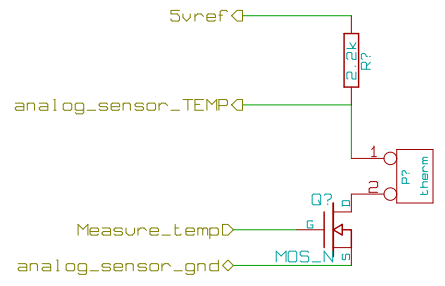


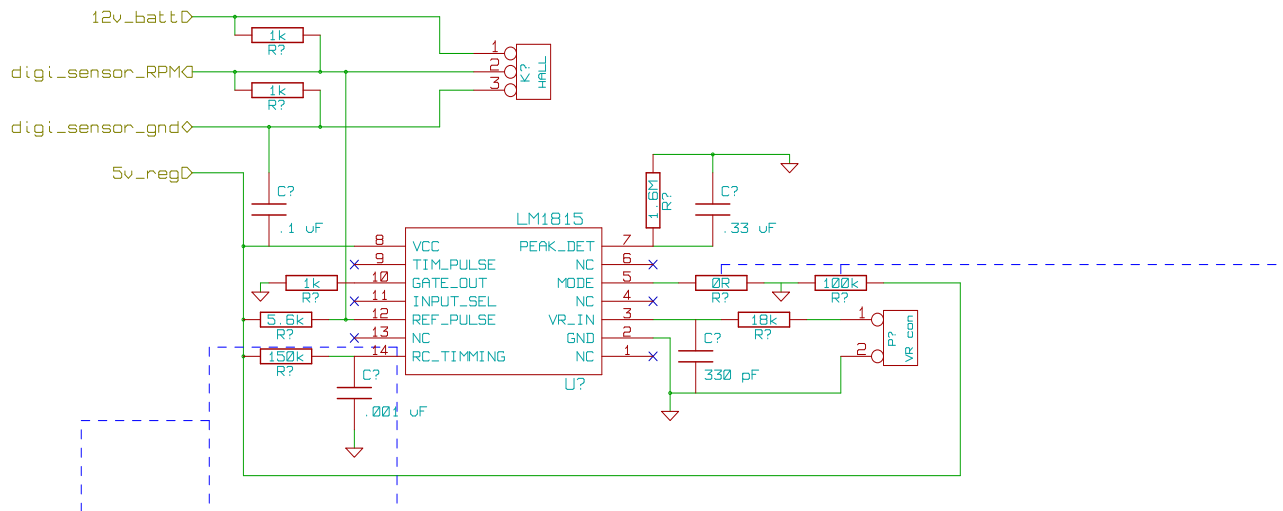
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KiCad E.D.A.	Rev: A.07
	Sheet: 1/31



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Size: A4	Date: 1 aug 2008	Rev: A.07
KiCad E.D.A.		Sheet: 26/31

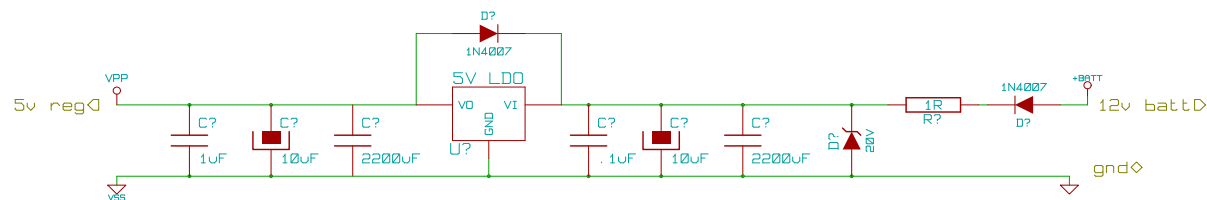


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Size: A	Date: 1 aug 2008	Rev: A.07
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- RECOMMENDED TO REMOVE 150K AND SHORT CAP TO CREATE SQUARE WAVE OUTPUT, NOT TIMMED PULSE

SWITCHING THESE RESISTORS AROUND WILL CHANGE THE MODE OF OUTPUT SIGNAL FOR THE VR CIRCUIT



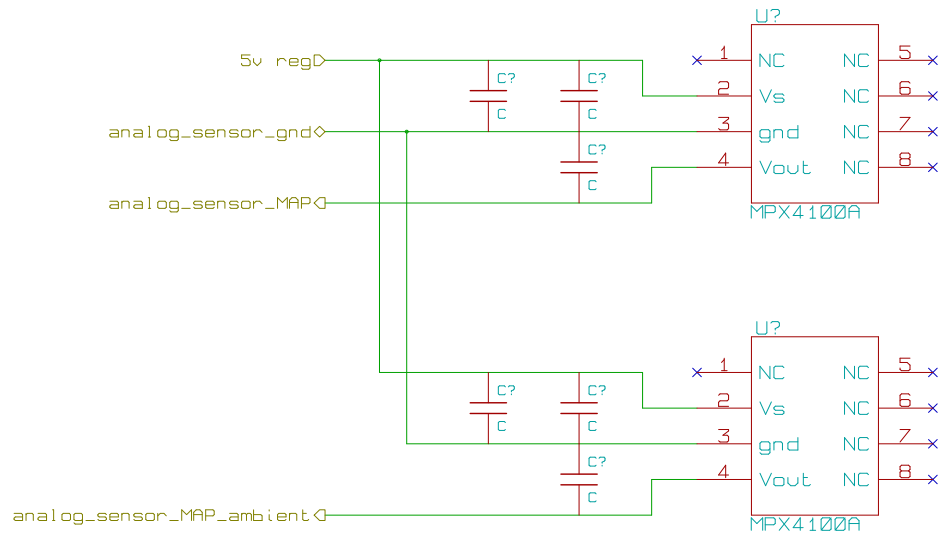
Starting from right and moving to the left we have in order :

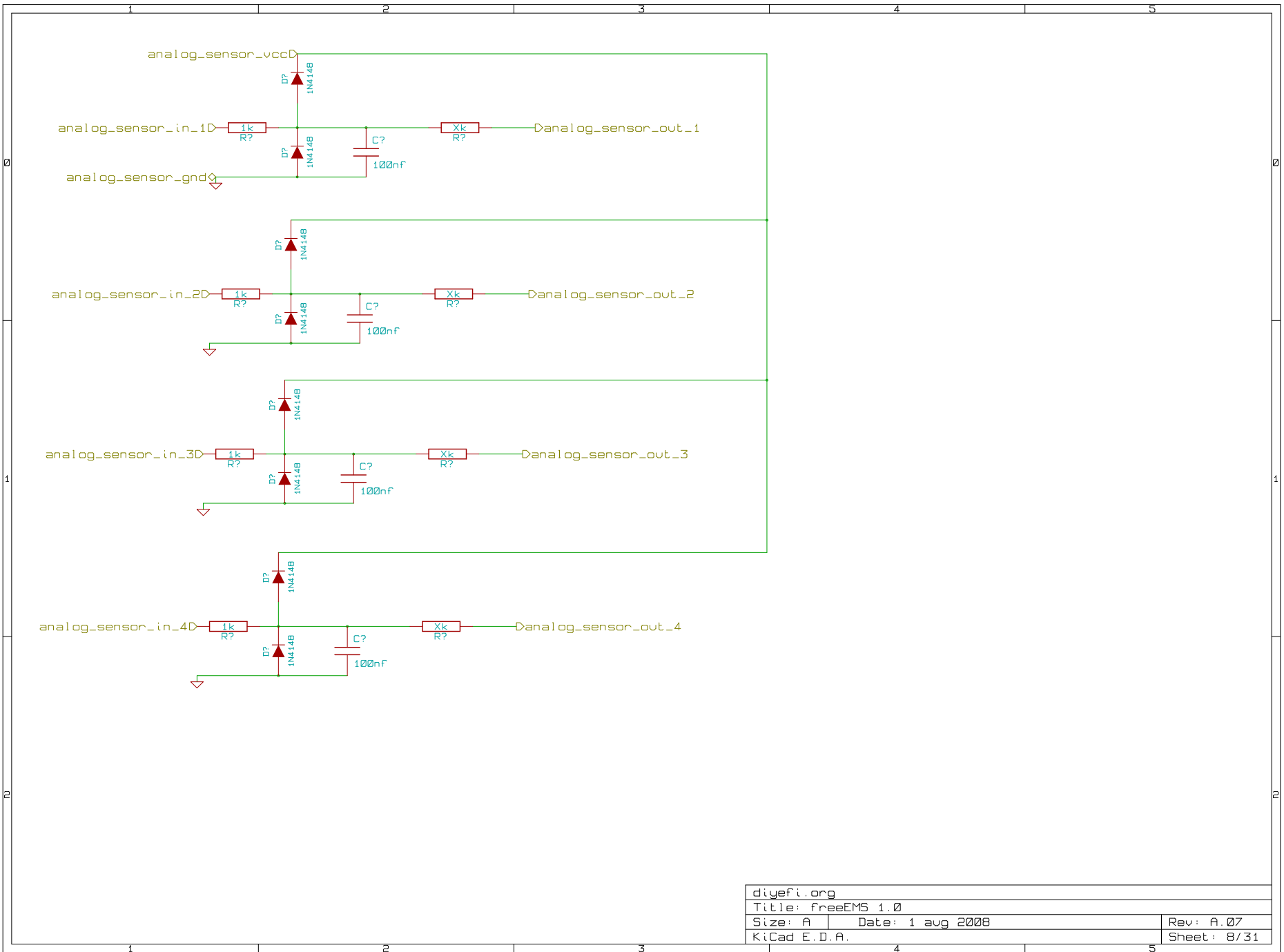
- Power feed and ground from battery and/or block
- Reverse polarity hook up protection diode
- Current limiting resistor
- Zener over voltage clamping diode
- Charge storage electrolytic polarised 25V 1000uF capacitor (value may change, but 220 - 2200 is around what we want)
- High frequency tantalum 25V 10uF capacitor (35V units are expensive, as are 22uF)
- Ultra high frequency ceramic 0.1uF capacitor (larger units with similar frequency response would also be acceptable)
- 5V LDO (low drop out) voltage regulator
- Reverse voltage protection diode for the regulator in case of external capacitors discharging more quickly and/or to a lower level than internal ones (snubbing not required as this will not happen when things are actually running)
- High frequency tantalum 25V 10uF capacitor (35V units are expensive, as are 22uF)
- Ultra high frequency ceramic 0.1uF capacitor (larger units with similar frequency response would also be acceptable)
- Power feed and ground for CPU core

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Size: A	Date: 1 aug 2008	Rev: A.07
KiCad E.D.A.		Sheet: 31/31

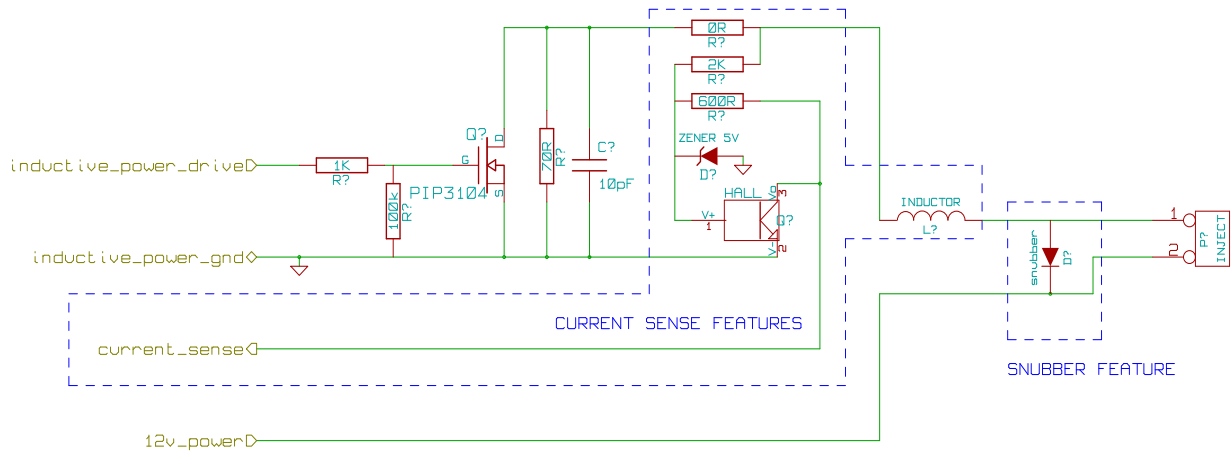


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Size: A4	Date: 1 aug 2008	Rev: A.07
KiCad E.D.A.		Sheet: 26/31





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Size: A	Date: 1 aug 2008	Rev: A.07	
KiCad E.D.A.		Sheet: 8/31	



NOTES:

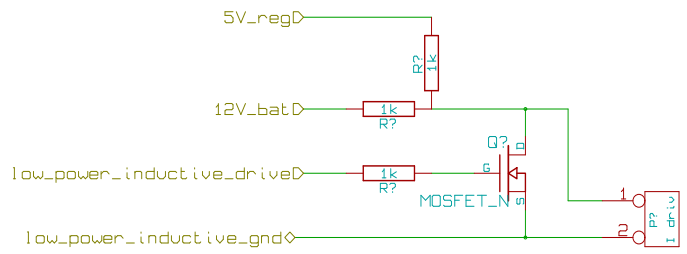
YOU CAN POPULATE DIFFERENT FEATRUES WITH THIS CIRCUIT

CURRENT SENSING ALLOWS YOU TO MEASURE WHEN THE INJECTOR IS ON VS OFF

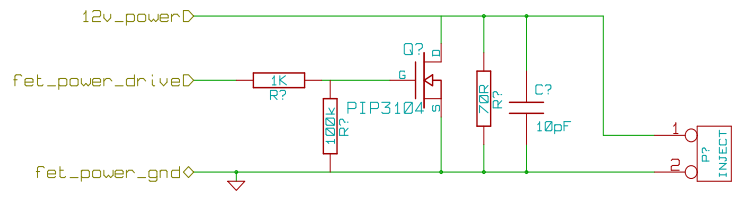
THE SNUBBER DIODE TO DECREASE INDUCTIVE CURRENT SPIKES

IF YOU DON'T POPULATE THE SNUBBER FEATURE, THE MOSFET WILL DISAPATE ENERGY FROM THE INJECTOR

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Size: A4	Date: 1 aug 2008	Rev: A.07
KiCad E.D.A.		Sheet: 22/31



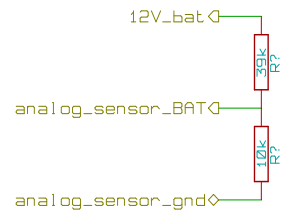
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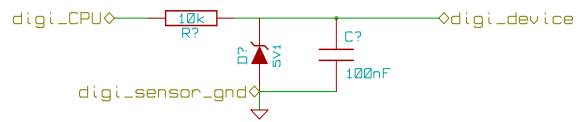
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Size: A4	Date: 1 aug 2008	Rev: A.07
KiCad E.D.A.		Sheet: 22/31

VCC	50	P?	1	▷PA7
GND	49		2	▷PA6
PE7	48		3	▷PA5
PK7	47		4	▷PA4
PK5	46		5	▷PA3
PK4	45		6	▷PA2
PK3	44		7	▷PA1
PK2	43		8	▷PA0
PK1	42		9	▷PB7
PK0	41		10	▷PB6
PJ0	40	95120PS12	11	▷PB5
PJ7	39		12	▷PB4
PJ6	38		13	▷PB3
PM7	37		14	▷PB2
PM6	36		15	▷PB1
PM5	35		16	▷PB0
PM4	34		17	▷R/W
PM3	33		18	▷ECLK
PM2	32		19	▷LSTRB
PM1	31		20	▷IRQ
PM0	30		21	▷PJ1
AN12	29		22	▷AN08
AN13	28		23	▷AN09
AN14	27		24	▷AN10
AN15	26		25	▷AN11

AN03	25	26	▷AN07
AN02	24	27	▷AN06
AN01	23	28	▷AN05
AN00	22	29	▷AN04
AN0	21	30	▷VRH
PP0	20	31	▷VRL
PP1	19	32	▷PS3
PP2	18	33	▷ECLK-2
PP4	17	34	▷PS2
PP5	16	35	▷PH7
PP6	15	36	▷PH6
PP7	14	37	▷PH5
PT0	13	38	▷PH4
PT1	12	39	▷PH3
PT2	11	40	▷PH2
PT3	10	41	▷PH1
PT4	9	42	▷PH0
PT5	8	43	▷PE7-2
PT6	7	44	▷RESET
PT7	6	45	▷PE0
PS1	5	46	▷PE1
PS7	4	47	▷VCC-2
PS6	3	48	▷PS0
PS5	2	49	▷GND-2
PS4	1	50	▷GND-3



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Size: A4	Date: 1 aug 2008	Rev: A.07
KiCad E.D.A.		Sheet: 25/31



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