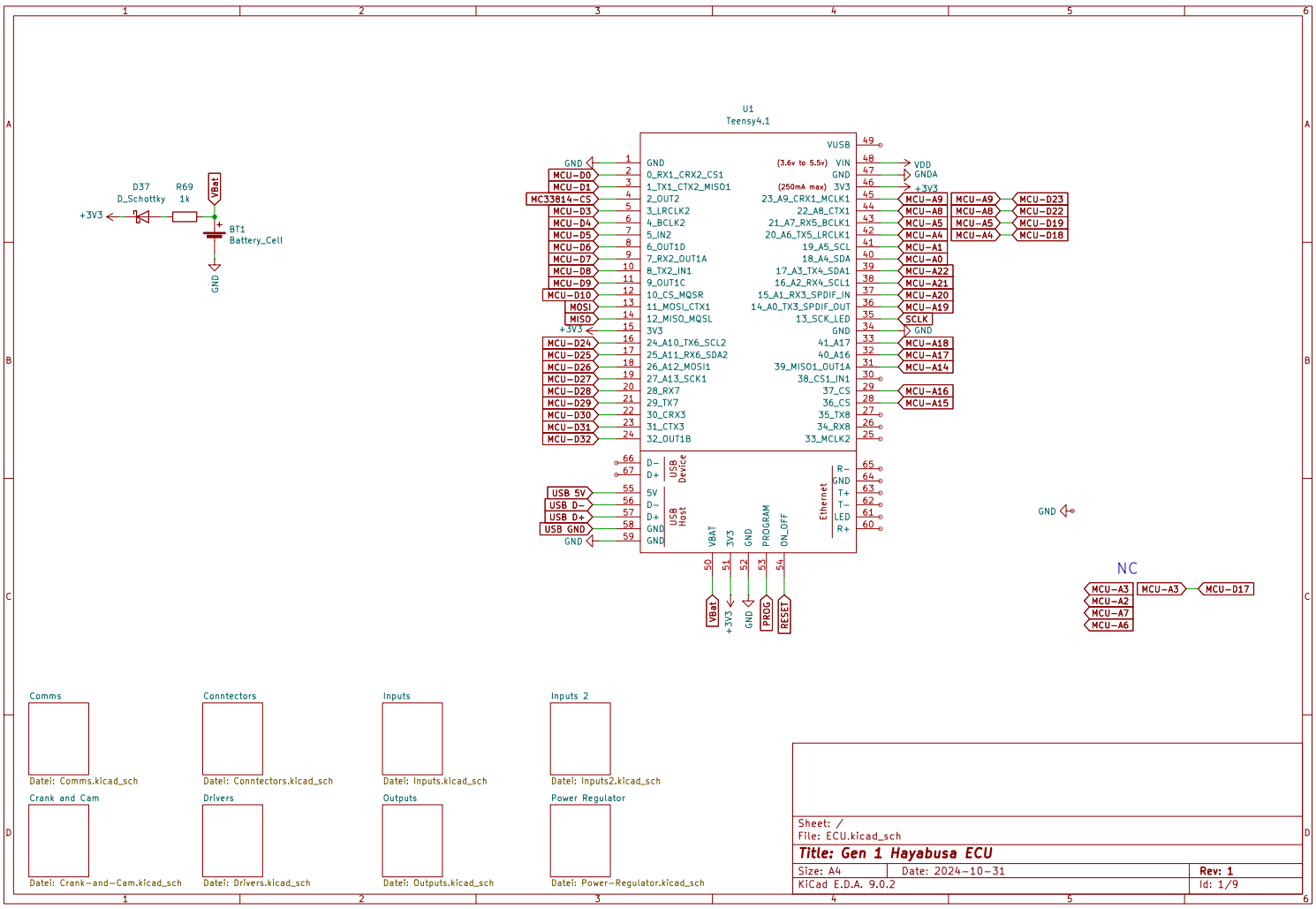
U1
Teensy4.1
D37
D_Schottky
R69
1k
VBat
+3V3
BT1
Battery_Cell
GND
GND
0_RX1_CRX2_CS1
1_TX1_CTX2_MISO1
2_OUT2
3_LRCLK2
4_BCLK2
5_IN2
6_OUT1D
7_RX2_OUT1A
8_TX2_IN1
9_OUT1C
10_CS_MQSR
11_MOSI_CTX1
12_MISO_MQSL
3V3
24_A10_TX6_SCL2
25_A11_RX6_SDA2
26_A12_MOSI1
27_A13_SCK1
28_RX7
29_TX7
30_CRX3
31_CTX3
32_OUT1B
VUSB
(3.6v to 5.5v) VIN
GND
(250mA max) 3V3
23_A9_CRX1_MCLK1
22_A8_CTX1
21_A7_RX5_BCLK1
20_A6_TX5_LRCLK1
19_A5_SCL
18_A4_SDA
17_A3_TX4_SDA1
16_A2_RX4_SCL1
15_A1_RX3_SPDIF_IN
14_A0_TX3_SPDIF_OUT
13_SCK_LED
GND
41_A17
40_A16
39_MISO1_OUT1A
38_CS1_IN1
37_CS
36_CS
35_TX8
34_RX8
33_MCLK2
VDD
GNDA
+3V3
GND
MCU-D0
MCU-D1
MC33814-CS
MCU-D3
MCU-D4
MCU-D5
MCU-D6
MCU-D7
MCU-D8
MCU-D9
MCU-D10
MOSI
MISO
+3V3
MCU-D24
MCU-D25
MCU-D26
MCU-D27
MCU-D28
MCU-D29
MCU-D30
MCU-D31
MCU-D32
MCU-A9
MCU-A8
MCU-A5
MCU-A4
MCU-A1
MCU-A0
MCU-A22
MCU-A21
MCU-A20
MCU-A19
SCLK
MCU-A18
MCU-A17
MCU-A14
MCU-A16
MCU-A15
MCU-A9
MCU-A8
MCU-A5
MCU-A4
MCU-D23
MCU-D22
MCU-D19
MCU-D18
USB Device
D-
D+
USB Host
5V
D-
D+
GND
GND
USB 5V
USB D-
USB D+
USB GND
GND
Ethernet
R-
GND
T+
T-
LED
R+
VBAT
3V3
GND
PROGRAM
ON_OFF
VBat
+3V3
GND
PROG
RESET
GND
NC
MCU-A3
MCU-A2
MCU-A7
MCU-A6
MCU-A3
MCU-D17
Comms
Datei: Comms.kicad_sch
Conntectors
Datei: Conntectors.kicad_sch
Inputs
Datei: Inputs.kicad_sch
Inputs 2
Datei: Inputs2.kicad_sch
Crank and Cam
Datei: Crank-and-Cam.kicad_sch
Drivers
Datei: Drivers.kicad_sch
Outputs
Datei: Outputs.kicad_sch
Power Regulator
Datei: Power-Regulator.kicad_sch
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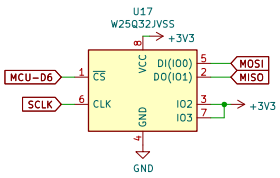
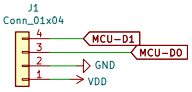
Title: Gen 1 Hayabusa ECU
Size: A4
Date: 2024-10-31
Rev: 1
KiCad E.D.A. 9.0.2
Id: 1/9

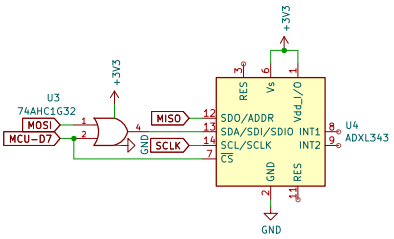
Flash Storage



HC-05 Bluetooth Connector



Accelerometer



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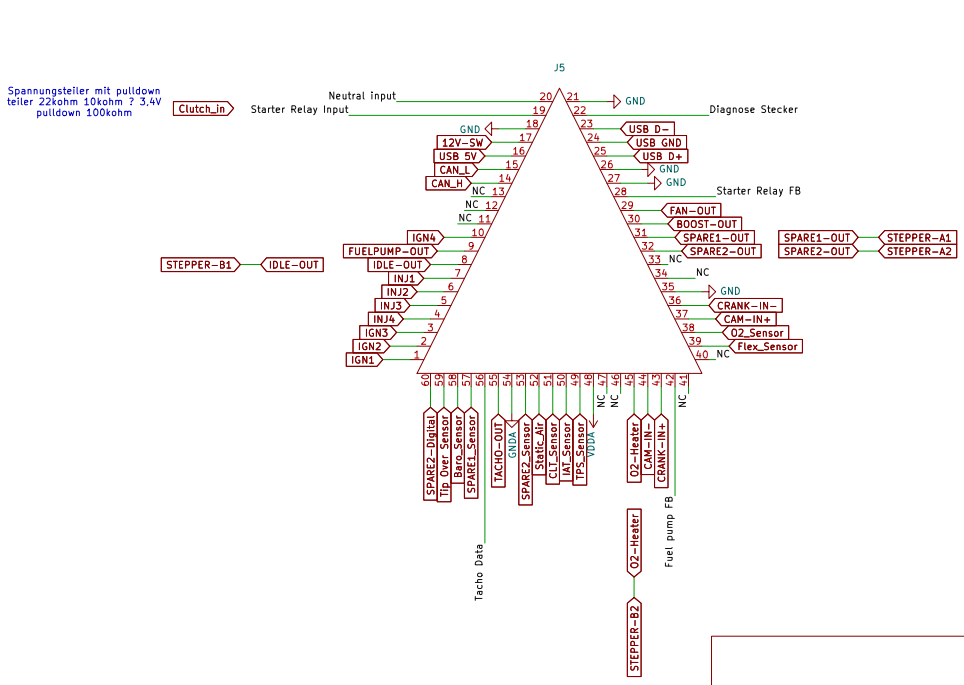
Size: A4	Date:	**Rev:**
KiCad E.D.A. 9.0.2		Id: 2/9



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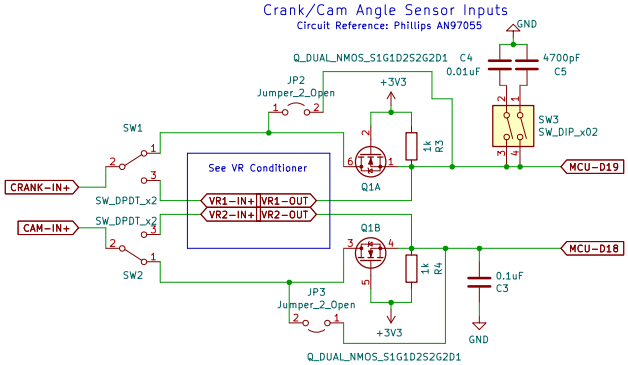
File: Conntectors.kicad_sch	
Title:	
Size: A4	Date:
KiCad E.D.A. 9.0.2	Id: 3/9

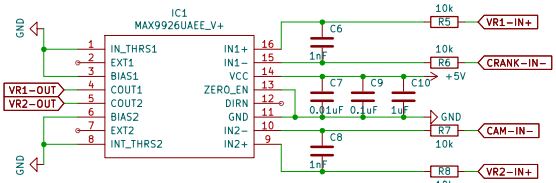
Crank/Cam Angle Sensor Inputs

Circuit Reference: Phillips AN97055



VR Conditioner Circuit

Running in A2 mode



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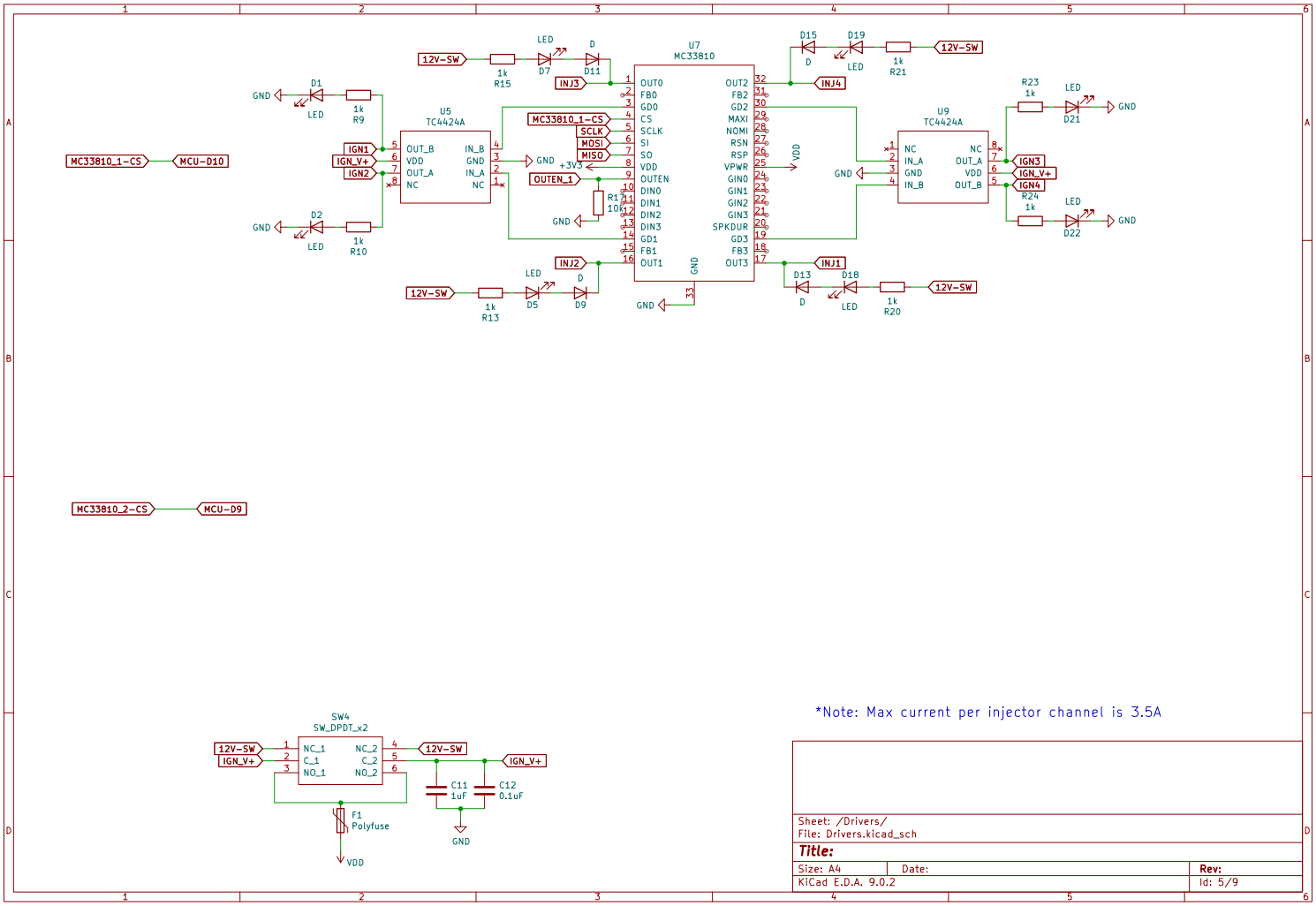
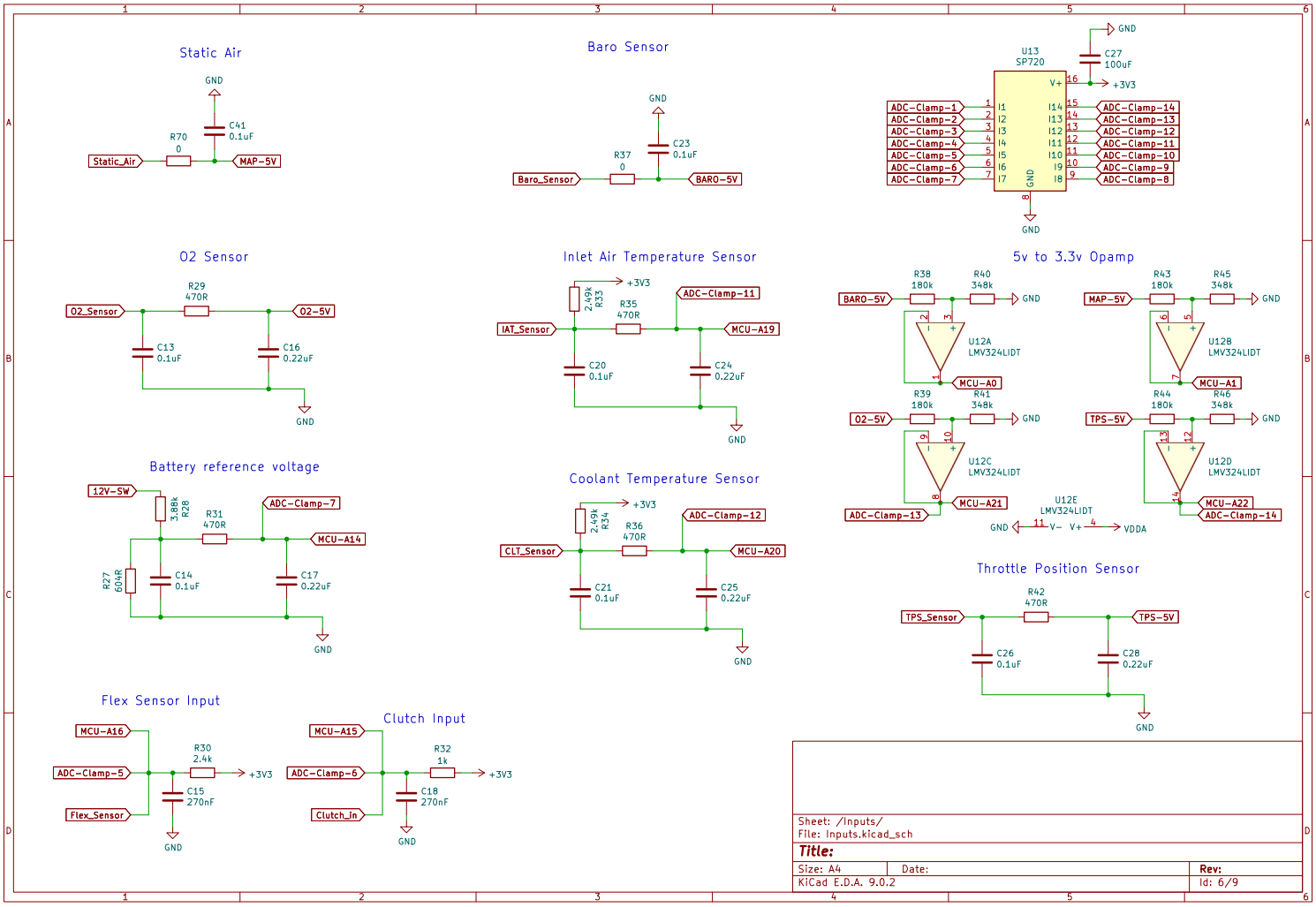
KiCad E.D.A. 9.0.2	Id: 4/9


MC33810_1-CS
MCU-D10
MC33810_2-CS
MCU-D9
12V-SW
IGN_V+
IGN1
IGN2
IGN3
IGN4
INJ1
INJ2
INJ3
INJ4
SCLK
MOSI
MISO
OUTEN_1
GND
VDD
+3V3
U5
TC4424A
U7
MC33810
U9
TC4424A
D1
D2
D5
D7
D9
D11
D13
D15
D18
D19
D21
D22
LED
R9
R10
R13
R15
R17
10k
R20
R21
R23
R24
1k
SW4
SW_DPDT_x2
F1
Polyfuse
C11
1uF
C12
0.1uF
*Note: Max current per injector channel is 3.5A
Sheet: /Drivers/
File: Drivers.kicad_sch
Title:
Size: A4
Date:
Rev:
KiCad E.D.A. 9.0.2
Id: 5/9



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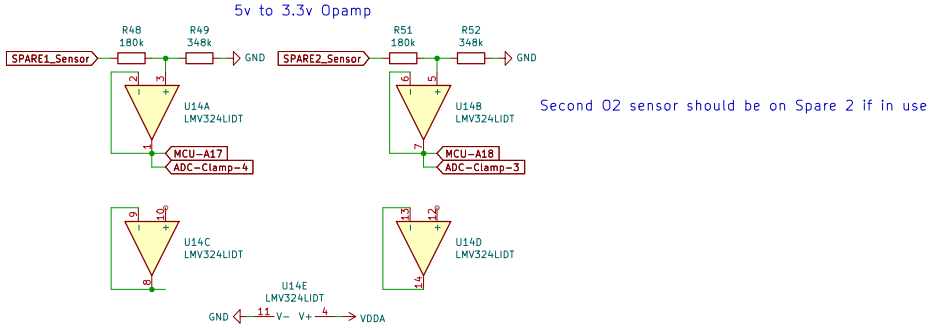
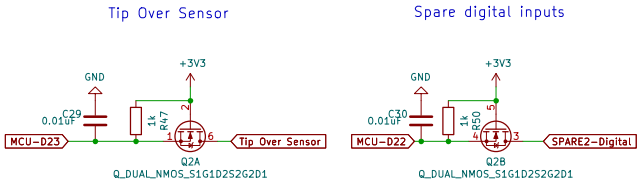
Size: A4	Date:	**Rev:**
KiCad E.D.A. 9.0.2		Id: 6/9





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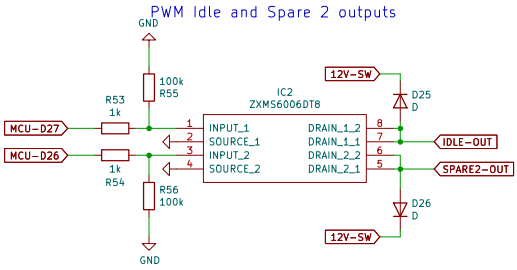
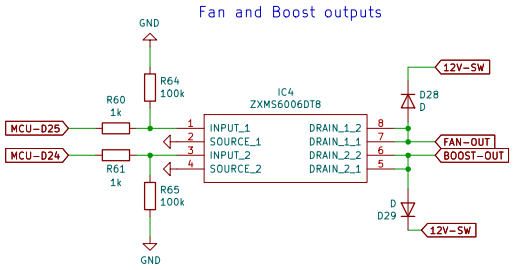
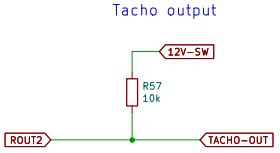
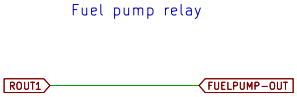
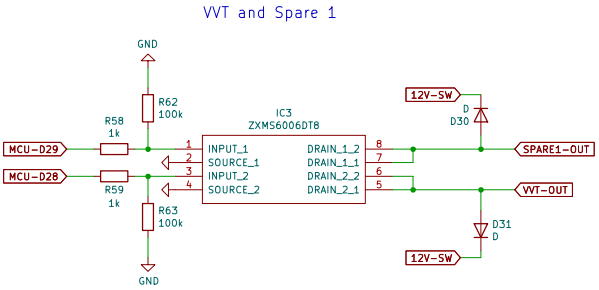
Size: A4	Date:	**Rev:**
KiCad E.D.A. 9.0.2		Id: 7/9

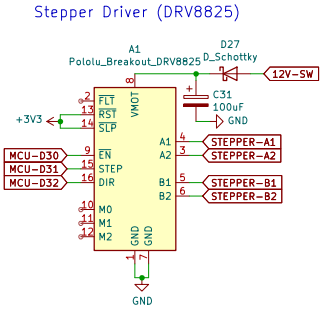












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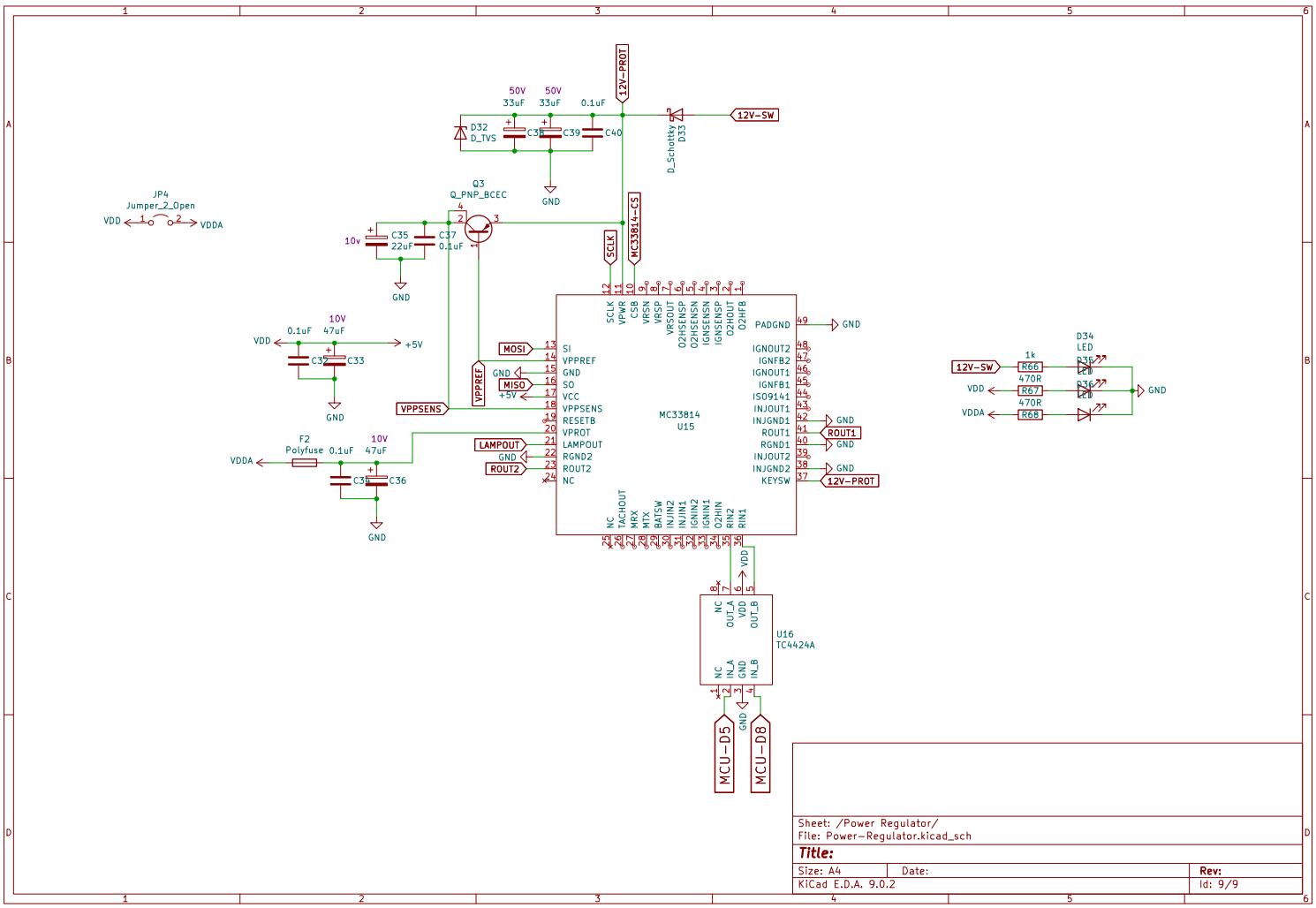
Size: A4	Date:	**Rev:**
KiCad E.D.A. 9.0.2		Id: 8/9



Sheet: /Power Regulator/
File: Power-Regulator.kicad_sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. 9.0.2		Id: 9/9