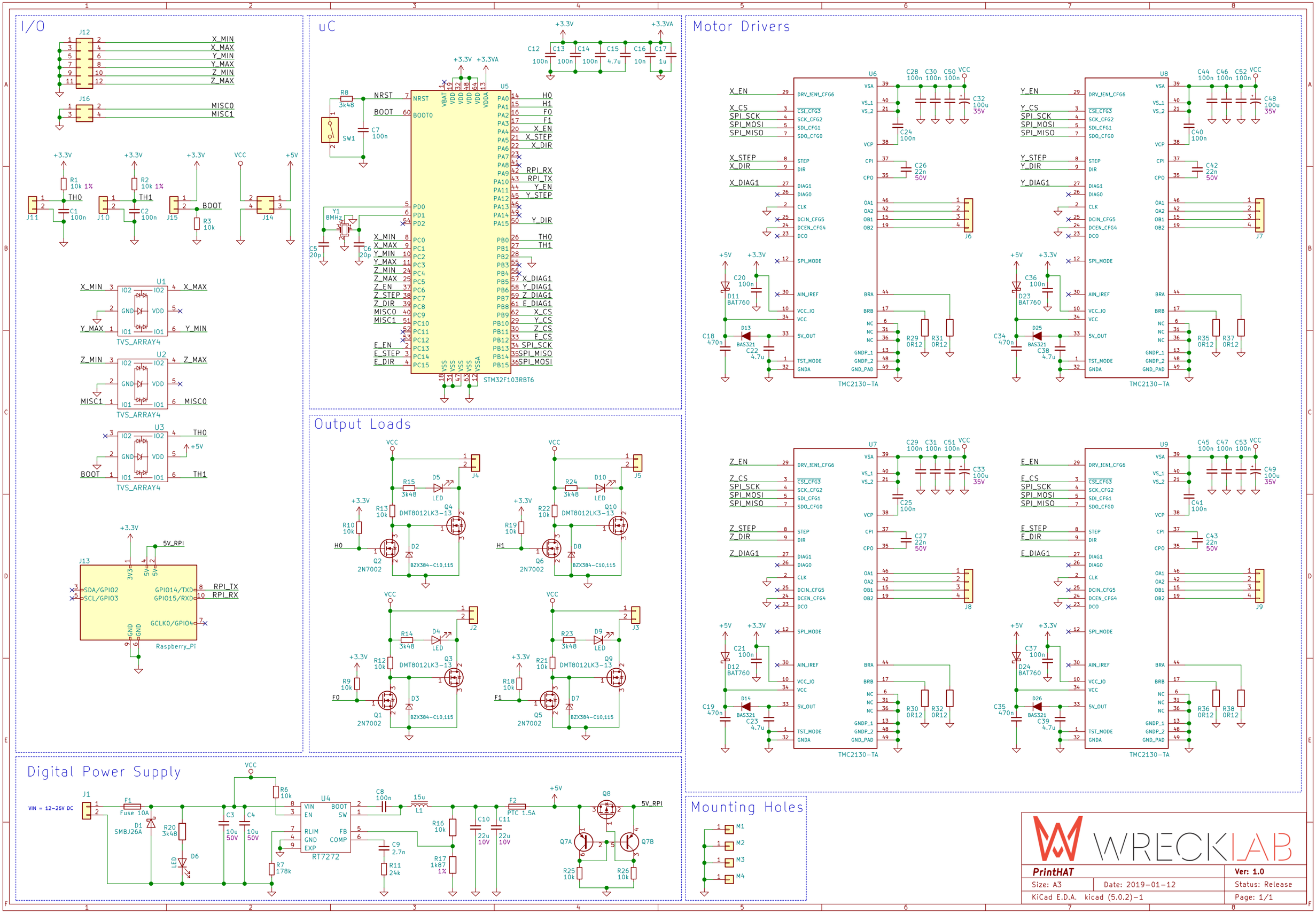
I/O
J12
X_MIN
X_MAX
Y_MIN
Y_MAX
Z_MIN
Z_MAX
J16
MISC0
MISC1
J11
J10
J15
J14
TH0
TH1
BOOT
R1 10k 1%
R2 10k 1%
R3 10k
C1 100n
C2 100n
U1
U2
U3
TVS_ARRAY4
J13
5V_RPI
RPI_TX
RPI_RX
SDA/GPIO2
SCL/GPIO3
GPIO14/TXD
GPIO15/RXD
GCLK0/GPIO4
Raspberry_Pi
uC
U5
STM32F103RBT6
NRST
BOOT0
R8 3k48
SW1
C7 100n
Y1 8MHz
C5 20p
C6 20p
C12 100n
C13 100n
C14 100n
C15 4.7u
C16 10n
C17 1u
+3.3V
+3.3VA
Output Loads
J4
J5
J2
J3
R15 3k48
R24 3k48
R14 3k48
R23 3k48
D5 LED
D10 LED
D4 LED
D9 LED
Q4 DMT8012LK3-13
Q10 DMT8012LK3-13
Q3 DMT8012LK3-13
Q9 DMT8012LK3-13
Q2 2N7002
Q6 2N7002
Q1 2N7002
Q5 2N7002
D2 BZX384-C10,115
D8 BZX384-C10,115
D3 BZX384-C10,115
D7 BZX384-C10,115
R10 10k
R13 10k
R19 10k
R22 10k
R9 10k
R12 10k
R18 10k
R21 10k
Motor Drivers
U6
U7
U8
U9
TMC2130-TA
J6
J7
J8
J9
C28 100n
C30 100n
C50 100n
C32 100u 35V
C24 100n
C26 22n 50V
C29 100n
C31 100n
C51 100n
C33 100u 35V
C25 100n
C27 22n 50V
C44 100n
C46 100n
C52 100n
C48 100u 35V
C40 100n
C42 22n 50V
C45 100n
C47 100n
C53 100n
C49 100u 35V
C41 100n
C43 22n 50V
D11 BAT760
D12 BAT760
D23 BAT760
D24 BAT760
D13 BAS321
D14 BAS321
D25 BAS321
D26 BAS321
C18 470n
C19 470n
C34 470n
C35 470n
C20 100n
C21 100n
C36 100n
C37 100n
C22 4.7u
C23 4.7u
C38 4.7u
C39 4.7u
R29 0R12
R31 0R12
R30 0R12
R32 0R12
R35 0R12
R37 0R12
R36 0R12
R38 0R12
Digital Power Supply
J1
VIN = 12-26V DC
F1 Fuse 10A
D1 SMBJ26A
R20 3k48
D6 LED
C3 10u 50V
C4 10u 50V
R6 10k
R7 178k
U4
RT7272
VIN
EN
RLIM
GND
EXP
BOOT
SW
FB
COMP
C8 100n
L1 15u
C9 2.7n
R11 24k
R16 10k
R17 1k87 1%
C10 22u 10V
C11 22u 10V
F2 PTC 1.5A
Q8
Q7A
Q7B
R25 10k
R26 10k
Mounting Holes
M1
M2
M3
M4
WRECKLAB
PrintHAT
Ver: 1.0
Size: A3
Date: 2019-01-12
Status: Release
KiCad E.D.A. kicad (5.0.2)-1
Page: 1/1