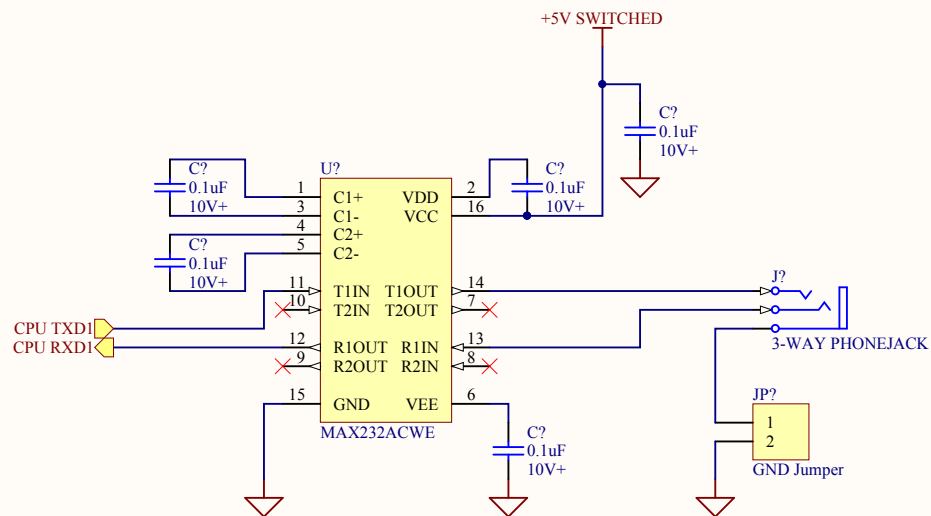

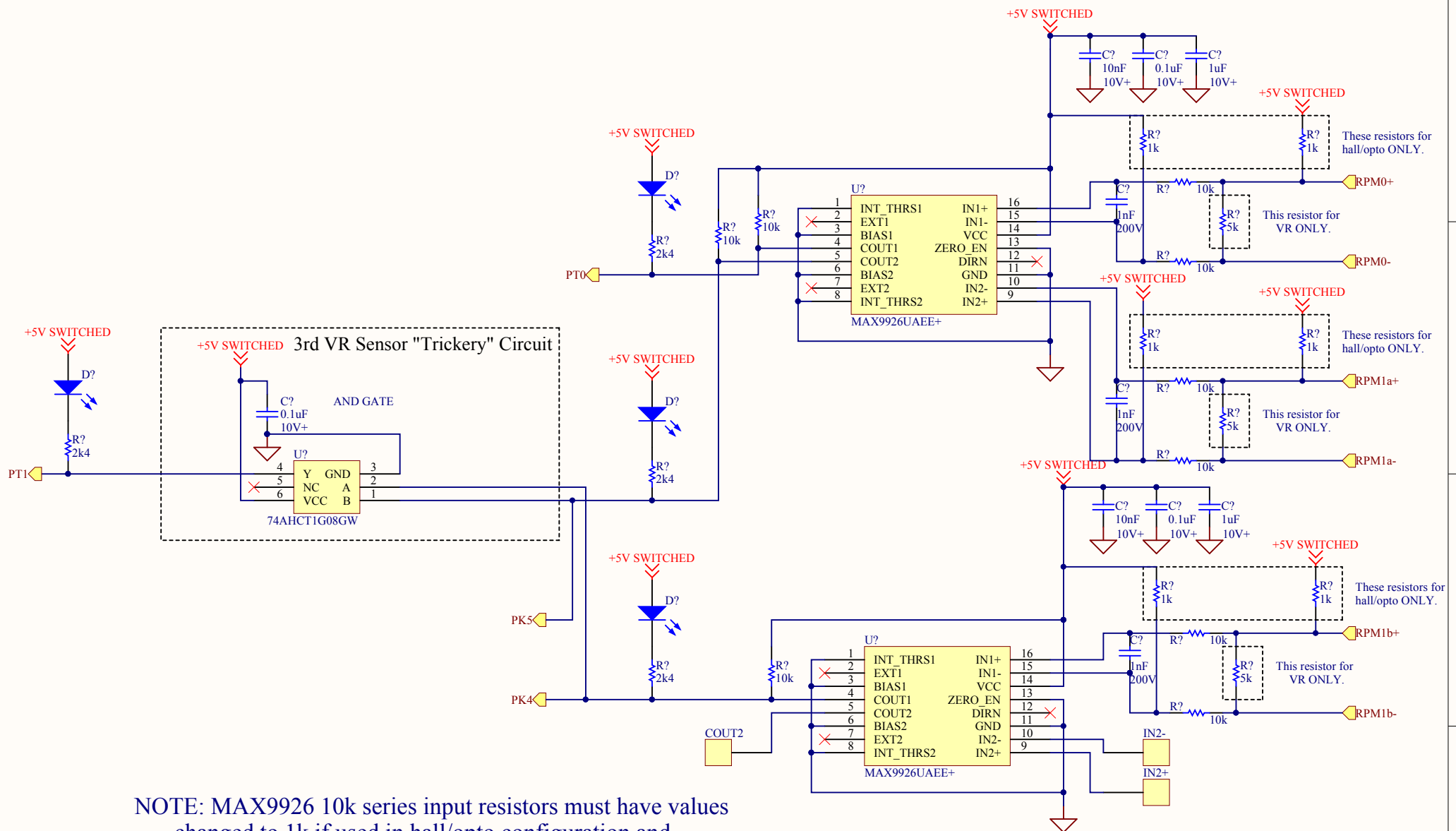


Title Ravage - USB Comms			Drawn By: Dan Visser	
Size: A4	Number: A	Revision: 0.2		
Date: 5/02/2013	Time: 6:31:44 AM	Sheet 3 of 16		

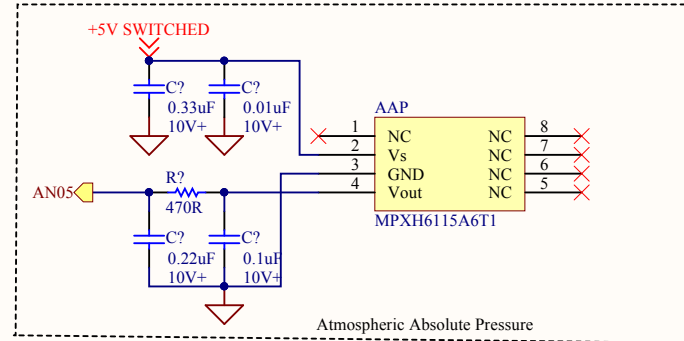
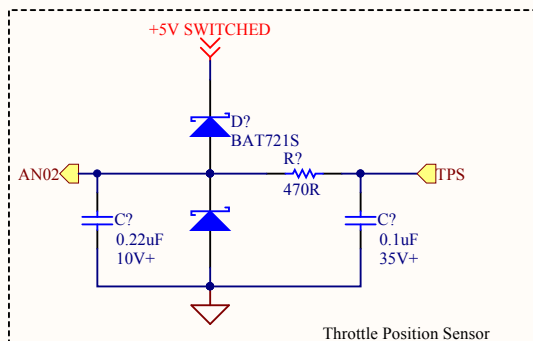
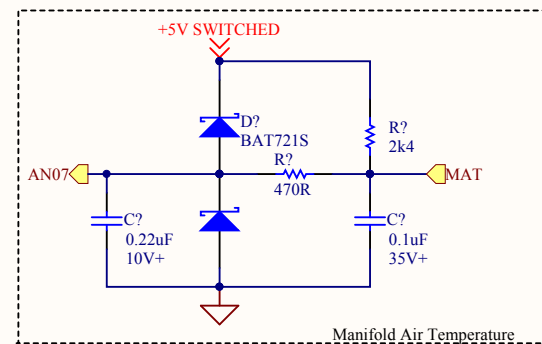
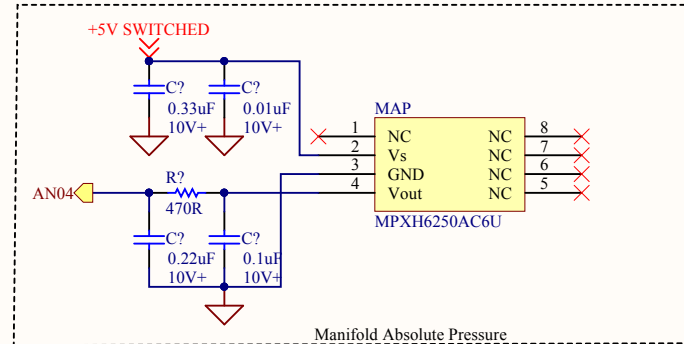
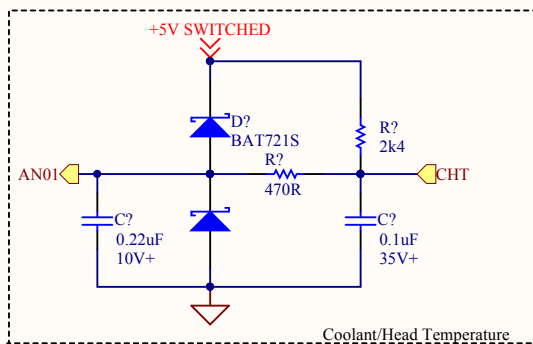
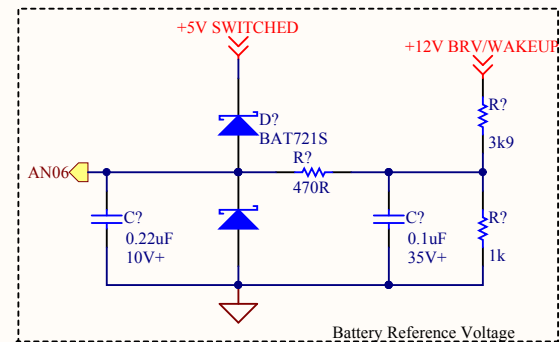
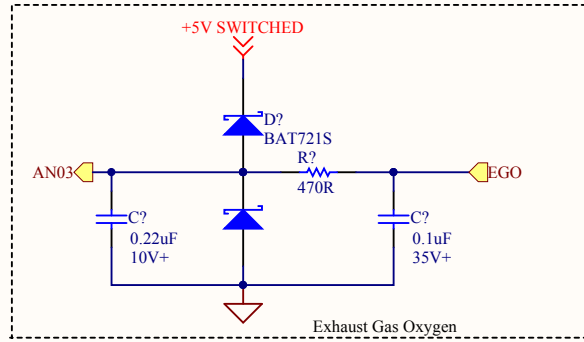
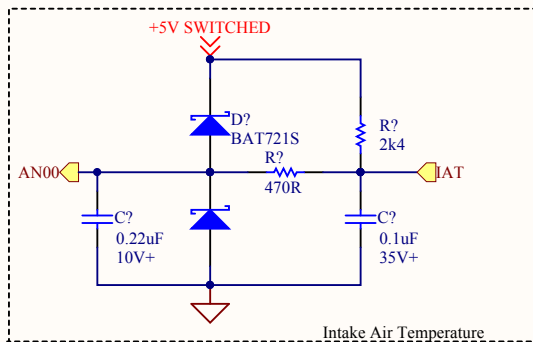


Title Ravage - RS232 Comms			Drawn By: <i>Dan Visser</i>	
Size: A4	Number: A	Revision: 0.2		
Date: 5/02/2013	Time: 6:31:44 AM	Sheet 4 of 16		



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: 6:31:44 AM	Sheet 5 of 16		



SENSOR GND

Title **Ravage - Core Analogue Inputs**

Size: A4

Number: A

Revision: 0.2

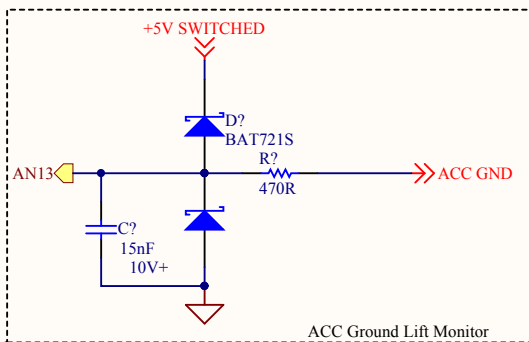
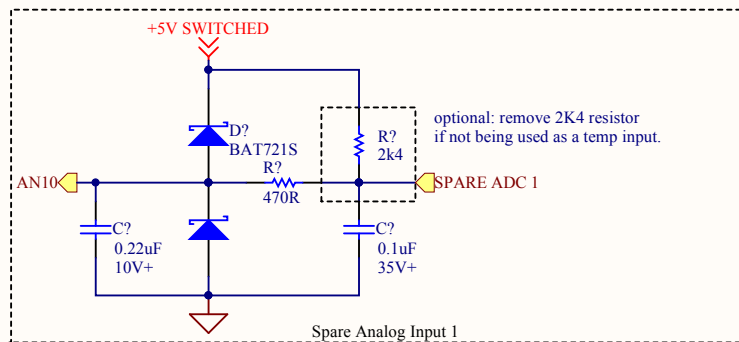
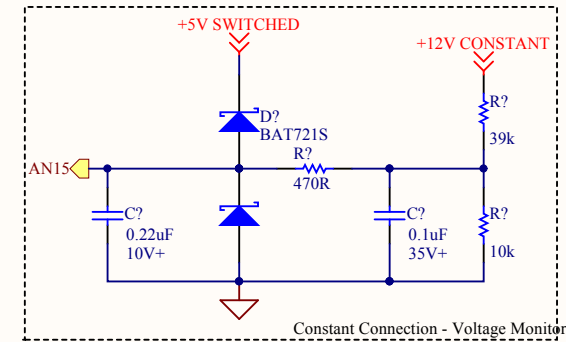
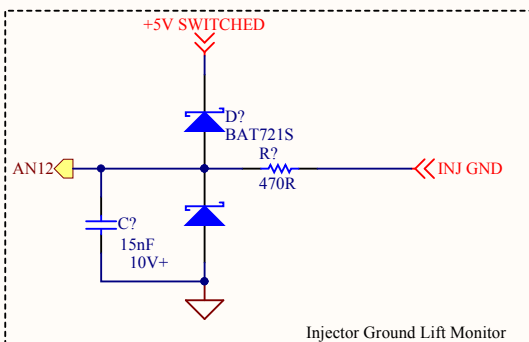
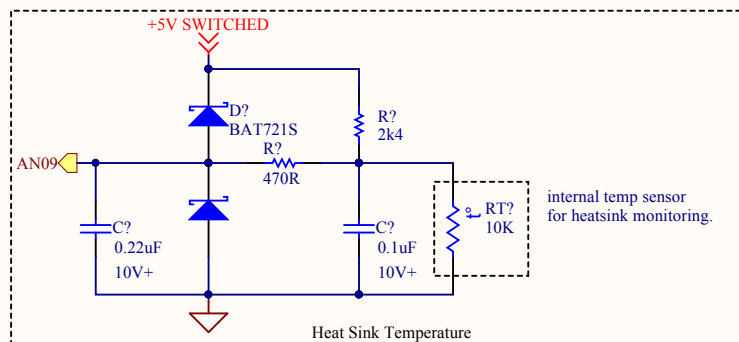
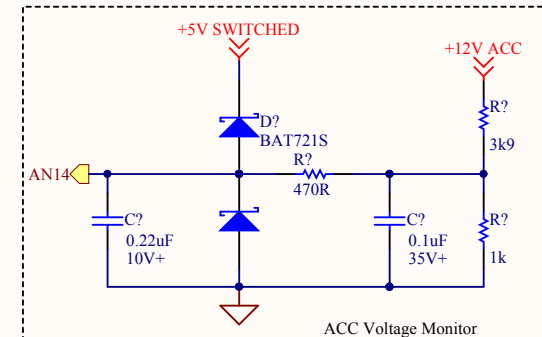
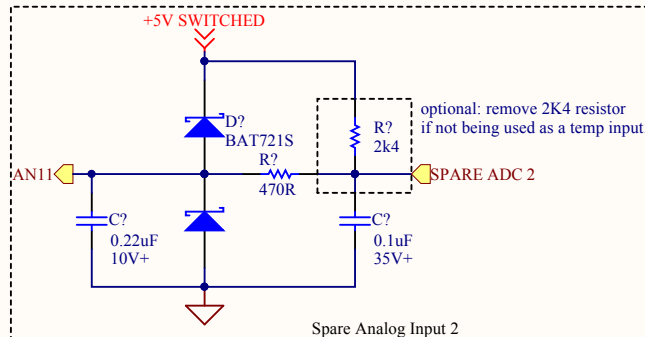
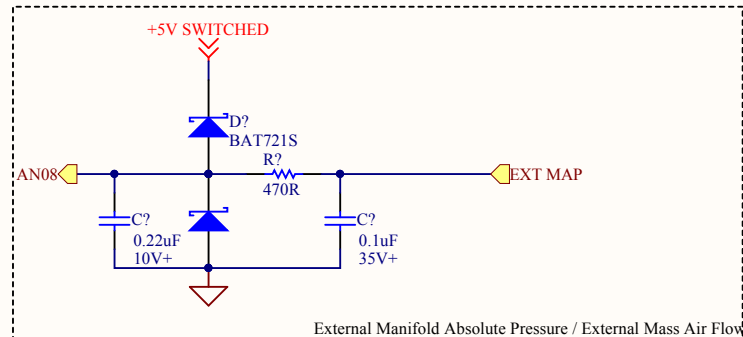
Date: 5/02/2013

Time: 6:31:44 AM

Sheet 6 of 16

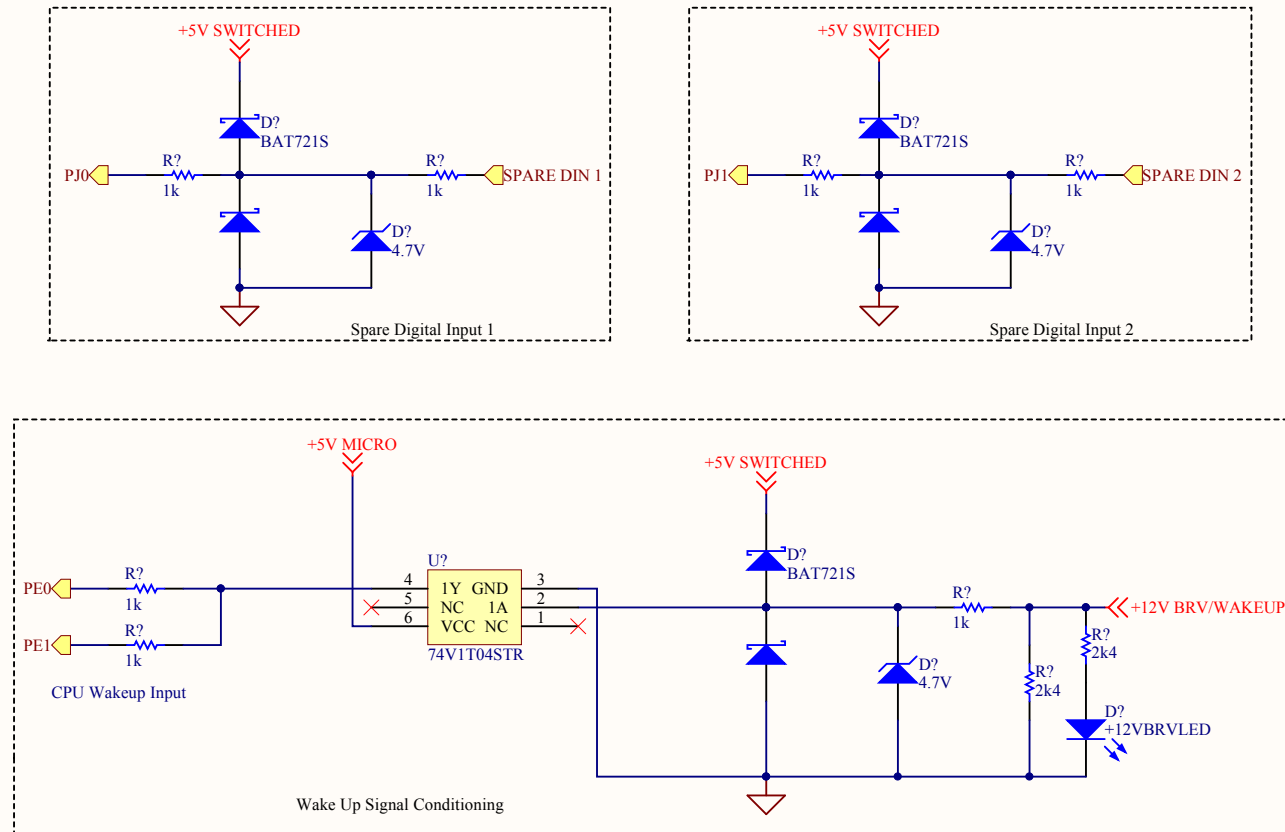
Drawn By:
Dan Visser

Altium



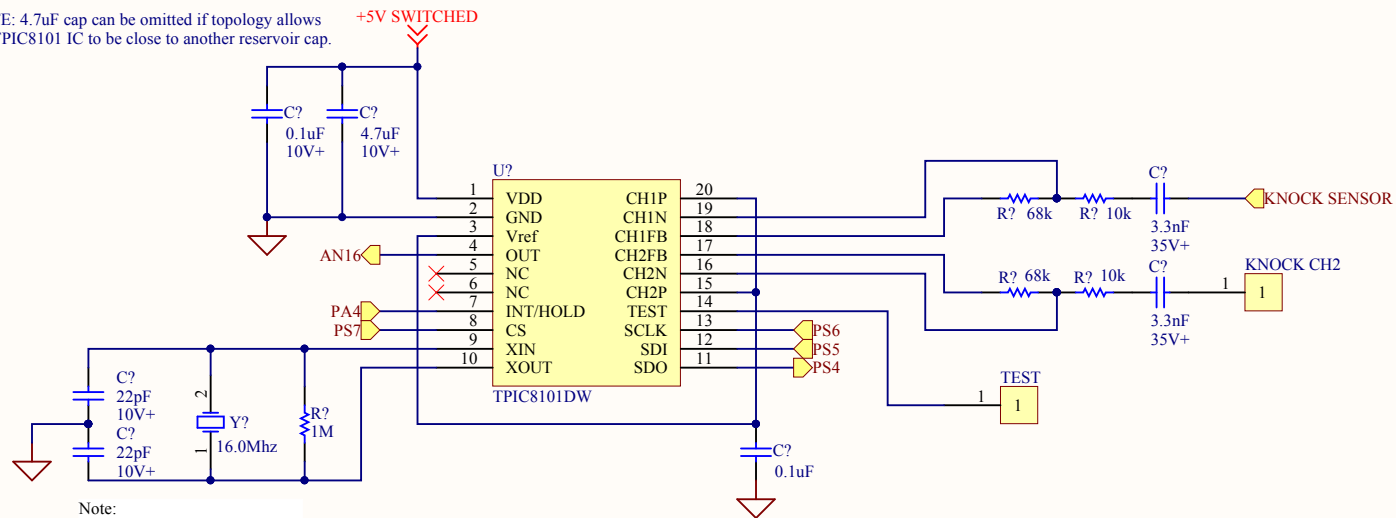
Title Ravage - Extra Analogue Inputs			Drawn By: Dan Visser	
Size: A4	Number: A	Revision: 0.2		
Date: 5/02/2013	Time: 6:31:45 AM	Sheet 7 of 16		

All inputs 12V capable.



Title Ravage - Digital Inputs			Drawn By: Dan Visser	
Size: A4	Number: A	Revision: 0.2		
Date: 5/02/2013	Time: 6:31:45 AM	Sheet 8 of 16		

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

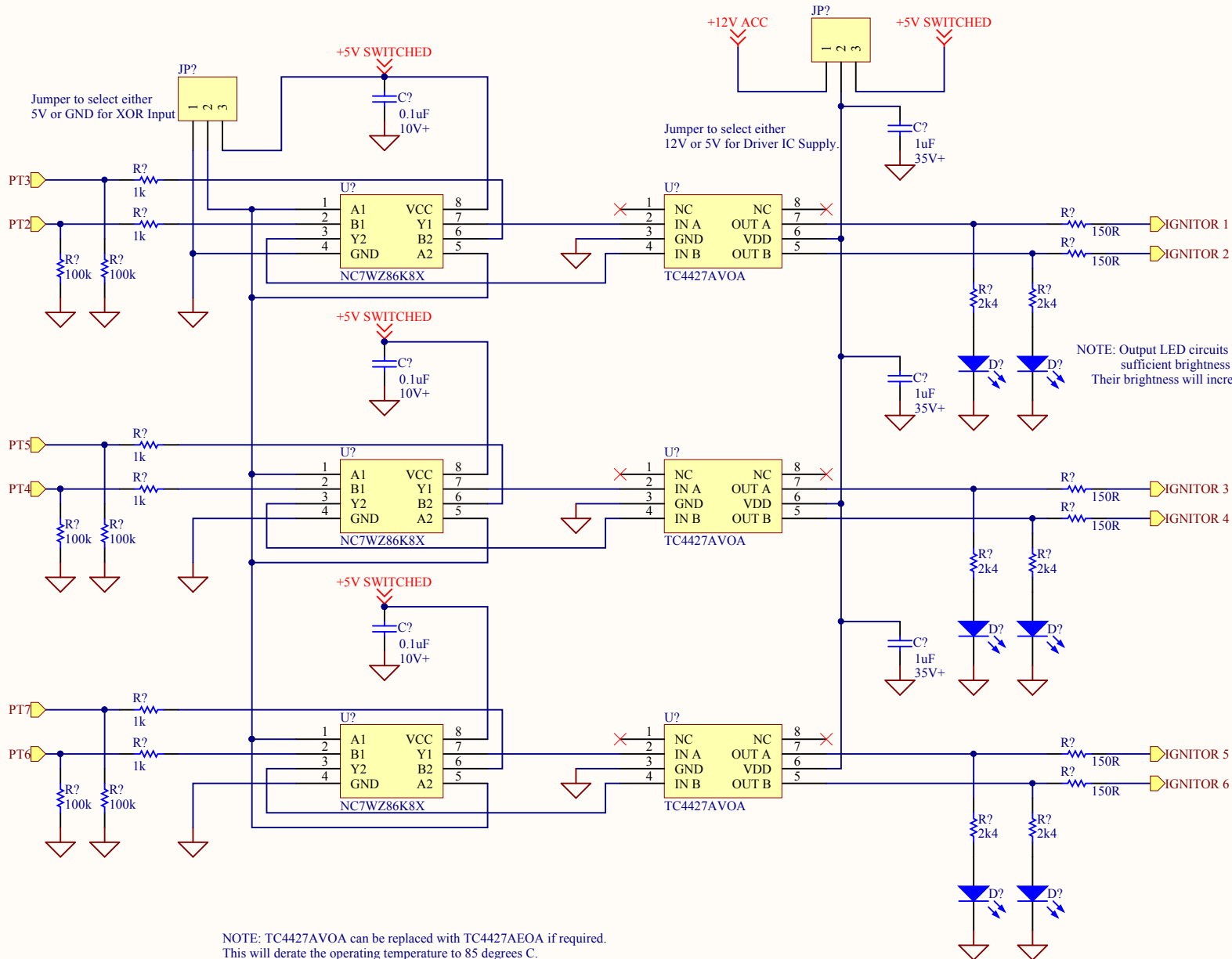
Date: 5/02/2013

Time: 6:31:45 AM

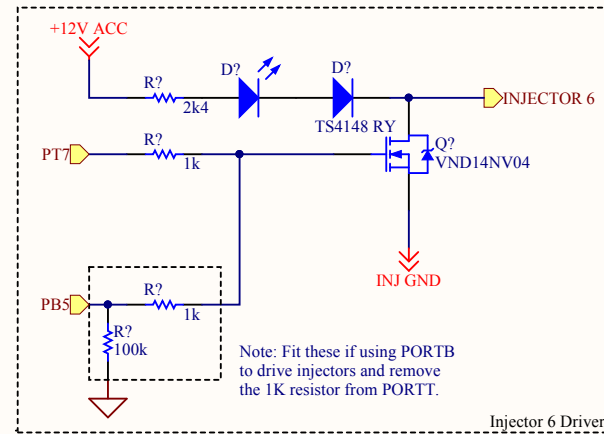
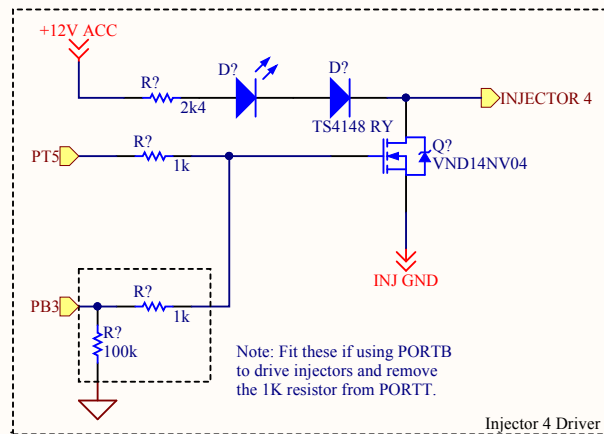
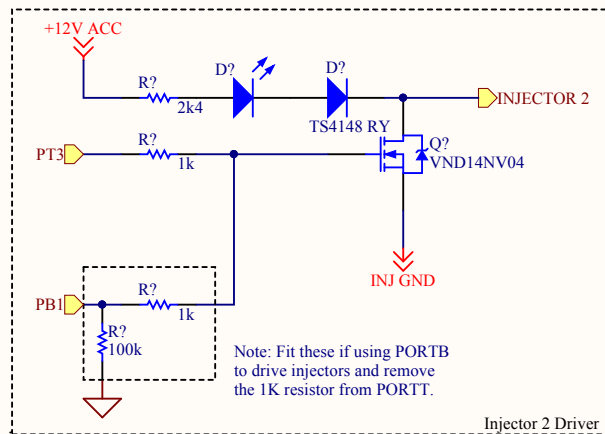
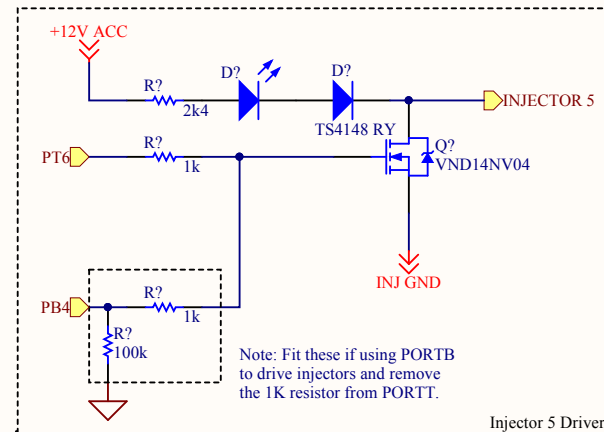
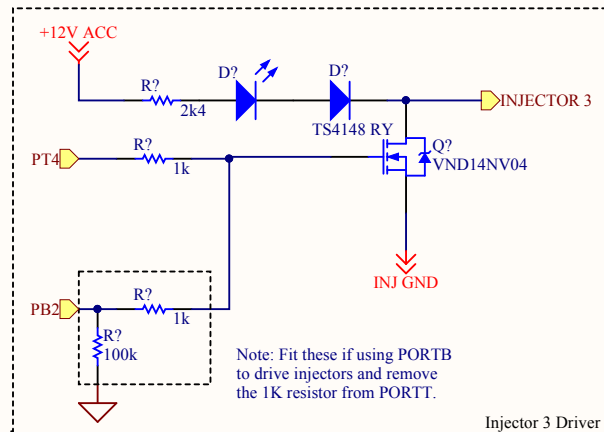
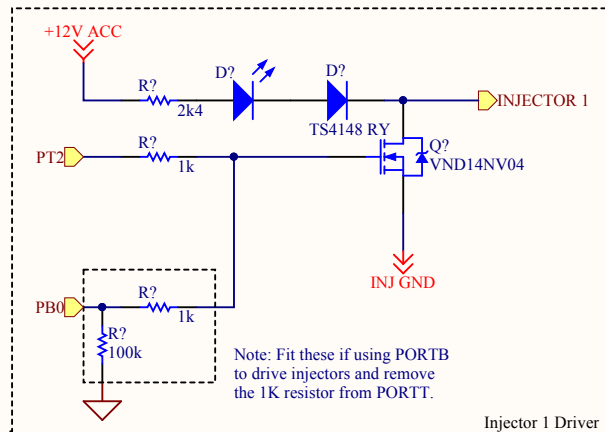
Sheet 9 of 16

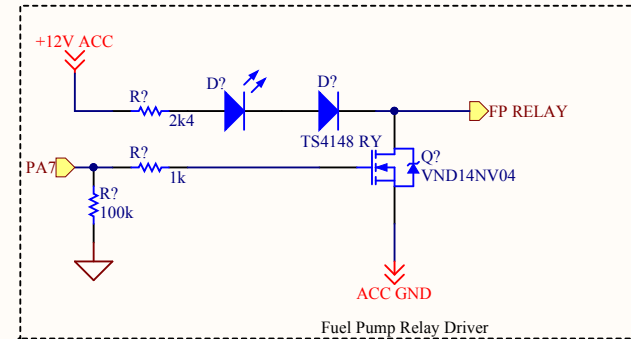
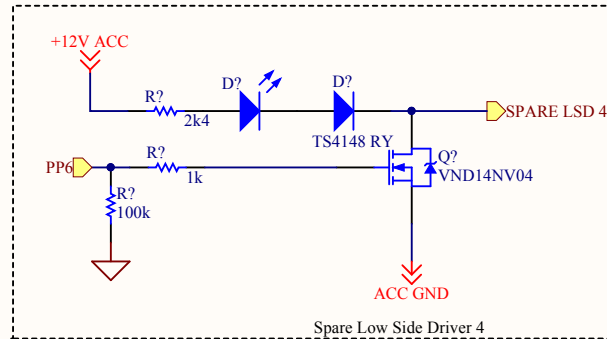
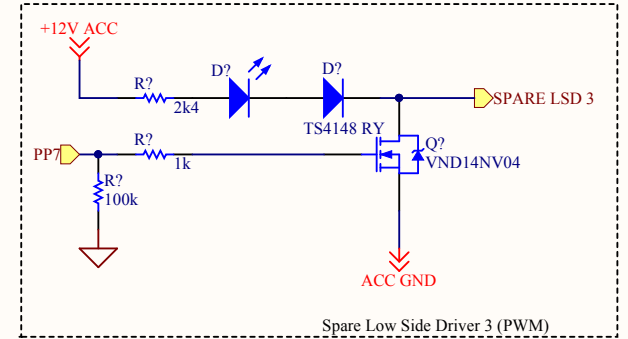
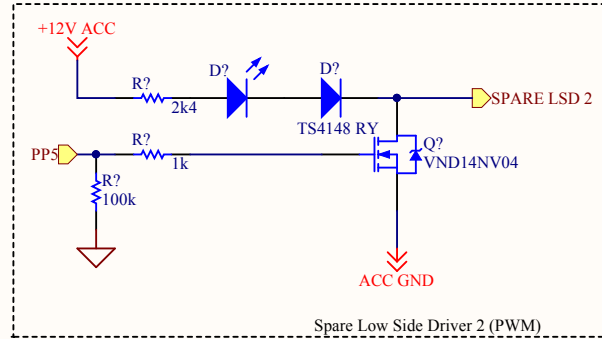
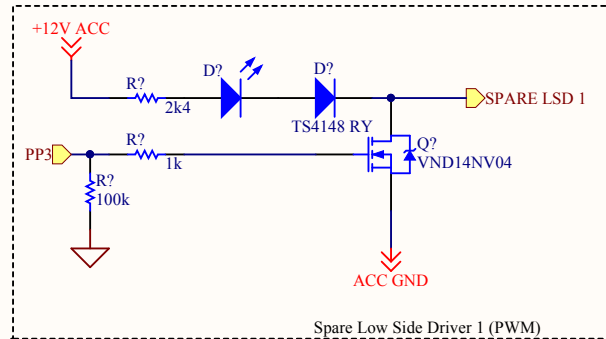
Drawn By:
Dan Visser

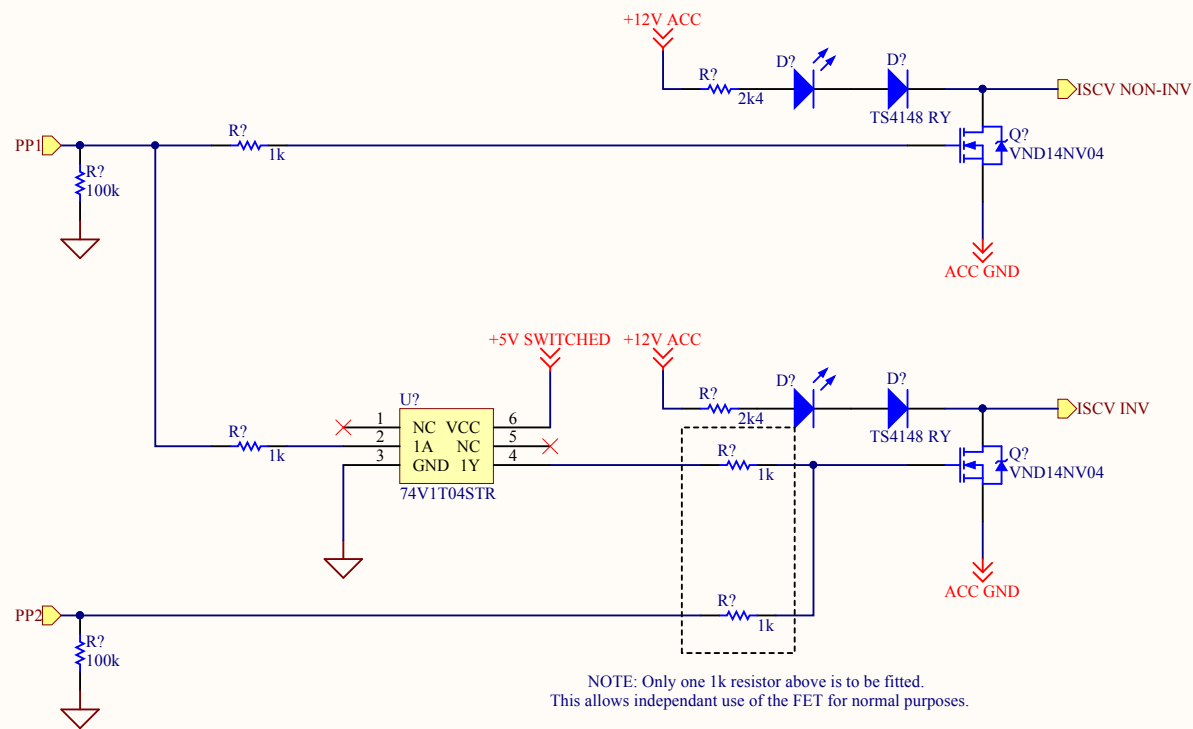





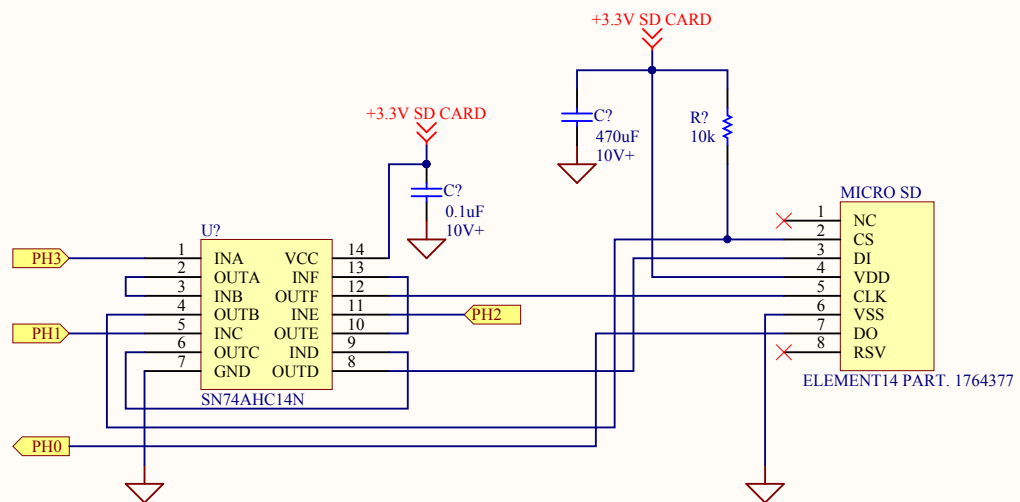
Title Ravage - Ignitor Outputs			Drawn By: Dan Visser	
Size: A4	Number: A	Revision: 0.2		
Date: 5/02/2013	Time: 6:31:45 AM	Sheet 10 of 16		




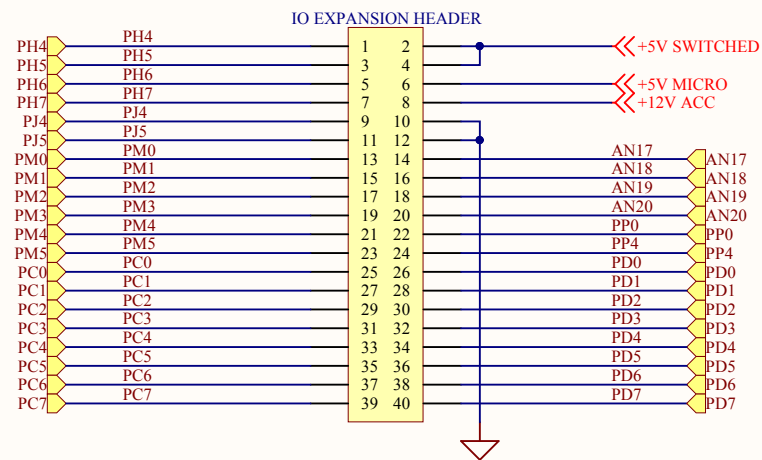




Title Ravage - 3-Wire ISCV Driver			Drawn By: <i>Dan Visser</i>	
Size: A4	Number: A	Revision: 0.2		
Date: 5/02/2013	Time: 6:31:45 AM	Sheet 13 of 16		



Title Ravage - SD Card Interface			Drawn By: <i>Dan Visser</i>	
Size: A4	Number: A	Revision: 0.2		
Date: 5/02/2013	Time: 6:31:46 AM	Sheet 14 of 16		



Title Ravage - IO Expansion Header			Drawn By: Dan Visser	
Size: A4	Number: A	Revision: 0.2		
Date: 5/02/2013	Time: 6:31:46 AM	Sheet 15 of 16		

NOTE: L and M pins are rated at 12A max, with remaining pins rated at 6A max.

