

Title **Ravage - Power Supplies**

Size: **A4**

Number: **A**

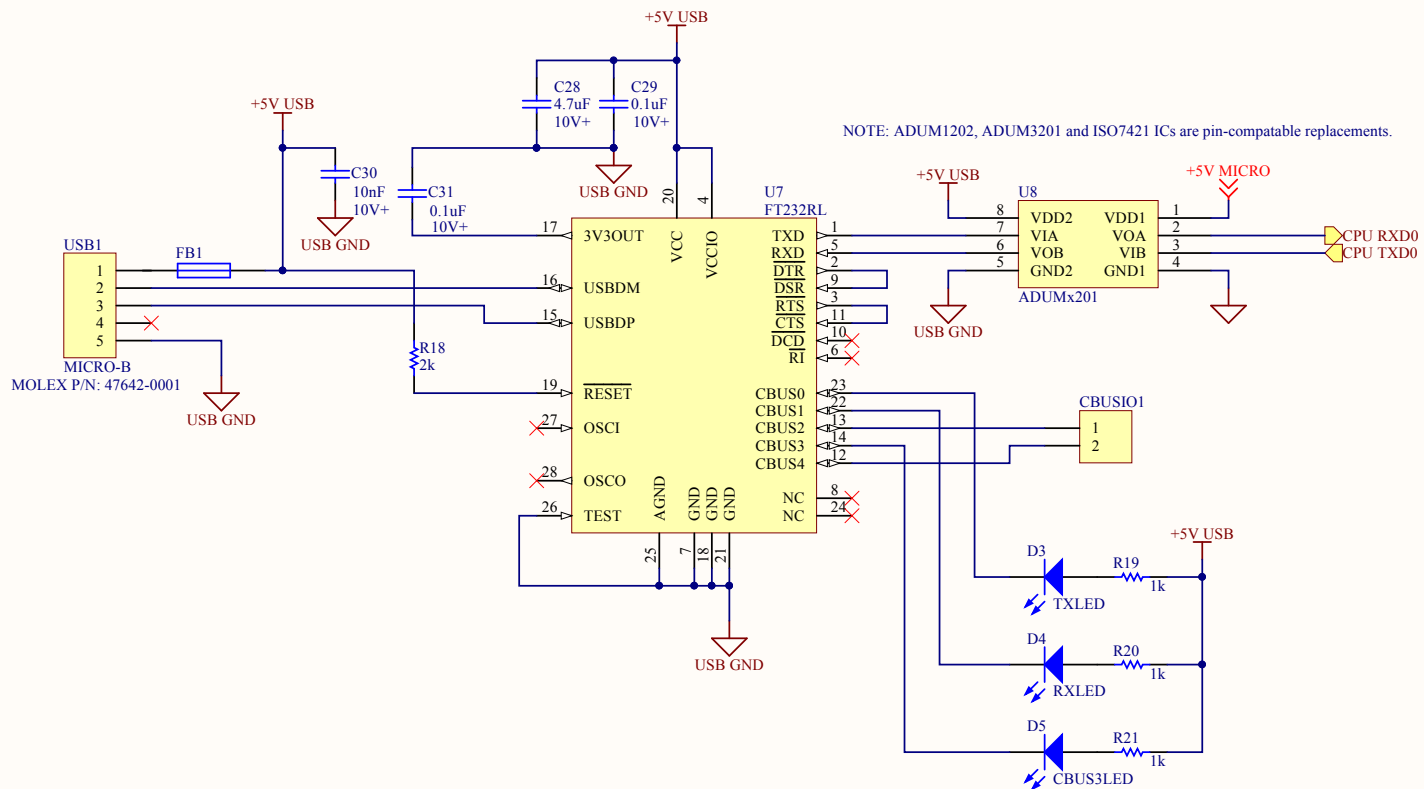
Revision: **0.1-alpha**

Date: **19-Jun-13**


Time: **12:57:39 PM** Sheet **2** of **16**

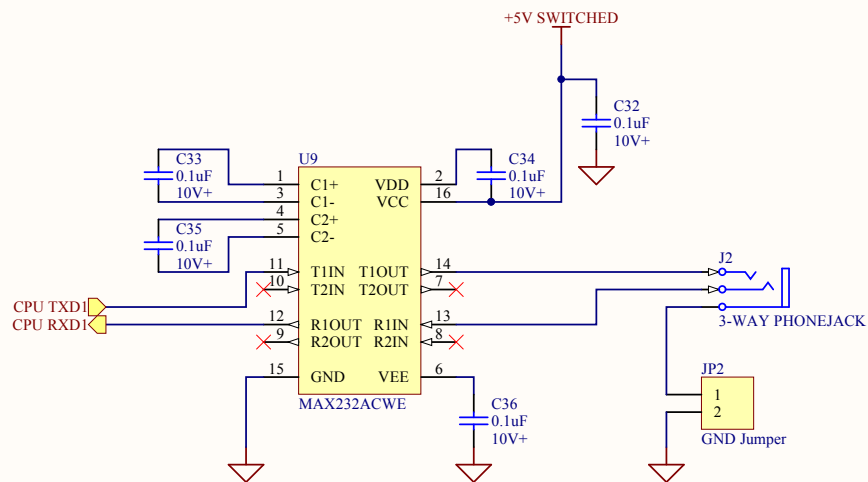
Drawn By:  
**Dan Visser**




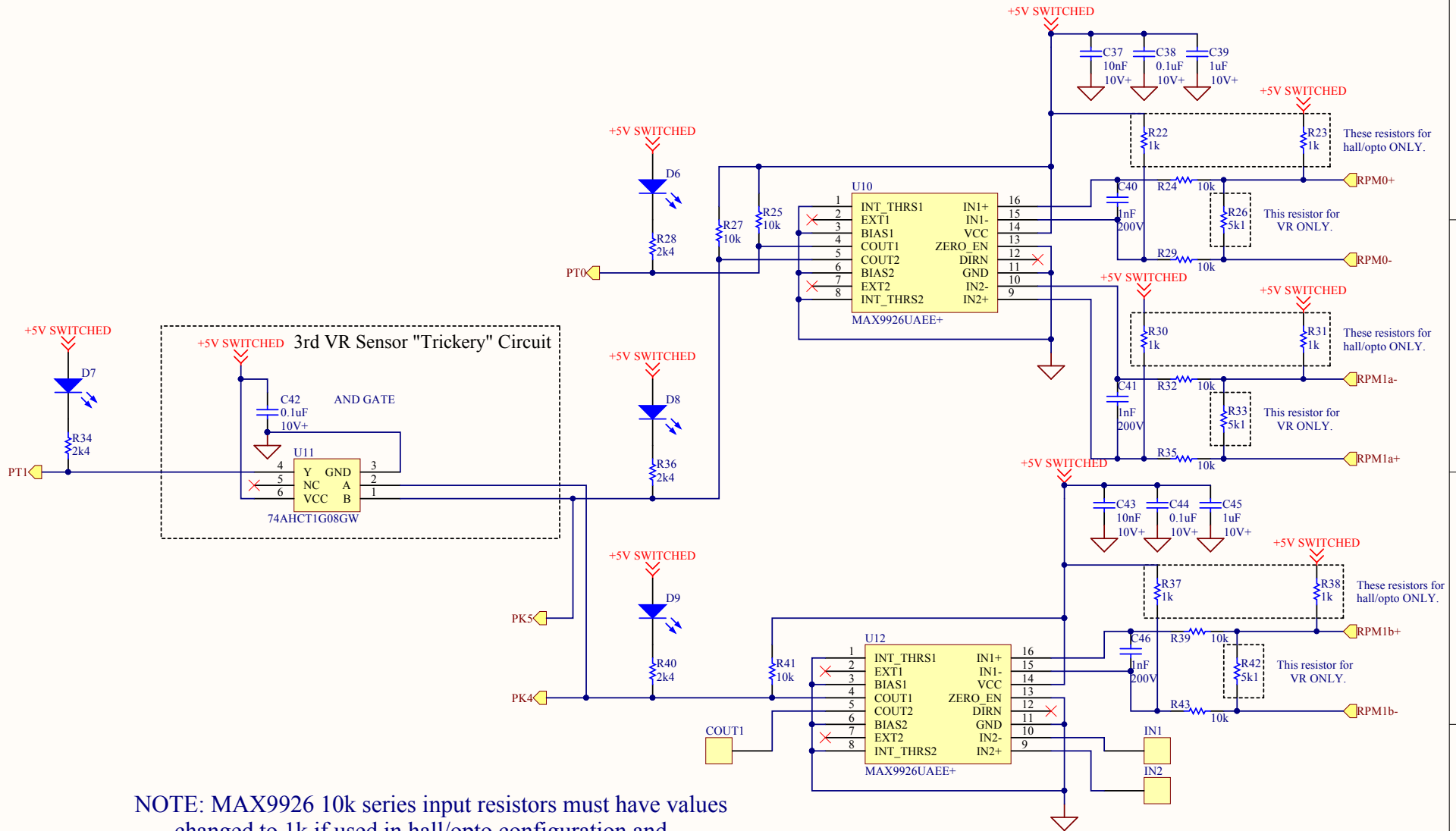



NOTE: 1k resistors are to ensure adequate brightness when LEDs are intermittently flashing.

Title <b><i>Ravage - USB Comms</i></b>			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>12:57:39 PM</b> Sheet <b>3</b> of <b>16</b>			



Title <i><b>Ravage - RS232 Comms</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>12:57:39 PM</b>	Sheet <b>4</b> of <b>16</b>		



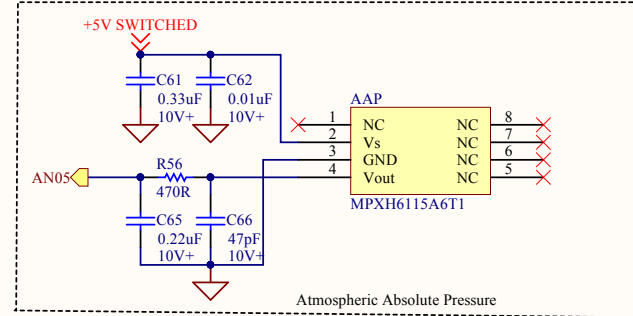
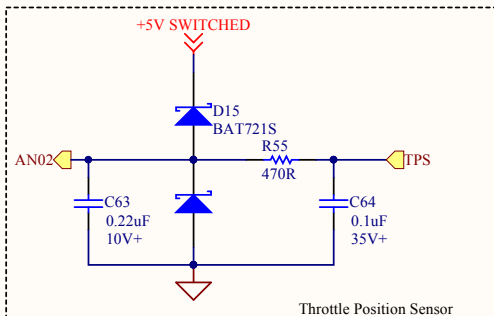
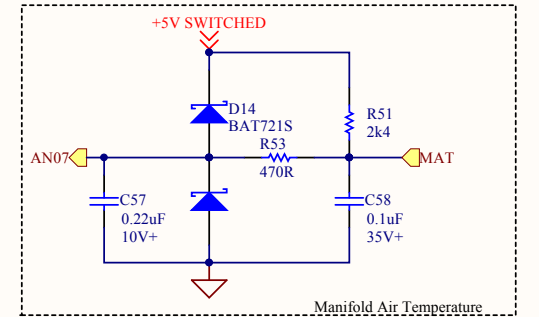
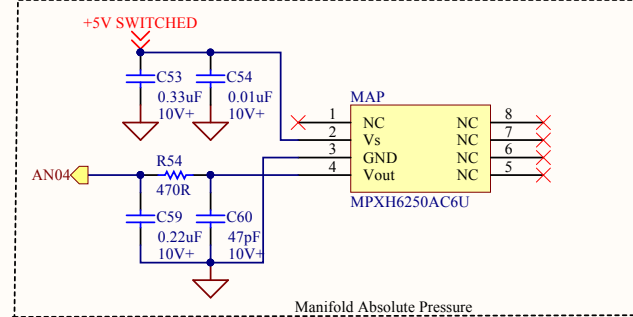
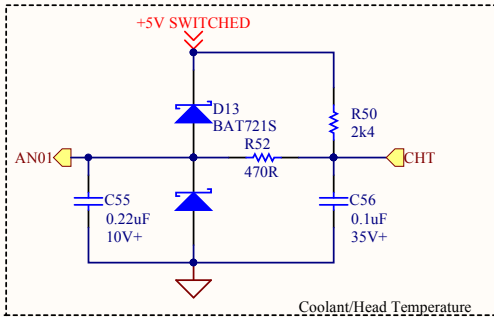
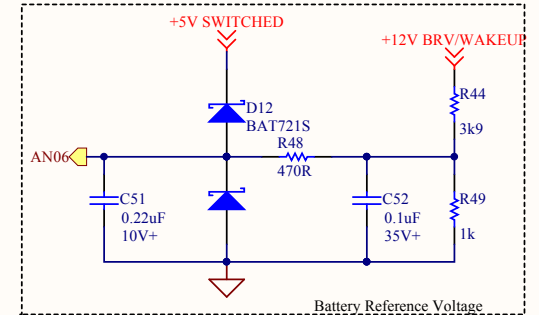
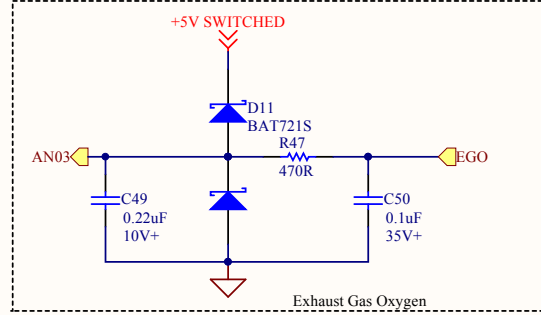
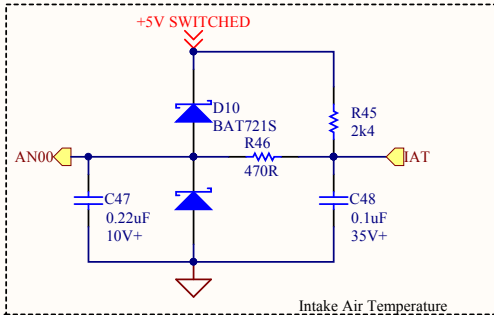
Title <i><b>Ravage - VR Interfaces</b></i>			Drawn By: <i>Dan Visser</i>	
Size: <b>A4</b>	Number: <b>A</b>	Revision: <b>0.1-alpha</b>		
Date: <b>19-Jun-13</b>	Time: <b>12:57:39 PM</b>	Sheet <b>5</b> of <b>16</b>		

1

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4



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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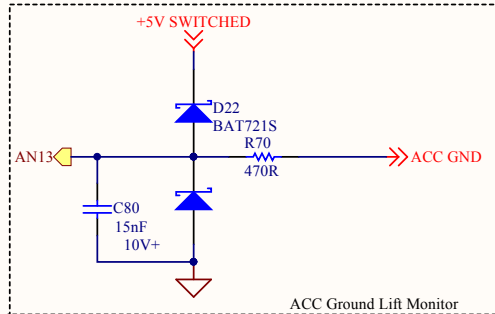
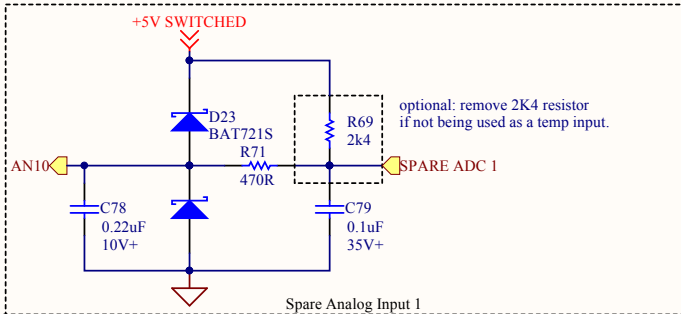
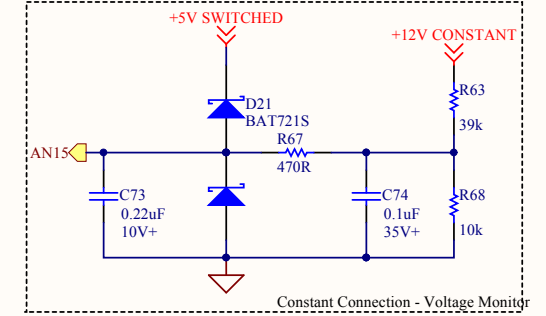
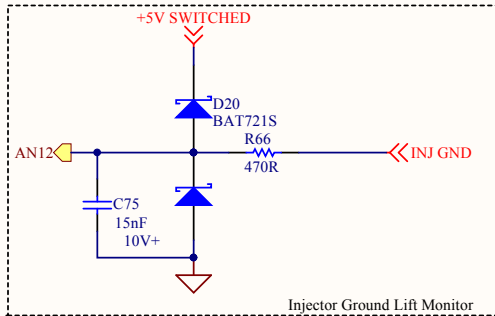
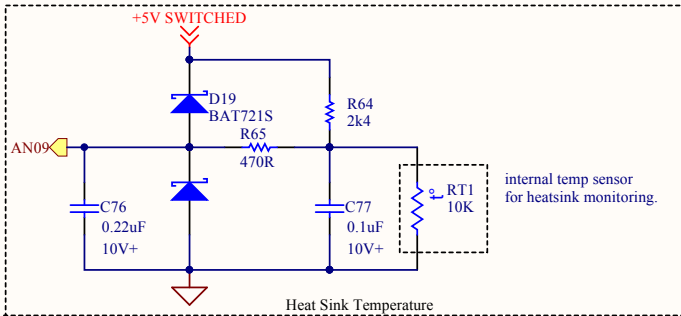
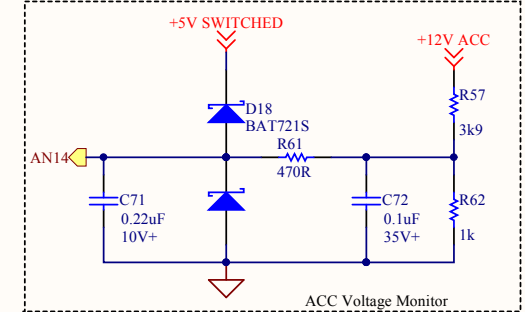
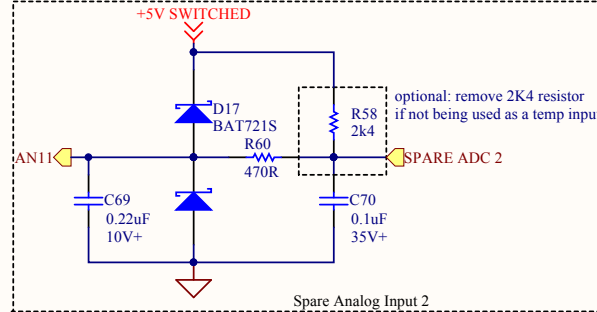
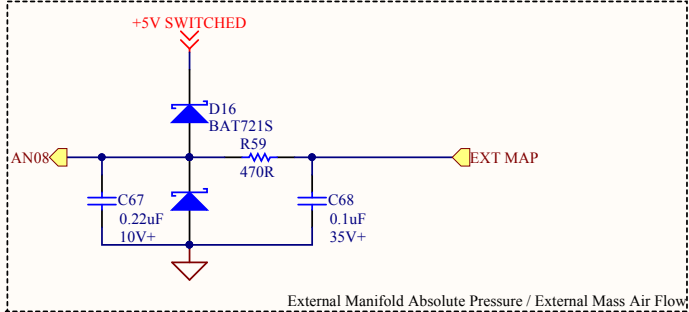
4

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Title **Ravage - Extra Analogue Inputs**Size: **A4**Number: **A**Revision: **0.1-alpha**Drawn By:  
Dan VisserDate: **19-Jun-13**Time: **12:57:39 PM** Sheet **7** of **16****Altium**

1

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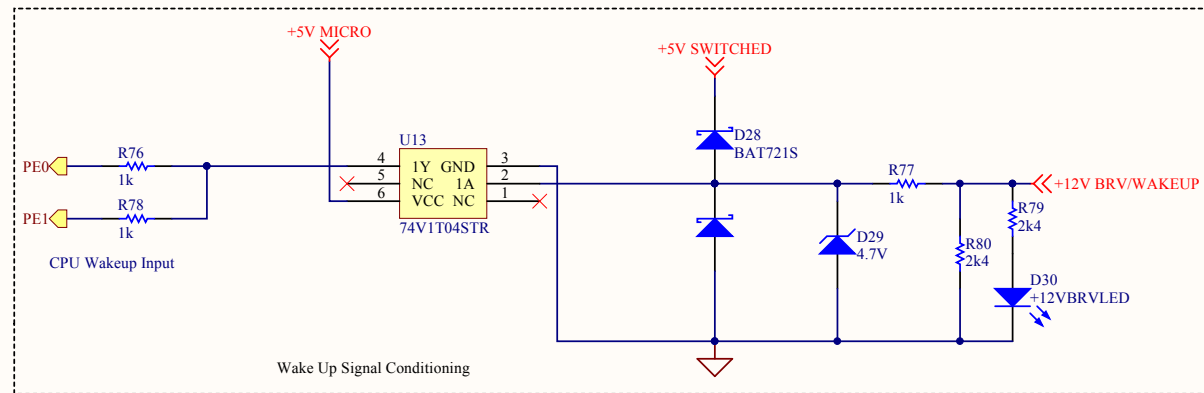
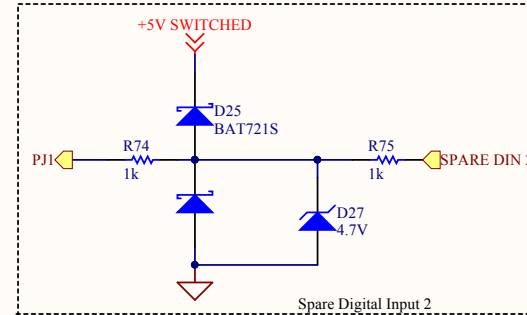
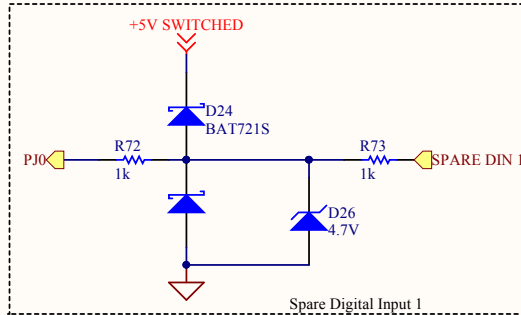
1

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All inputs 12V capable.

Title **Ravage - Digital Inputs**

Size: A4

Number: A

Revision: 0.1-alpha

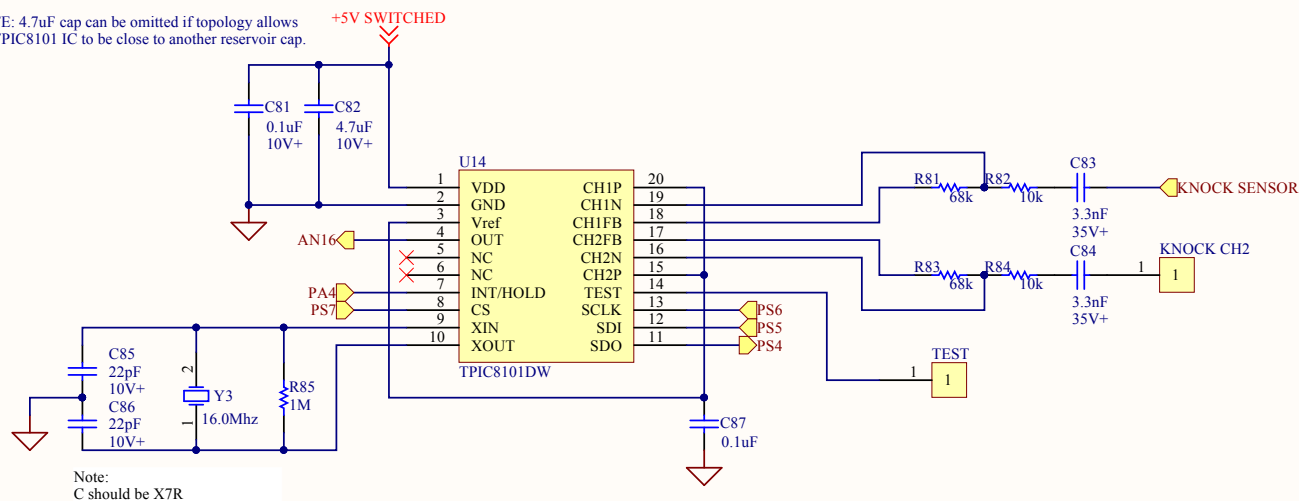
Date: 19-Jun-13

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Drawn By:  
Dan Visser



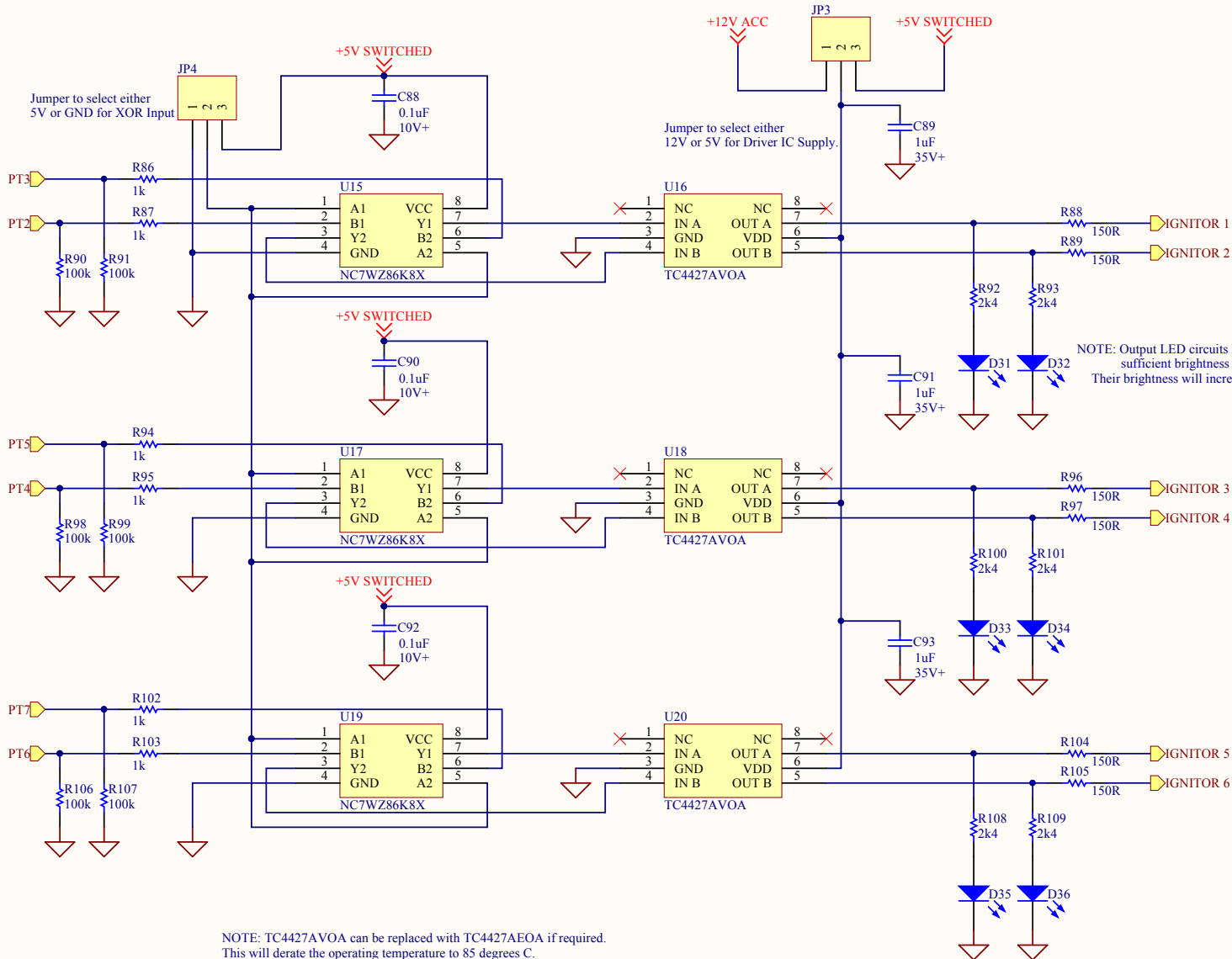
NOTE: 4.7uF cap can be omitted if topology allows the TPIC8101 IC to be close to another reservoir cap.



Title <b>Ravage - Knock Sensing</b>		
Size: <b>A4</b>	Number: <b>A</b>	Revision: <b>0.1-alpha</b>
Date: <b>19-Jun-13</b>	Time: <b>12:57:39 PM</b> Sheet <b>9</b> of <b>16</b>	

Drawn By:  
Dan Visser





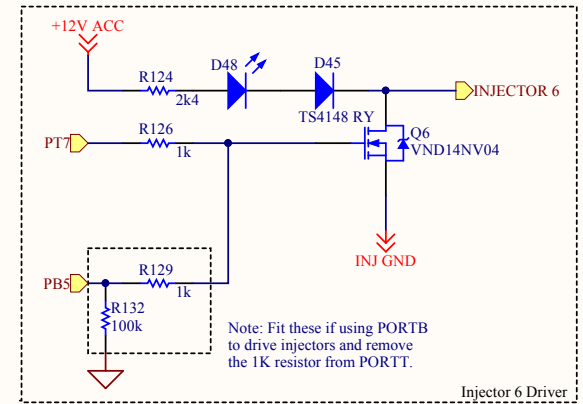
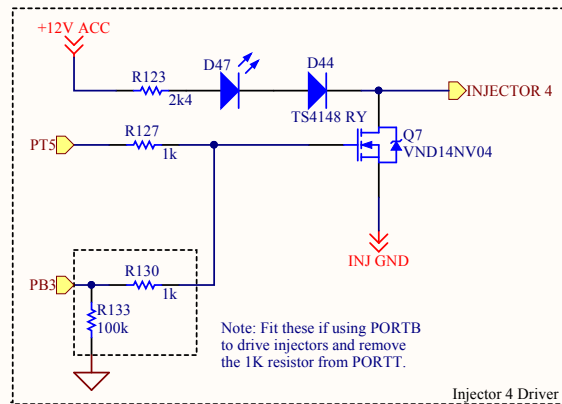
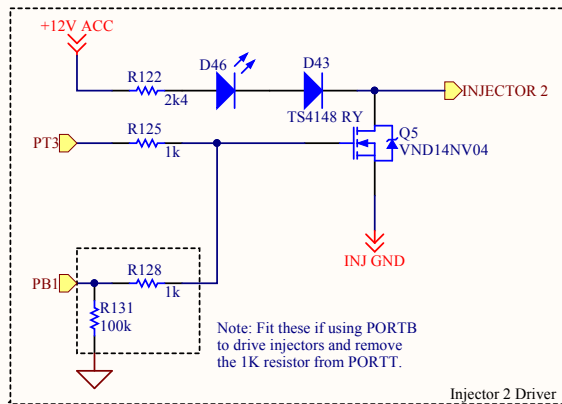
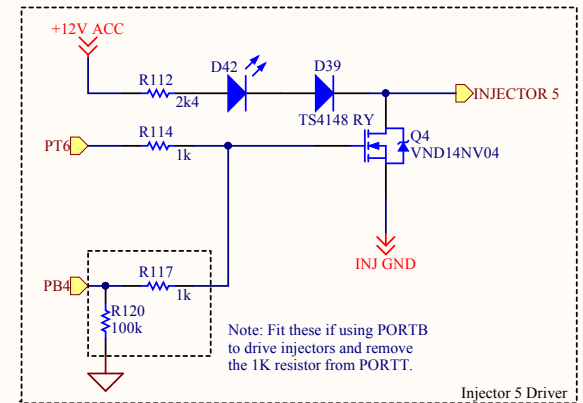
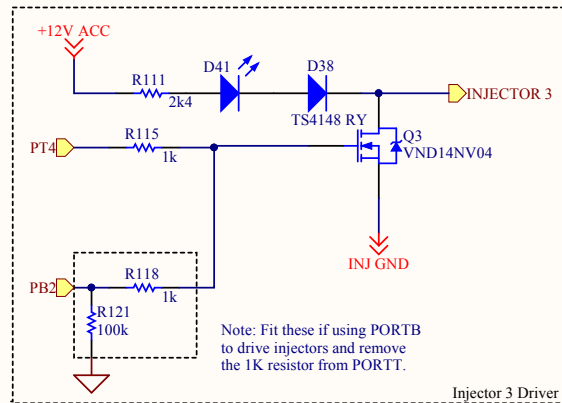
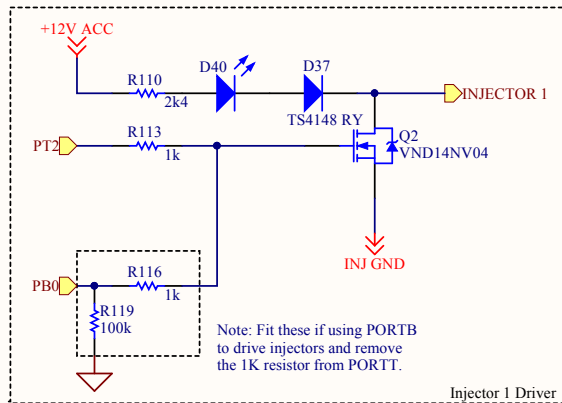
Title **Ravage - Ignitor Outputs**


Size: A4 Number: A Revision: 0.1-alpha

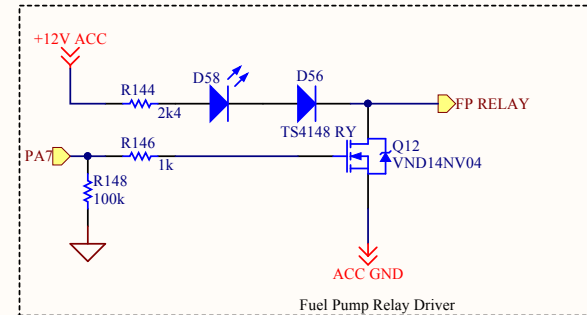
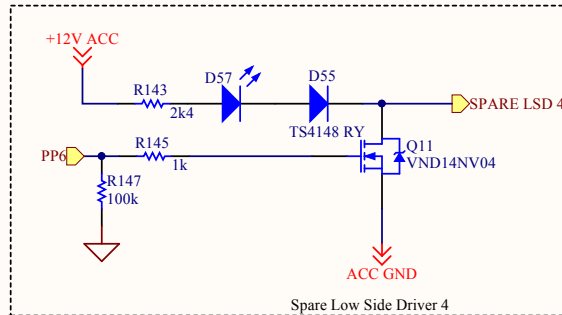
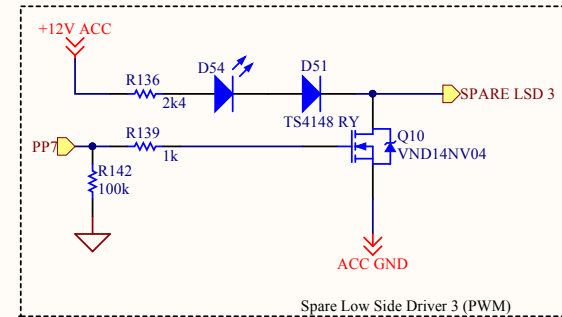
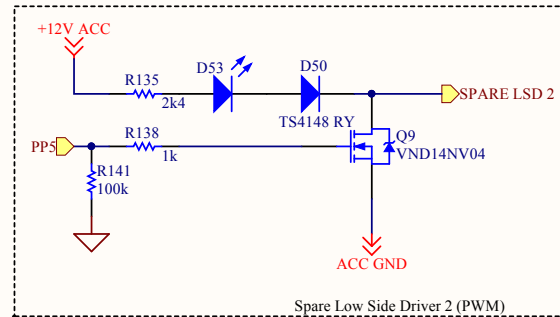
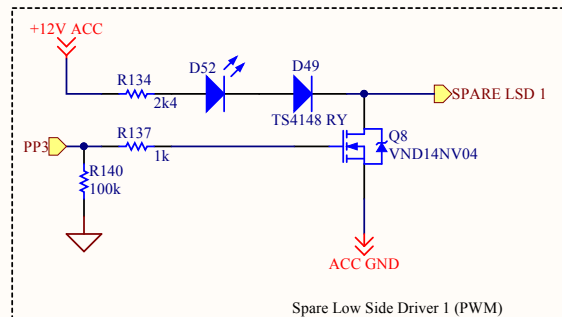
Date: 19-Jun-13 Time: 12:57:40 PM Sheet 10 of 16


Drawn By:  
Dan Visser

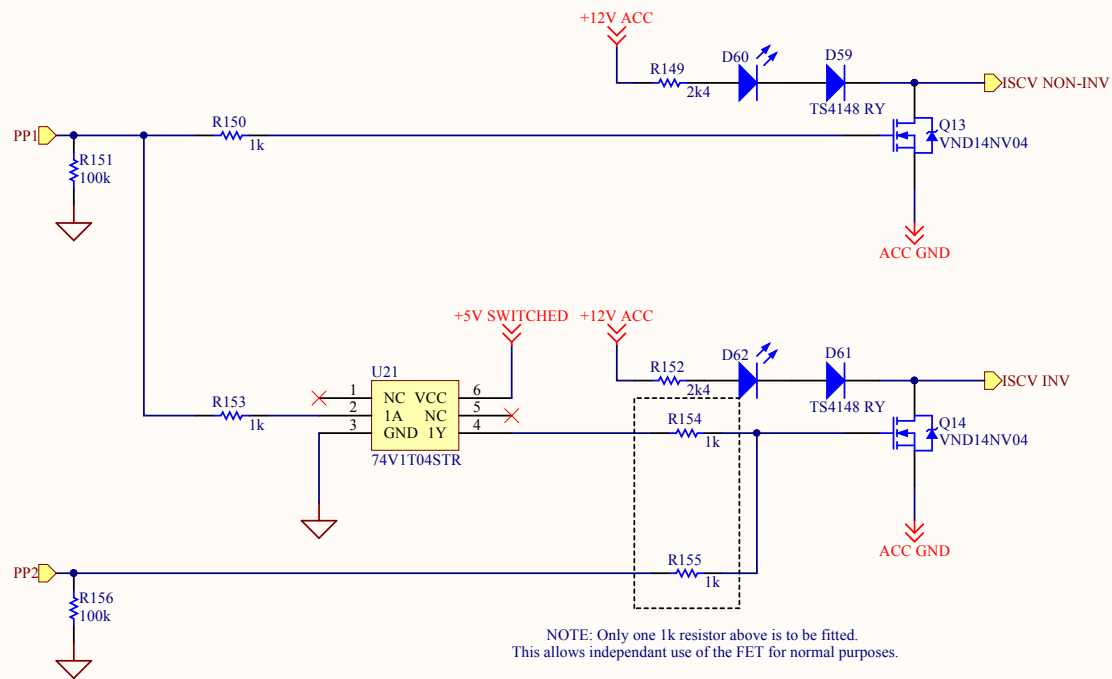
**Altium**



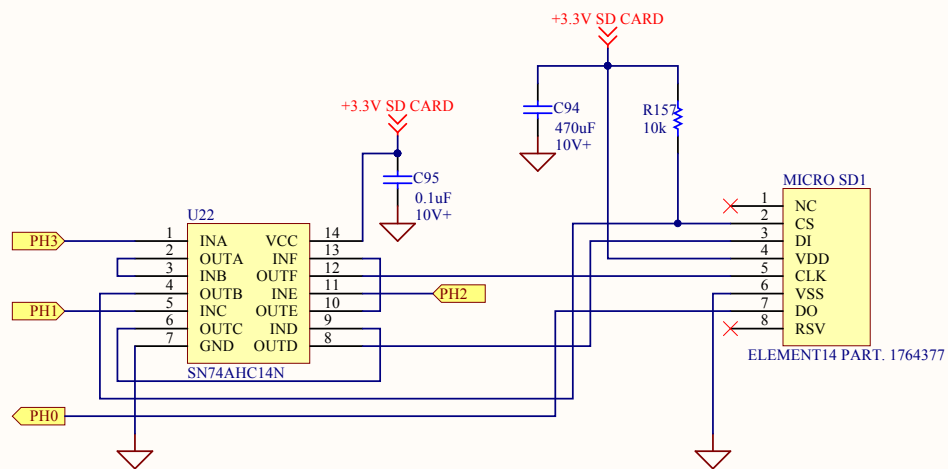
Title <b><i>Ravage - Injectors</i></b>			Drawn By: <i>Dan Visser</i>	
Size: <b>A4</b>	Number: <b>A</b>	Revision: <b>0.1-alpha</b>		
Date: <b>19-Jun-13</b>	Time: <b>12:57:40 PM</b> Sheet <b>11</b> of <b>16</b>			

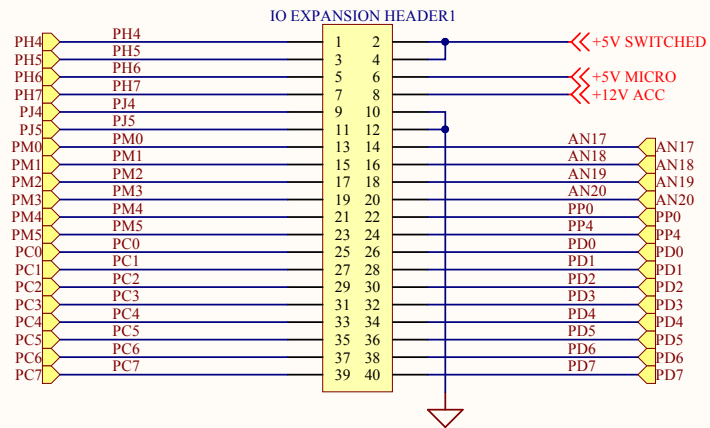



Title <i><b>Ravage - Low Side Drivers</b></i>			Drawn By: <i>Dan Visser</i>	
Size: <b>A4</b>	Number: <b>A</b>	Revision: <b>0.1-alpha</b>		
Date: <b>19-Jun-13</b>	Time: <b>12:57:40 PM</b> Sheet <b>12</b> of <b>16</b>			



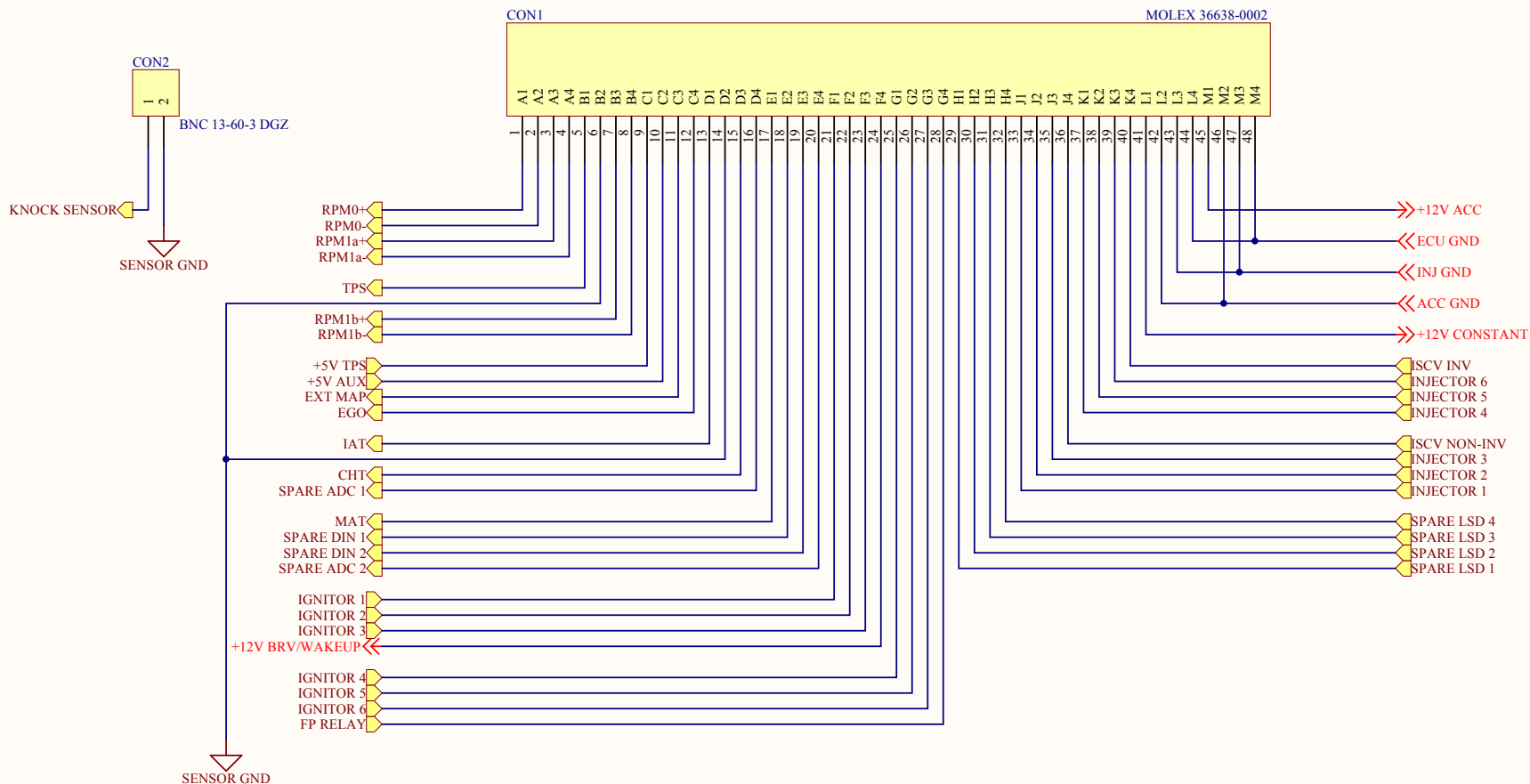
Title <b>Ravage - 3-Wire ISCV Driver</b>			Drawn By: Dan Visser	Altium
Size: A4	Number: A	Revision: 0.1-alpha		
Date: 19-Jun-13	Time: 12:57:40 PM	Sheet 13 of 16		






Title <i><b>Ravage - IO Expansion Header</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>12:57:40 PM</b>	Sheet <b>15</b> of <b>16</b>		

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



Title <b><i>Ravage - Connectors</i></b>			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>12:57:40 PM</b>	Sheet <b>16</b> of <b>16</b>		



