

Title **Ravage - Power Supplies**

Size: **A4**

Number: **A**

Revision: **0.1-alpha**

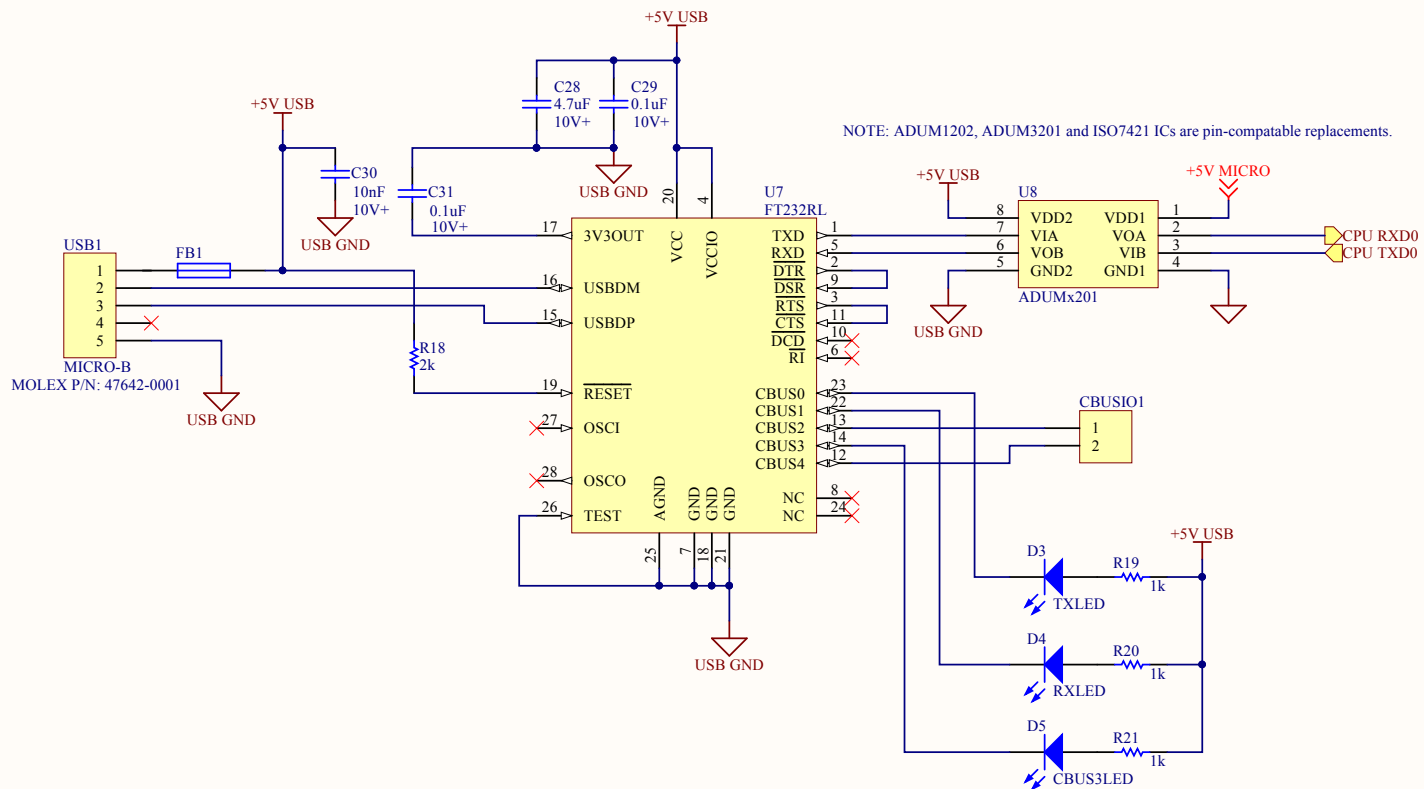
Date: **19-Jun-13**

Time: **6:10:39 AM**

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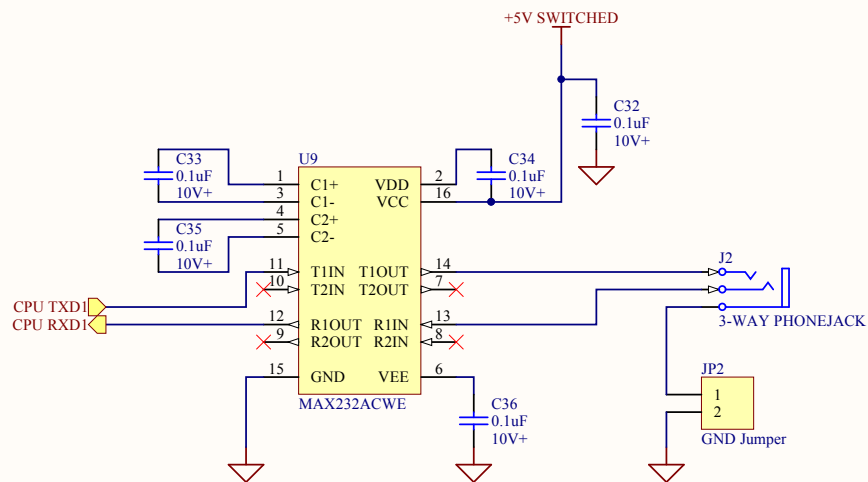
Drawn By:  
**Dan Visser**




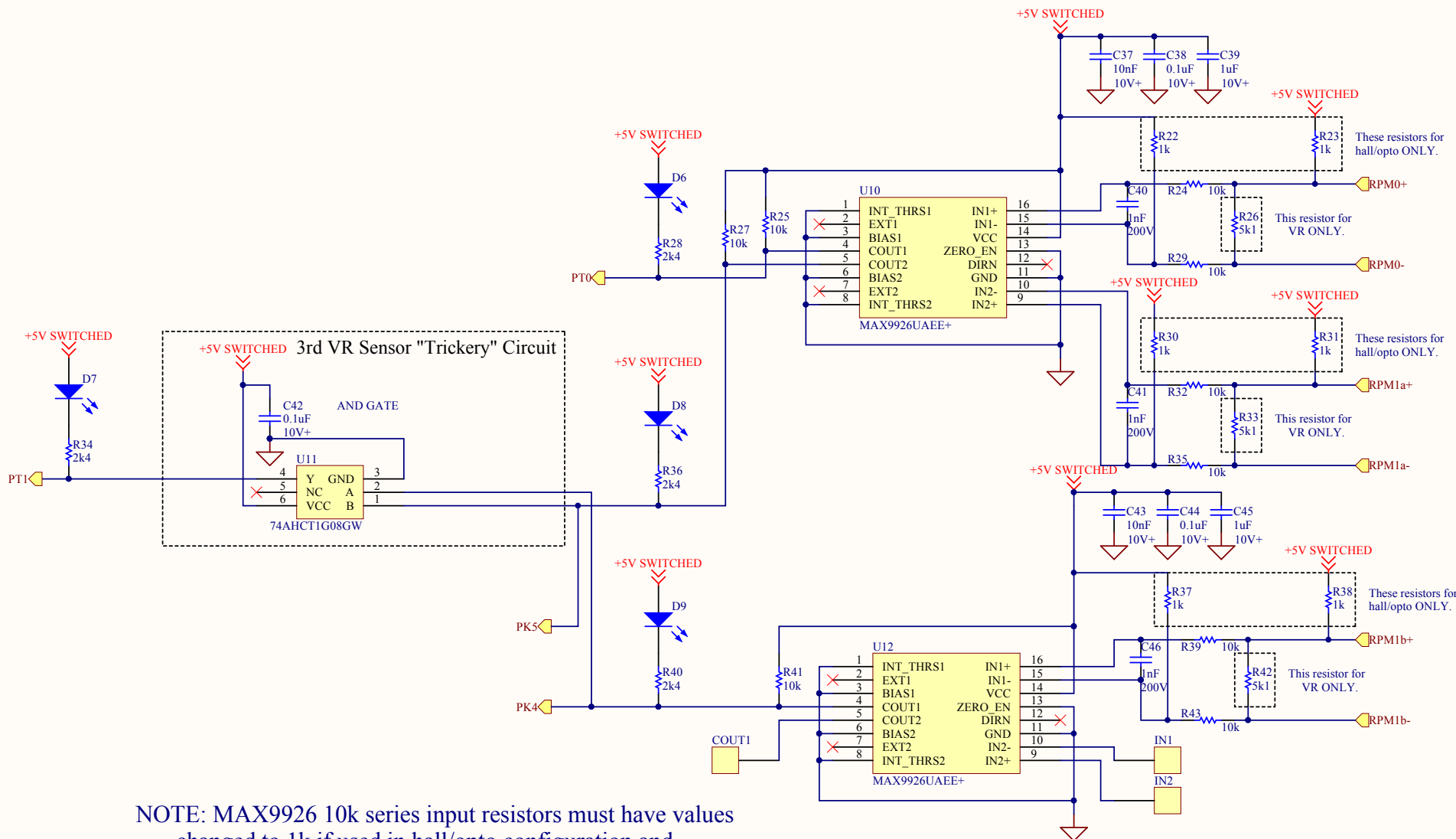


NOTE: 1k resistors are to ensure adequate brightness when LEDs are intermittently flashing.


Title <b>Ravage - USB Comms</b>			Drawn By: Dan Visser	
Size: A4	Number: A	Revision: 0.1-alpha		
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Title <b>Ravage - RS232 Comms</b>			Drawn By: Dan Visser	
Size: <b>A4</b>	Number: <b>A</b>	Revision: <b>0.1-alpha</b>		
Date: <b>19-Jun-13</b>	Time: <b>6:10:40 AM</b>	Sheet <b>4</b> of <b>16</b>		



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.

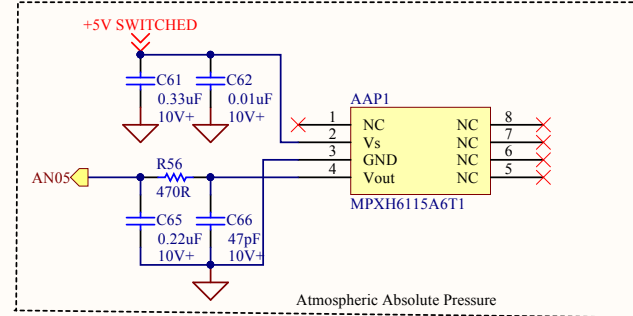
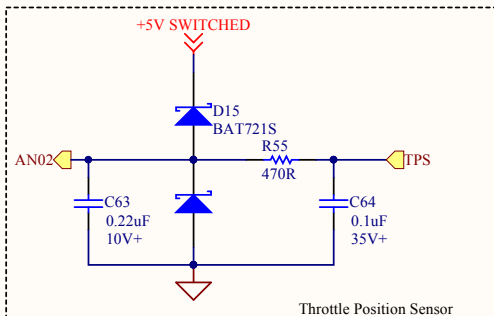
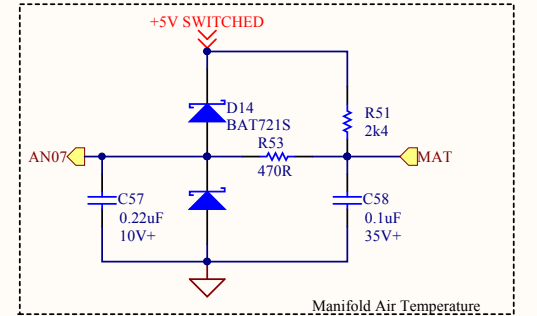
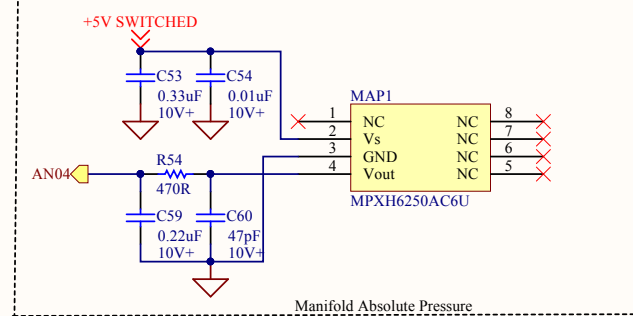
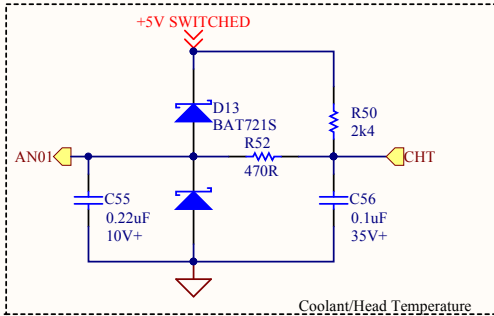
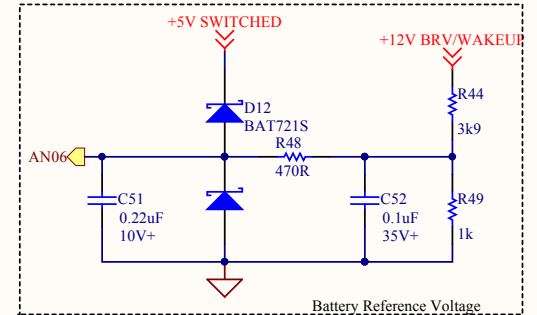
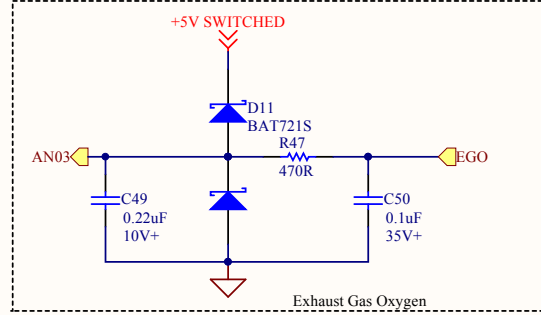
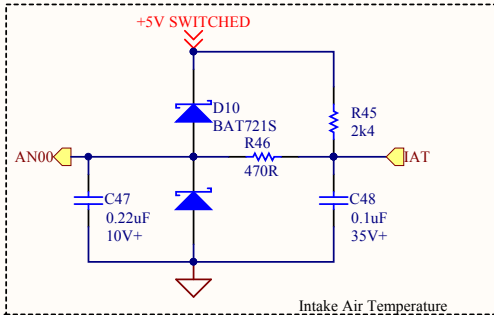
Title <i><b>Ravage - VR Interfaces</b></i>			Drawn By: <i>Dan Visser</i>	
Size: <b>A4</b>	Number: <b>A</b>	Revision: <b>0.1-alpha</b>		
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SENSOR GND

Title **Ravage - Core Analogue Inputs**

Size: **A4**

Number: **A**

Revision: **0.1-alpha**

Drawn By:  
Dan Visser

Date: **19-Jun-13**

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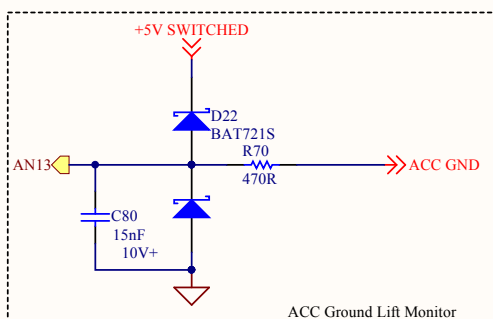
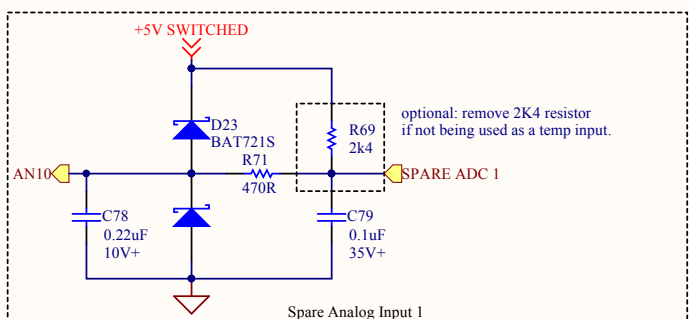
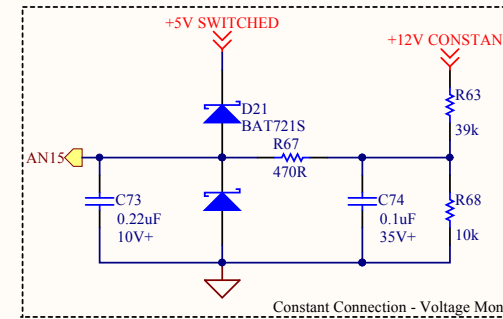
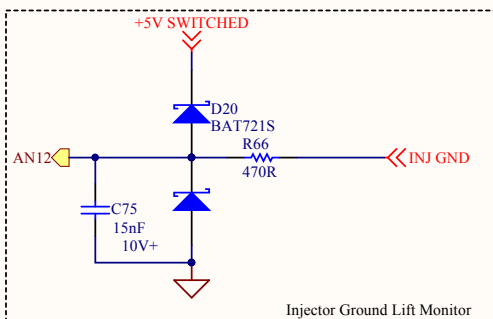
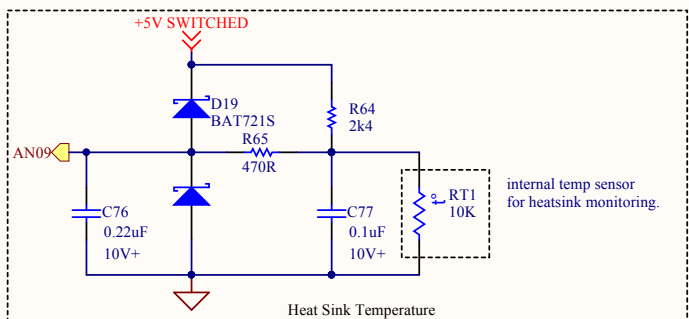
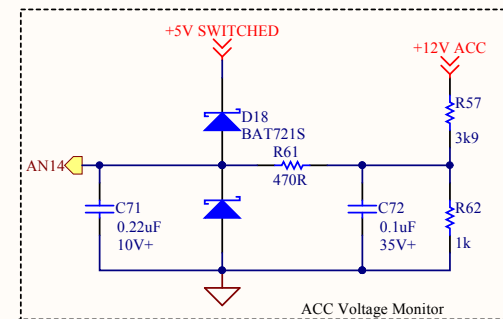
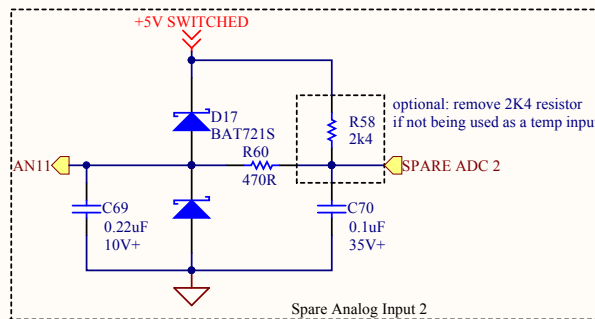
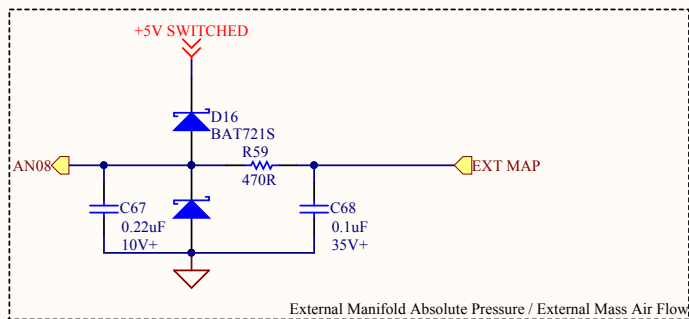
**Altium**

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Title <b>Ravage - Extra Analogue Inputs</b>			Drawn By: Dan Visser	
Size: A4	Number: A	Revision: 0.1-alpha		
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A

B

C

D

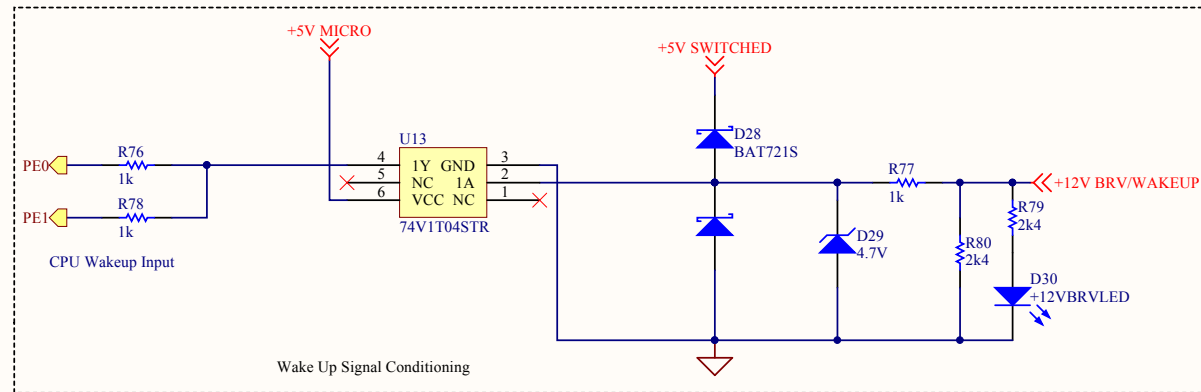
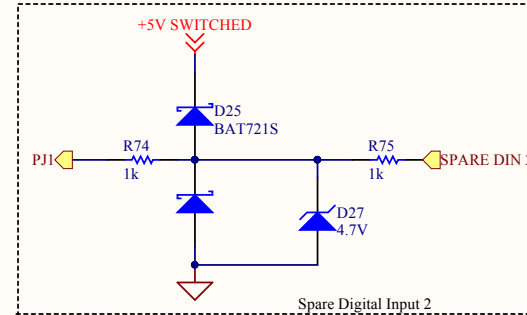
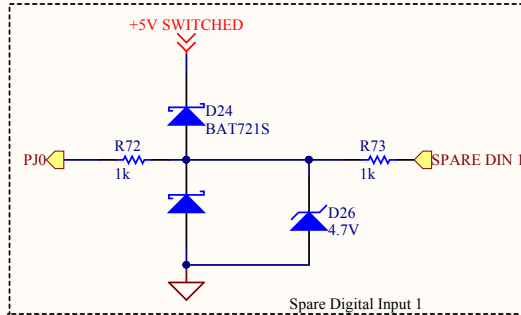
A

B

C

D

All inputs 12V capable.

Title **Ravage - Digital Inputs**

Size: A4

Number: A

Revision: 0.1-alpha

Drawn By:  
Dan Visser

Date: 19-Jun-13

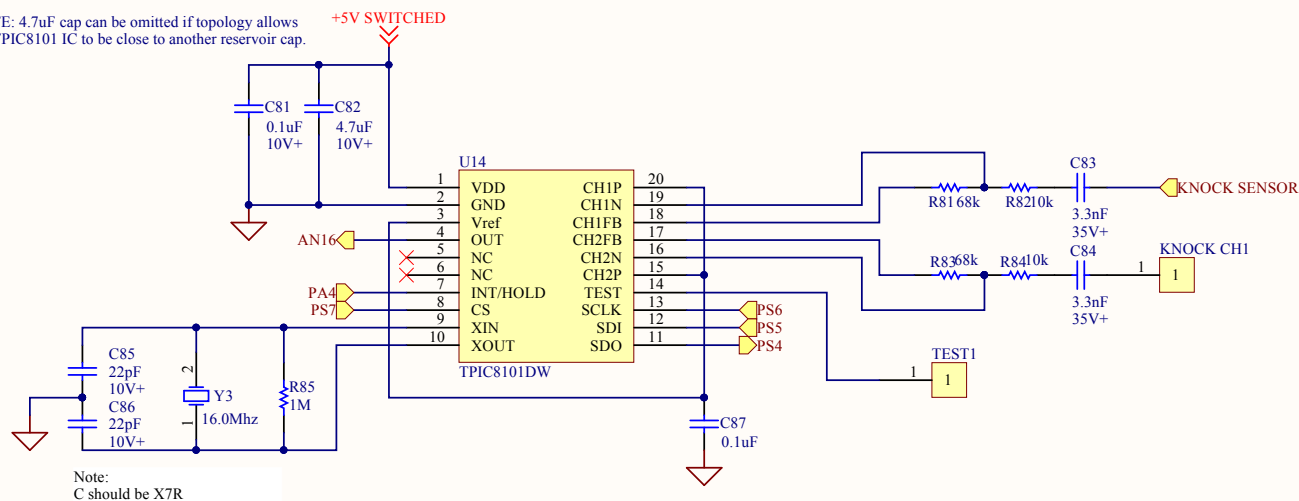
Time: 6:10:40 AM

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



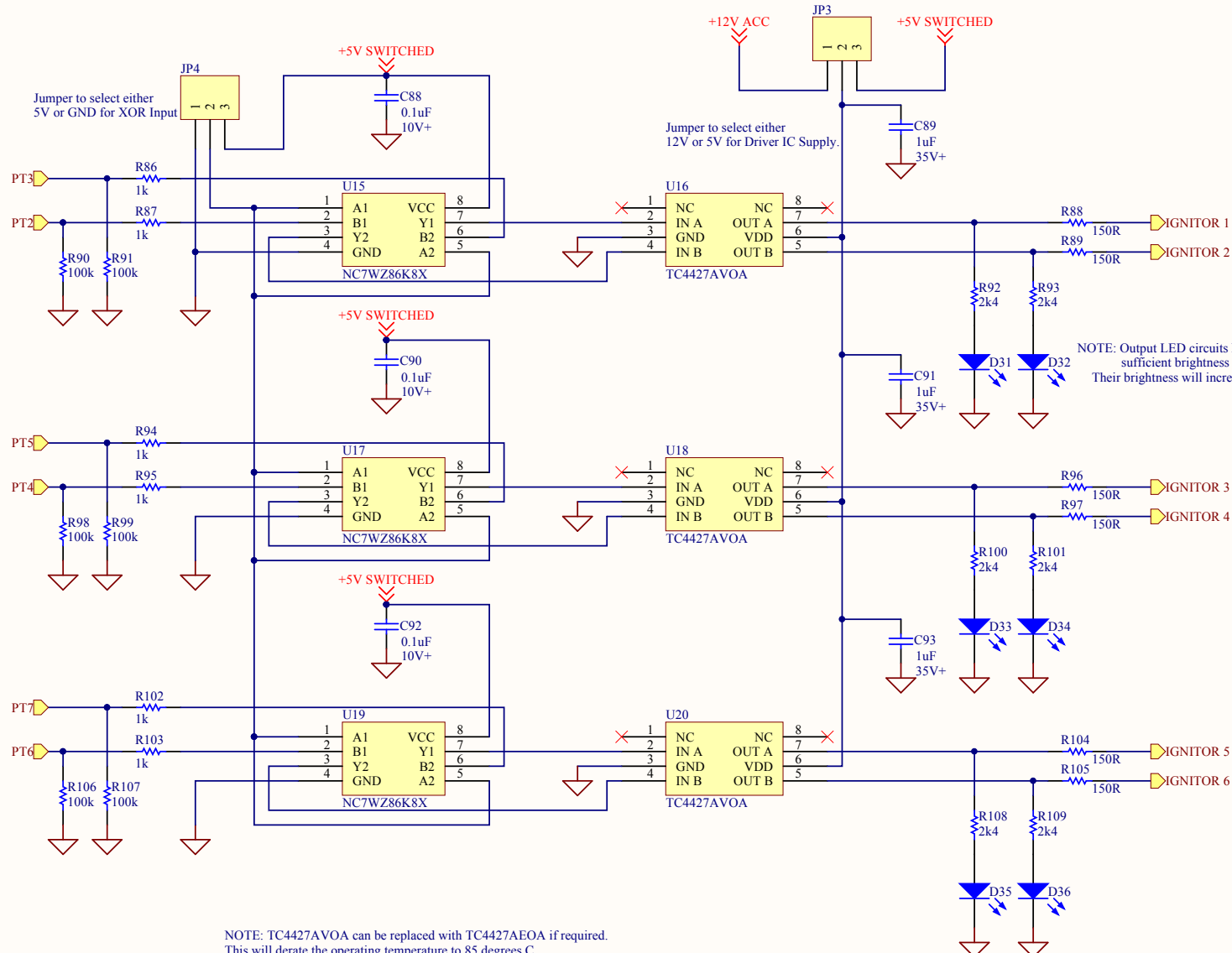
Title <b>Ravage - Knock Sensing</b>			Drawn By: Dan Visser	
Size: <b>A4</b>	Number: <b>A</b>	Revision: <b>0.1-alpha</b>		
Date: <b>19-Jun-13</b>	Time: <b>6:10:40 AM</b>	Sheet <b>9</b> of <b>16</b>		

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Title **Ravage - Ignitor Outputs**

Size: A4

Number: A

Revision: 0.1-alpha

Drawn By:  
Dan Visser

Date: 19-Jun-13

Time: 6:10:40 AM

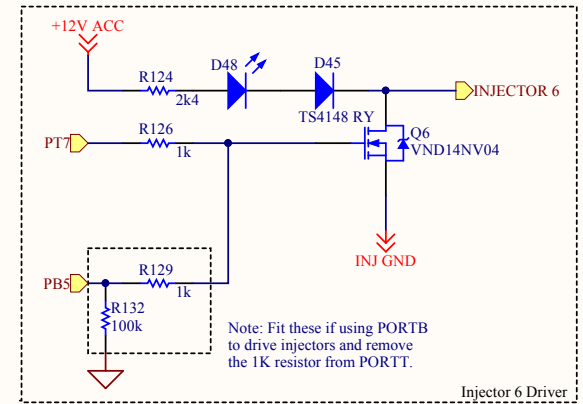
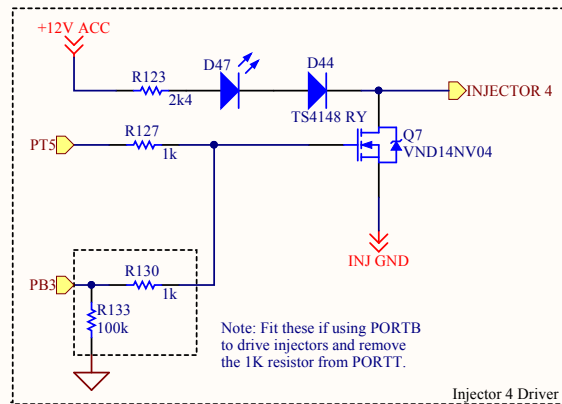
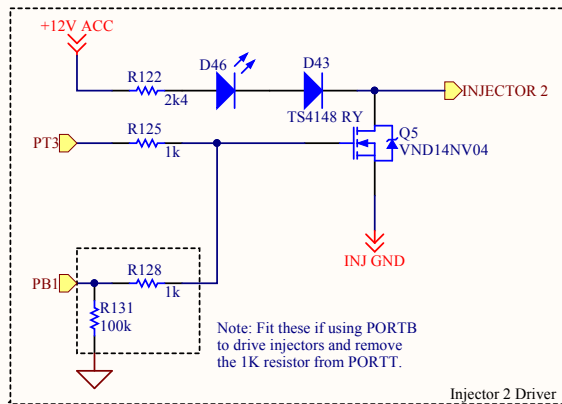
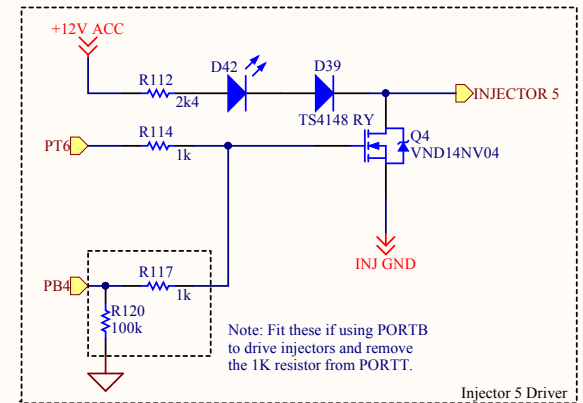
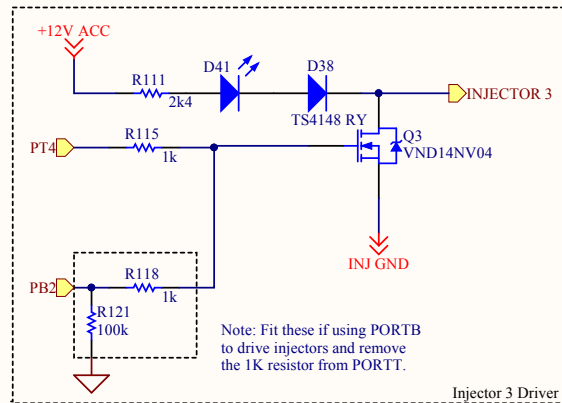
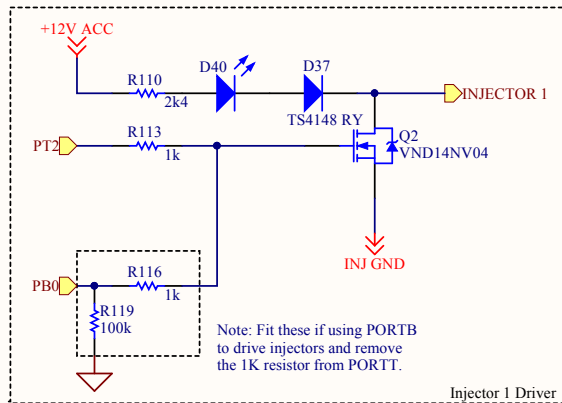
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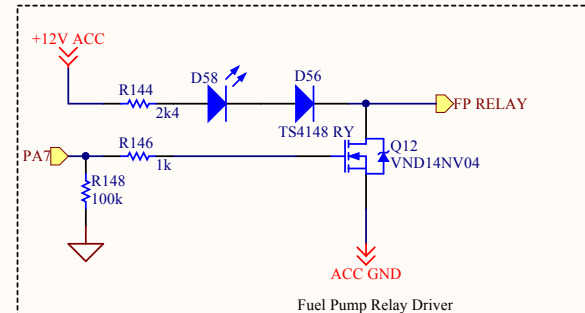
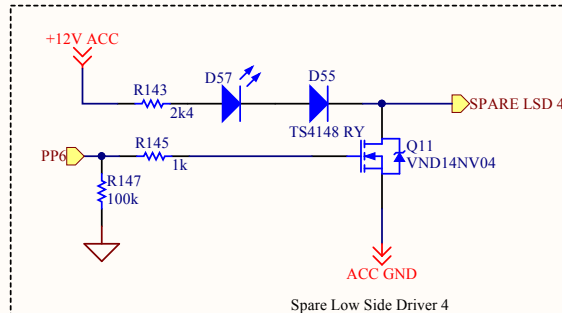
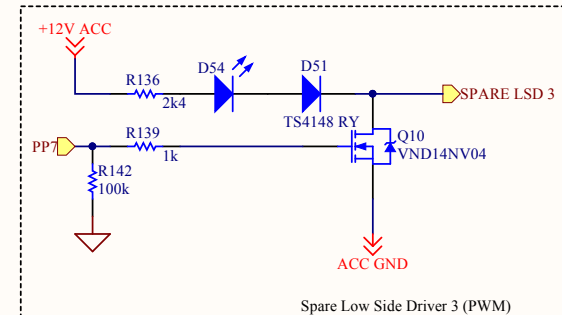
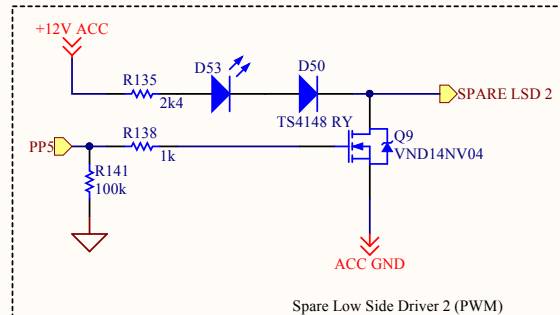
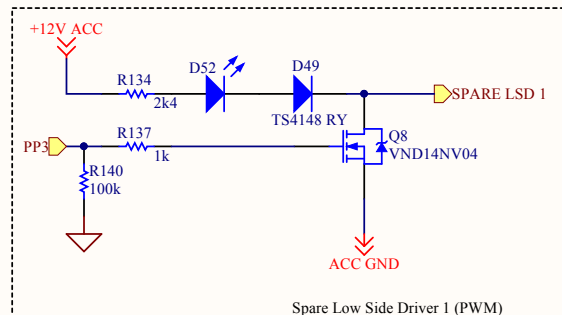
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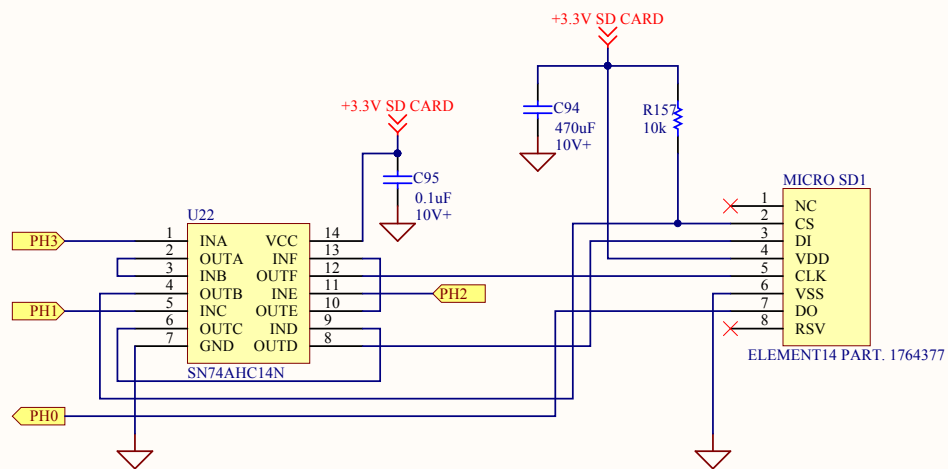



Title <b><i>Ravage - Injectors</i></b>			Drawn By: <i>Dan Visser</i>	
Size: <b>A4</b>	Number: <b>A</b>	Revision: <b>0.1-alpha</b>		
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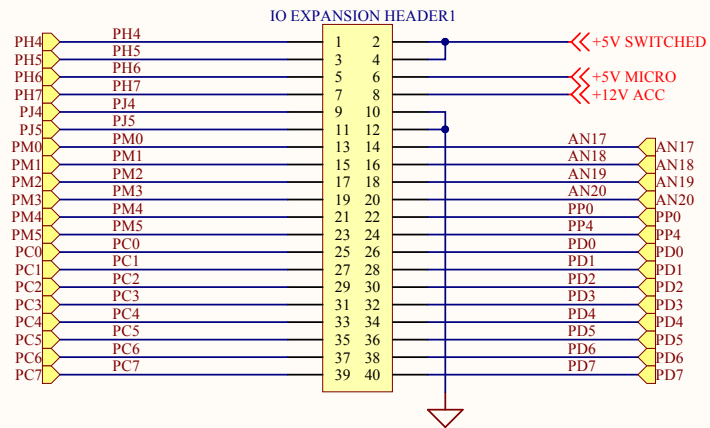


Title <i><b>Ravage - Low Side Drivers</b></i>			Drawn By: <i>Dan Visser</i>	
Size: <b>A4</b>	Number: <b>A</b>	Revision: <b>0.1-alpha</b>		
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Title <b><i>Ravage - SD Card Interface</i></b>			Drawn By: <i>Dan Visser</i>	
Size: <b>A4</b>	Number: <b>A</b>	Revision: <b>0.1-alpha</b>		
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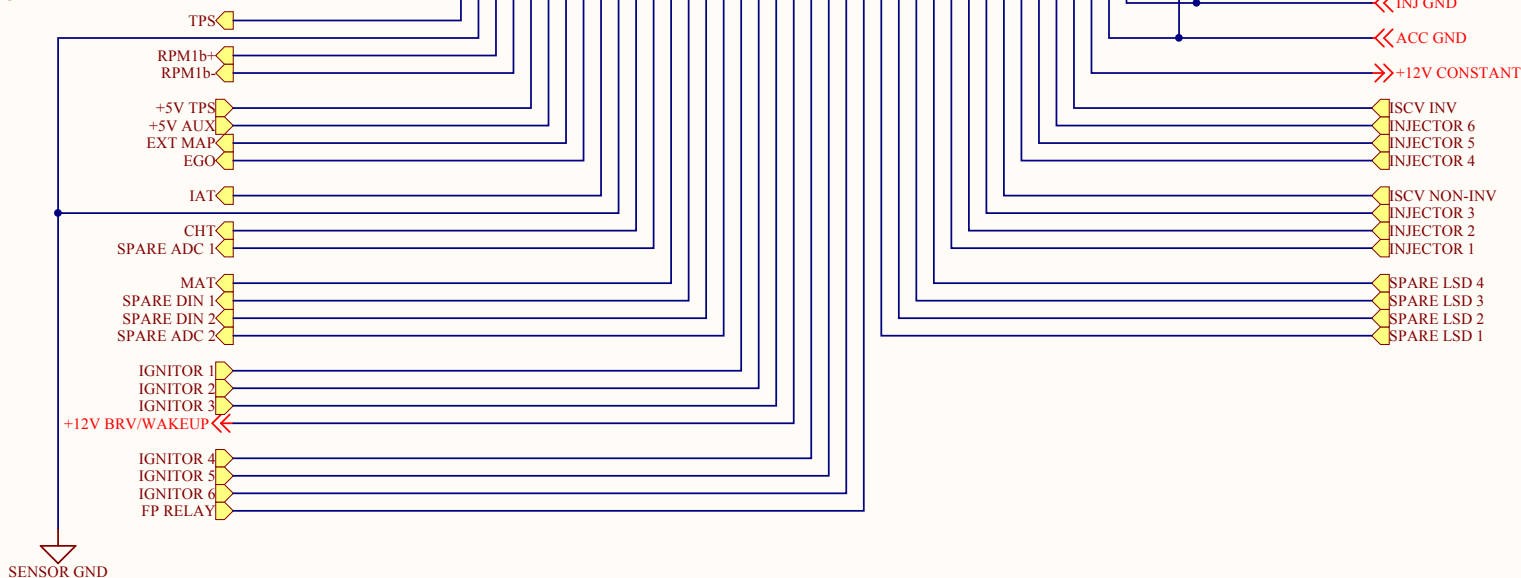
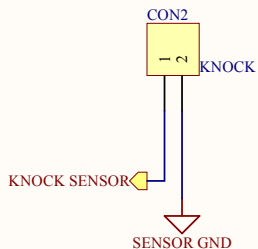
NOTE: L and M pins are rated at 12A max, with remaining pins rated at 6A max.


CON1

MOLEX 36638-0002

A1 A2 A3 A4 B1 B2 B3 B4 C1 C2 C3 C4 D1 D2 D3 D4 E1 E2 E3 E4 F1 F2 F3 F4 G1 G2 G3 G4 H1 H2 H3 H4 J1 J2 J3 J4 K1 K2 K3 K4 L1 L2 L3 L4 M1 M2 M3 M4

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48



Title <i><b>Ravage - Connectors</b></i>			Drawn By: <i>Dan Visser</i>	
Size: <b>A4</b>	Number: <b>A</b>	Revision: <b>0.1-alpha</b>		
Date: <b>19-Jun-13</b>	Time: <b>6:10:41 AM</b>	Sheet <b>16</b> of <b>16</b>		