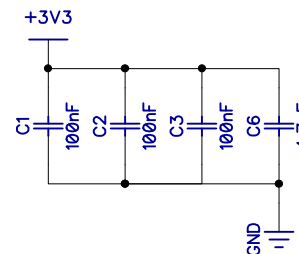
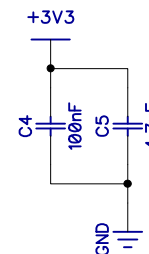


MCU pin capacitors

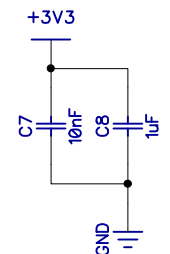
3xVDD pin caps



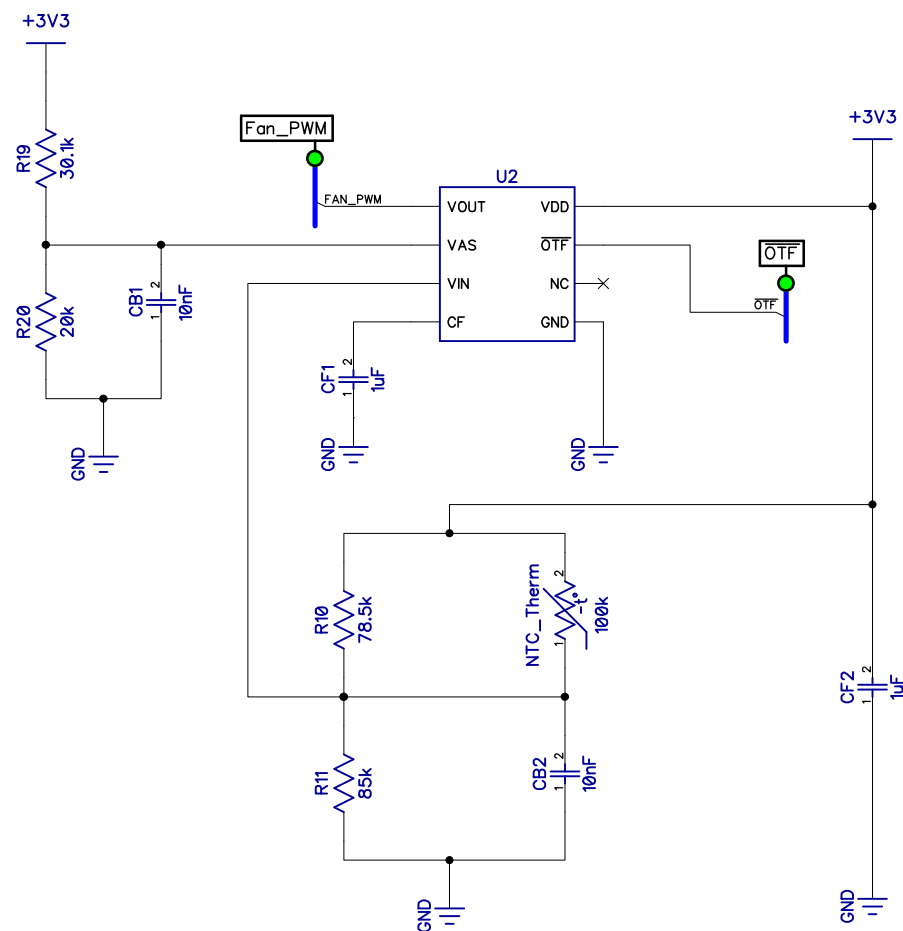
VDDIO2 pin caps



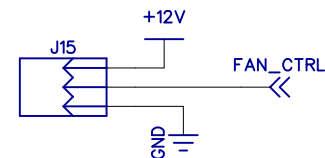
VDDA pin caps



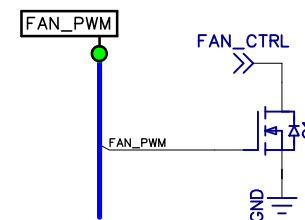
UW Mars Rover		
Size	Limit Switch & Fan Controller	Rev
A 1:1	MicroController	1.0
January 25, 2018		Drawn by JHR
LimSw_FanCon_V4.dch		Sheet 1 of 7



Fan Control

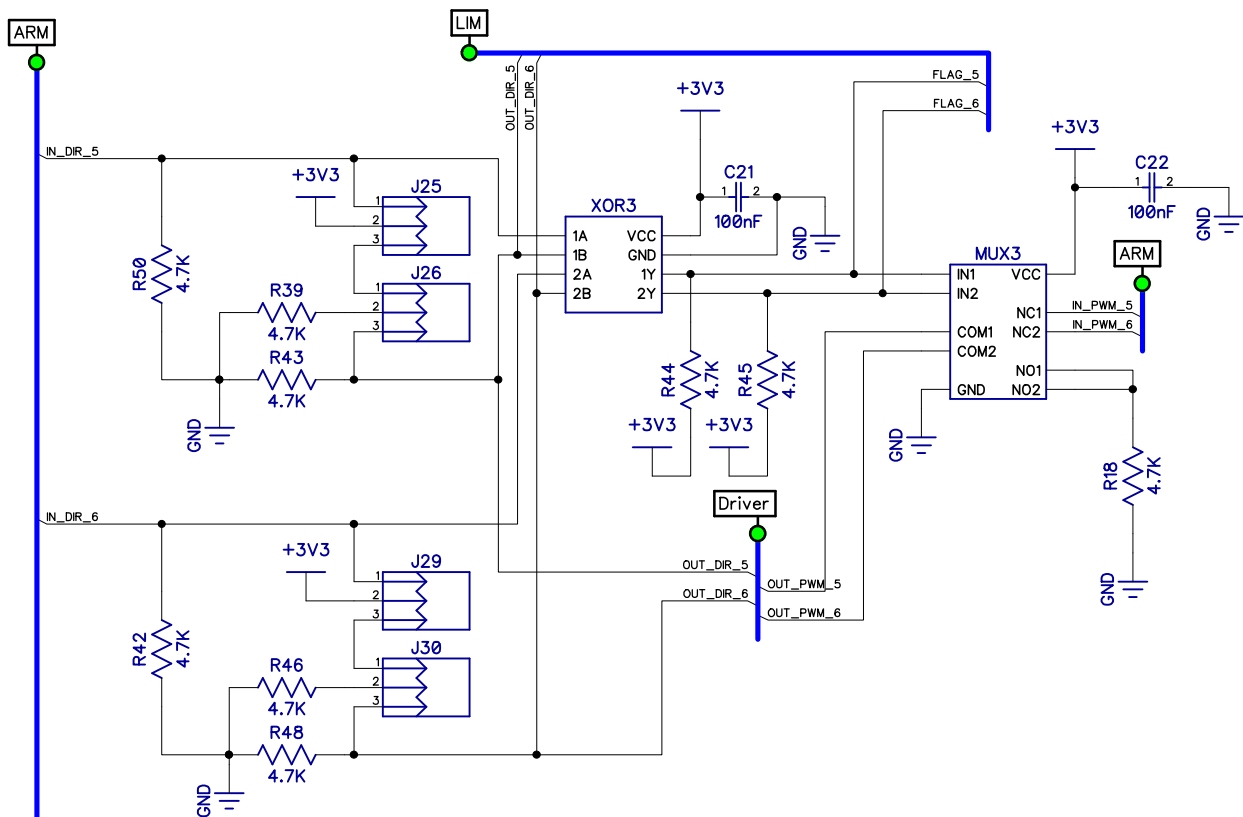


Fan FET



Based on the design on page 9 (Figure 5-1) in the TC648 Datasheet: <http://ww1.microchip.com/downloads/en/DeviceDoc/21448D.pdf>

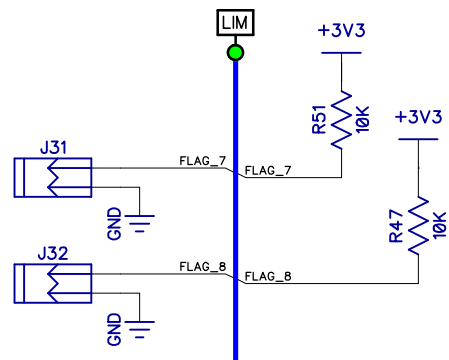
UW Mars Rover		
Size	Limit Switch and Fan Controller	Rev
A 1:1	Fan Controller	1.0
January 25, 2018		Drawn by JHR
LimSw_FanCon_V4.dch		Sheet 2 of 7



Either 3V3 or GND limit switch should be shorted across 1 and 3 for unidirectional limiting

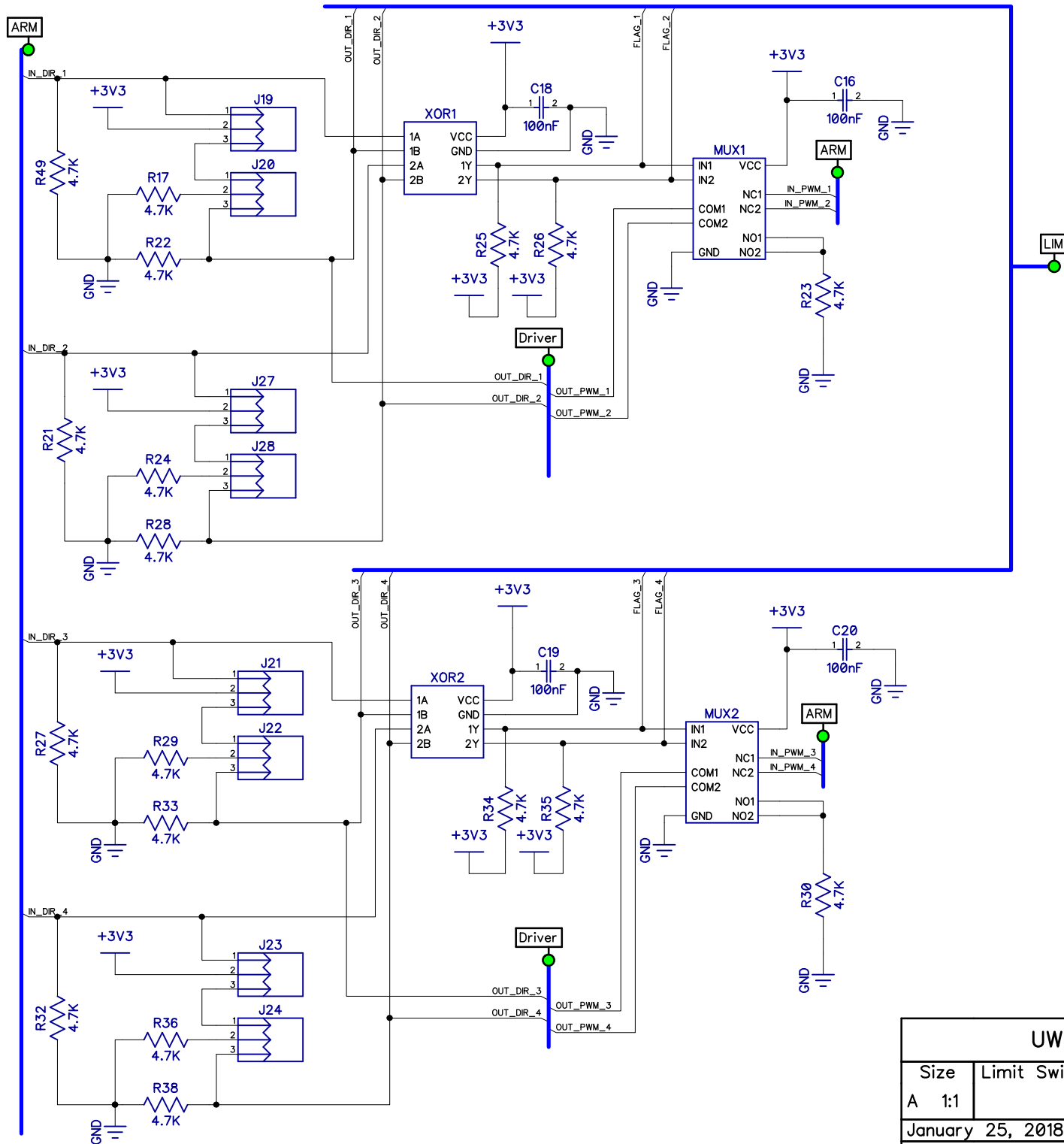
1: NC, 2: NO, 3: COM on SPDT limit switch

Limit Monitoring



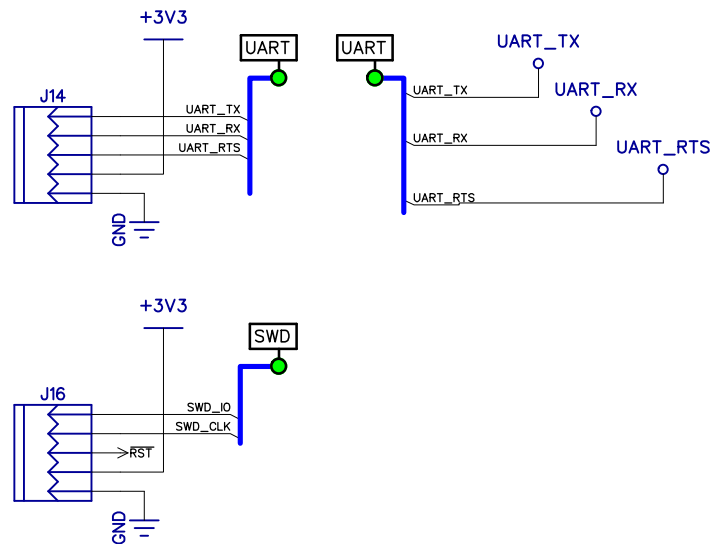
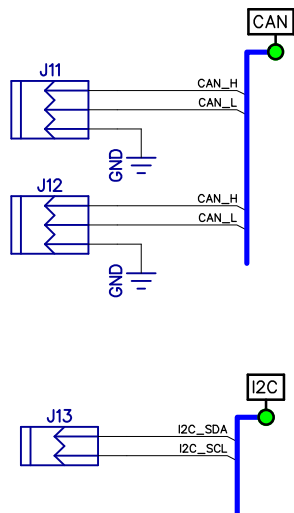
3V3 to NO, GND to COM

UW Mars Rover		
Size	Limit Switch & Fan Controller	Rev
A 1:1	Limits 1	1.0
January 25, 2018		Drawn by JHR
LimSw_FanCon_V4.dch		Sheet 3 of 7

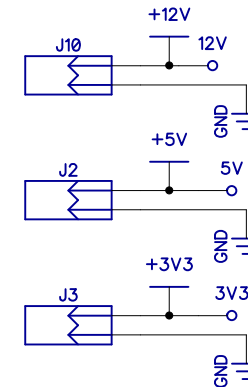


UW Mars Rover		
Size	Limit Switch & Fan Controller	Rev
A 1:1	Limits 2	1.0
January 25, 2018		Drawn by JHR
LimSw_FanCon_V4.dch		Sheet 4 of 7

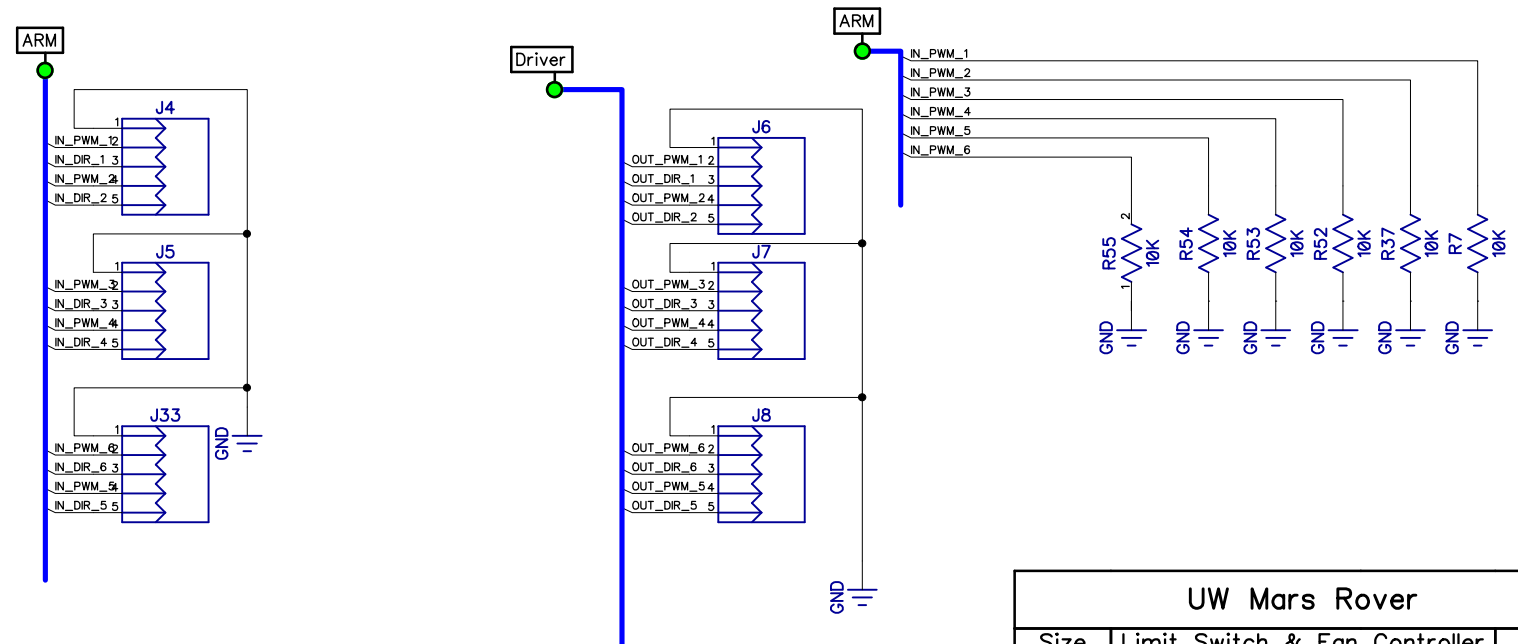
Communications Connectors



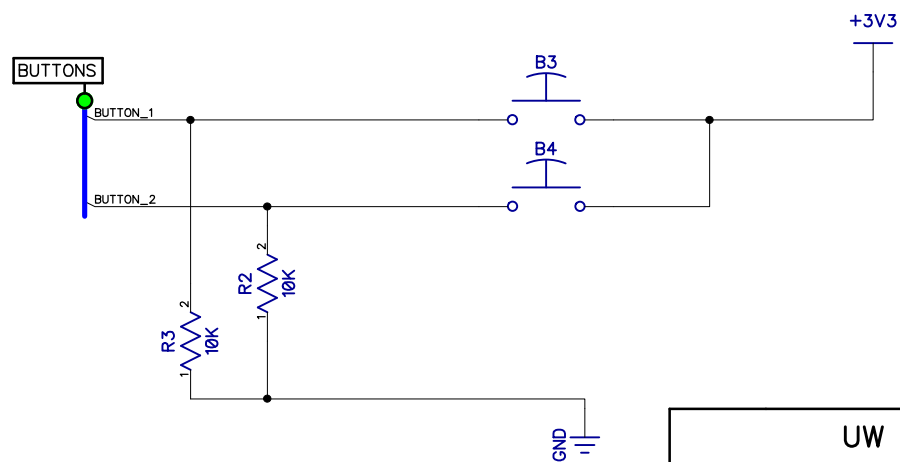
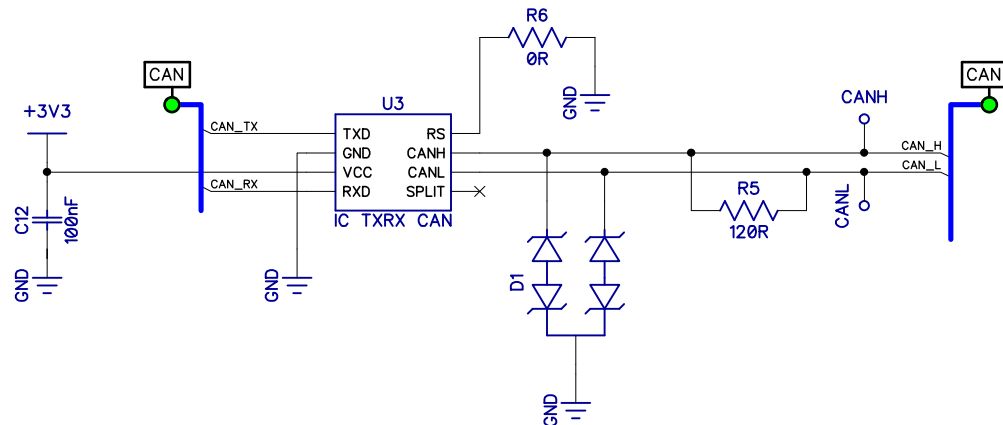
Power Connectors



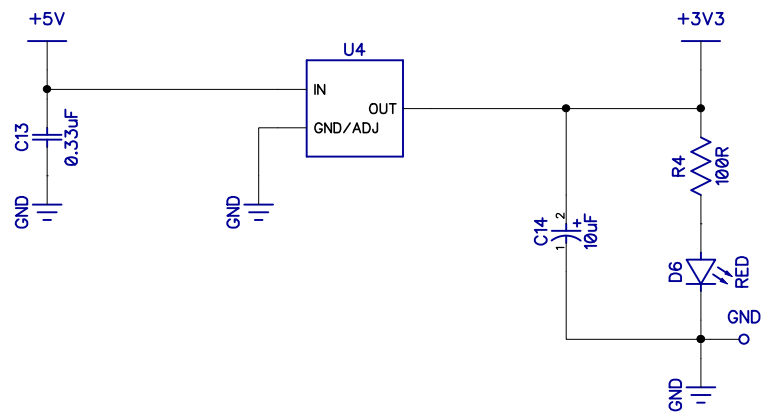
PWM pull-downs



UW Mars Rover		
Size A 1:1	Limit Switch & Fan Controller Connections	Rev 1.0
January 25, 2018		Drawn by JHR
LimSw_FanCon_V4.dch		Sheet 5 of 7



UW Mars Rover		
Size A 1:1	Limit Switch & Fan Controller Support	Rev 1.0
January 25, 2018		Drawn by JHR
LimSw_FanCon_V4.dch		Sheet 6 of 7



UW Mars Rover		
Size	Limit Switch & Fan Controller	Rev
A 1:1	Power	1.0
January 25, 2018		Drawn by JHR
LimSw_FanCon_V4.dch		Sheet 7 of 7