Bus types
General purpose bus
Ignition
Injection
Analog inputs (sensors)
Discrete inputs
LS & HS outputs
DC Motor

M5 Module-wbo-0.5
M7 Module-can-0.1
M6 Module:mega-mcu100/0.3
M3 Module-vr-discrete-0.5
M4 Module-vr-max9924-0.1
M2 Module-knock-0.2
M1 Module-power_12and5V-0.3
Ignition
Injector
LS
LS HOT
DC Driver 1
DC Driver 2
Internal TC2030 connector
Bluetooth Module
Barometer on this I2C bus
F40x does not have UART8
uSD card and accelerometer on SPI1 bus
Internal buttons
Connected

Pin Name Recommended function
B8 OUT_LS_HOT2 Fan Relay
B9 OUT_LS_HOT1 Main Relay
B16 OUT_LS4 Fuel Pump Replay
B18 OUT_LS2 Idle Air Valve
C8 GND VR Shield
C16 IN_AUX3 Fuel Pressure
D10 IN_BUTTON2 A/C Request

All inputs are 12V-tolerant

3.5A MAX Solenoid load capable
OUT_LS_HOT1 OUT_LS_HOT2 3.5A MAX Always hot capable

Move the resistor from position R6 to R5 to use ADC3 for receiving the analog signal VR-DISCRETE instead of the knock signal

Move the resistor from position R143 to R145 to enable the CAN WAKEUP function. The AUX1 analog input will be unavailable.

Pin 8 may be used for shielding VR signals

Install a 4.7 kOhm R1 resistor for using VR2- as a hall sensor input

Configurable "BUTTON" pulls

1N4148WS CR1220

Hellen-One-PCB-logo
https://rusefi.com/s/uaefi
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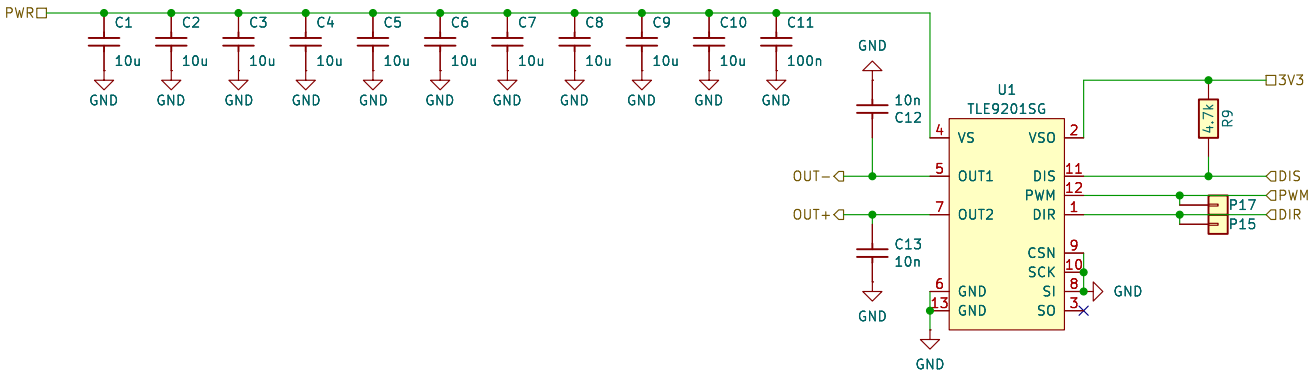
KiCad E.D.A. 8.0.9 | Id: 1/9



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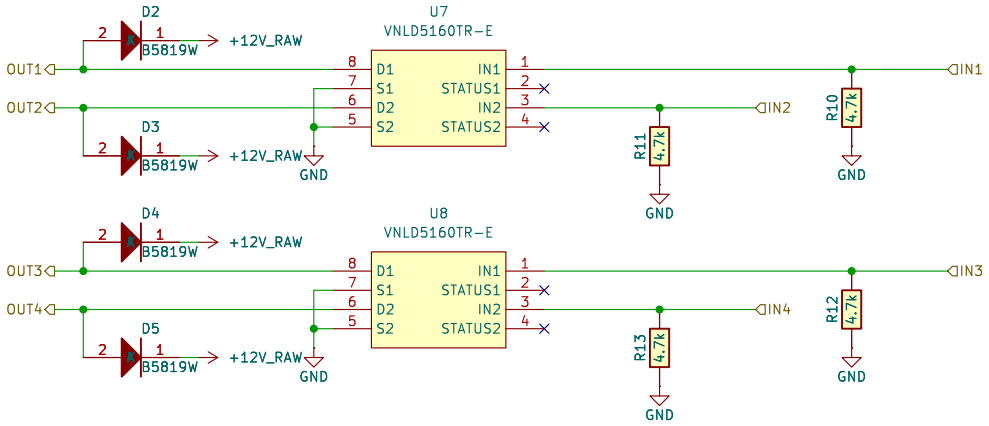

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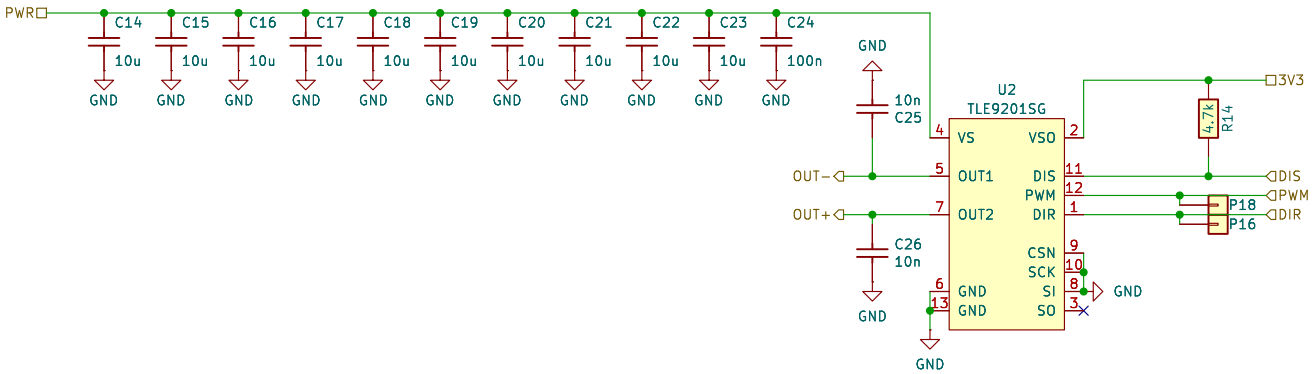

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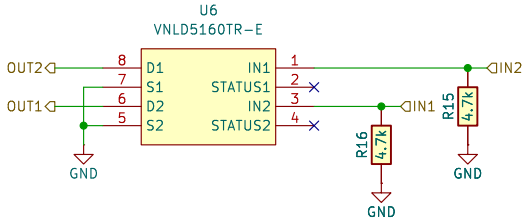

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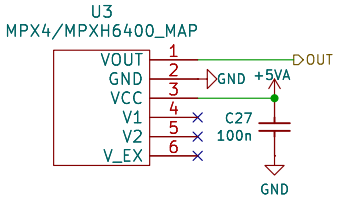

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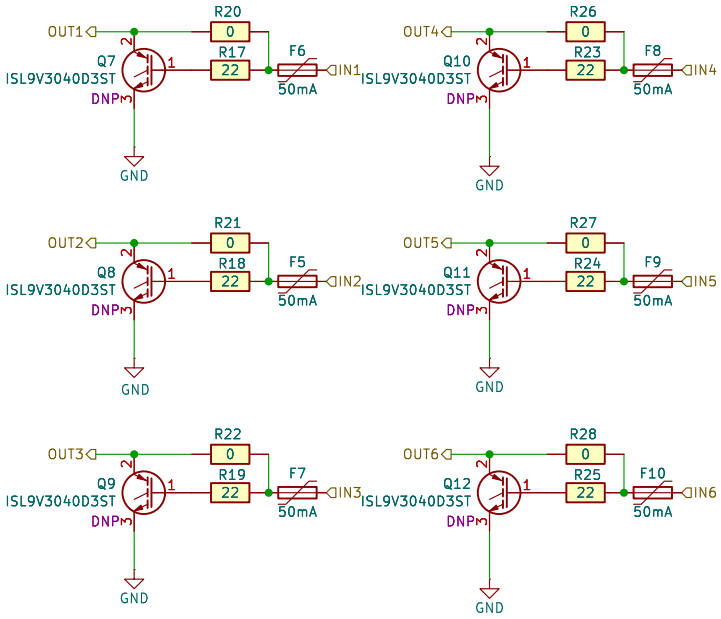
Title: UAEFI

Size: A4	Date: 2025-04-30	**Rev: E**
KiCad E.D.A. 8.0.9		Id: 8/9

Remove R20–R22, R26–R28, and install Q7–Q12 for use with dumb coils



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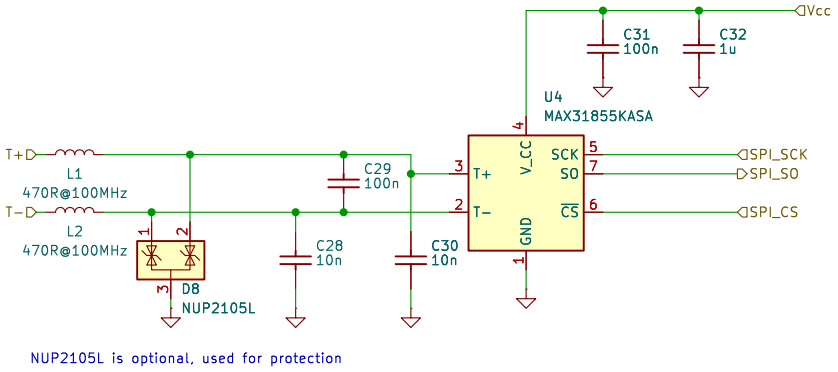

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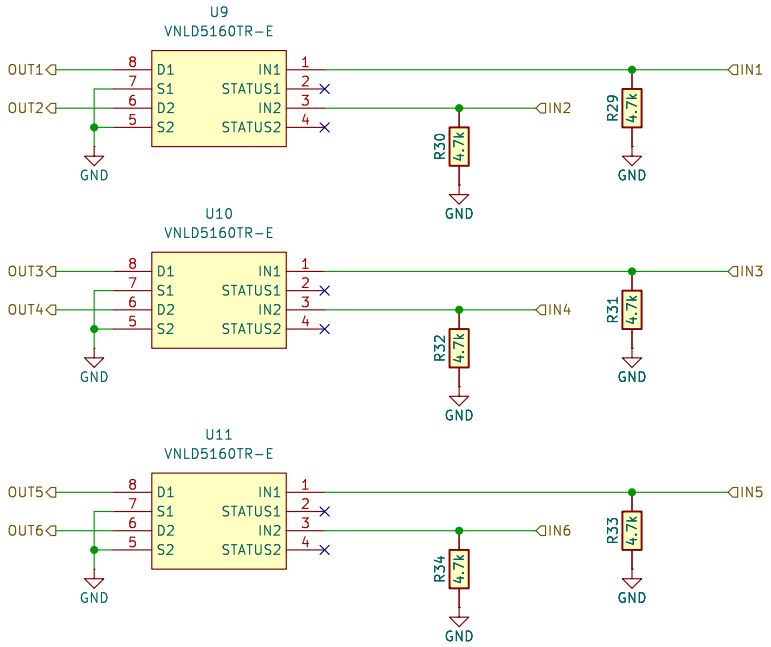

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