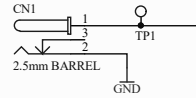
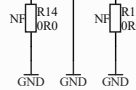
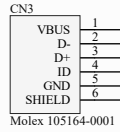


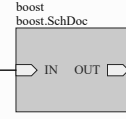
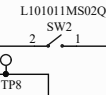
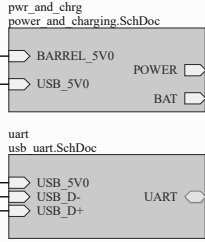
5V Barrel Jack



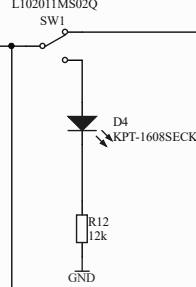
Micro USB



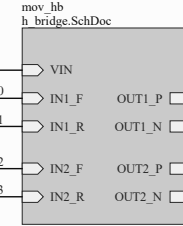
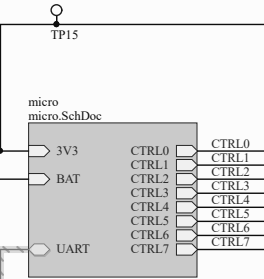
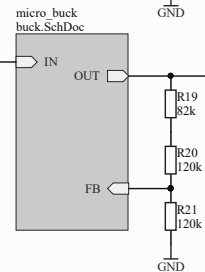
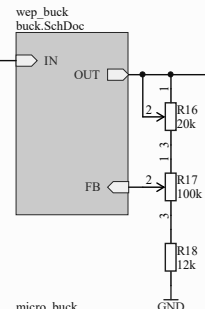
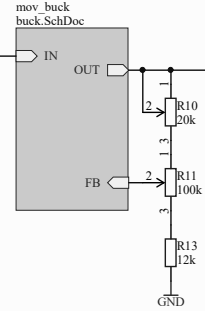
Master Power



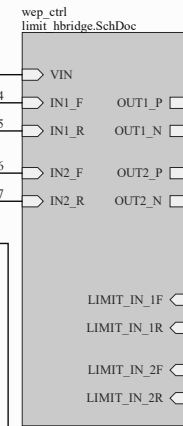
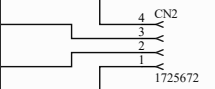
Arming



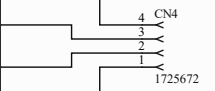
Rail Adjust



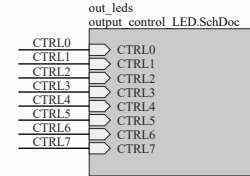
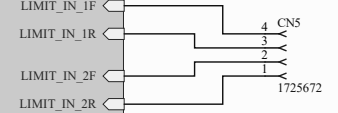
Movement Motors



Weapon outputs



Limit Switches



Title		
Size	Number	Revision
A3		
Date:	24/01/2021	Sheet of
File:	Main.SchDoc	Drawn By:

TABLE 6-1: STATUS OUTPUTS

Charge Cycle State	STAT1	STAT2	PG
Shutdown	Hi-Z	Hi-Z	Hi-Z
Standby	Hi-Z	Hi-Z	L
Charge in Progress	L	Hi-Z	L
Charge Complete (EOC)	Hi-Z	L	L
Temperature Fault	Hi-Z	Hi-Z	L
Timer Fault	Hi-Z	Hi-Z	L
System Test Mode	L	L	L

Input Select

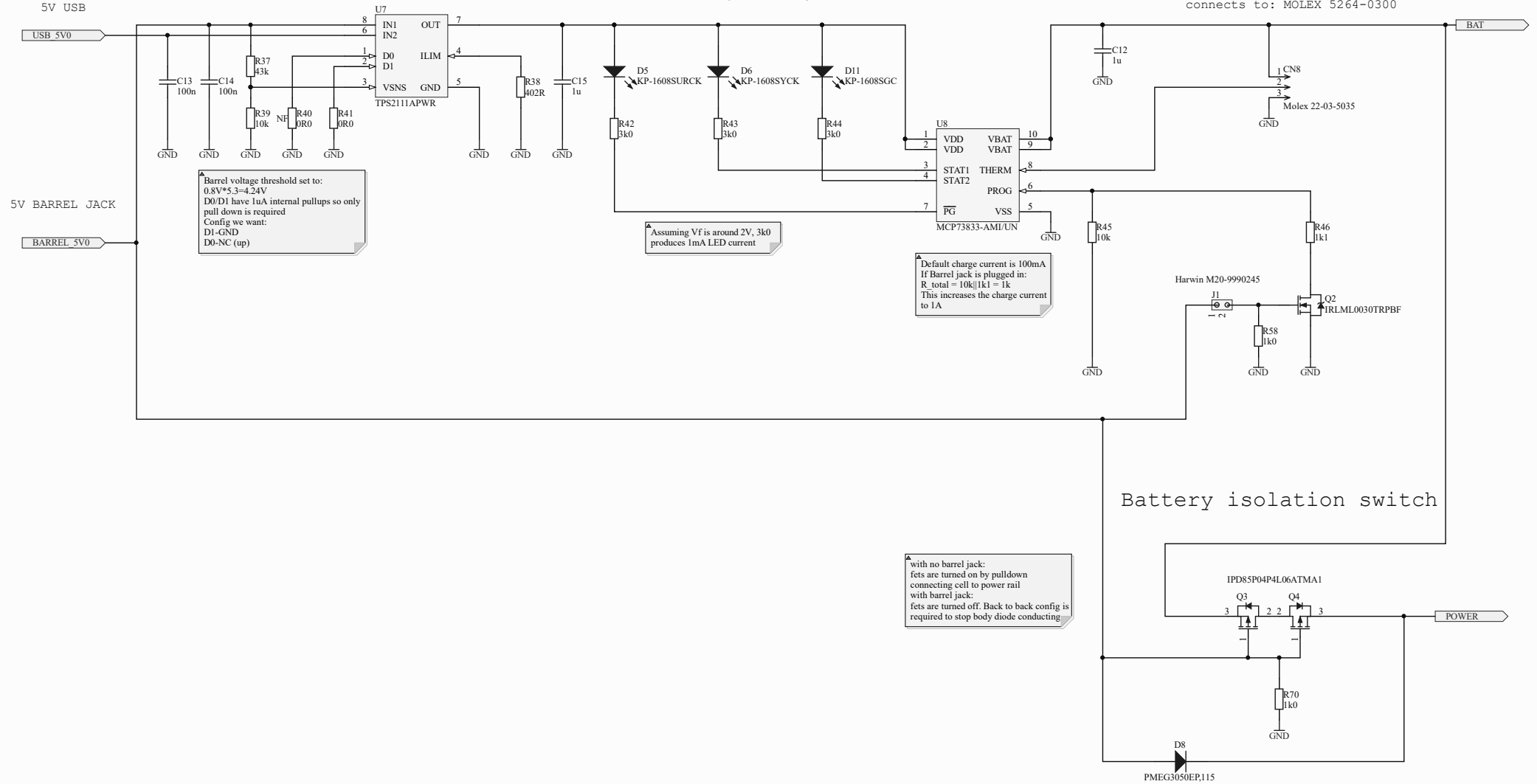
Charging Status LEDs

Battery Charger

Battery connector

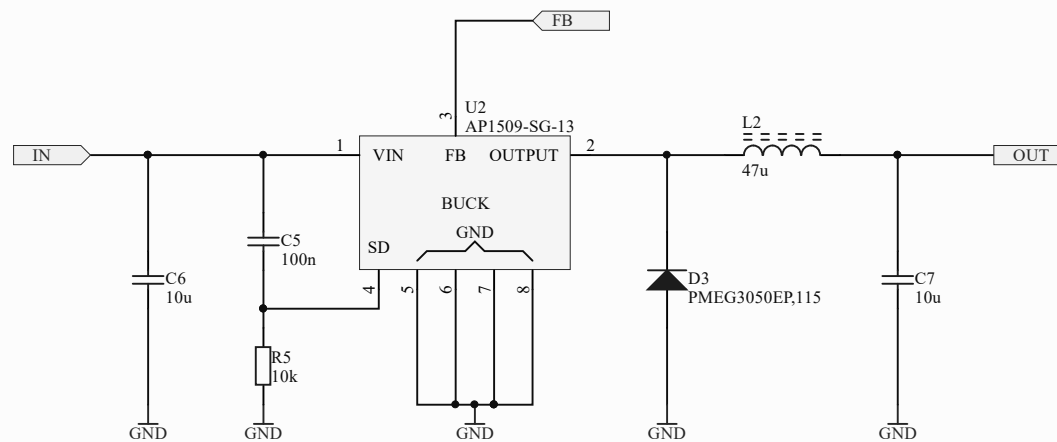
power connected charging done!
RED YELLOW GREEN

Molex Mini-SPOX 5267 series
connects to: MOLEX 5264-0300



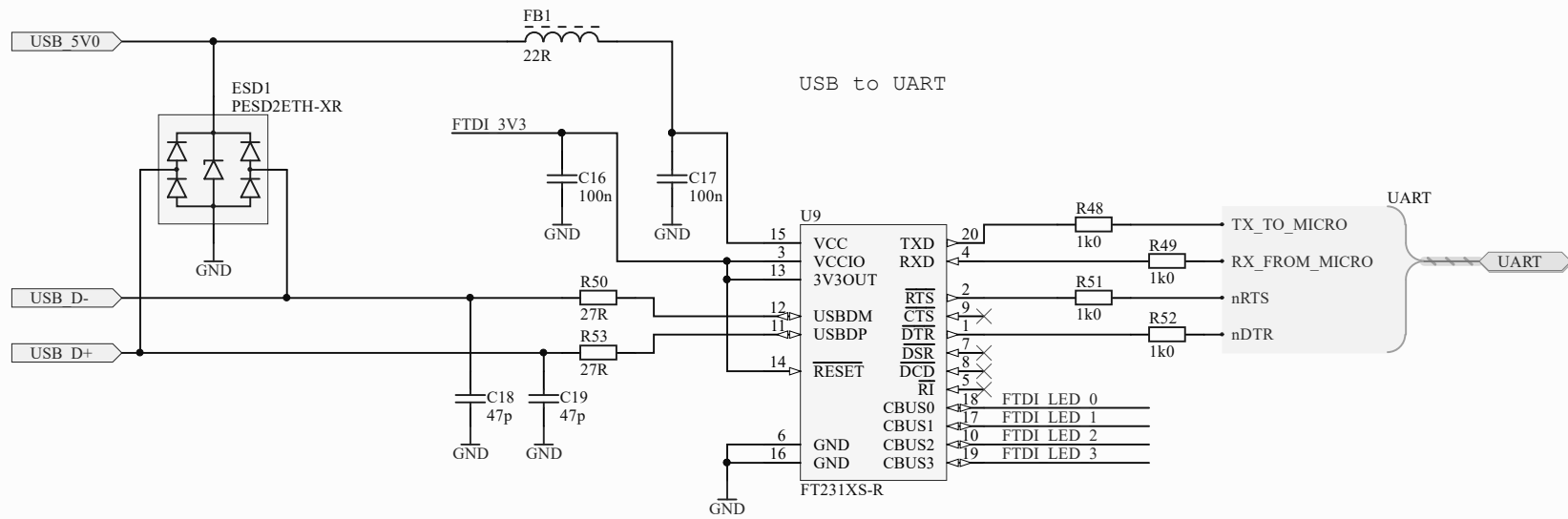
Title		
Size	Number	Revision
A3		
Date:	24/01/2021	Sheet of
File:	power_and_charging.SchDoc	Drawn By:

ADJUSTABLE STEP DOWN CONVERTER



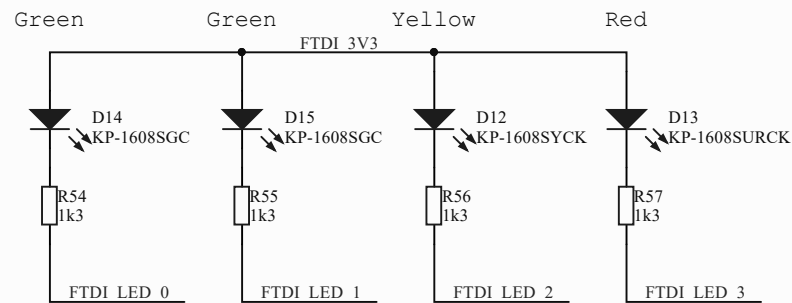
Title		
Size	Number	Revision
A4		
Date:	24/01/2021	Sheet of
File:	buck.SchDoc	Drawn By:

USB Pins



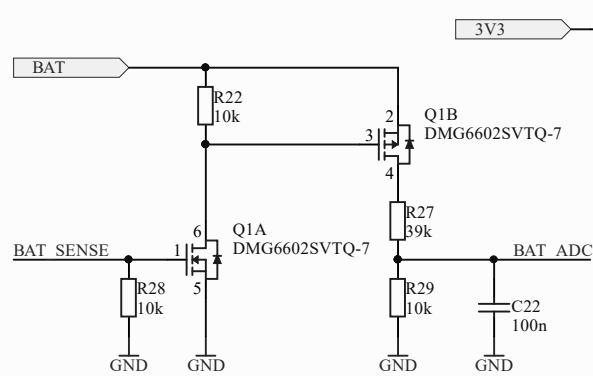
UART LEDs

(only powered when USB is connected)

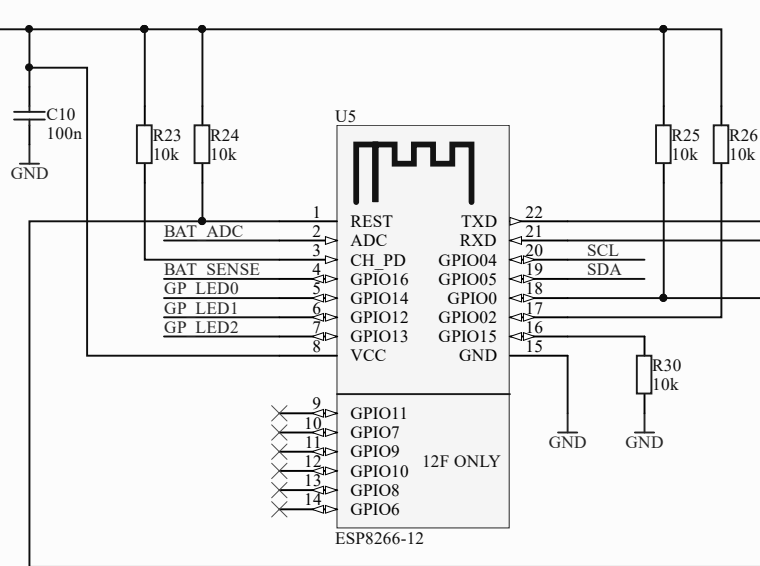


Title		
Size	Number	Revision
A4		
Date:	24/01/2021	Sheet of
File:	usb_uart.SchDoc	Drawn By:

Battery Voltage Sense

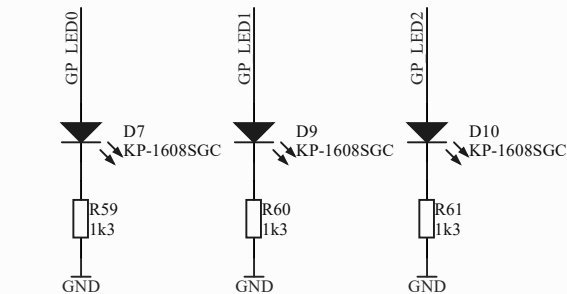


Microcontroller

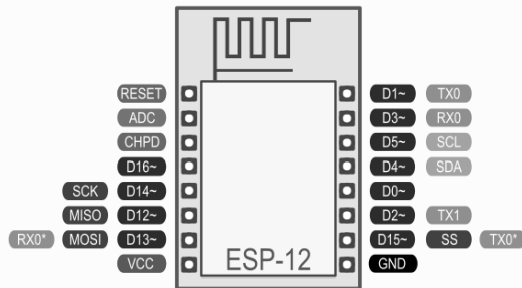
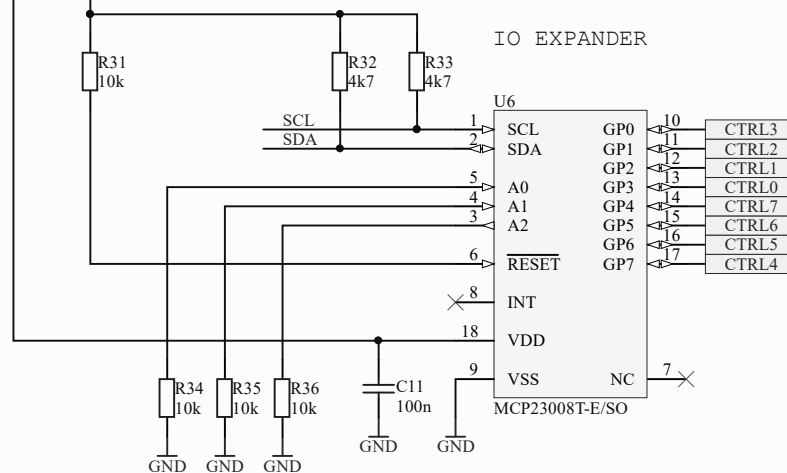


Analogue input full scale range is:
0.0 - 1.0V
39k + 10k means 4.9V > 1.0V

General Purpose Blinky Lights



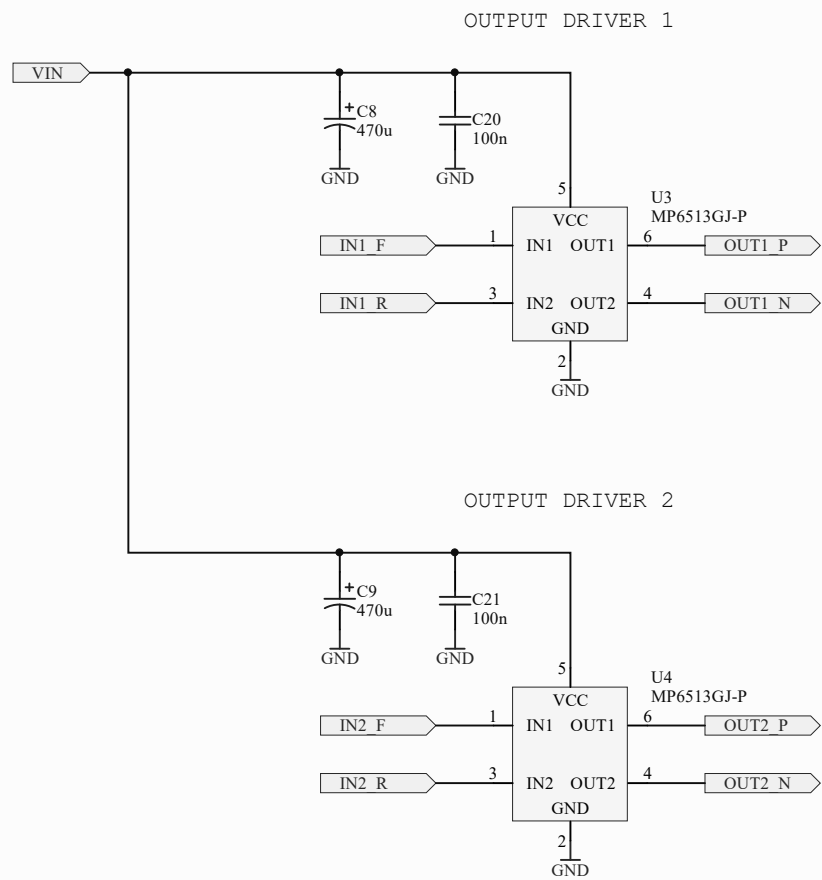
IO EXPANDER



Pin Functions

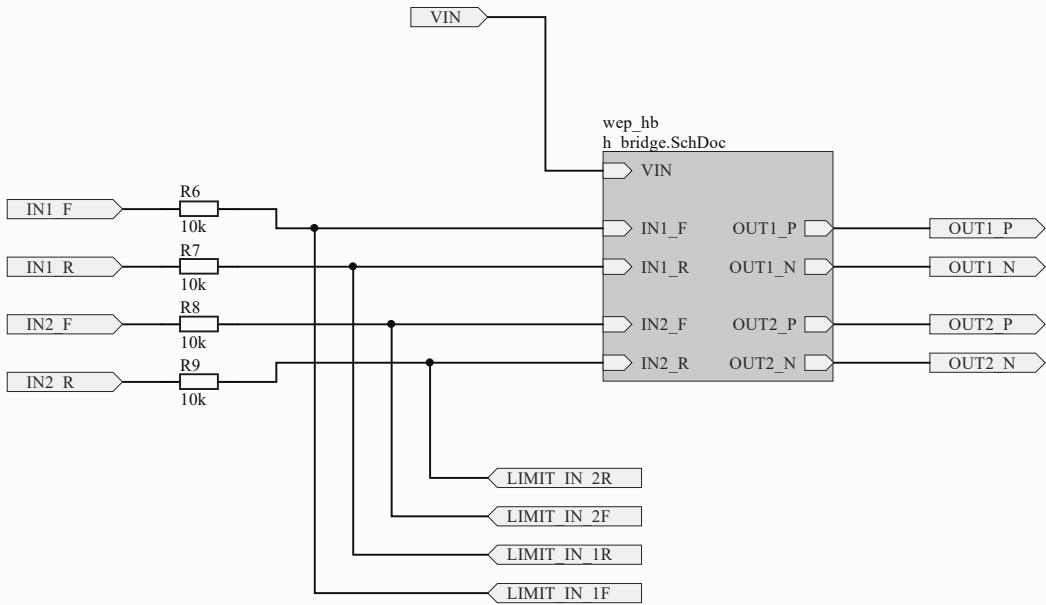
Title		
Size	Number	Revision
A4		
Date:	24/01/2021	Sheet of
File:	micro.SchDoc	Drawn By:

Table 1: Input Logic Truth Table				
IN1	IN2	OUT1	OUT2	Function (DC Motor)
L	L	Z	Z	Coast
L	H	L	H	Reverse
H	L	H	L	Forward
H	H	L	L	Brake



Title			
Size	Number		Revision
A4			
Date:	24/01/2021	Sheet of	
File:	h bridge.SchDoc	Drawn By:	

Table 1: Input Logic Truth Table				
IN1	IN2	OUT1	OUT2	Function (DC Motor)
L	L	Z	Z	Coast
L	H	L	H	Reverse
H	L	H	L	Forward
H	H	L	L	Brake



Title		
Size	Number	Revision
A4		
Date:	24/01/2021	Sheet of
File:	limit_hbridge.SchDoc	Drawn By:

