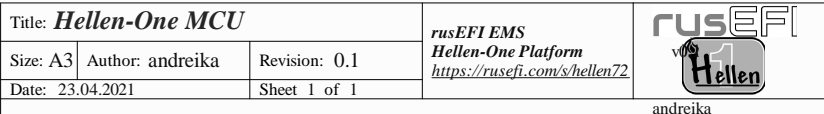


Board info
Hellen-One-PCB-Logo
<http://rusefi.com/s/hellen121vag>

andrei.k. rusEfi.com
Sheet: /
File: hellen121vag.kicad_sch
Title: Hellen121vag
Size: A2 Date: 2021-05-18
KiCad E.D.A. kicad (5.99.0-10483-ga6ad7a470) Rev: b
Id: 1/1





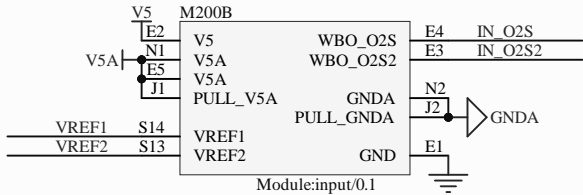
| M200D | | | |
|----------------|------------|------------|----------------|
| PULL_CRANK J21 | PULL_CRANK | PULL_MAP1 | J14 PULL_MAP1 |
| PULL_CAM J17 | PULL_CAM | PULL_MAP2 | J13 PULL_MAP2 |
| PULL_VSS J18 | PULL_VSS | PULL_MAP3 | J12 PULL_MAP3 |
| | | | |
| PULL_TPS J19 | PULL_TPS | PULL_AUX1 | J10 PULL_AUX1 |
| PULL_PPS J5 | PULL_PPS | PULL_AUX2 | J9 PULL_AUX2 |
| PULL_IAT J15 | PULL_IAT | PULL_AUX3 | J8 PULL_AUX3 |
| PULL_CLT J16 | PULL_CLT | PULL_AUX4 | J7 PULL_AUX4 |
| | | | |
| PULL_O2S J20 | PULL_O2S | PULL_SENS1 | J26 PULL_SENS1 |
| PULL_O2S2 J4 | PULL_O2S2 | PULL_SENS2 | J25 PULL_SENS2 |
| | | PULL_SENS3 | J24 PULL_SENS3 |
| | | PULL_SENS4 | J23 PULL_SENS4 |
| PULL_RES1 J6 | PULL_RES1 | PULL_KNOCK | J22 PULL_KNOCK |
| PULL_RES2 J3 | PULL_RES2 | | |
| PULL_RES3 J11 | PULL_RES3 | | |

Module:input/0.1

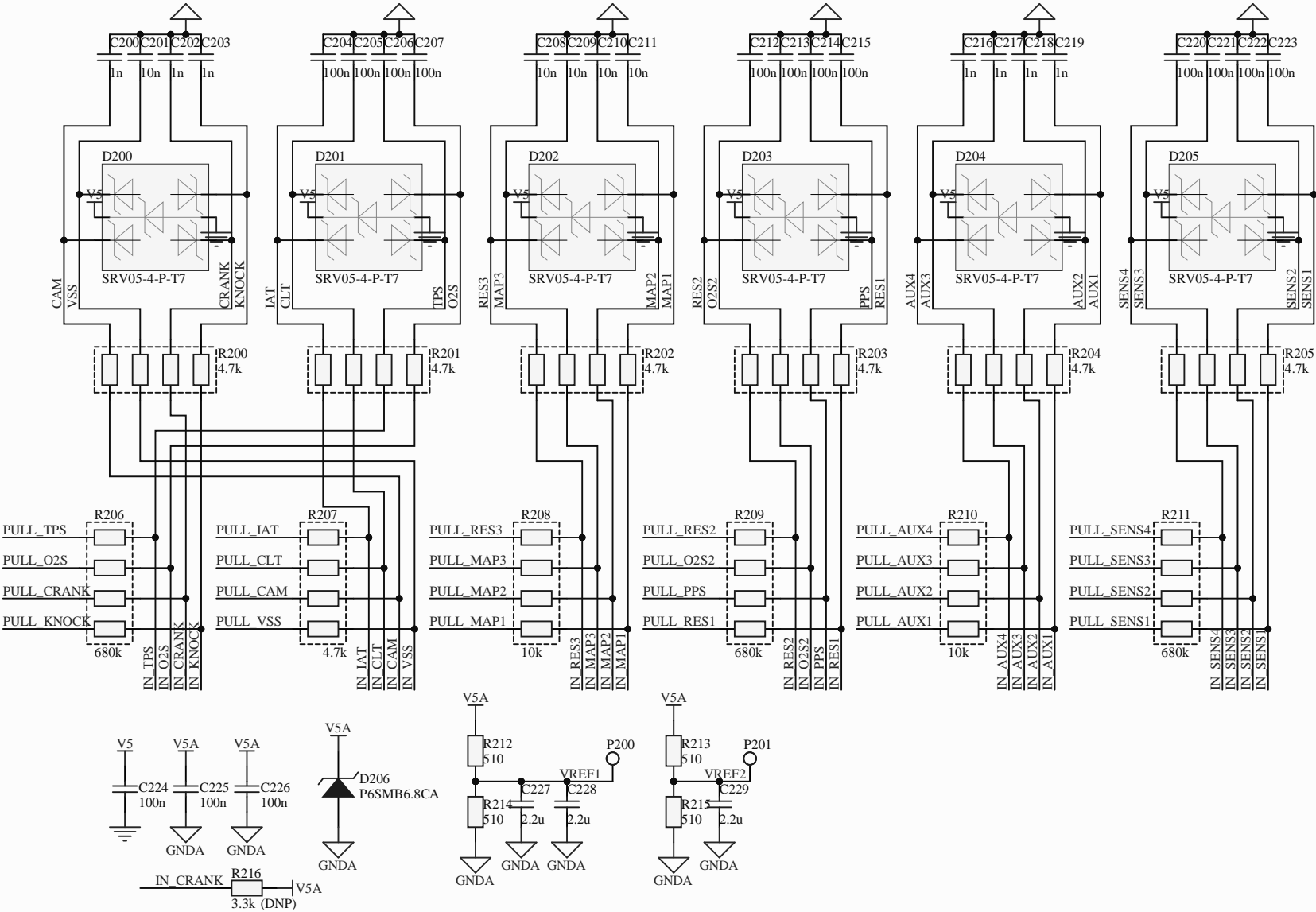
| M200C | | | M200A | | |
|-------------|----------|-----------|-------|---------|--|
| IN_CRANK S8 | IN_CRANK | N21 CRANK | CRANK | N19 CAM | |
| IN_CAM S5 | IN_CAM | N19 CAM | CAM | N20 VSS | |
| IN_VSS S6 | IN_VSS | N20 VSS | VSS | | |
| | | | | | |
| IN_TPS S10 | IN_TPS | N17 TPS | TPS | | |
| IN_PPS S24 | IN_PPS | N5 PPS | PPS | | |
| IN_IAT S16 | IN_IAT | N15 IAT | IAT | | |
| IN_CLT S15 | IN_CLT | N16 CLT | CLT | | |
| | | | | | |
| IN_O2S S9 | IN_O2S | N18 O2S | O2S | | |
| IN_O2S2 S25 | IN_O2S2 | N4 O2S2 | O2S2 | | |
| | | | | | |
| IN_RES1 S23 | IN_RES1 | N6 RES1 | RES1 | | |
| IN_RES2 S26 | IN_RES2 | N3 RES2 | RES2 | | |
| IN_RES3 S22 | IN_RES3 | N11 RES3 | RES3 | | |
| | | | | | |
| IN_MAP1 S11 | IN_MAP1 | N14 MAP1 | MAP1 | | |
| IN_MAP2 S12 | IN_MAP2 | N13 MAP2 | MAP2 | | |
| IN_MAP3 S19 | IN_MAP3 | N12 MAP3 | MAP3 | | |
| | | | | | |
| IN_AUX1 S17 | IN_AUX1 | N10 AUX1 | AUX1 | | |
| IN_AUX2 S18 | IN_AUX2 | N9 AUX2 | AUX2 | | |
| IN_AUX3 S20 | IN_AUX3 | N8 AUX3 | AUX3 | | |
| IN_AUX4 S21 | IN_AUX4 | N7 AUX4 | AUX4 | | |
| | | | | | |
| IN_SENS1 S1 | IN_SENS1 | N26 SENS1 | SENS1 | | |
| IN_SENS2 S2 | IN_SENS2 | N25 SENS2 | SENS2 | | |
| IN_SENS3 S3 | IN_SENS3 | N24 SENS3 | SENS3 | | |
| IN_SENS4 S4 | IN_SENS4 | N23 SENS4 | SENS4 | | |
| | | | | | |
| IN_KNOCK S7 | IN_KNOCK | N22 KNOCK | KNOCK | | |

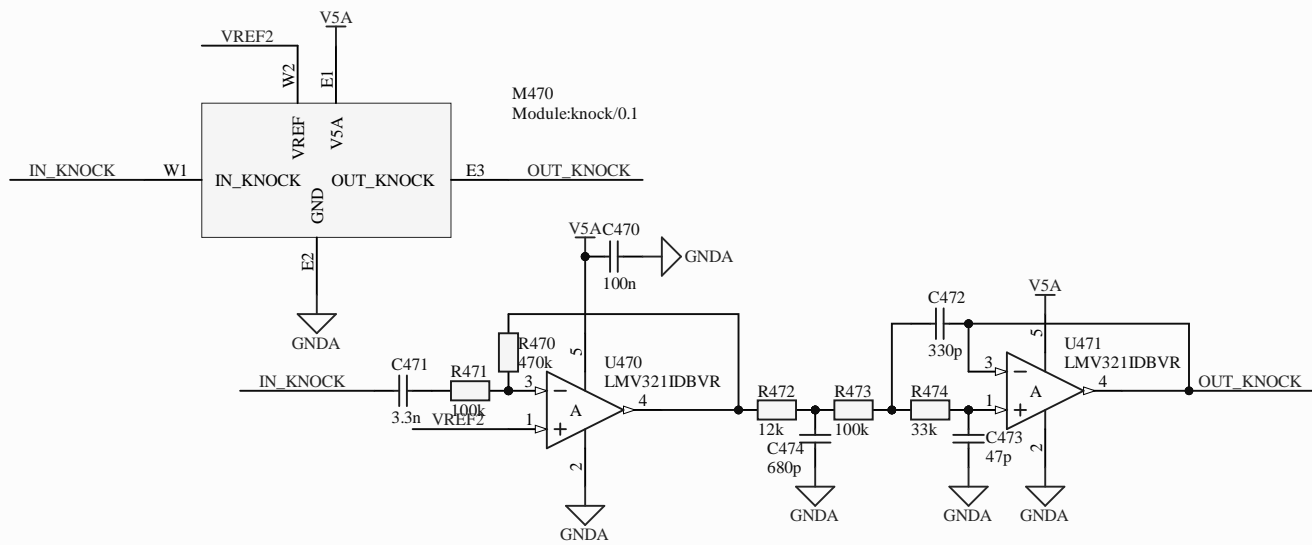
Module:input/0.1

Module:input/0.1



Module:input/0.1





A

B

C

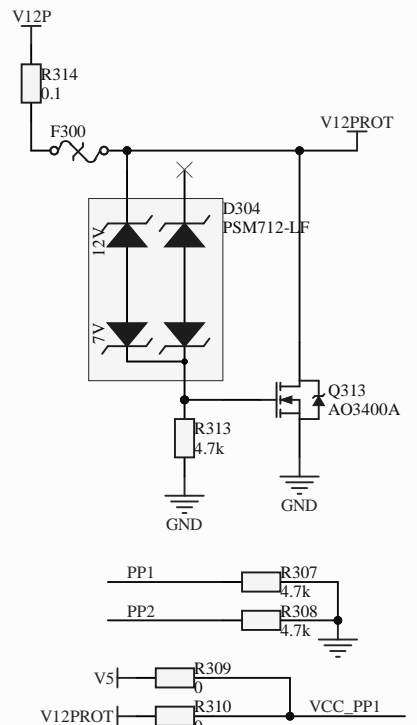
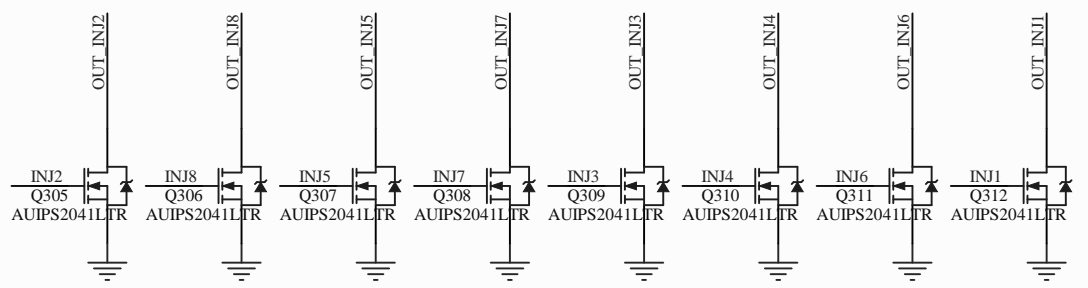
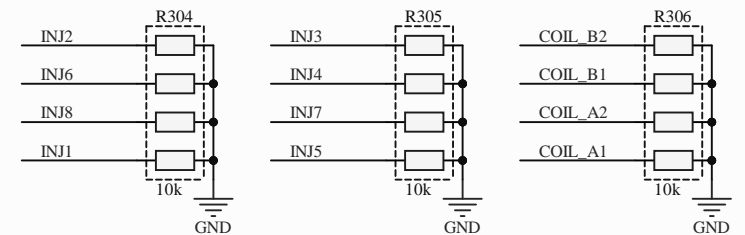
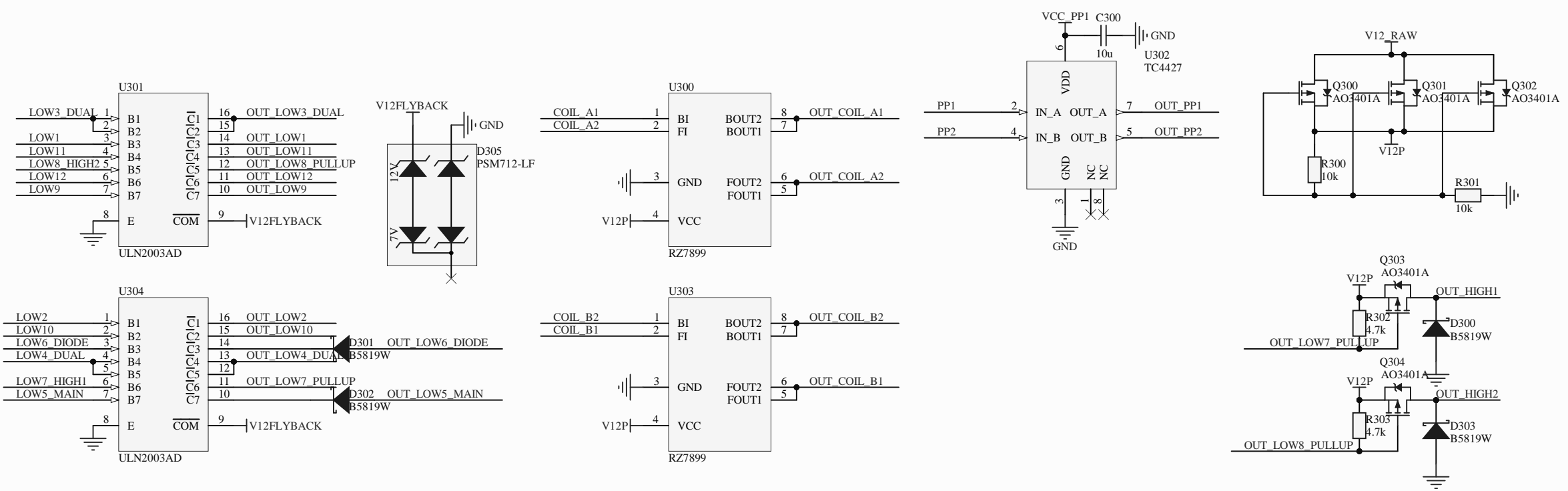
D

A

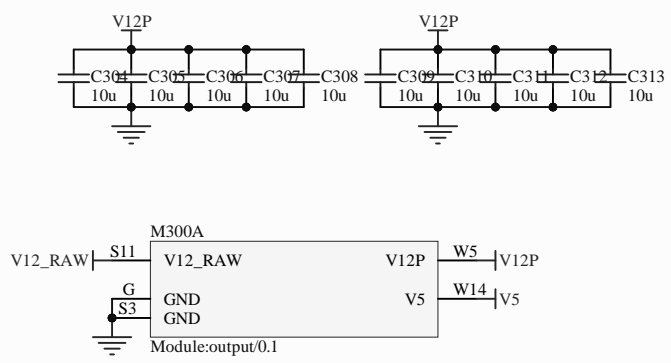
B

C

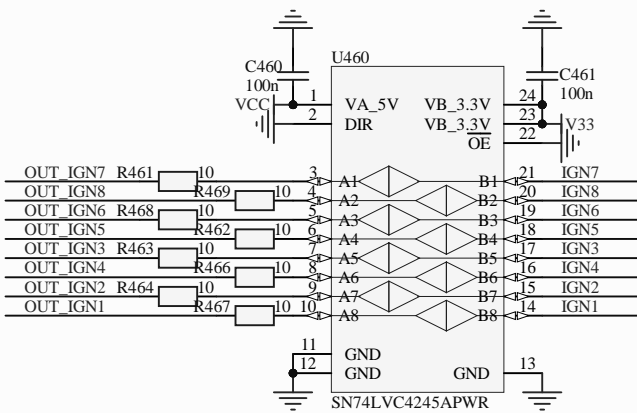
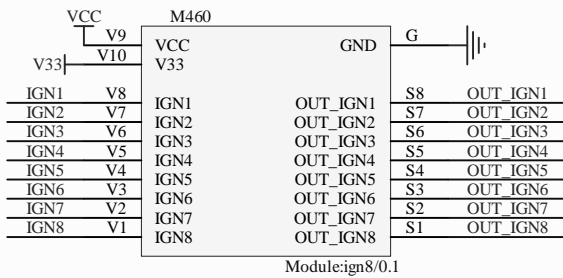
D

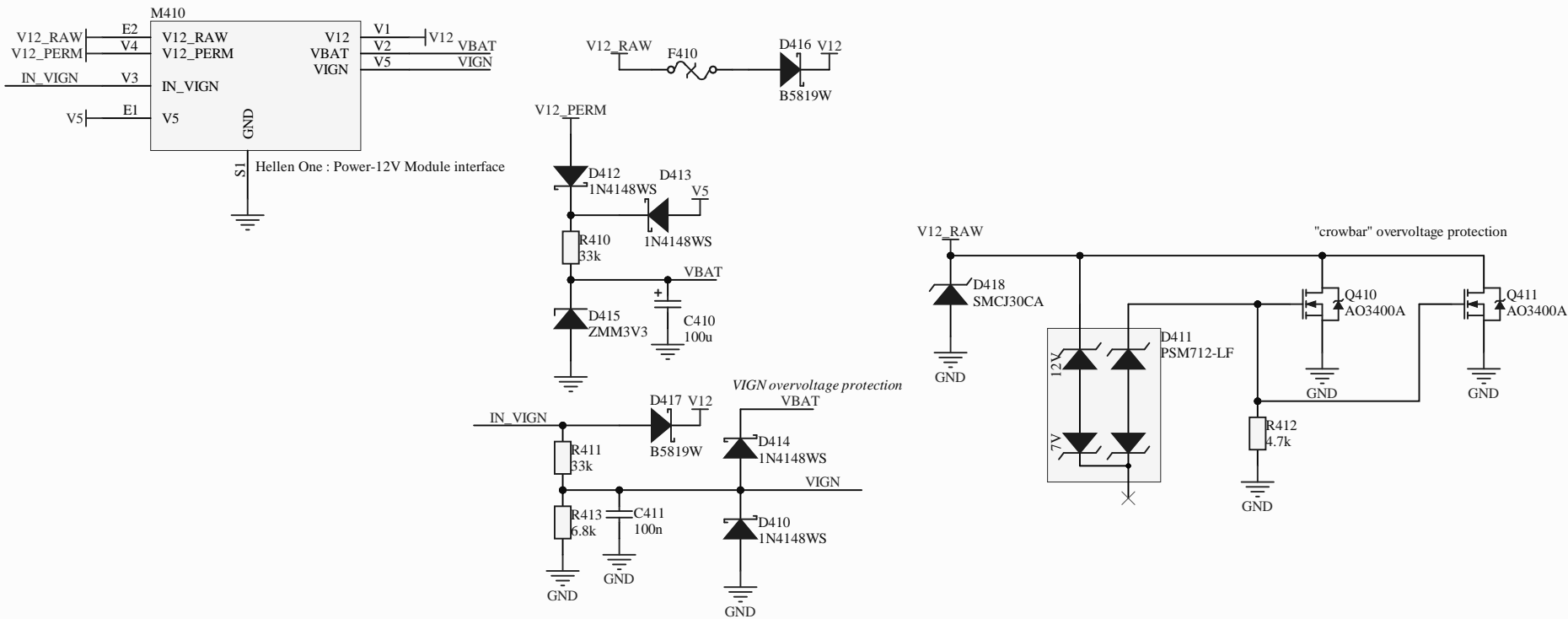


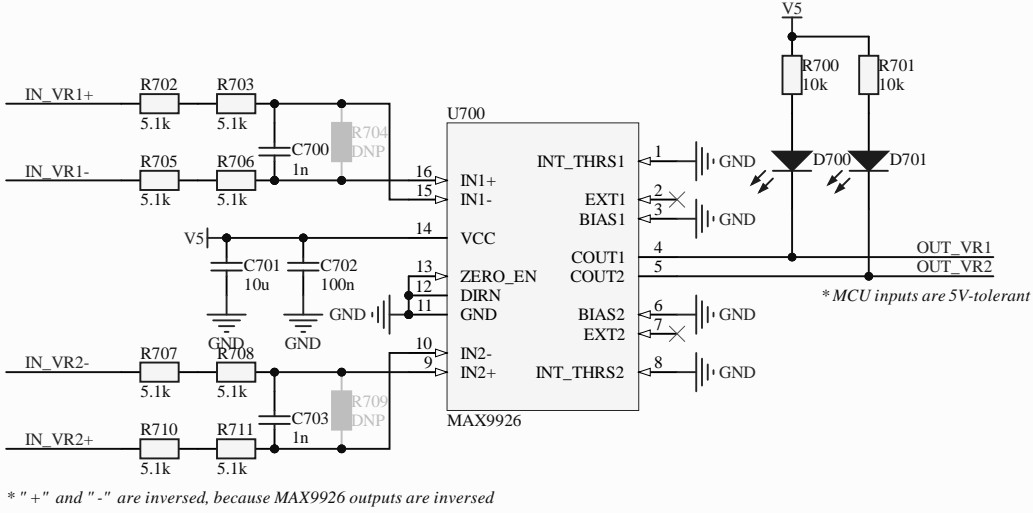
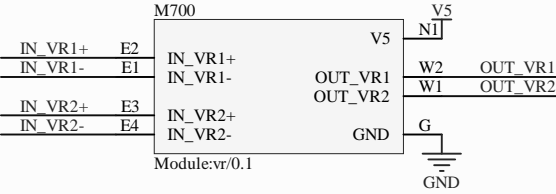
| | | | | |
|-----------------|-----|-----------------|-----|-----------------|
| INJ1 | W24 | INJ1 | S18 | OUT_INJ1 |
| INJ2 | W23 | INJ2 | S16 | OUT_INJ2 |
| INJ3 | W20 | INJ3 | S17 | OUT_INJ3 |
| INJ4 | W19 | INJ4 | W7 | OUT_INJ4 |
| INJ5 | W18 | INJ5 | W10 | OUT_INJ5 |
| INJ6 | W17 | INJ6 | S15 | OUT_INJ6 |
| INJ7 | W16 | INJ7 | W12 | OUT_INJ7 |
| INJ8 | W15 | INJ8 | W11 | OUT_INJ8 |
| PP1 | W28 | PP1 | W6 | OUT_PP1 |
| PP2 | W22 | PP2 | S6 | OUT_PP2 |
| COIL_A1 | W33 | SOLENOID_A1 | S1 | OUT_COIL_A1 |
| COIL_A2 | W32 | SOLENOID_A2 | S2 | OUT_COIL_A2 |
| COIL_B1 | W31 | SOLENOID_B1 | S4 | OUT_COIL_B1 |
| COIL_B2 | W30 | SOLENOID_B2 | S5 | OUT_COIL_B2 |
| LOW1 | W21 | LOW1 | S8 | OUT_LOW1 |
| LOW2 | W29 | LOW2 | W1 | OUT_LOW2 |
| LOW3_DUAL | W38 | LOW3_DUAL | S7 | OUT_LOW3_DUAL |
| LOW4_DUAL | W34 | LOW4_DUAL | W4 | OUT_LOW4_DUAL |
| LOW5_MAIN | W40 | LOW5_MAIN | W13 | OUT_LOW5_MAIN |
| LOW6_DIODE | W25 | LOW6_DIODE | W3 | OUT_LOW6_DIODE |
| LOW7_HIGH1 | W39 | LOW7_HIGH1 | W9 | OUT_LOW7_PULLUP |
| LOW8_HIGH2 | W37 | LOW8_HIGH2 | S12 | OUT_LOW8_PULLUP |
| LOW9 | W27 | LOW9 | S14 | OUT_LOW9 |
| LOW10 | W26 | LOW10 | W2 | OUT_LOW10 |
| LOW11 | W35 | LOW11 | S10 | OUT_LOW11 |
| LOW12 | W36 | LOW12 | S13 | OUT_LOW12 |
| OUT_LOW1 | | OUT_LOW1 | W8 | OUT_HIGH1 |
| OUT_LOW2 | | OUT_LOW2 | S9 | OUT_HIGH2 |
| OUT_LOW3_DUAL | | OUT_LOW3_DUAL | | |
| OUT_LOW4_DUAL | | OUT_LOW4_DUAL | | |
| OUT_LOW5_MAIN | | OUT_LOW5_MAIN | | |
| OUT_LOW6_DIODE | | OUT_LOW6_DIODE | | |
| OUT_LOW7_PULLUP | | OUT_LOW7_PULLUP | | |
| OUT_LOW8_PULLUP | | OUT_LOW8_PULLUP | | |
| OUT_LOW9 | | OUT_LOW9 | | |
| OUT_LOW10 | | OUT_LOW10 | | |
| OUT_LOW11 | | OUT_LOW11 | | |
| OUT_LOW12 | | OUT_LOW12 | | |
| OUT_SOLENOID_A1 | | OUT_SOLENOID_A1 | | |
| OUT_SOLENOID_A2 | | OUT_SOLENOID_A2 | | |
| OUT_SOLENOID_B1 | | OUT_SOLENOID_B1 | | |
| OUT_SOLENOID_B2 | | OUT_SOLENOID_B2 | | |
| OUT_HIGH1 | | OUT_HIGH1 | | |
| OUT_HIGH2 | | OUT_HIGH2 | | |



* These can be removed in the board compilation file







* "+" and "-" are inversed, because MAX9926 outputs are inversed

