
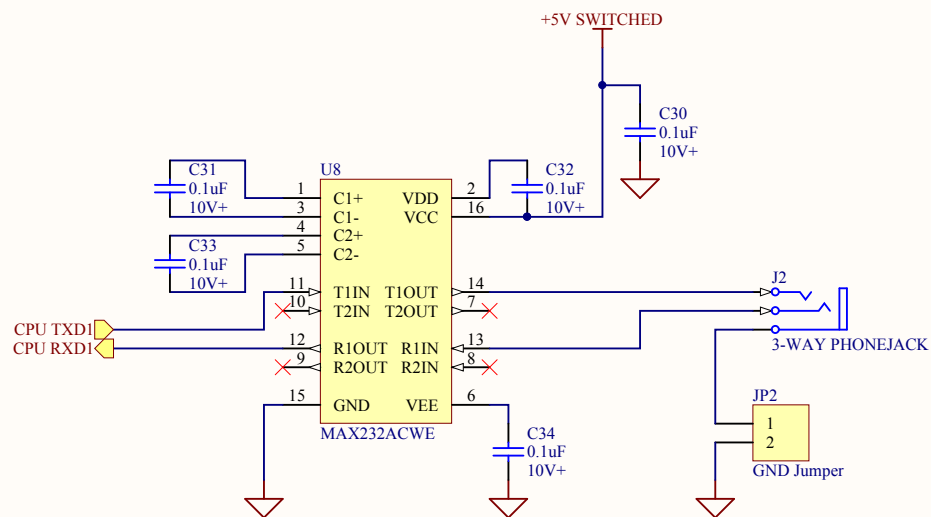

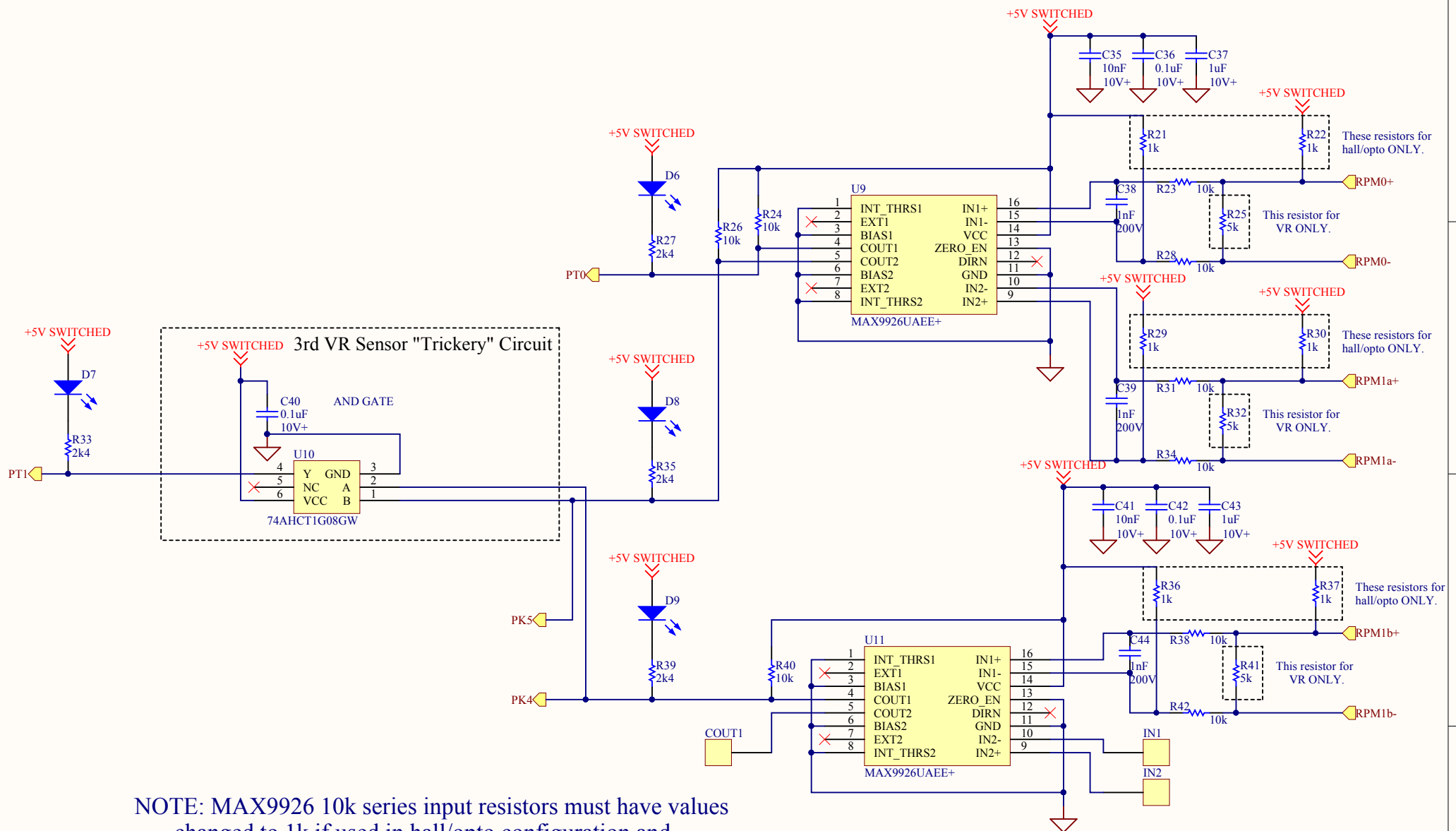


Title Ravage - Power Supplies			Drawn By: Dan Visser	
Size: A4	Number: A	Revision: 0.2		
Date: 5/02/2013	Time: 9:38:16 AM	Sheet 2 of 15		

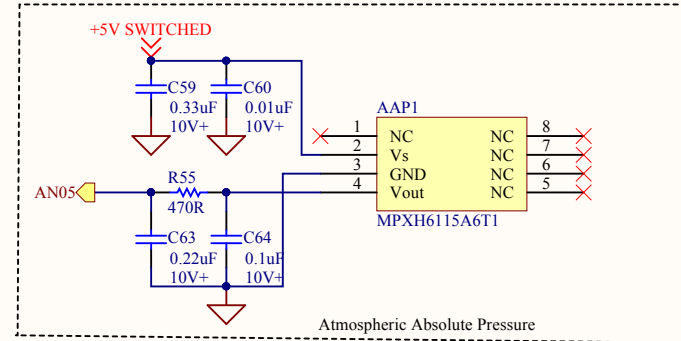
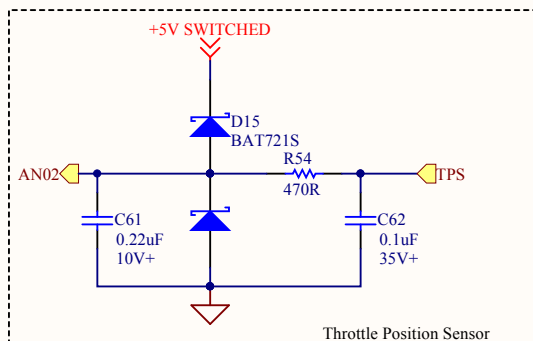
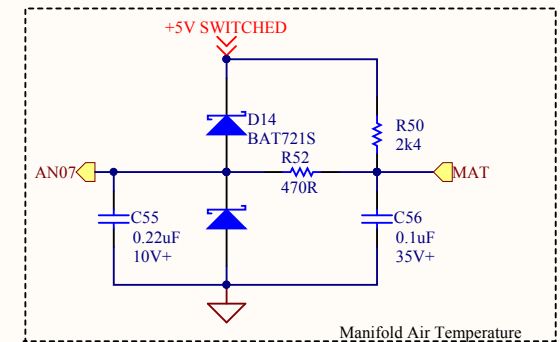
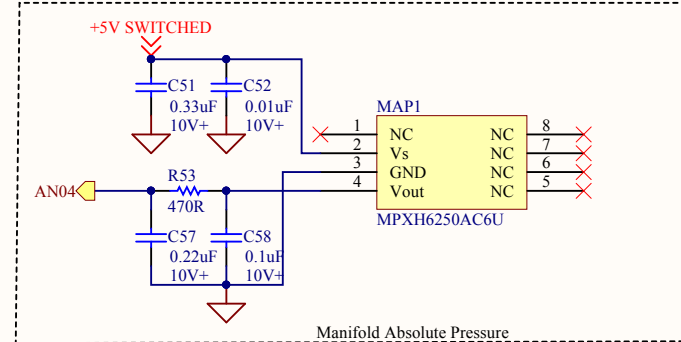
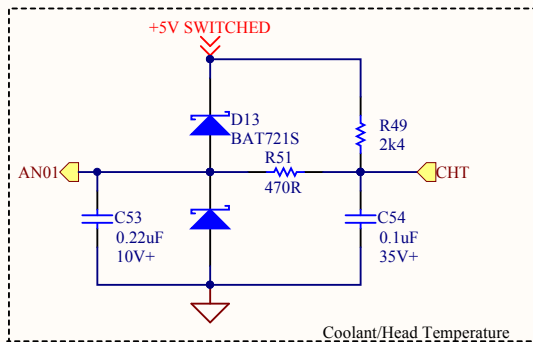
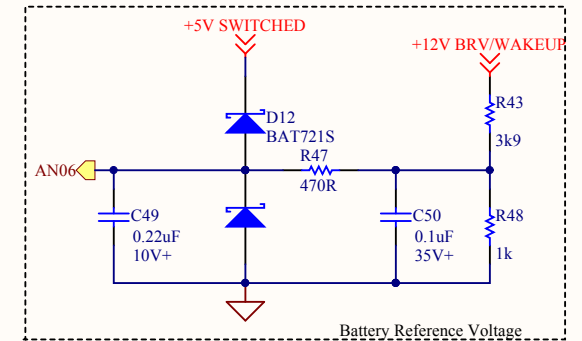
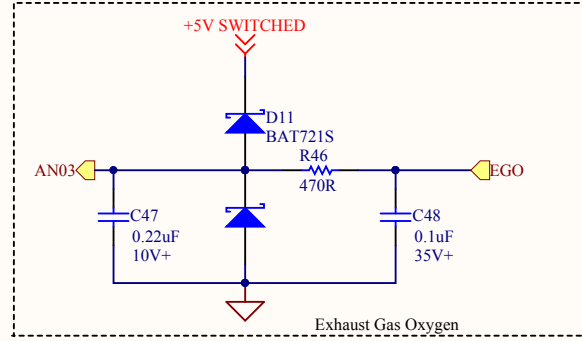
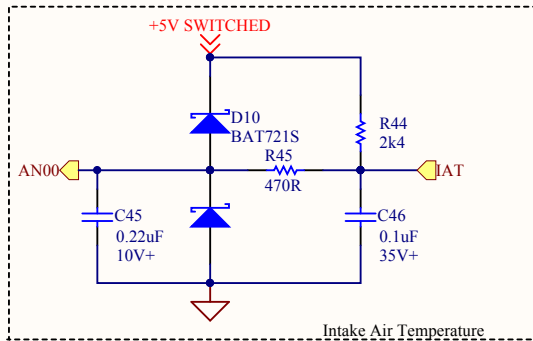


Title Ravage - RS232 Comms			Drawn By: Dan Visser	
Size: A4	Number: A	Revision: 0.2		
Date: 5/02/2013	Time: 9:38:16 AM	Sheet 4 of 15		



NOTE: MAX9926 10k series input resistors must have values changed to 1k if used in hall/opto configuration and the RPM0- inputs must also be externally grounded.

Title Ravage - VR Interfaces			Drawn By: Dan Visser	
Size: A4	Number: A	Revision: 0.2		
Date: 5/02/2013	Time: 9:38:16 AM	Sheet 5 of 15		



SENSOR GND

Title **Ravage - Core Analogue Inputs**

Size: **A4**

Number: **A**

Revision: **0.2**

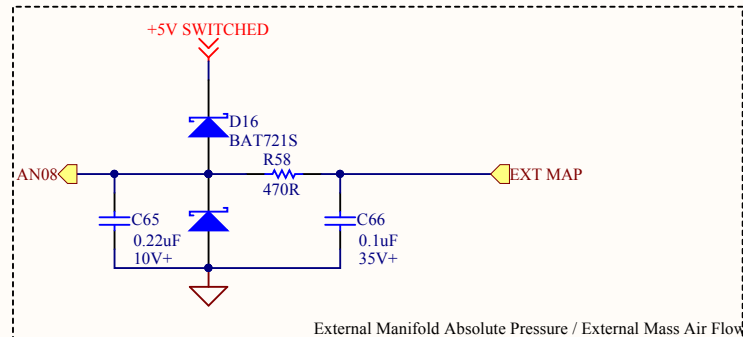
Date: **5/02/2013**

Time: **9:38:17 AM**

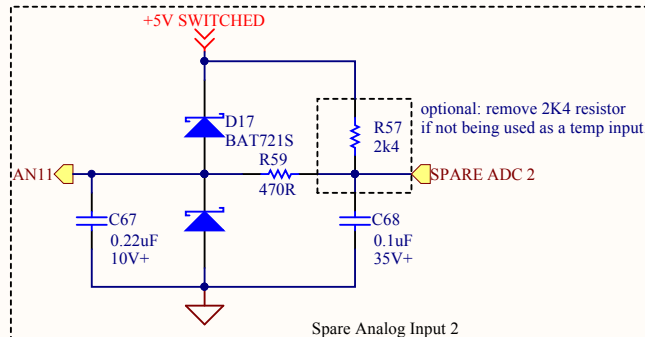
Sheet **6** of **15**

Drawn By:
Dan Visser

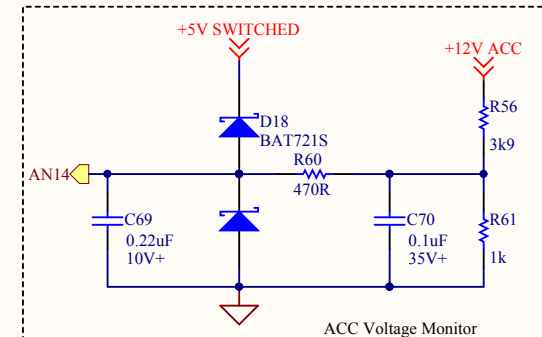
Altium



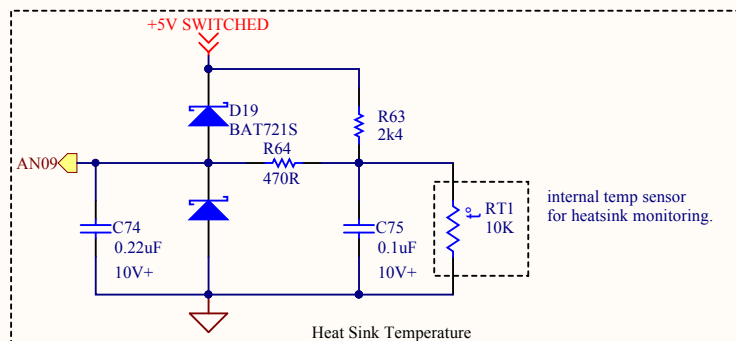
External Manifold Absolute Pressure / External Mass Air Flow



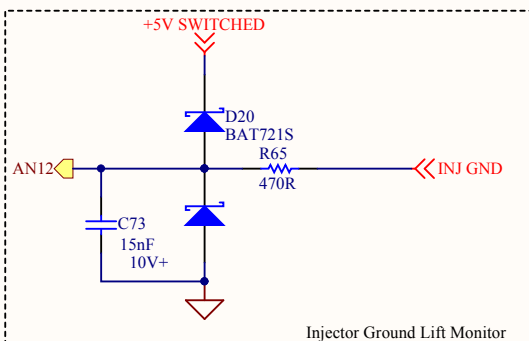
Spare Analog Input 2



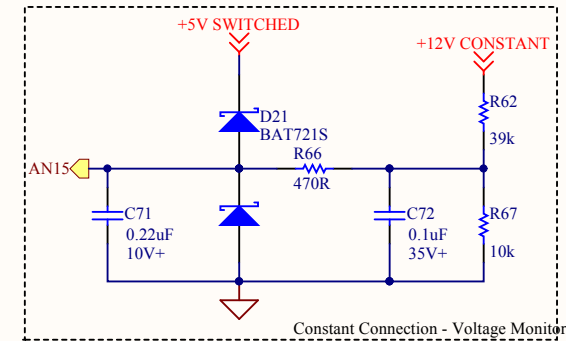
ACC Voltage Monitor



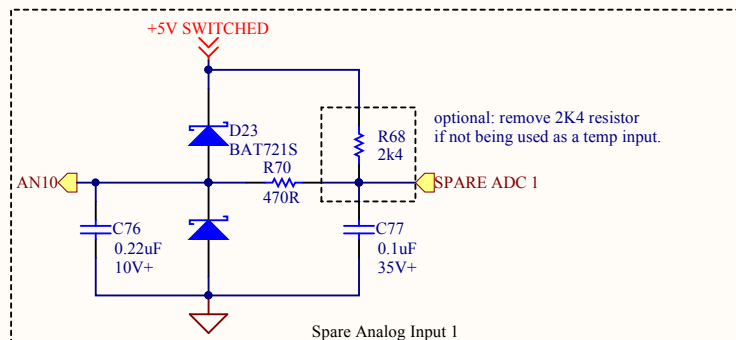
Heat Sink Temperature



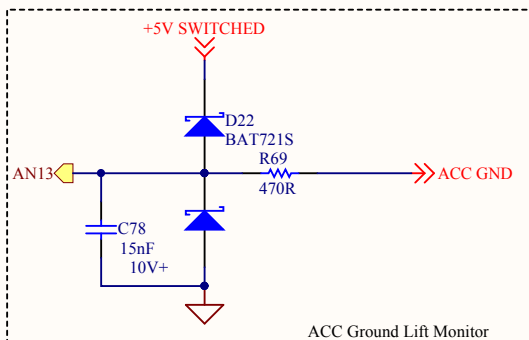
Injector Ground Lift Monitor



Constant Connection - Voltage Monitor



Spare Analog Input 1



ACC Ground Lift Monitor

Title **Ravage - Extra Analogue Inputs**

Size: A4

Number: A

Revision: 0.2

Date: 5/02/2013

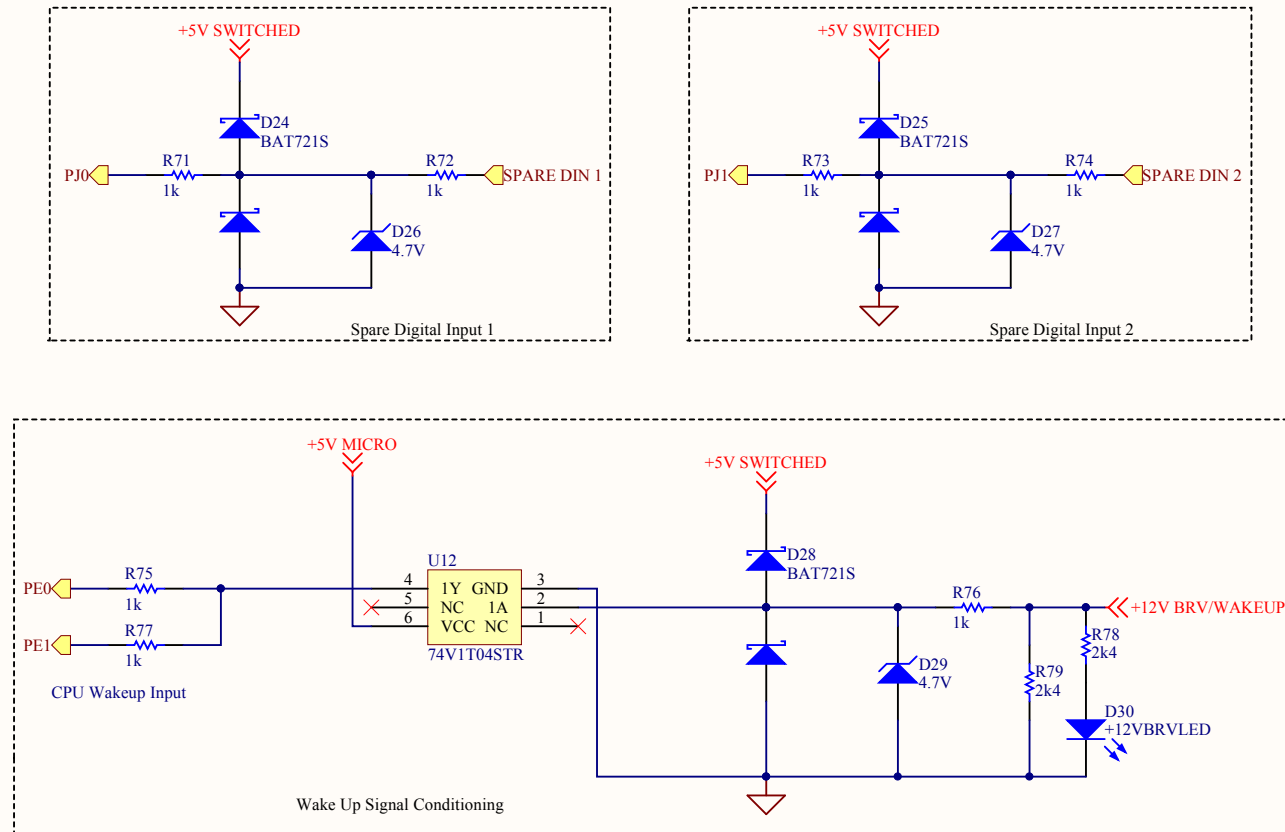
Time: 9:38:17 AM

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Drawn By:
Dan Visser

Altium

All inputs 12V capable.



Title **Ravage - Digital Inputs**

Size: A4

Number: A

Revision: 0.2

Date: 5/02/2013

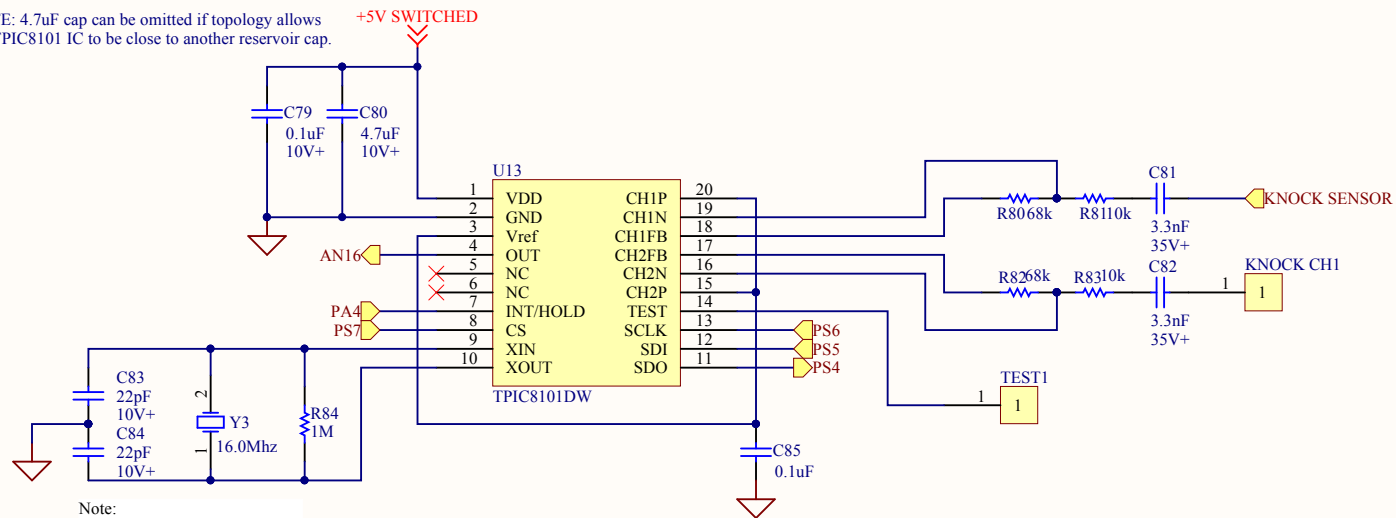
Time: 9:38:17 AM

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Drawn By:
Dan Visser

Altium

NOTE: 4.7uF cap can be omitted if topology allows the TPIC8101 IC to be close to another reservoir cap.



Note:
C should be X7R

Title **Ravage - Knock Sensing**

Size: A4

Number: A

Revision: 0.2

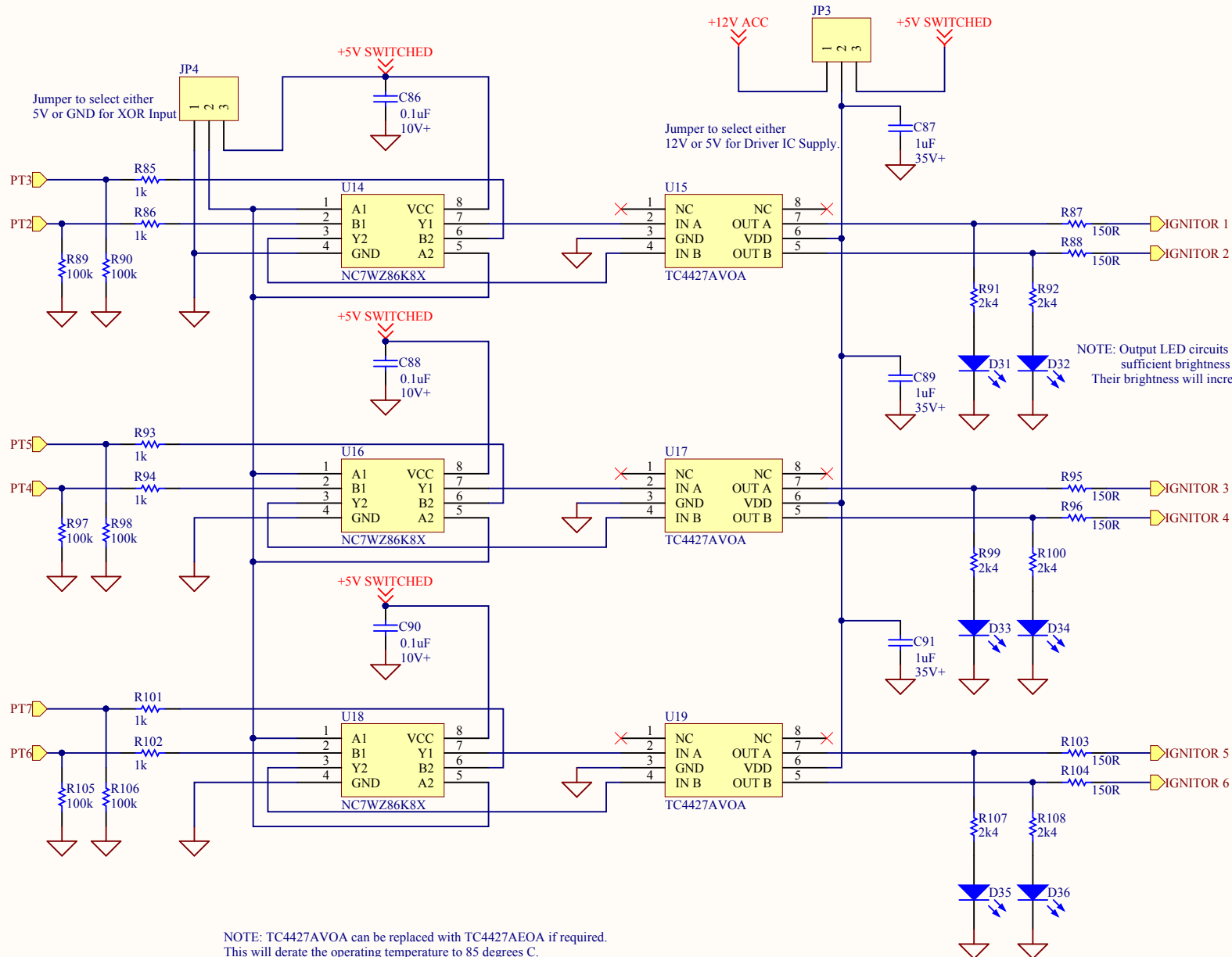
Date: 5/02/2013

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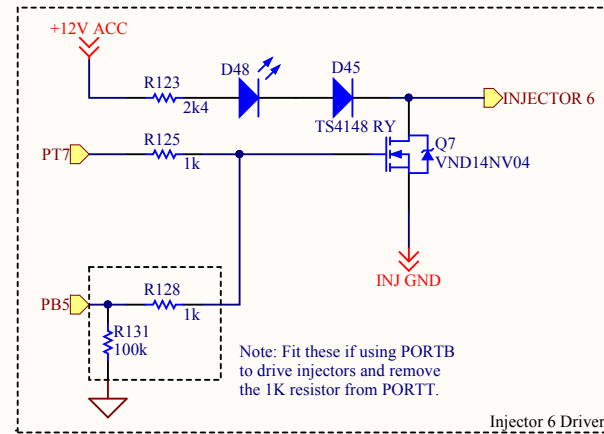
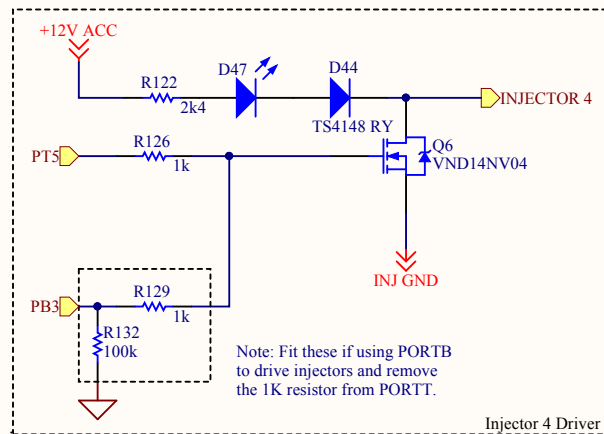
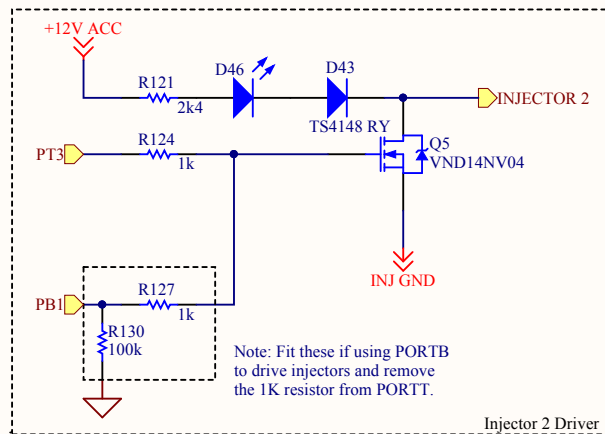
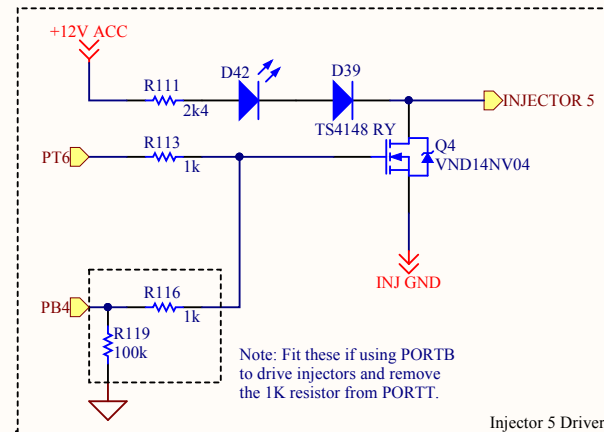
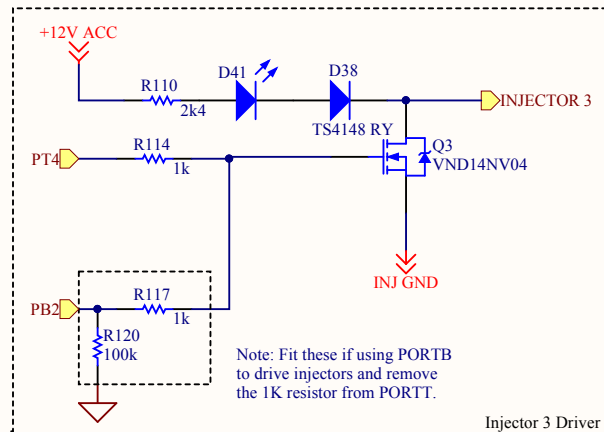
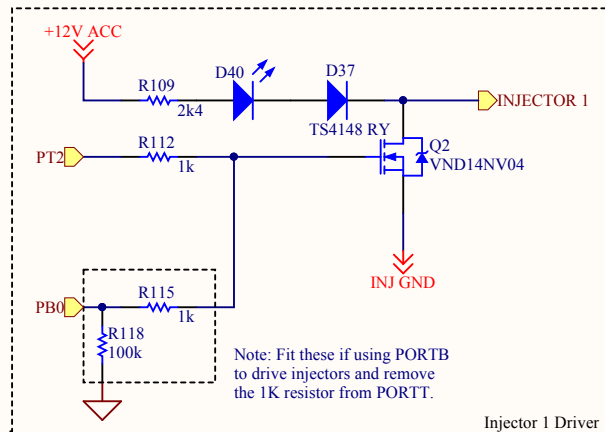
Drawn By:
Dan Visser

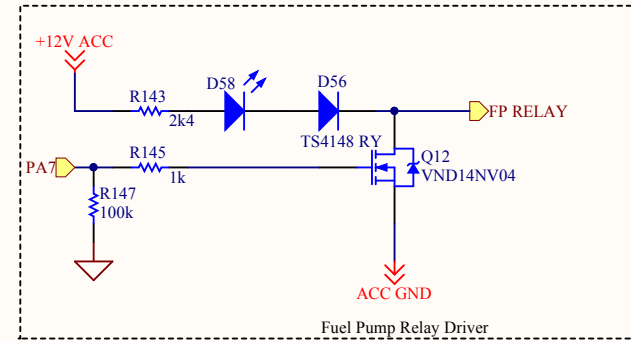
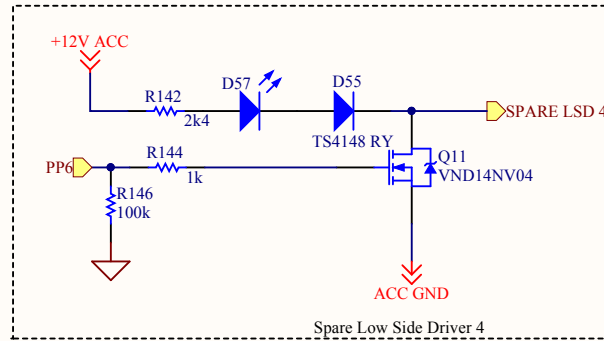
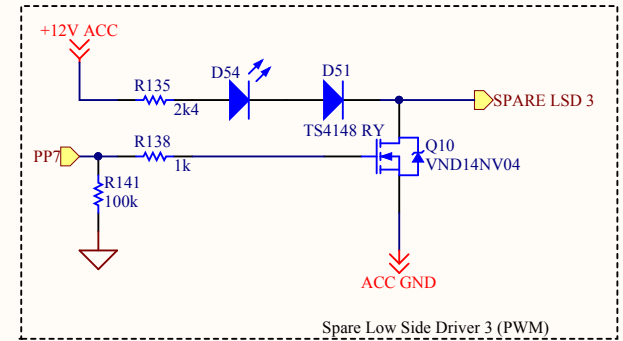
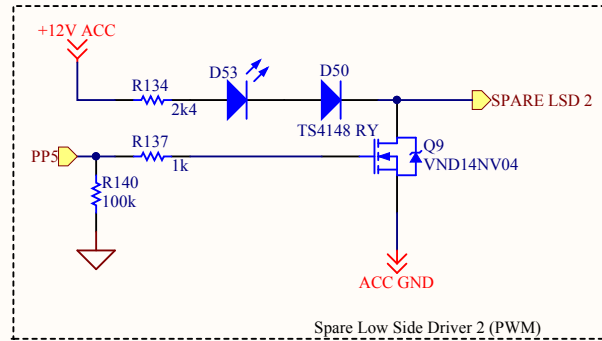
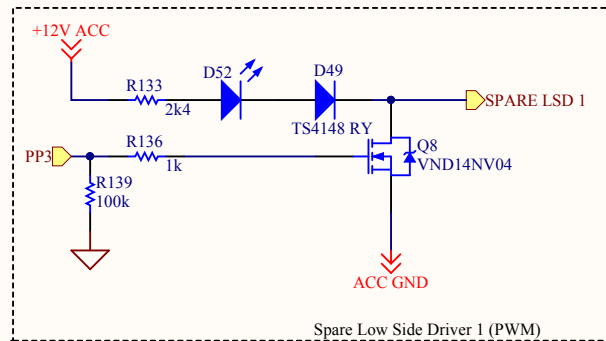
Altium

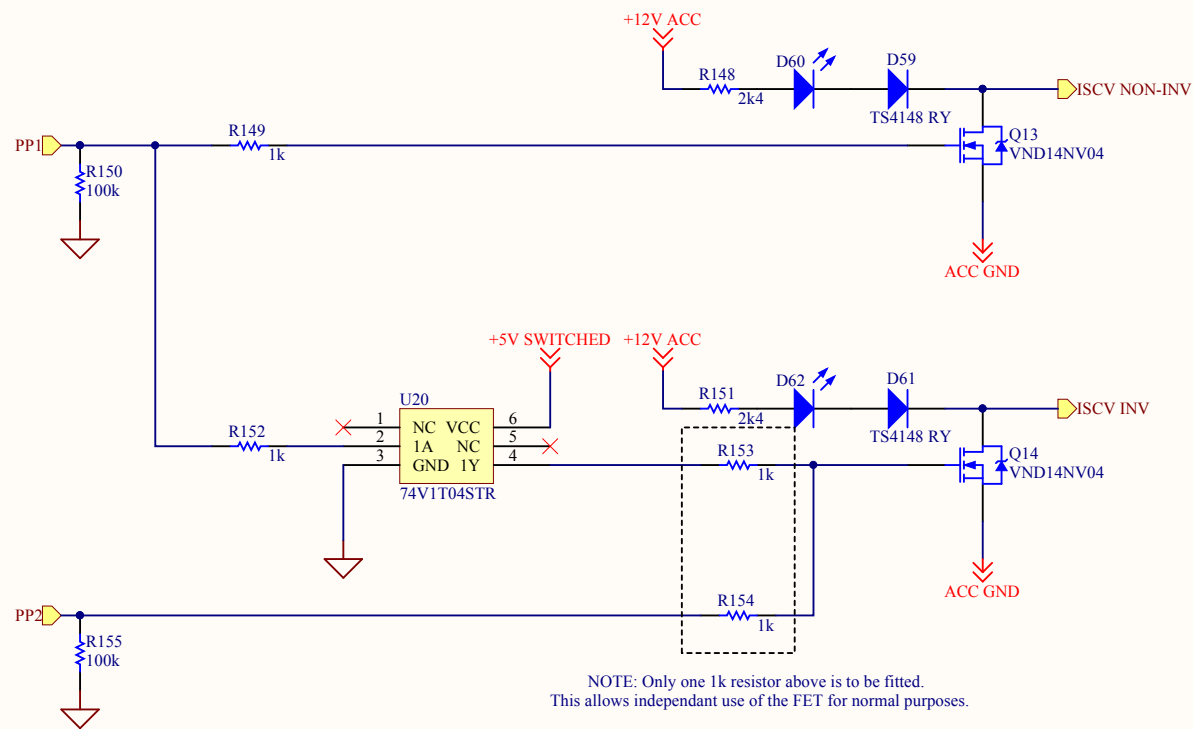



NOTE: Output LED circuits have been designed to have sufficient brightness with a 5V output. Their brightness will increase when 12V is selected.

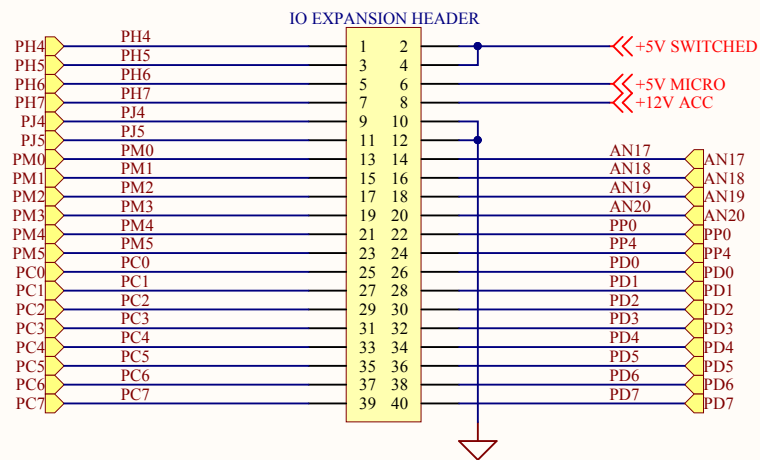
Title Ravage - Ignitor Outputs			Drawn By: Dan Visser	
Size: A4	Number: A	Revision: 0.2		
Date: 5/02/2013	Time: 9:38:17 AM	Sheet 10 of 15		







Title Ravage - 3-Wire ISCV Driver			Drawn By: Dan Visser	
Size: A4	Number: A	Revision: 0.2		
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Title Ravage - IO Expansion Header			Drawn By: Dan Visser	
Size: A4	Number: A	Revision: 0.2		
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NOTE: L and M pins are rated at 12A max, with remaining pins rated at 6A max.

