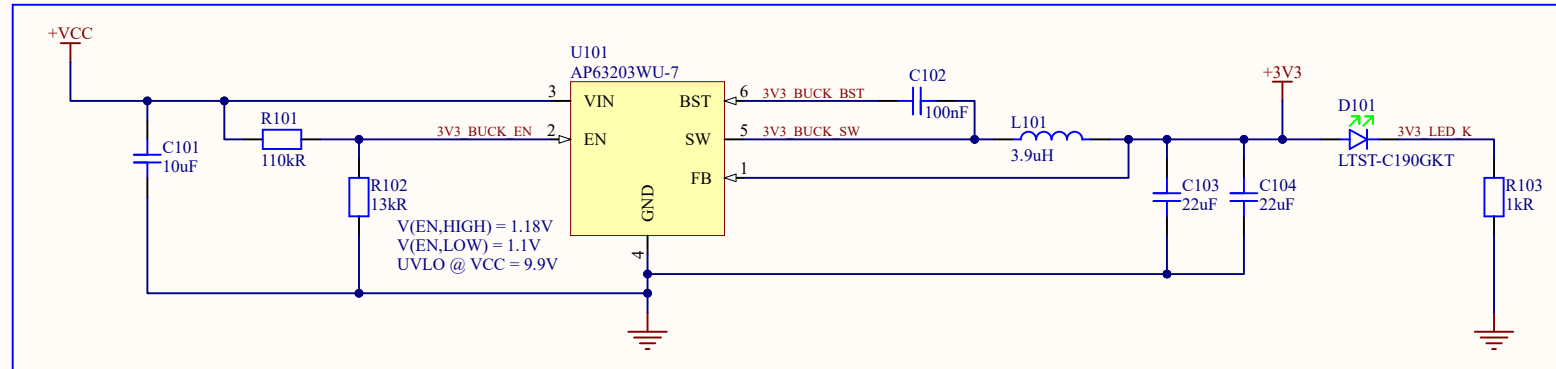
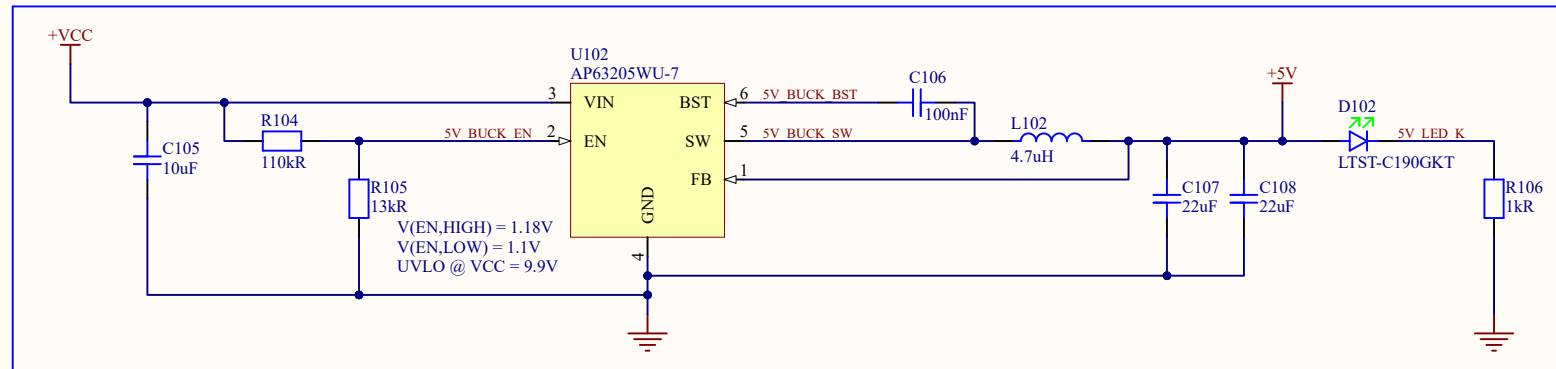


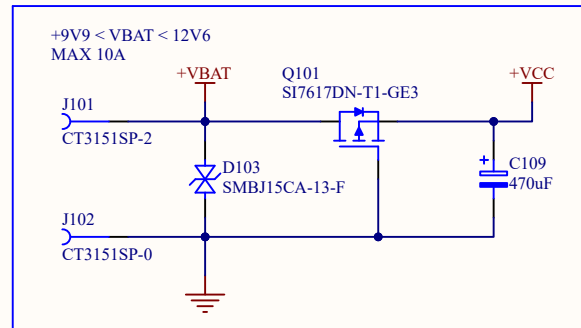
## VCC TO 3V3



## VCC TO 5V



## BATTERY CONNECTOR



### BUCK CONVERTERS INDUCTOR VALUE

$$L = \frac{V(OUT) * (V(IN) - V(OUT))}{V(IN) * I(L, rip) * F(SW)}$$

Where:

I(L, RIP): Inductor ripple current

F(SW): Buck converter switching frequency

Given that:

$$I(OUT) = 2A$$

$$L(3.3V) = \frac{3.3V * (12.6V - 3.3V)}{(12.6V * 30\% * 2A * 1.1MHz)}$$

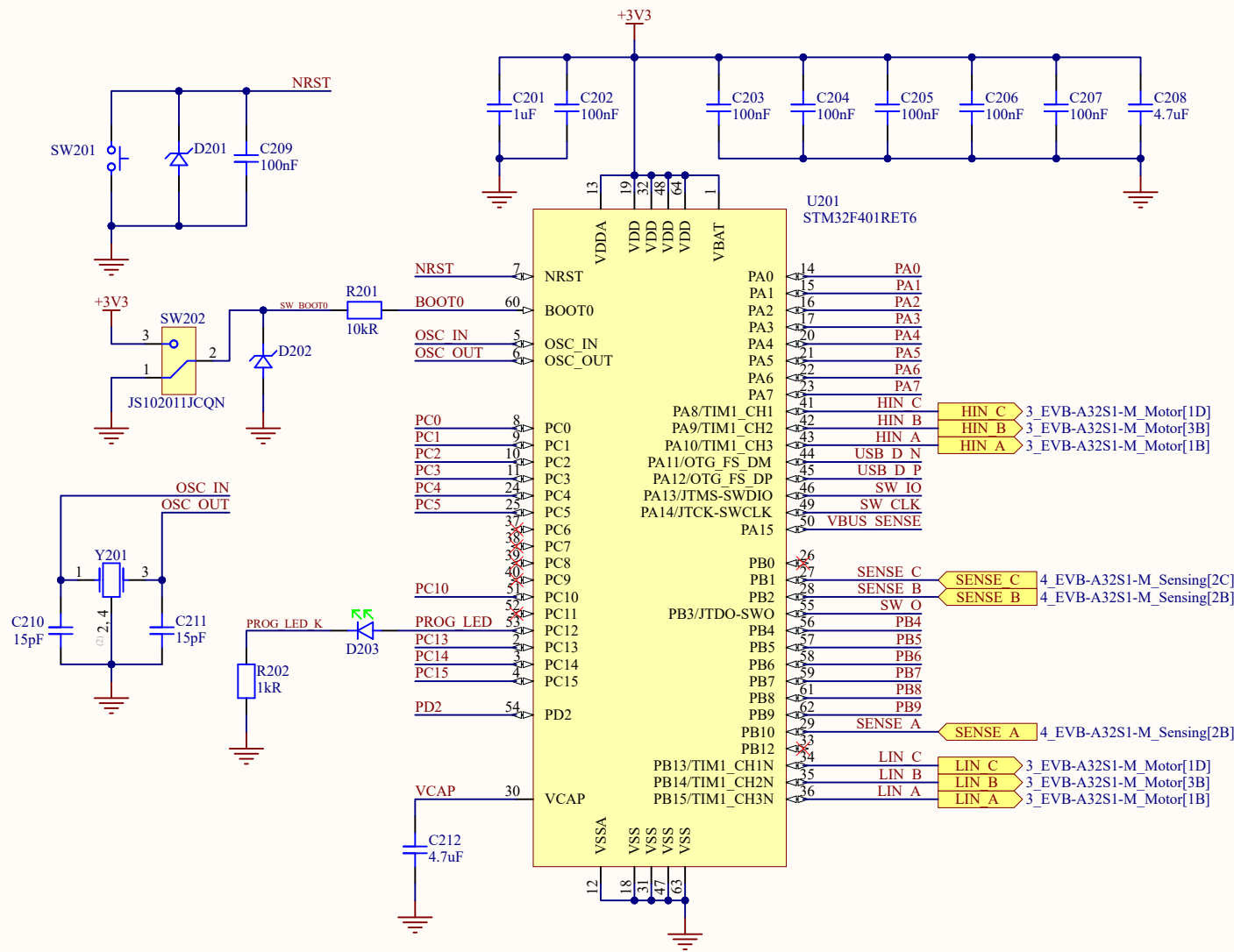
$$L(5V) = \frac{5V * (12.6V - 5V)}{(12.6V * 30\% * 2A * 1.1MHz)}$$

$$I(L, PEAK) = I(LOAD) + (I(L, RIP) / 2)$$

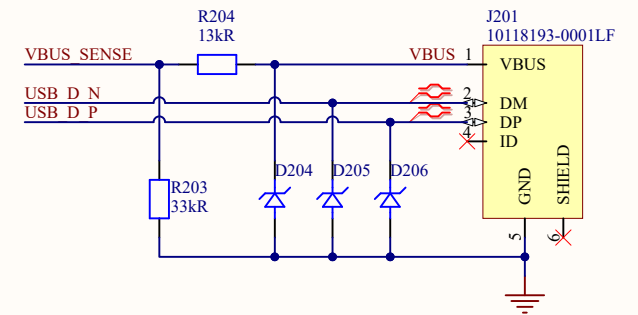
$$I(L, PEAK) = 2A + 0.3A$$

Title EVB-A32S1-M		Company Dennis Micro Computers	
Size A4	Number *		Revision 0.2
Date: 15/11/2024	Sheet 1 of 4		
Doc: 1_EVB-A32S1-M_Power.SchDoc	Drawn by: Dennis C. M.		

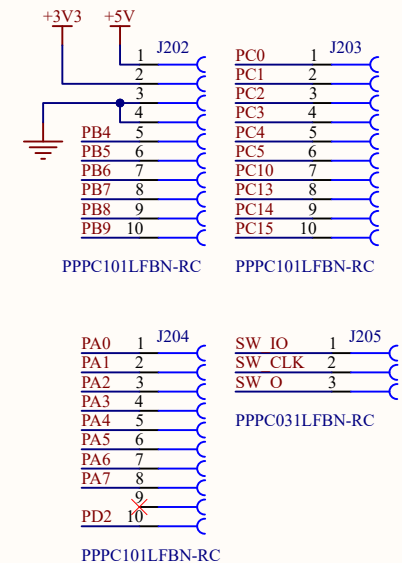
# MCU



# USB



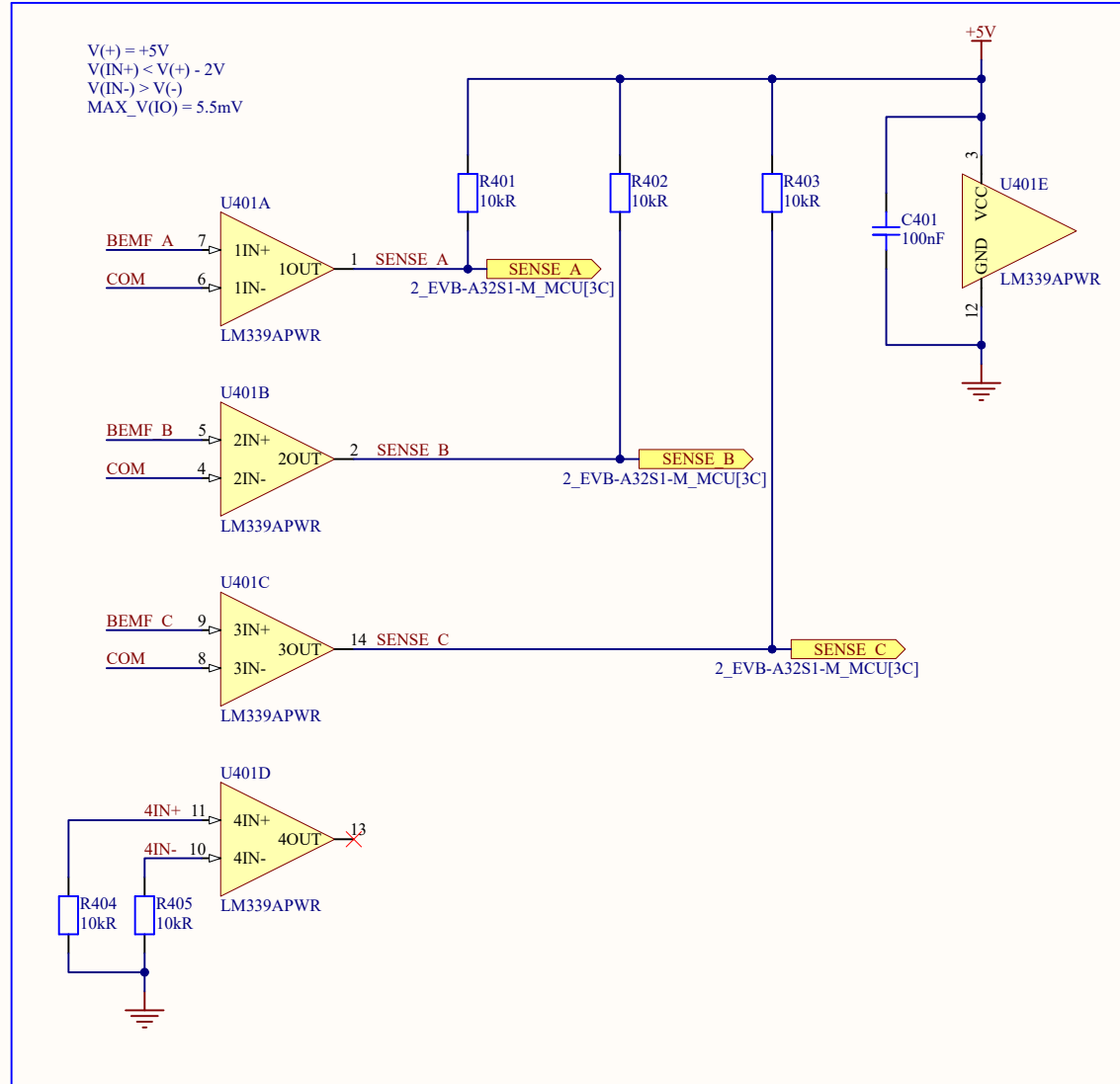
# CONNECTORS



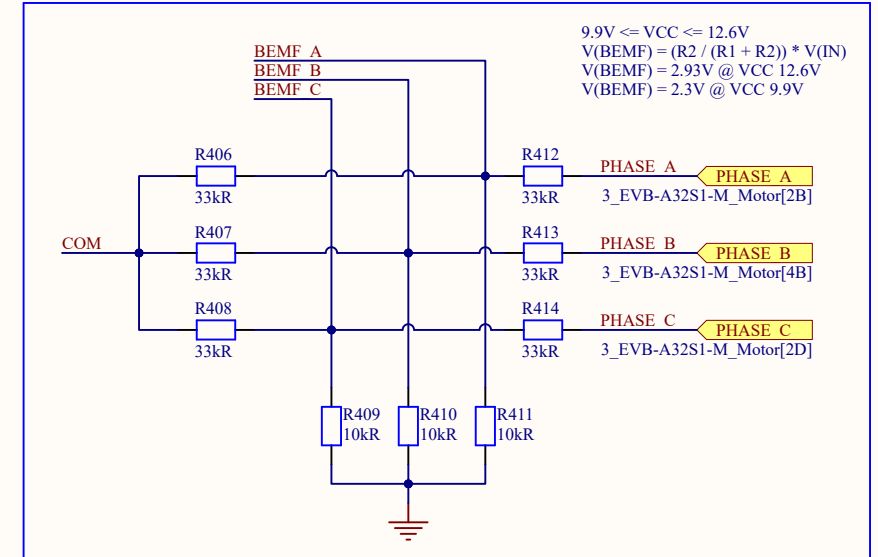
Title EVB-A32S1-M		Company Dennis Micro Computers	
Size A4	Number *	Revision 0.2	
Date: 15/11/2024		Sheet 2 of 4	
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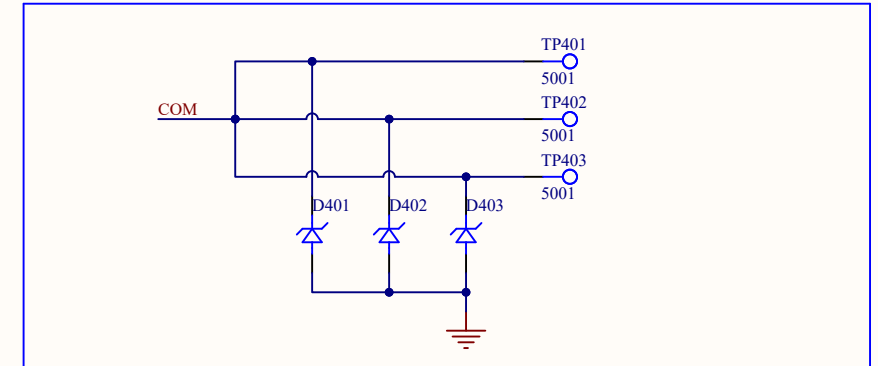
## COMPARATOR



## VOLTAGE DIVIDER



## TEST POINTS



Title EVB-A32S1-M		Company Dennis Micro Computers	
Size A4	Number *	Revision 0.2	
Date: 15/11/2024		Sheet 4 of 4	
Dob: 4_EVB-A32S1-M_Sensing.SchDoc		Drawn by: Dennis C. M.	