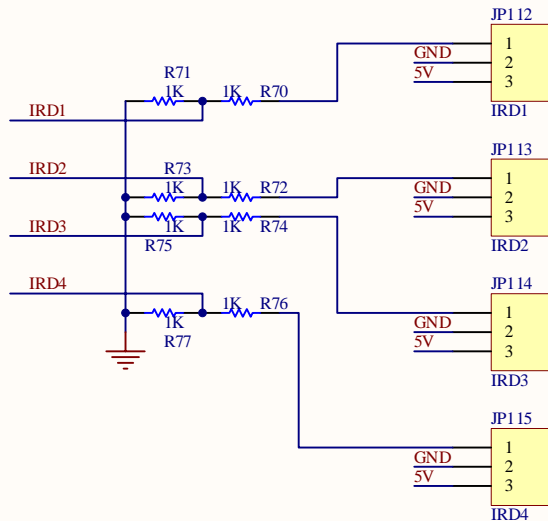
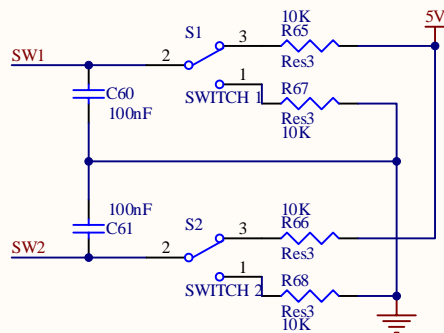


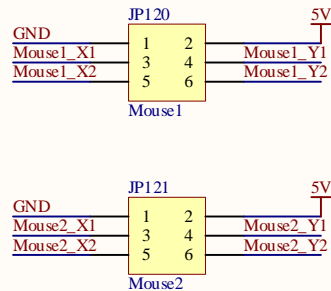
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Size	Number	Revision	
A3	01	A01	
Date:	23-May-07	Sheet of	
File:	C:\Documents and Settings\...Microcontroller_and_Memory.SCHDOC		



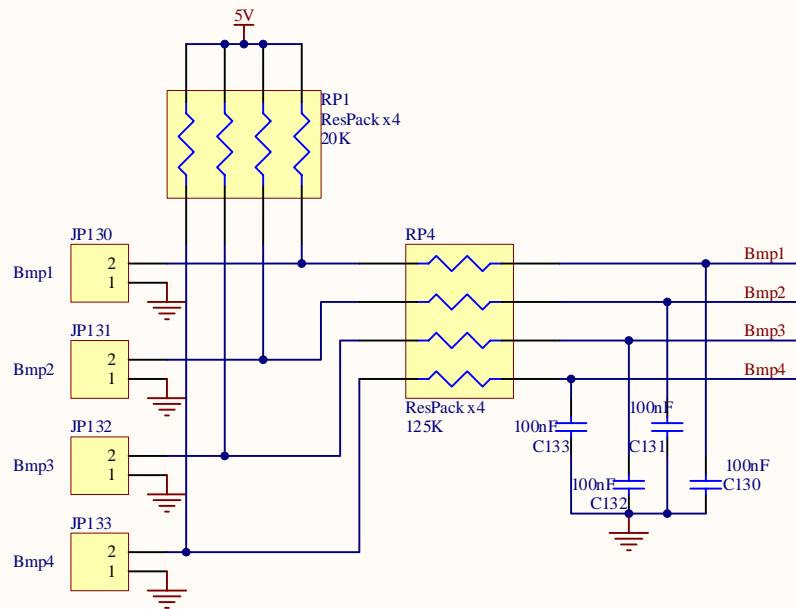
IR Range Inputs



Momentary switches

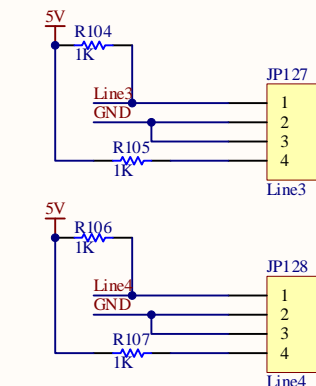
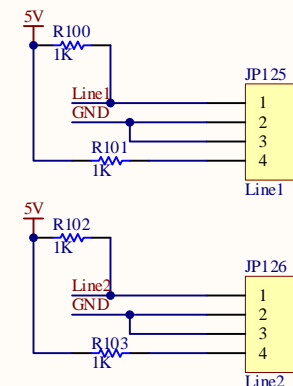


Mouse Sensors



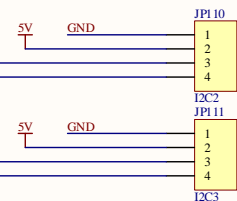
Bump Sensors

Normally Open switches

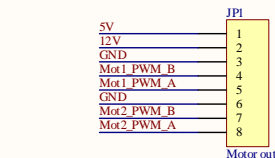
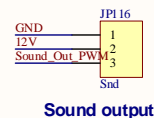


Line Sensors

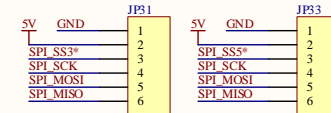
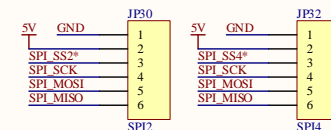
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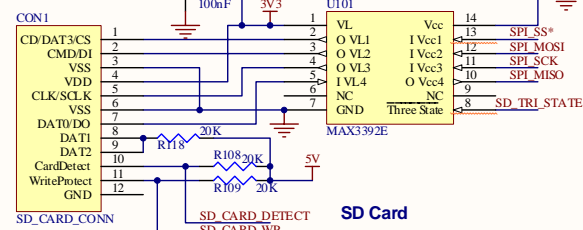
## I<sup>2</sup>C Serial Interface



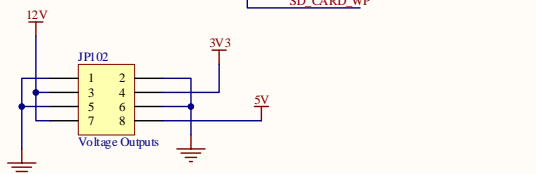
## Motor Control



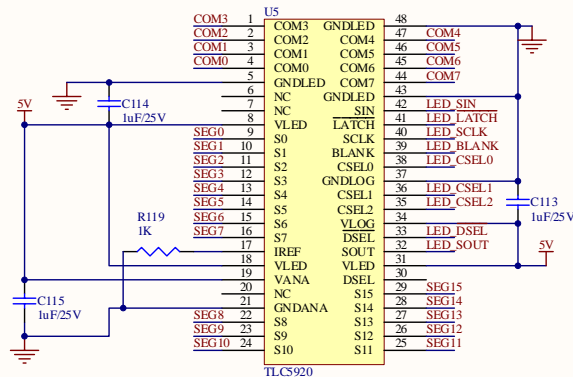
**SPI Serial**  
**SPI\_SS\*** is used for the SD Card



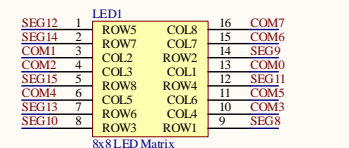
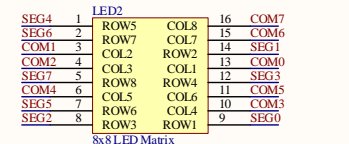
SD Card



## Regulated Voltage Outputs

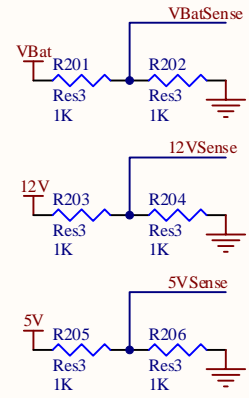
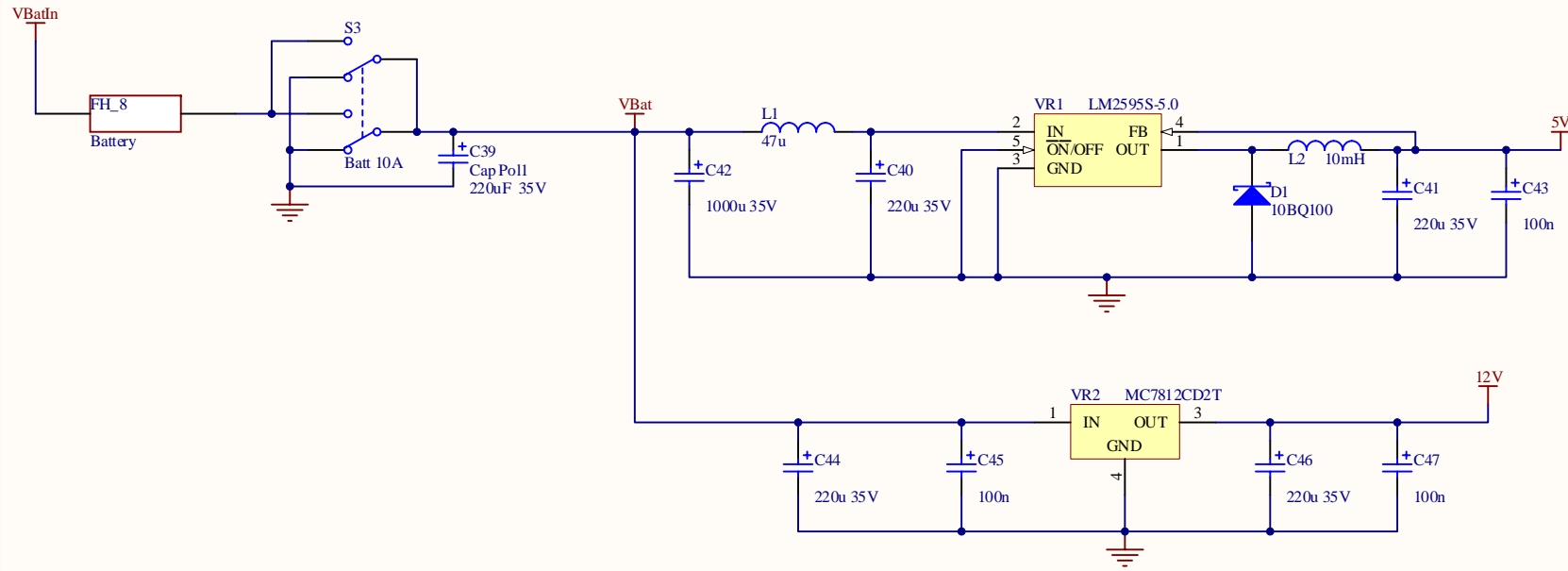


## LED Matrix

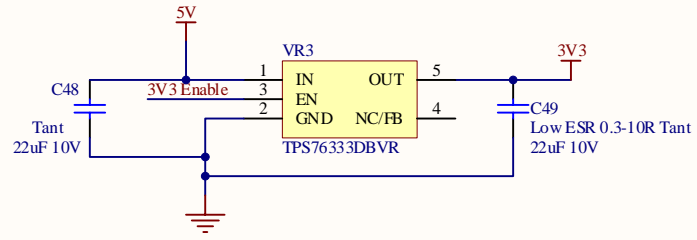


Using Common Cathode where Coms is the Columns and Segments is the rows.  
Seg 0-7 is LED 1, Seg 8-15 is LED2  
1k resistor sets current approx equal to 13mA per LED or 208mA total  
SOUT to be connected to a via in case it is needed but there is a lack of pins and it only mirrors the SIN input

Title Sumo_Interfaces_and_Connectors		
Size A3	Number 05	Revision A01
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File: C:\Documents and Settings\ Interfaces and Connectors\SCHDOC		



**Voltage Monitoring**



Title			Sumo_Power_Regulation_and_Protection	
Size	A4	Number	02	Revision
Date:		23-May-07		Sheet of
File:		C:\Documents and Settings\...\Power Regulation and Protection.SCHDOC		A01

