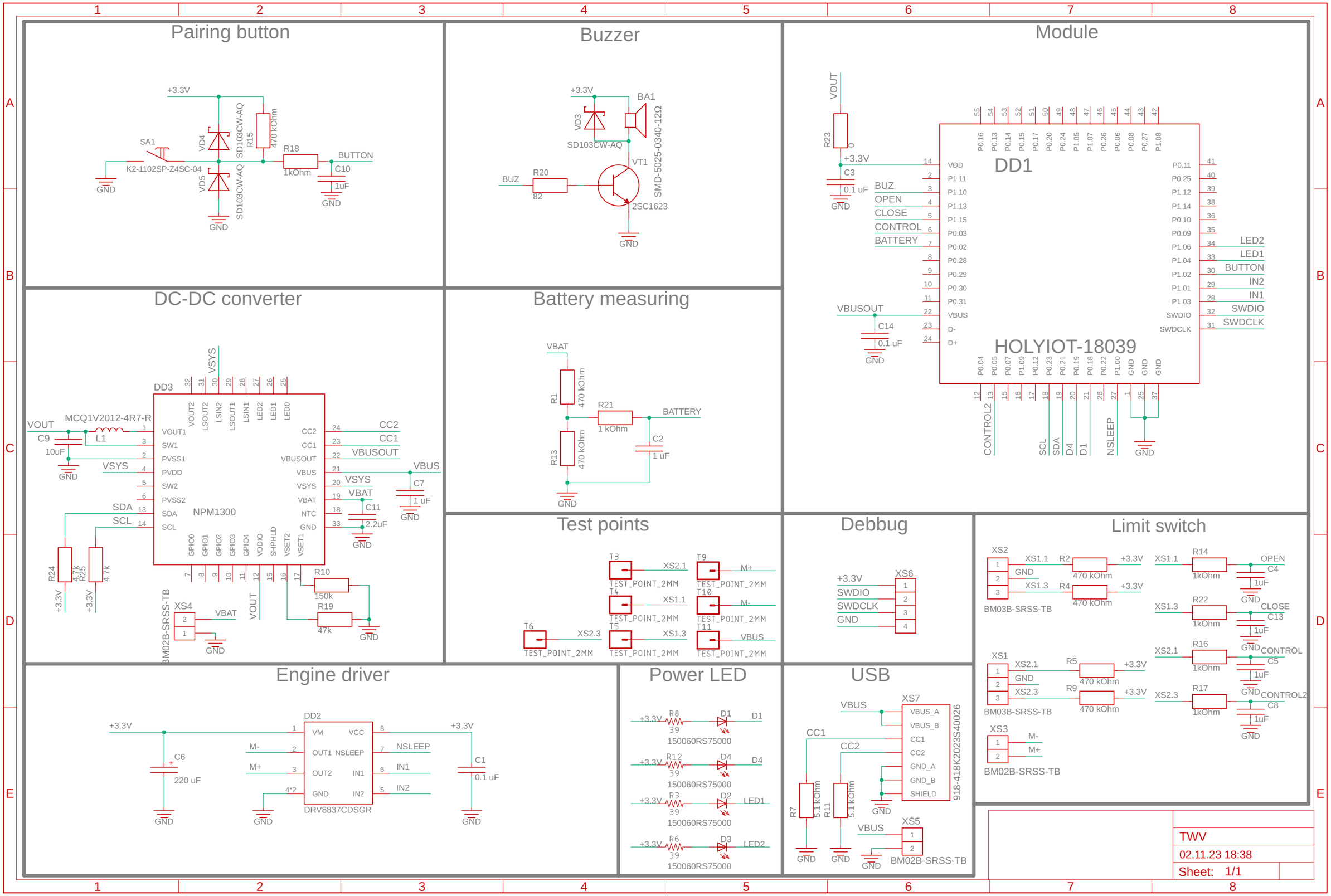
Pairing button
+3.3V
SA1
K2-1102SP-Z4SC-04
VD4
VD5
SD103CW-AQ
R15
470 kOhm
R18
1kOhm
BUTTON
C10
1uF
GND
Buzzer
+3.3V
BA1
VD3
SD103CW-AQ
SMD-5025-0340-12Ω
VT1
2SC1623
BUZ
R20
82
Module
VOUT
R23
0
+3.3V
C3
0.1 uF
BUZ
OPEN
CLOSE
CONTROL
BATTERY
VBUSOUT
C14
0.1 uF
DD1
HOLYIOT-18039
VDD
P1.11
P1.10
P1.13
P1.15
P0.03
P0.02
P0.28
P0.29
P0.30
P0.31
VBUS
D-
D+
P0.11
P0.25
P1.12
P1.14
P0.10
P0.09
P1.06
P1.04
P1.02
P1.01
P1.03
SWDIO
SWDCLK
LED2
LED1
BUTTON
IN2
IN1
SWDIO
SWDCLK
CONTROL2
SCL
SDA
D4
D1
NSLEEP
GND
DC-DC converter
DD3
NPM1300
VOUT
MCQ1V2012-4R7-R
L1
C9
10uF
VSYS
SDA
SCL
R24
4.7k
R25
4.7k
+3.3V
VOUT1
SW1
PVSS1
PVDD
SW2
PVSS2
SDA
SCL
VOUT2
LSOUT2
LSIN2
LSOUT1
LSIN1
LED2
LED1
LED0
CC2
CC1
VBUSOUT
VBUS
VSYS
VBAT
NTC
GND
GPIO0
GPIO1
GPIO2
GPIO3
GPIO4
VDDIO
SHPHLD
VSET2
VSET1
CC2
CC1
VBUSOUT
VBUS
VSYS
VBAT
C7
1 uF
C11
2.2uF
R10
150k
R19
47k
XS4
BM02B-SRSS-TB
VBAT
VOUT
Battery measuring
VBAT
R1
470 kOhm
R13
470 kOhm
R21
1 kOhm
BATTERY
C2
1 uF
Test points
T3
XS2.1
T9
M+
T4
XS1.1
T10
M-
T6
XS2.3
T5
XS1.3
T11
VBUS
TEST_POINT_2MM
Debbug
+3.3V
SWDIO
SWDCLK
GND
XS6
Limit switch
XS2
XS1.1
GND
XS1.3
BM03B-SRSS-TB
R2
470 kOhm
R4
470 kOhm
+3.3V
R14
1kOhm
OPEN
C4
1uF
R22
1kOhm
CLOSE
C13
1uF
XS1
XS2.1
GND
XS2.3
BM03B-SRSS-TB
R5
470 kOhm
R9
470 kOhm
R16
1kOhm
CONTROL
C5
1uF
R17
1kOhm
CONTROL2
C8
1uF
XS3
M-
M+
BM02B-SRSS-TB
Engine driver
+3.3V
C6
220 uF
DD2
DRV8837CDSGR
VM
VCC
OUT1
NSLEEP
OUT2
IN1
GND
IN2
M-
M+
NSLEEP
IN1
IN2
C1
0.1 uF
Power LED
R8
39
D1
150060RS75000
R12
39
D4
150060RS75000
R3
39
D2
LED1
150060RS75000
R6
39
D3
LED2
150060RS75000
USB
VBUS
CC1
CC2
XS7
VBUS_A
VBUS_B
CC1
CC2
GND_A
GND_B
SHIELD
918-418K2023S40026
R7
5.1 kOhm
R11
5.1 kOhm
XS5
BM02B-SRSS-TB
TWV
02.11.23 18:38
Sheet: 1/1