

NOTES TO REMEMBER  
PERHAPS INSTALL USB FROM PUMA

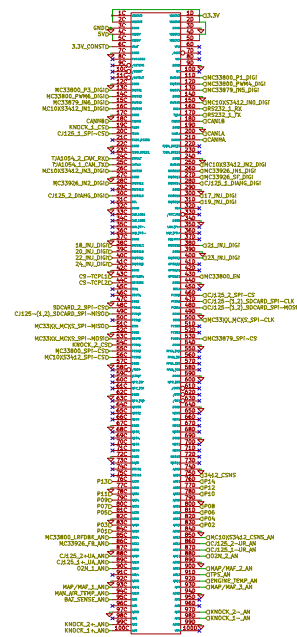
Sheet: amp\_connector

12V BAT  
GND  
ENABLE\_PWR

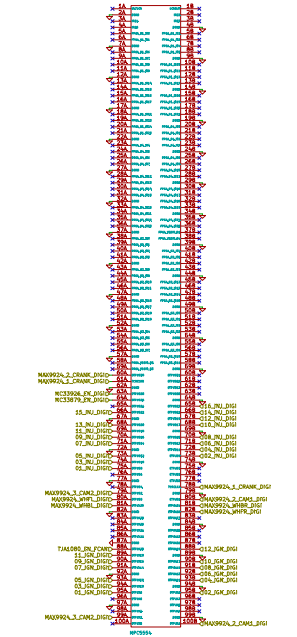
Sheet: power\_regulator\_constant  
12V BAT  
GND  
ENABLE\_PWR

Sheet: CPU  
5V\_CPU  
3.3V\_CPU  
GND  
ENABLE\_PWR

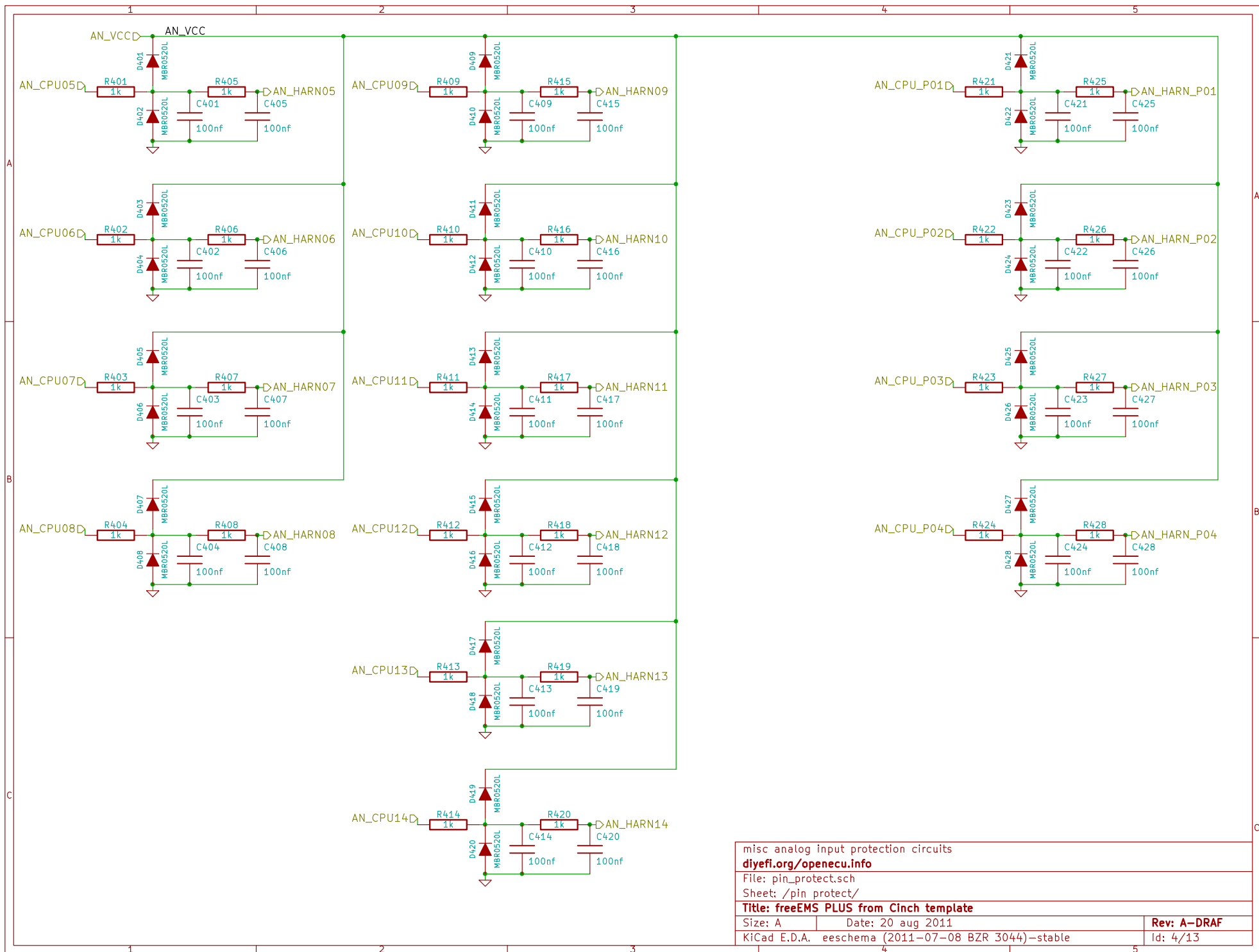
Sheet: #1  
12V BAT  
GND  
ENABLE\_PWR



P201







misc analog input protection circuits

[diyefi.org/openecu.info](http://diyefi.org/openecu.info)

File: pin\_protect.sch

Sheet: /pin\_protect/

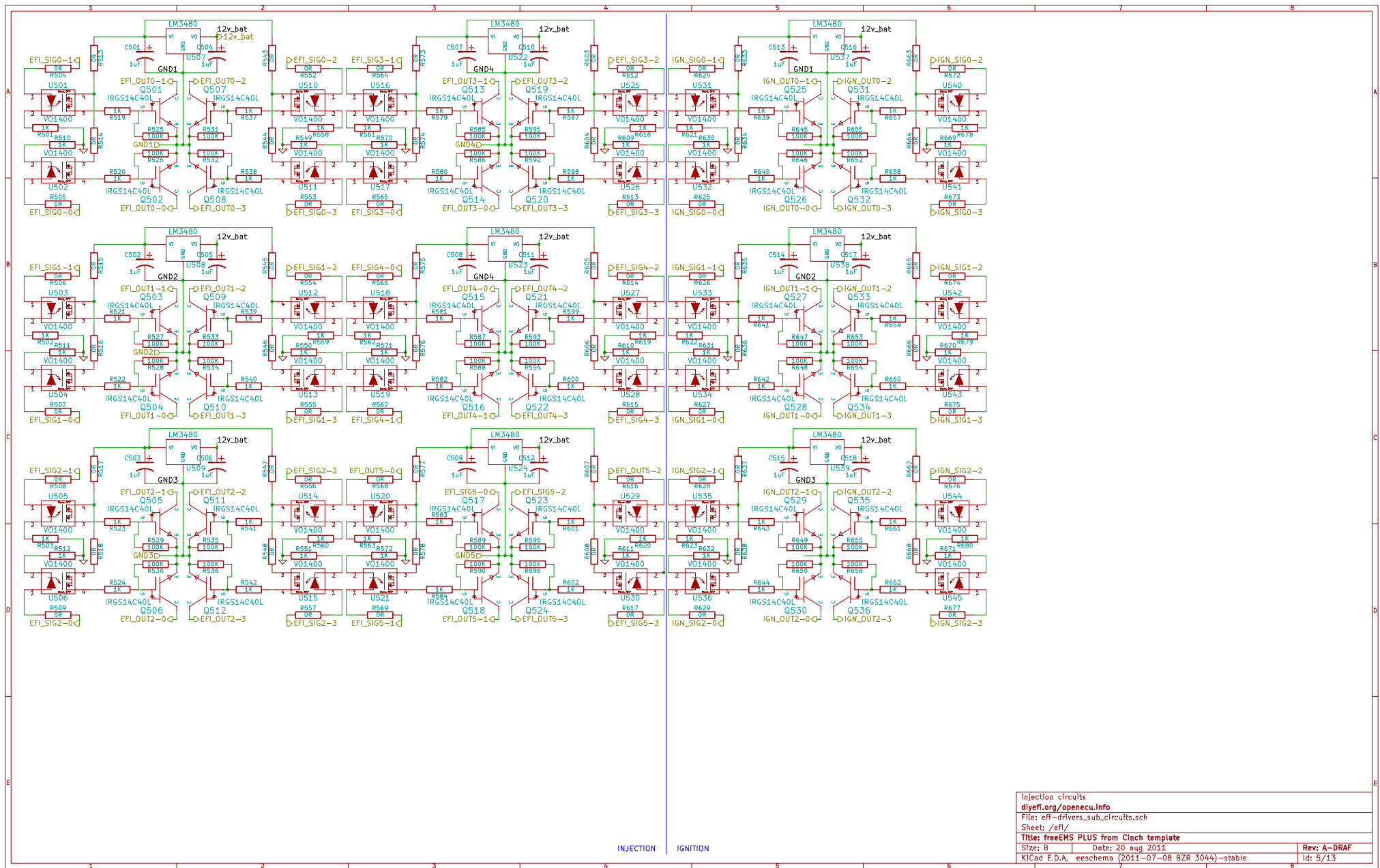
Title: freeEMS PLUS from Cinch template

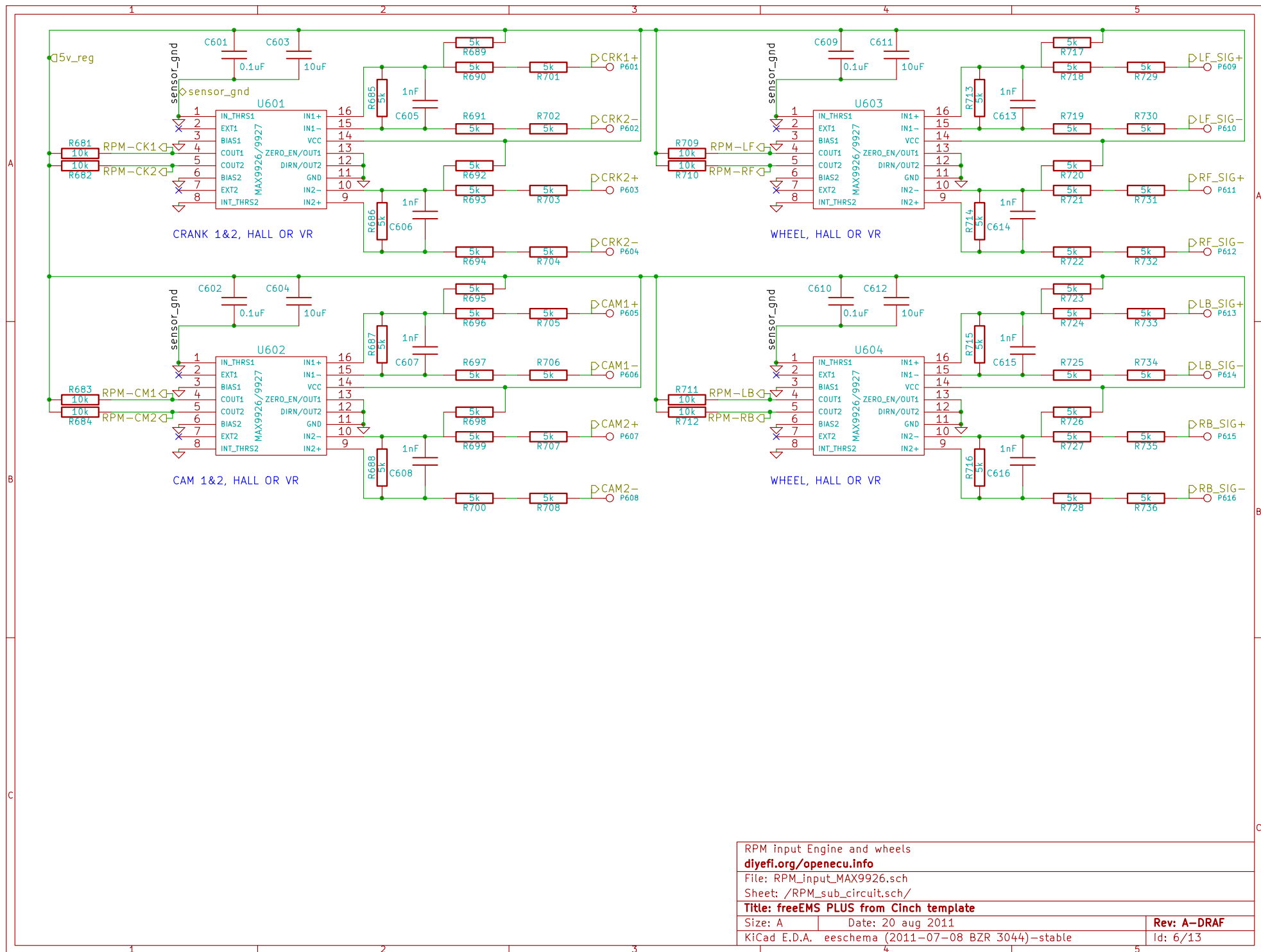
Size: A Date: 20 aug 2011

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Rev: A-DRAF

Id: 4/13





RPM input Engine and wheels

[diyefi.org/openecu.info](http://diyefi.org/openecu.info)

File: RPM\_input\_MAX9926.sch

Sheet: /RPM\_sub\_circuit.sch/

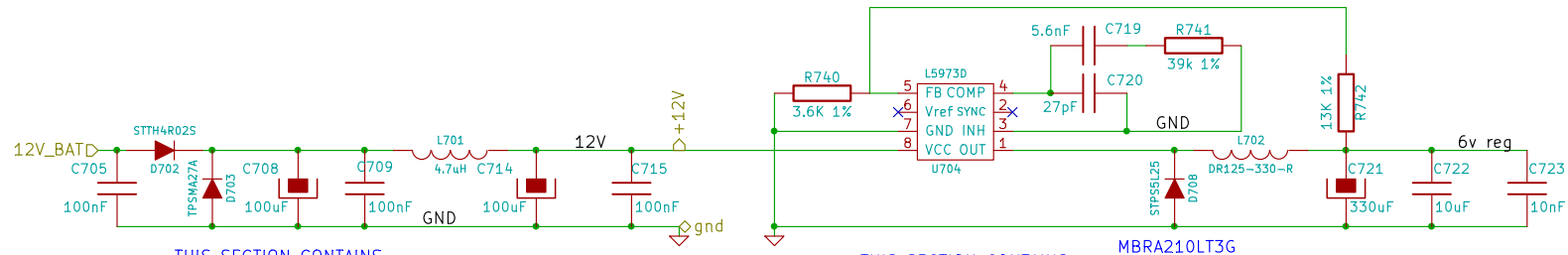
Title: freeEMS PLUS from Cinch template

Size: A Date: 20 aug 2011

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Rev: A-DRAF

Id: 6/13

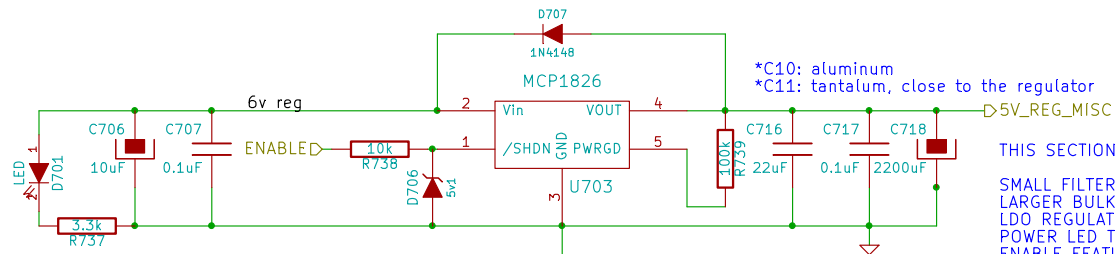


THIS SECTION CONTAINS

FILTER/BULK CAPS  
REVERSE POLARITY PROTECTION DIODE  
REVERSE POLARITY SPIKE PROTECTION  
TRANSIENT INDUCTOR

THIS SECTION CONTAINS

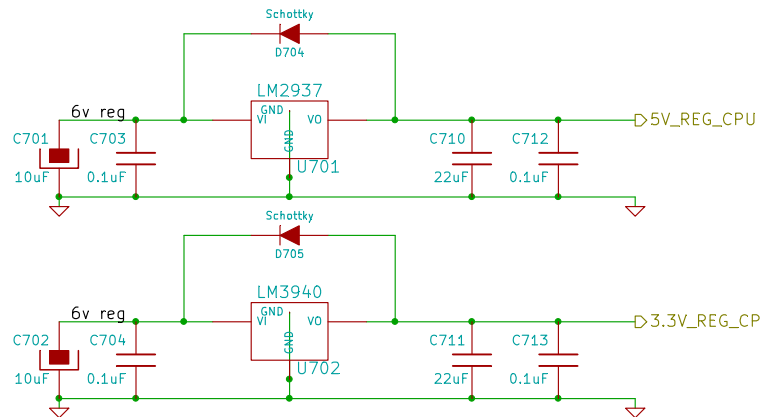
A 2 AMP SWITCHING 6V REGULATOR. THIS PREVENTS THE LINEARS FROM HEATING UP IN EXCESS.



MCP regulator pin compatible with:  
LP3852 or MIC29150 (26v-input capable)

THIS SECTION CONTAINS

SMALL FILTERING CAPS TO PREVENT OSSILATION  
LARGER BULK CAPS TO HANDLE THE BULK NEEDS  
LDO REGULATOR TO GENERATE A 1 AMP ACCURATE 5V SOURCE GOOD FOR MISC NEEDS  
POWER LED TO INDICATE IT'S POWRED  
ENABLE FEATURE TO ALLOW MCU TO TURN THINGS OFF.  
REVERSE POLARITY DIODE PROTECTING THE MCP1826



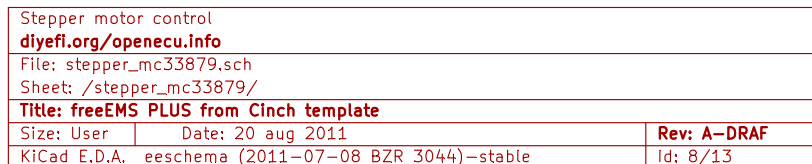
THIS SECTION CONTAINS

SMALL FILTERING CAPS TO PREVENT OSSILATION  
LARGER BULK CAPS TO HANDLE THE BULK NEEDS  
LDO REGULATOR TO GENERATE A 1 AMP 5V PERCISSION LOW RIPPLE SOURCE

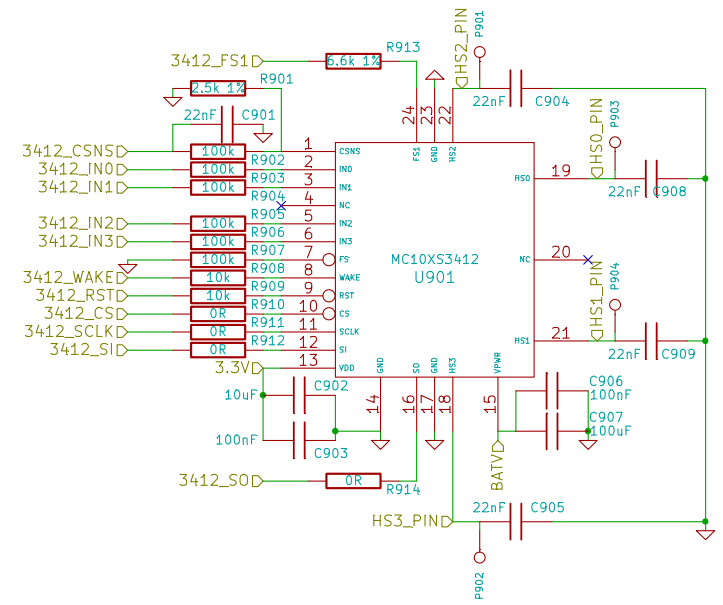
THIS SECTION CONTAINS

SMALL FILTERING CAPS TO PREVENT OSSILATION  
LARGER BULK CAPS TO HANDLE THE BULK NEEDS  
LDO REGULATOR TO GENERATE A 1 AMP 3.3V PERCISSION LOW RIPPLE SOURCE

power regulator		
<a href="http://diyefi.org/openecu.info">diyefi.org/openecu.info</a>		
File: power_reg.sch		
Sheet: /power regulator constant/		
Title: freeEMS PLUS from Cinch template		
Size: A	Date: 20 aug 2011	Rev: A-DRAF
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High side drive circuits	
<a href="http://diyefi.org/openecu.info">diyefi.org/openecu.info</a>	
File: high_side_drive.sch	
Sheet: /high_side_drive1/	
<b>Title: freeEMS PLUS from Cinch template</b>	
Size: A4	Date: 20 aug 2011
Rev: A-DRAF	
KiCad E.D.A. eeschema (2011-07-08 BZR 3044)-stable	
Id: 9/13	

