

Sheet: /  
File: hellen1-vr-discrete.kicad\_sch

**Title:**

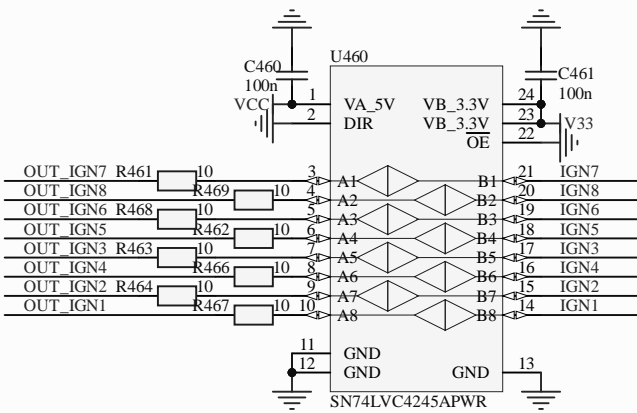
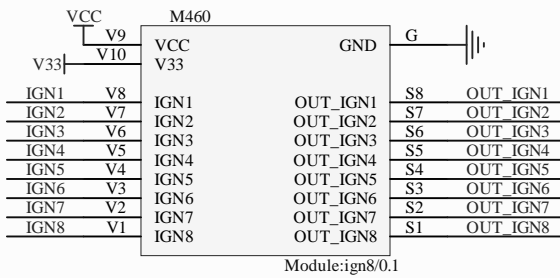
Size: A4

Date:

KiCad E.D.A. kicad (5.99.0-10483-ga6ad7a4a70)

**Rev:**

Id: 1/1



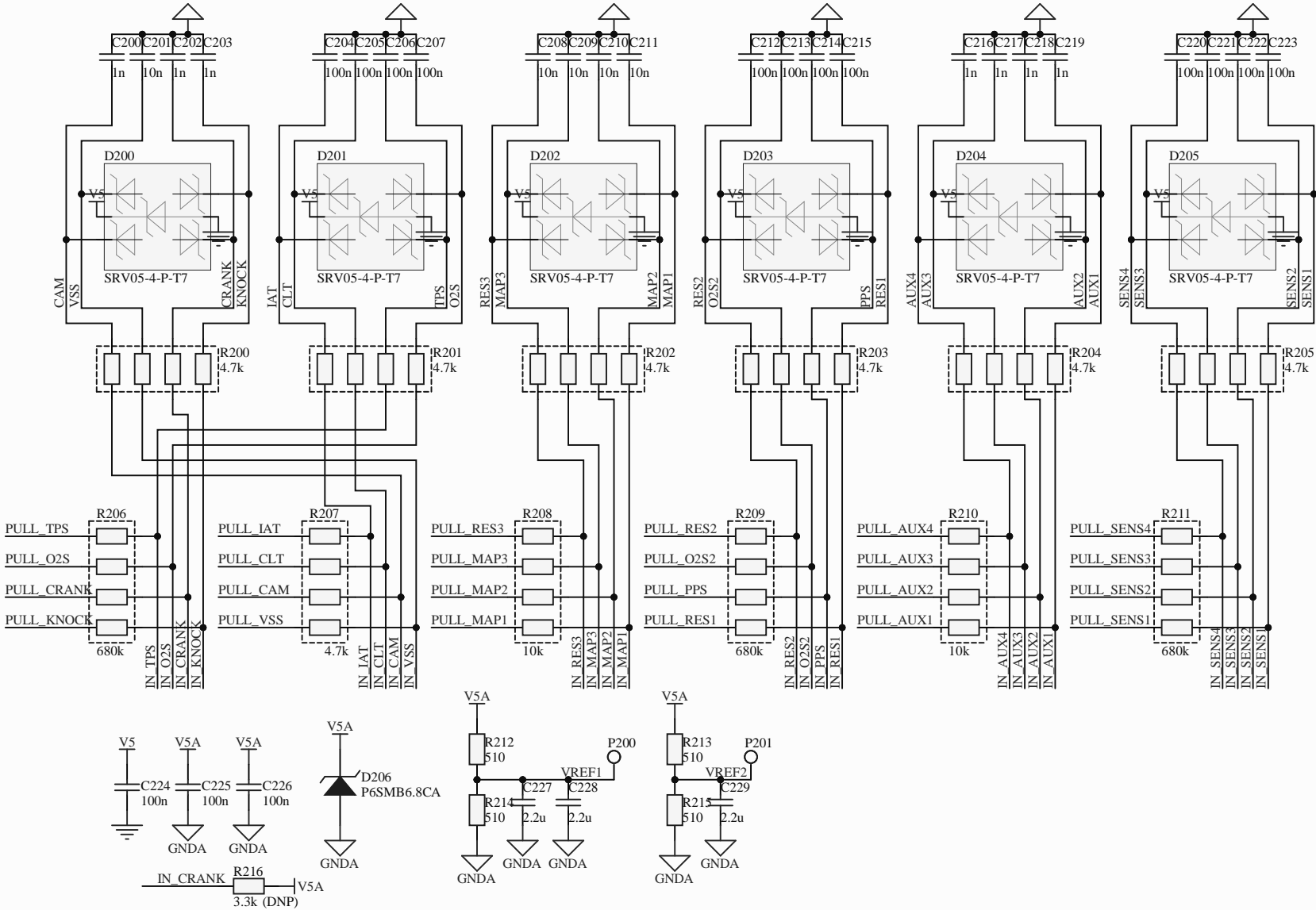
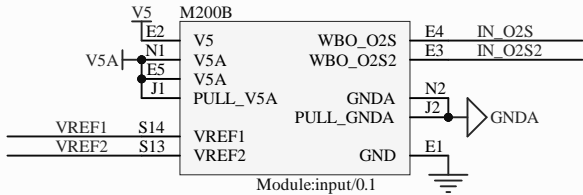
M200D			
PULL_CRANK J21	PULL_CRANK	PULL_MAP1	J14 PULL_MAP1
PULL_CAM J17	PULL_CAM	PULL_MAP2	J13 PULL_MAP2
PULL_VSS J18	PULL_VSS	PULL_MAP3	J12 PULL_MAP3
PULL_TPS J19	PULL_TPS	PULL_AUX1	J10 PULL_AUX1
PULL_PPS J5	PULL_PPS	PULL_AUX2	J9 PULL_AUX2
PULL_IAT J15	PULL_IAT	PULL_AUX3	J8 PULL_AUX3
PULL_CLT J16	PULL_CLT	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		

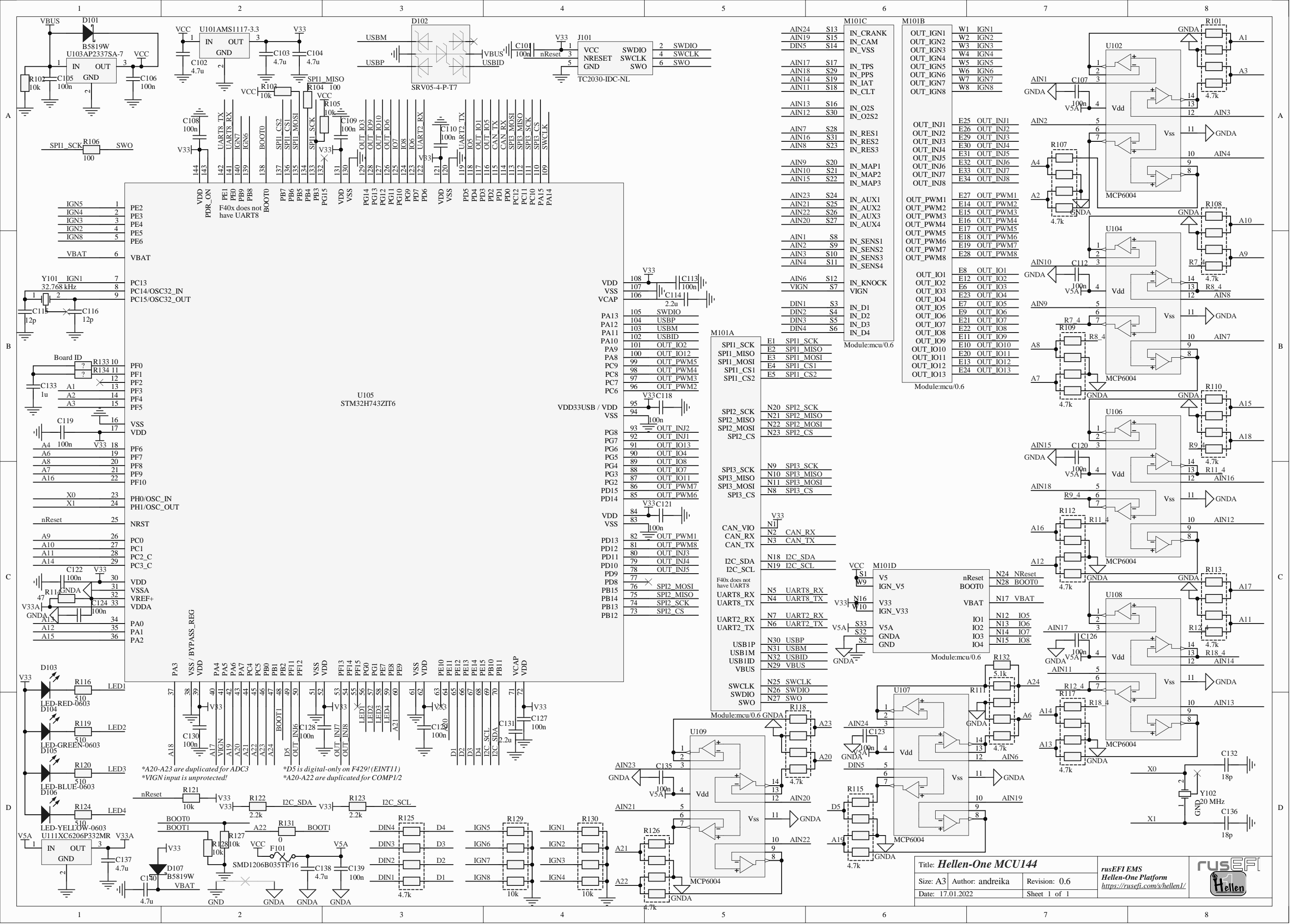
Module:input/0.1

M200C			M200A		
IN_CRANK S8	IN_CRANK	N21 CRANK	CRANK	N19 CAM	
IN_CAM S5	IN_CAM	N19 CAM		N20 VSS	
IN_VSS S6	IN_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





Title: **Hellen-One MCU144**

Size: A3

Author: andreika

Revision: 0.6

Date: 17.01.2022

Sheet 1 of 1

rusEFI EMS  
Hellen-One Platform  
<https://rusefi.com/s/hellen1/>



