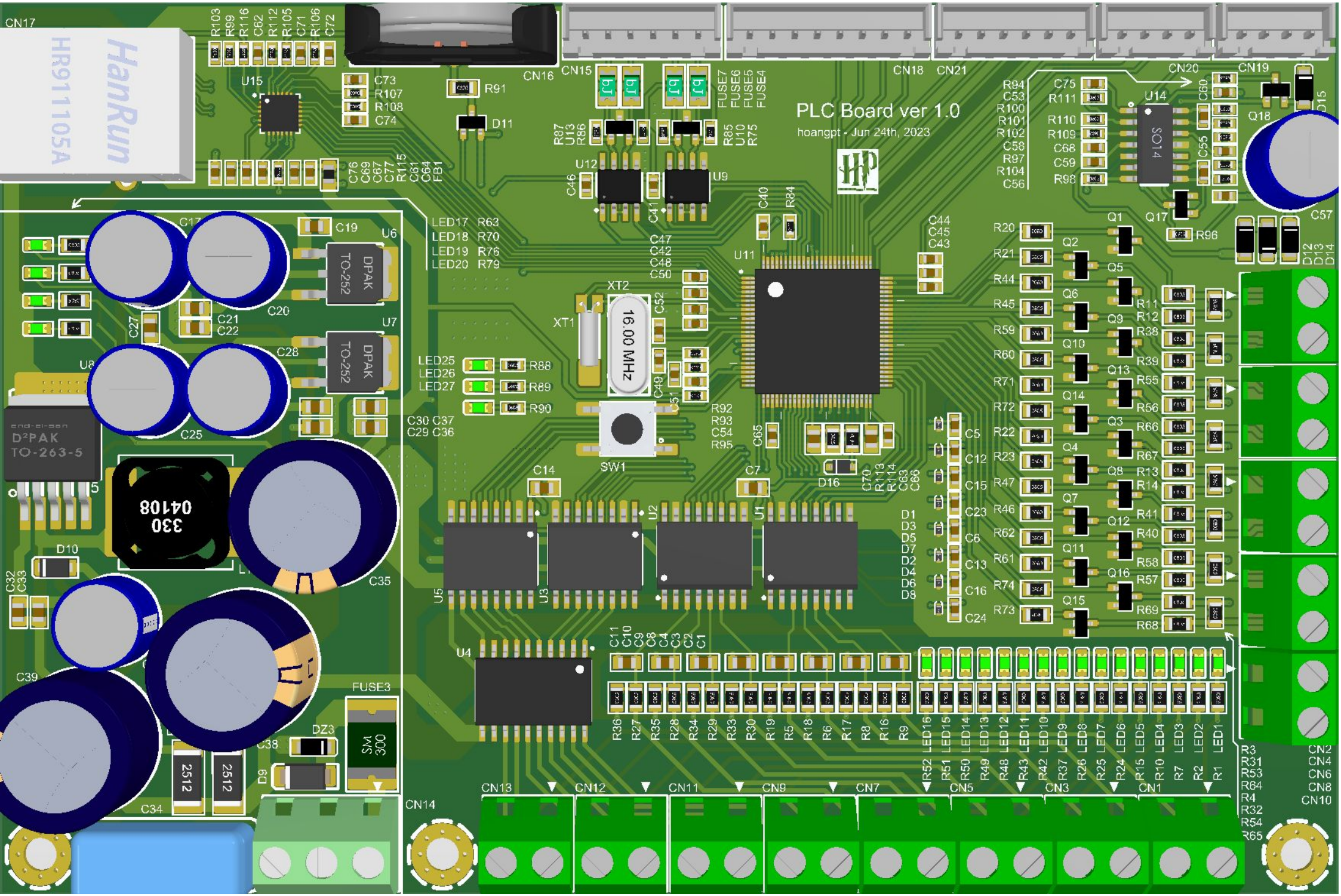
LED19
LED20
LED25
LED26
LED27


PLC Board ver 1.0
hoangpt - Jun 24th, 2023
HanRun
HR911105A
16.00 MHz
D²PAK
TO-263-5
TO-252
DPAK
SO14
330
04108
2512
SM
300
CN13
CN12
CN11
CN9
CN7
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U1
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XT1
XT2
SW1
FUSE3
FUSE4
FUSE5
FUSE6
FUSE7
DZ3
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LED1
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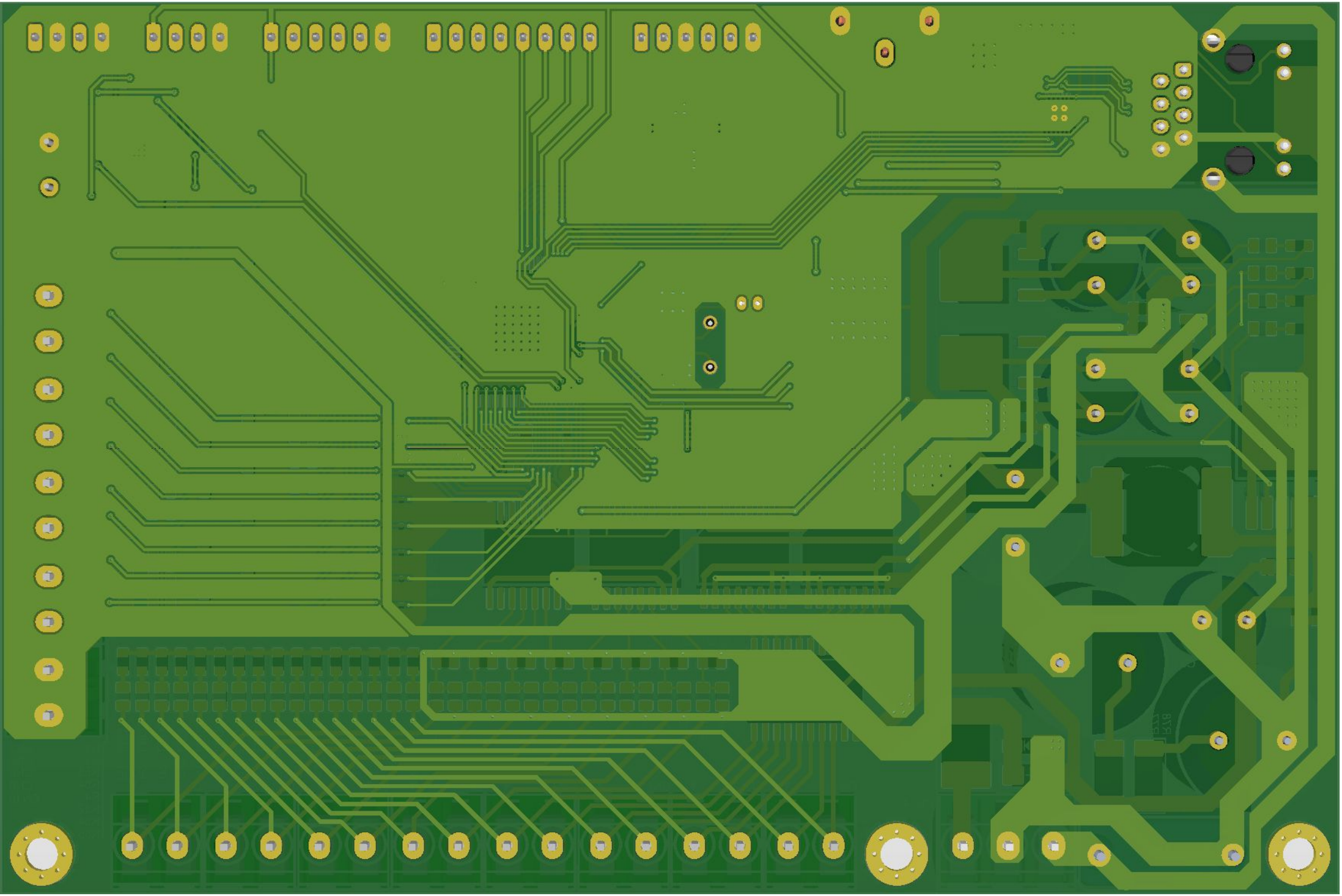

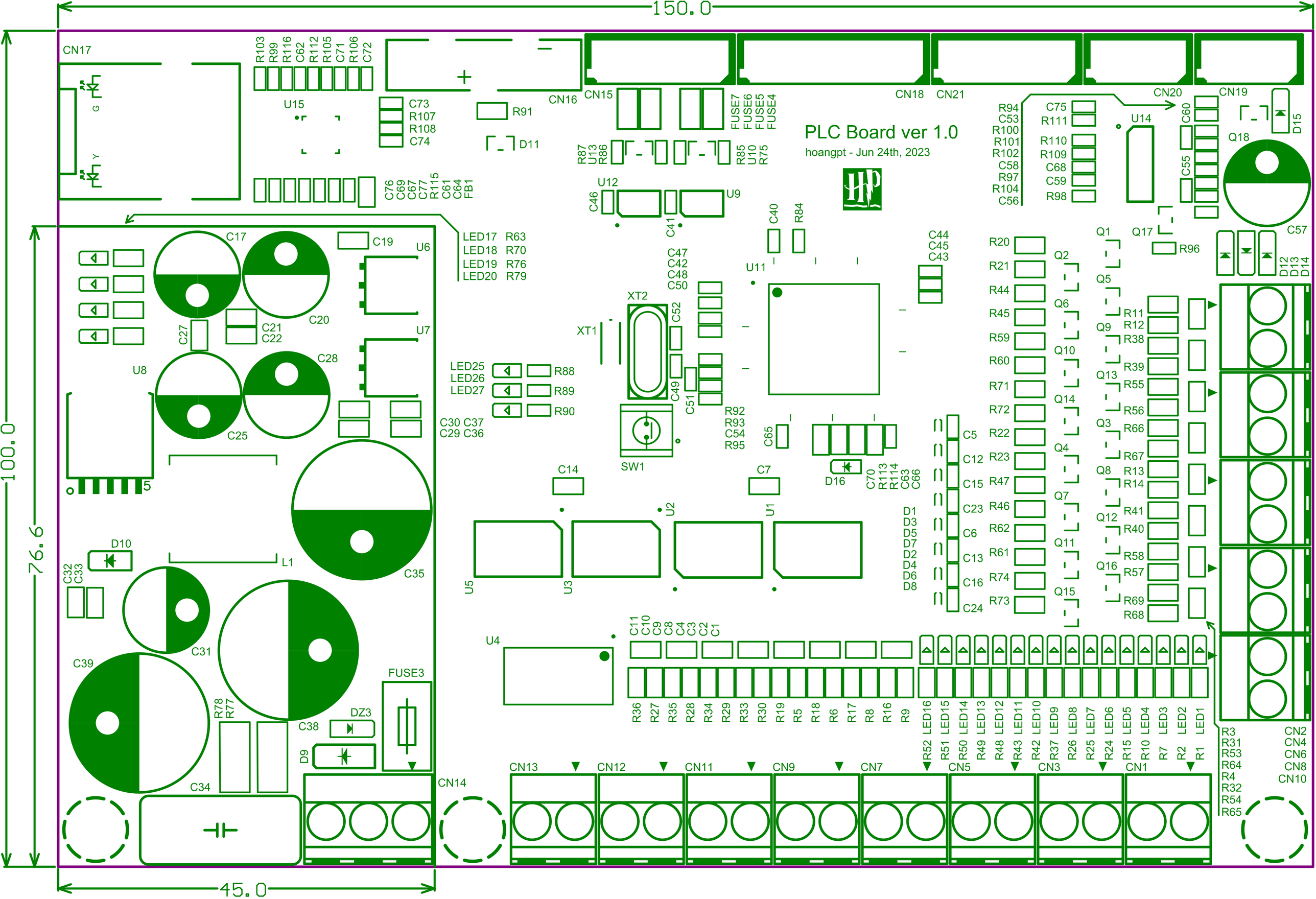
150.0
100.0
76.6
45.0
PLC Board ver 1.0
hoangpt - Jun 24th, 2023
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XT1
XT2
SW1
FUSE3
FUSE7
FUSE6
FUSE5
FUSE4
Q18
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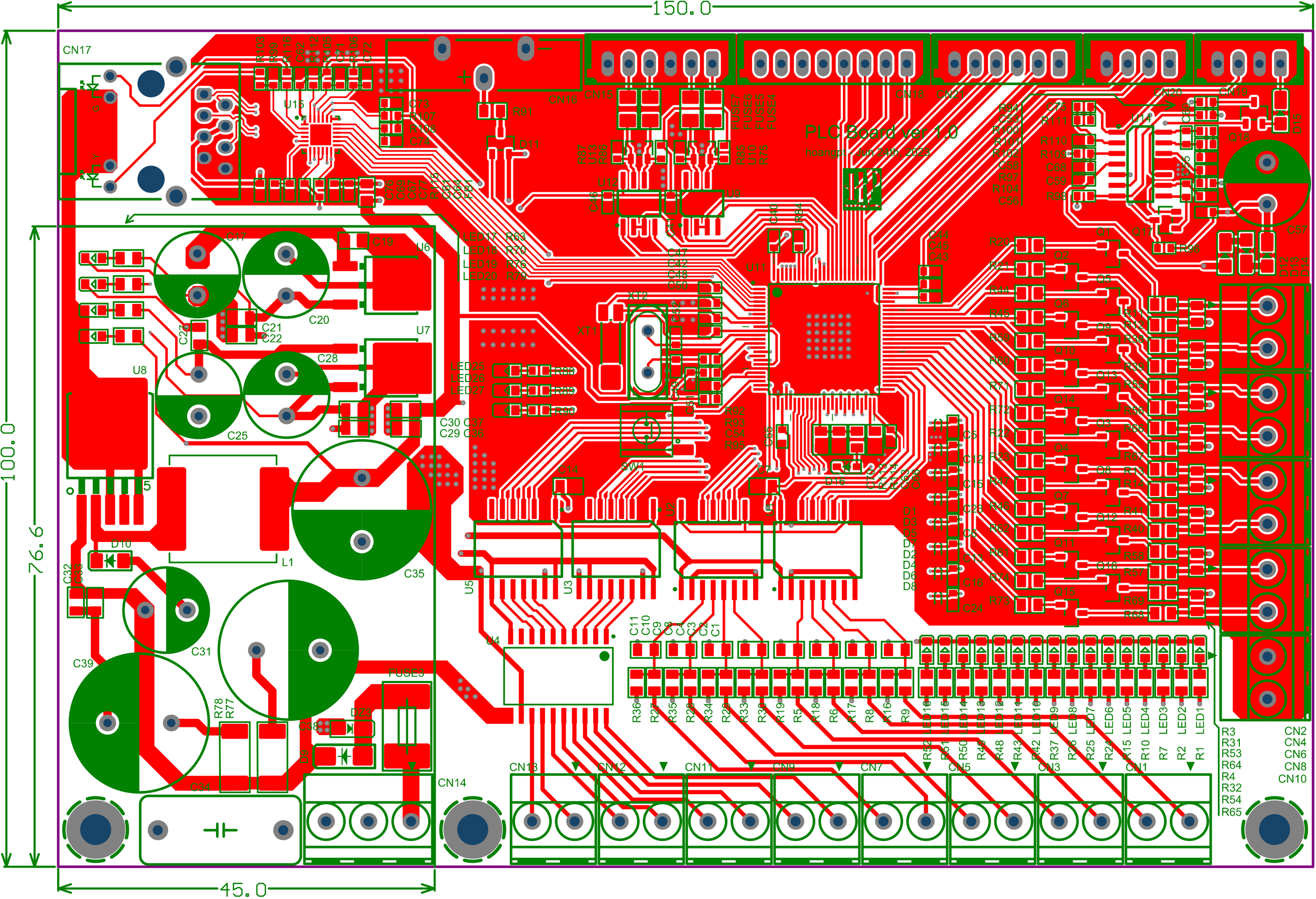
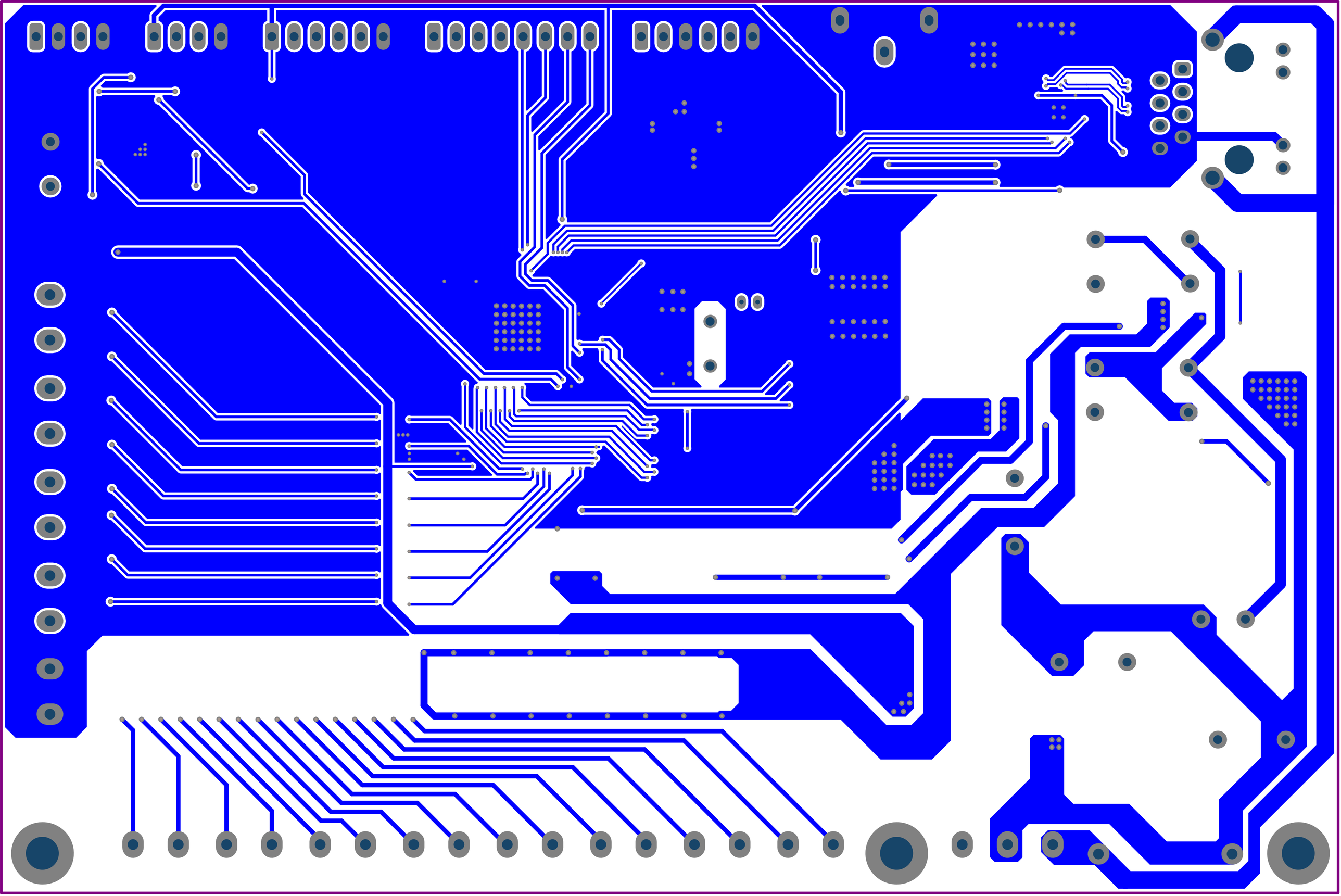
Q2
Q5
Q6
Q9
Q10
Q13
Q14
Q3
Q4
Q8
Q7
Q12
Q11
Q16
Q15
Q17
D10
D11
D15
D12
D13
D14
D16
DZ3
D9
L1
LED17 R63
LED18 R70
LED19 R76
LED20 R79
LED25
LED26
LED27
R88
R89
R90
C30 C37
C29 C36
R91
R96


150.0
100.0
76.6
45.0
PLC Board ver 1.0
hoangd1 Jun 24th, 2023
CN17
CN16
CN15
CN18
CN21
CN20
CN19
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CN12
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CN7
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CN1
CN2
CN4
CN6
CN8
CN10
U15
U6
U7
U8
U12
U9
U11
U5
U3
U4
U2
U14
XT1
XT2
SW1
L1
FUSE3
DZ3
D10
D11
D16
Q18
D6
C17
C19
C20
C21
C22
C25
C28
C30
C37
C29
C36
C35
C31
C39
C32
C33
C34
C38
C57
R91
R63
R70
R76
R78
R77
R3
R31
R53
R64
R4
R32
R54
R65