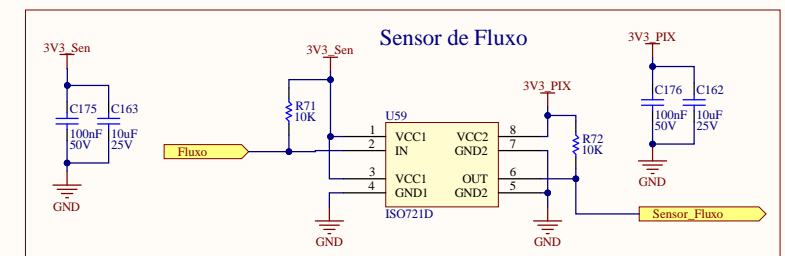


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<https://www.analog.com/en/analog-dialogue/articles/staying-well-grounded.html>

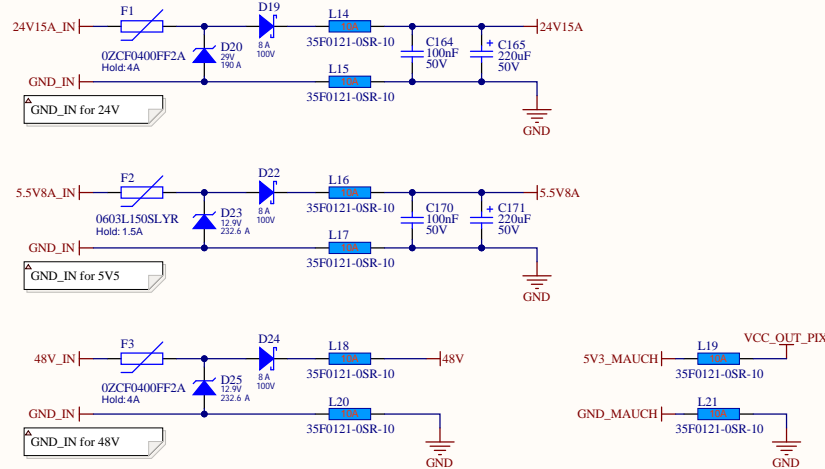
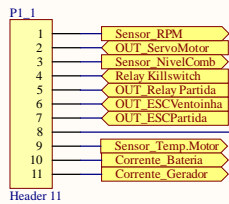
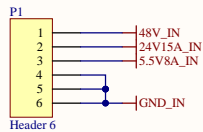
Título Extras.SchDoc			Autor: Daniel Zidoi de Moura		XRobots
Tamanho: A3			Verificado: -----		Rodovia Washington Luiz, NORTE KM 226 + 738 m – Centro Logístico Modenur
Data: 22/02/2022			Hora: 15:05:23		São Carlos - SP
Autorizado: -----			Folha 2 de 12		CEP 13566-970
File: C:\Users\Tales\Documents\Somens\I&D_Hardware\projects\pixAFNGS\pixAFNGS\Extras.SchDoc			Brasil		

PixAFNGS 2.1.0

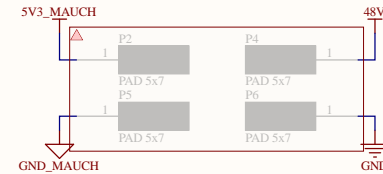
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Conexão MPU

Conectores tipo Phoenix



Power Supply Mauch



* Usar trilha 48V para 8A potencia da Mauch

Utilizado o BEC Mauch 5,3V 4-14S

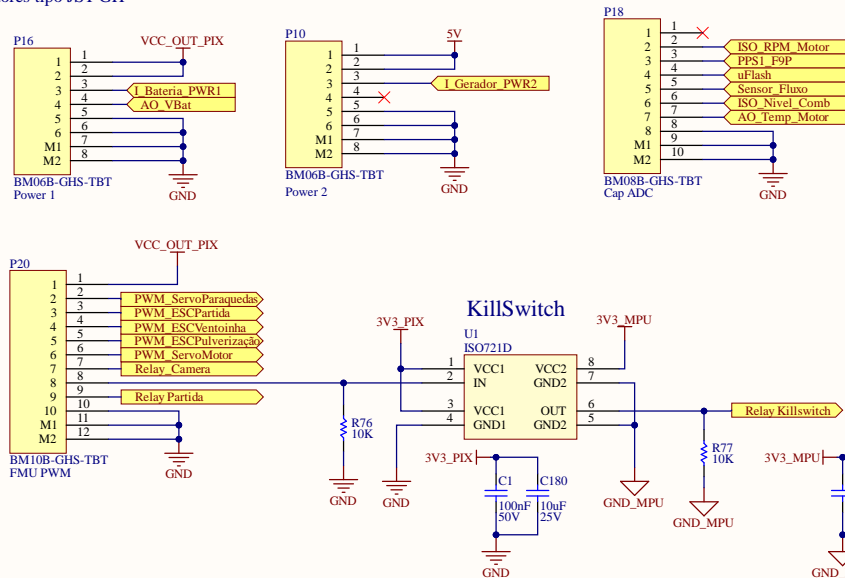
<https://www.craftandtheoryllc.com/store/mauch-084-4-14s-hyb-bec-5-30v-df-13-4p/>

IPC-2222 Hole Size / Annular Rings

Cannot open file ClipboardPicture25/08/2021 09:56:32. File does not exist.

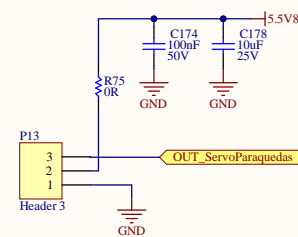
Conexão Pixhawk 4

Conectores tipo JST-GH

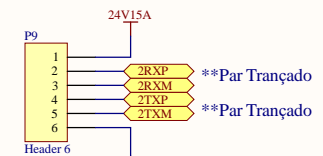


Conexão Rotores e Paraquedas

- Conectores tipo Barra de pinos



Conector Routerboard

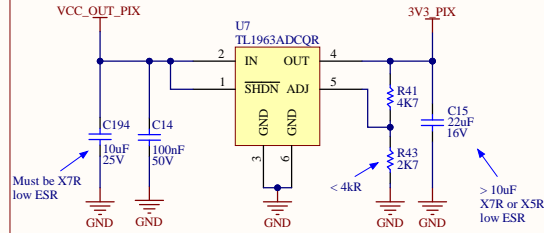


Suporte Pixhawk D25

Título Sch1 - Conectores.SchDoc			Autor: Daniel Zidoi de Moura		XRobots Rodovia Washington Luiz, NORTE KM 226 + 738 m – Centro Logístico Modernut São Carlos - SP CEP 13566-970 Brasil
Tamanho: A3	Registro: -----	Revisão: --	Verificado: -----		
Data: 22/02/2022	Hora: 15:05:23	Folha 3 de 12	Autorizado: -----		
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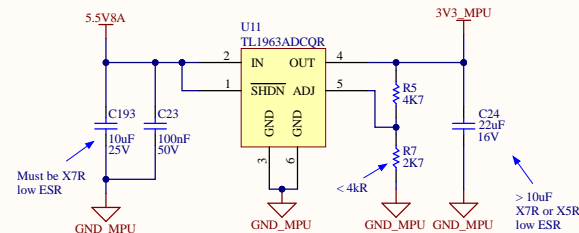
Regulador de Tensão 3.3V

Referência Pixhawk (entradas)



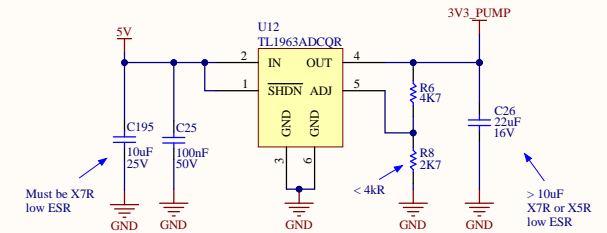
Regulador de Tensão 3.3V

Referencia MPU (saídas)



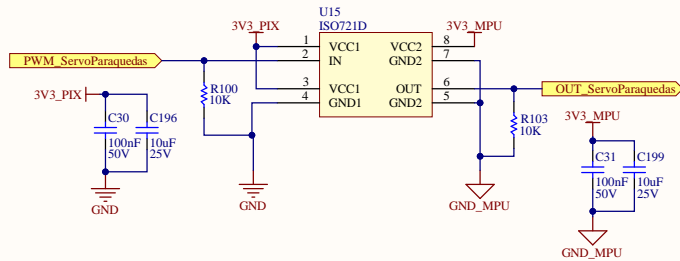
Regulador de Tensão 3.3V

Referencia PWM ESC Bomba

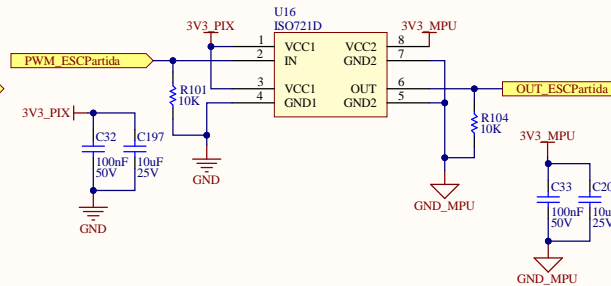


Isoladores - Canais de controle Pixhawk

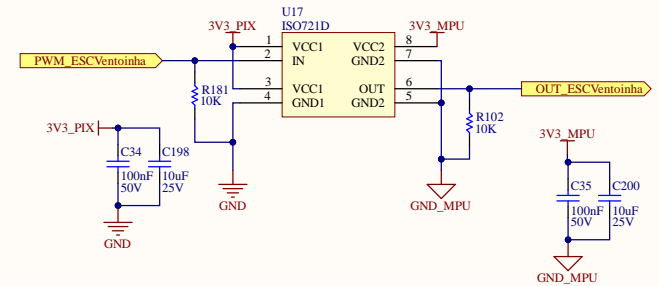
Paraquedas



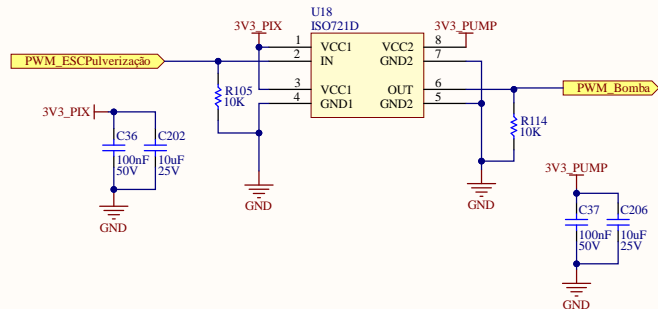
Motor de partida



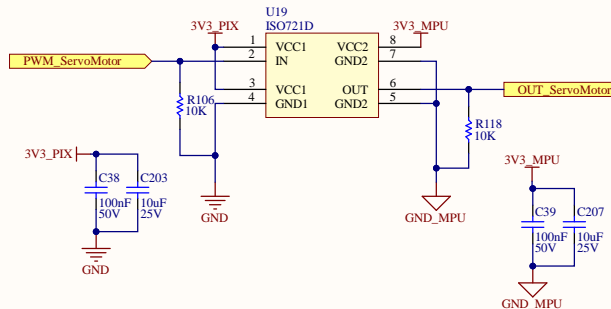
Ventoinha



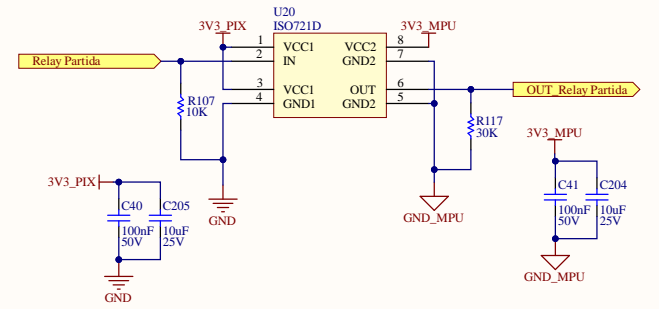
PWM Bomba



Servo Motor



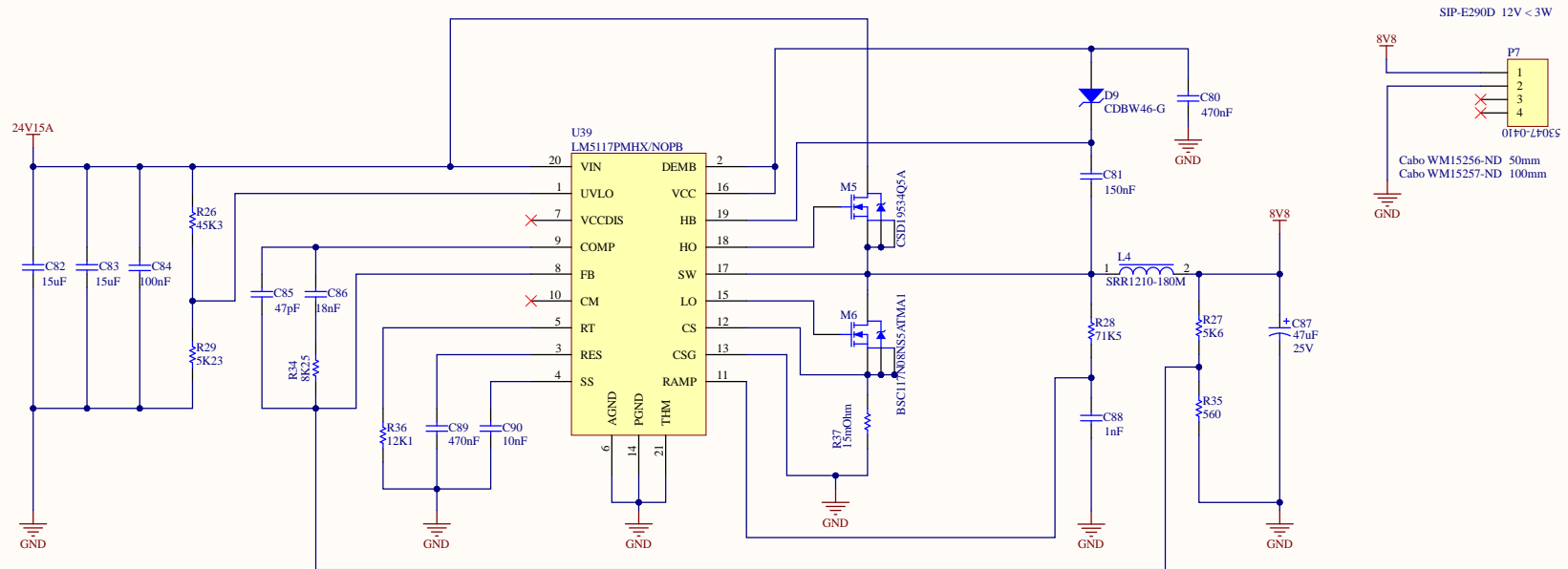
Relé de partida



[illegible]

Título <i>Sch4 - Fonte 5V.SchDoc</i>			Autor: Daniel Zidoi de Moura	<i>XMobots</i> <i>Rodovia Washington Luiz, NORTE KM 226 + 738 m – Centro Logístico Modernat</i> <i>São Carlos - SP</i> <i>CEP 13566-970</i> <i>Brasil</i>
Tamanho: A3	Registro: -----	Revisão: --	Verificado: -----	
Data: 22/02/2022	Hora: 15:05:24	Folha 6 de 12	Autorizado: -----	
File: C:\Users\Tales\Documents\Somensi\R&D_Hardware\projects\pixAFNGS\pixAFNGS\Sch4 - Fonte 5V.SchDoc				

Entrada 12 a 32 Vcc / Saída 8V8_5A
400KHz - 40mVpp

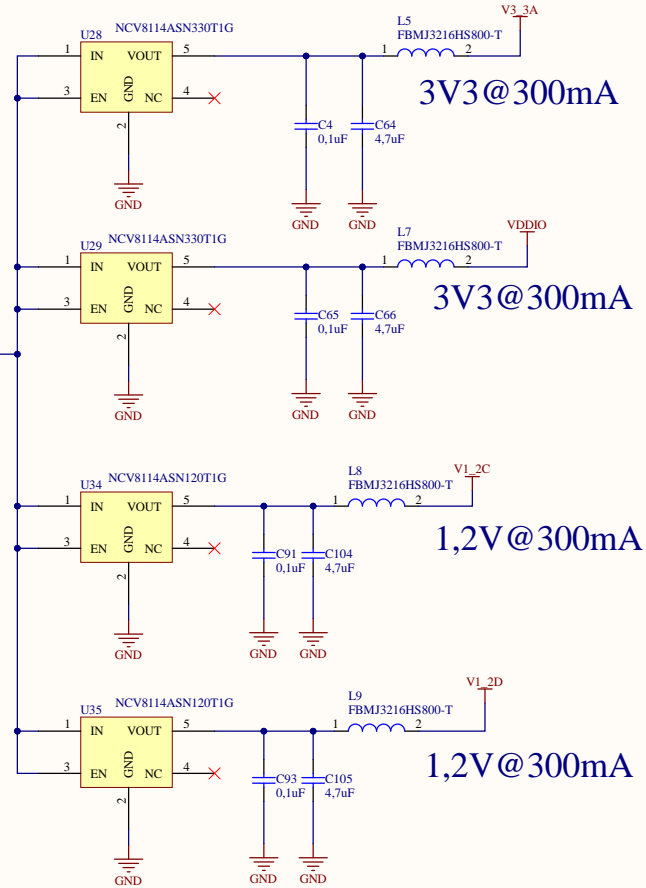
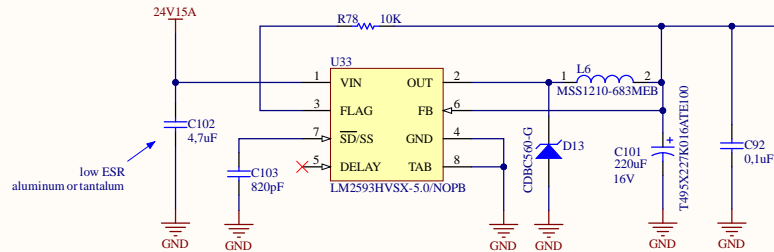


<https://webench.ti.com/appinfo/webench/scripts/SDP.cgi?ID=BCC67B4E0337093D>

Título Sch5 - Fonte 8.8V.SchDoc			Autor: Daniel Zidoi de Moura	XRobots Rodovia Washington Luiz, NORTE KM 226 + 738 m – Centro Logístico Modernut São Carlos - SP CEP 13566-970 Brasil
Tamanho: A3	Registro: -----	Revisão: --	Verificado: -----	
			Autorizado: -----	
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File: C:\Users\Tales\Documents\Somens\R&D_Hardware\projects\pixAFNGS\pixAFNGS\Sch5 - Fonte 8.8V.SchDoc				

Fontes e LVDO Switch Ethernet

Entrada 36 a 60 Vcc / Saída 5V@2A



Título Sch6 - Fonte Switch.SchDoc			Autor: Daniel Zidoi de Moura	XMobots Rodovia Washington Luiz, NORTE KM 226 + 738 m – Centro Logístico Modenut São Carlos - SP CEP 13566-970 Brasil
Tamanho: A3	Registro: -----	Revisão: --	Verificado: -----	
Data: 22/02/2022	Hora: 15:05:24	Folha 8 de 12	Autorizado: -----	
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A

B

D

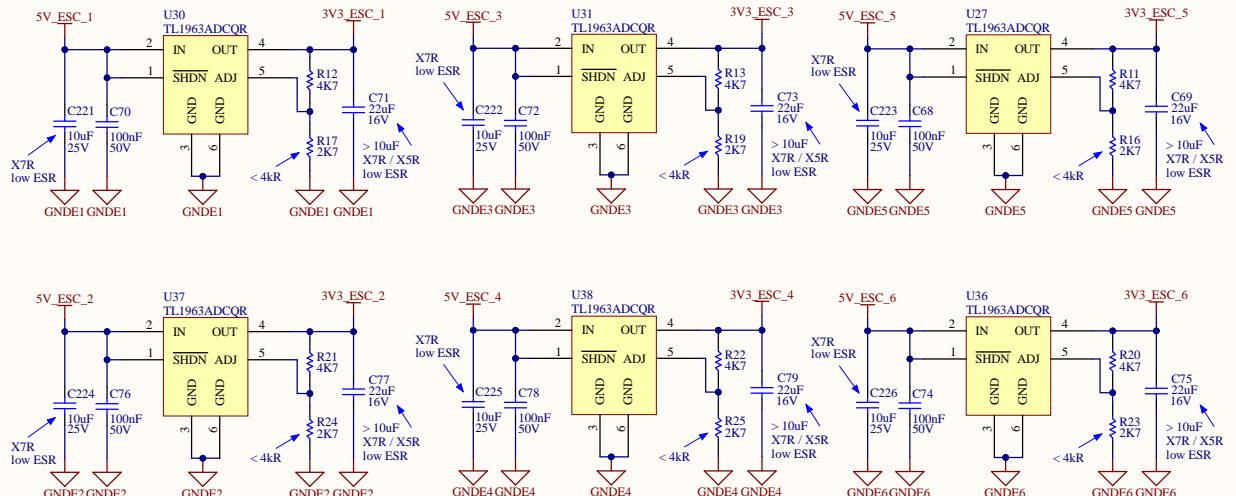
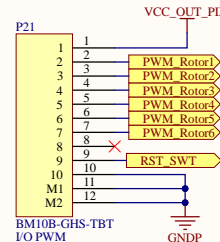
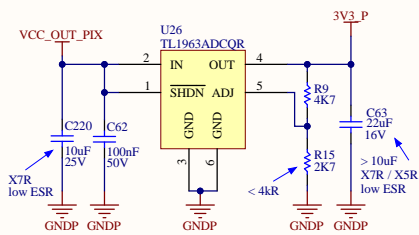
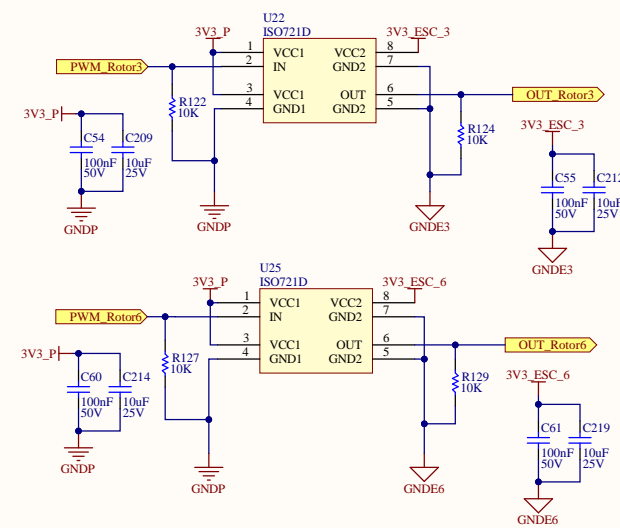
A

D

B

C

D

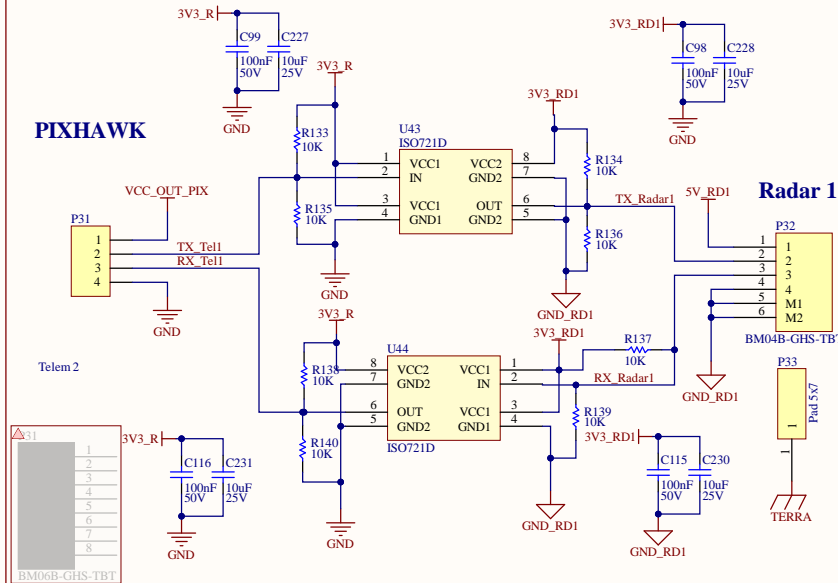


Título <i>Sch8 - Isoladores dos Rotores.SchDoc</i>			Autor: Daniel Zadoi de Moura	<i>XMobots</i> Rodovia Washington Luiz, NORTE KM 226 + 738 m – Centro Logístico Modenut São Carlos - SP CEP 13566-970 Brasil
Tamanho: A3	Registro: -----	Revisão: --	Verificado: -----	
Data: 22/02/2012	Hora: 15:05:24	Folha 10 de 12	Autorizado: -----	
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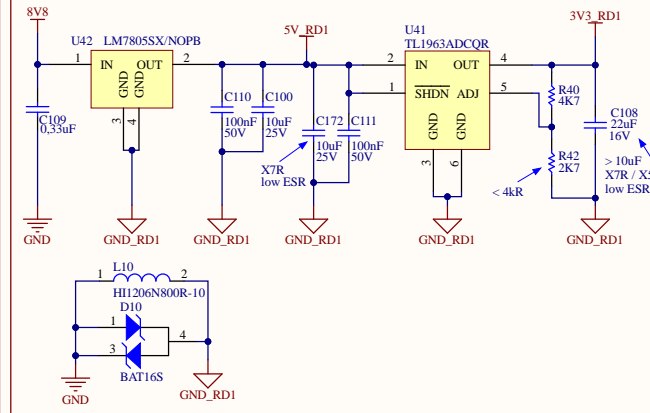
Isoladores de TX e RX dos Radares OPS243

PIXHAWK

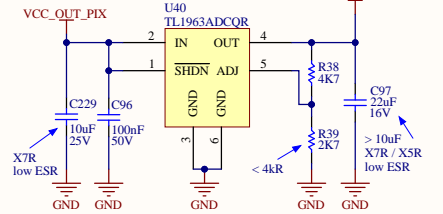
Radar 1



Alimentação Radar 1



Alimentação de Entrada

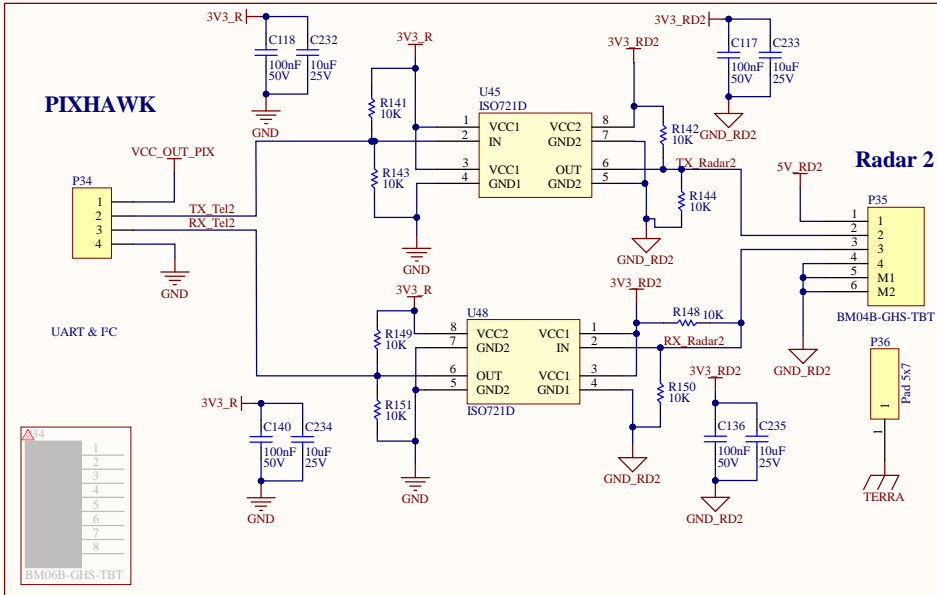


Pinagem Pixhawk4

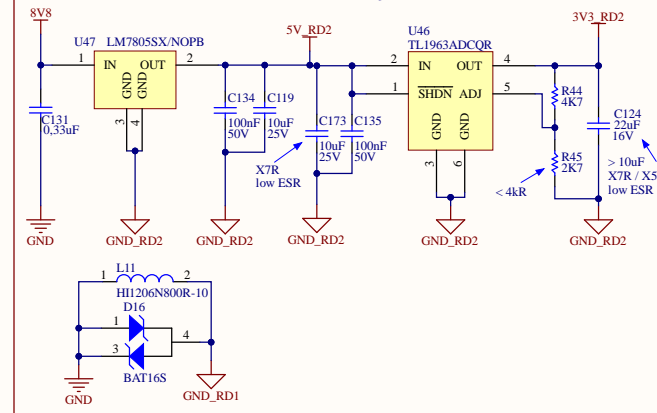
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PIXHAWK

Radar 2



Alimentação Radar 2

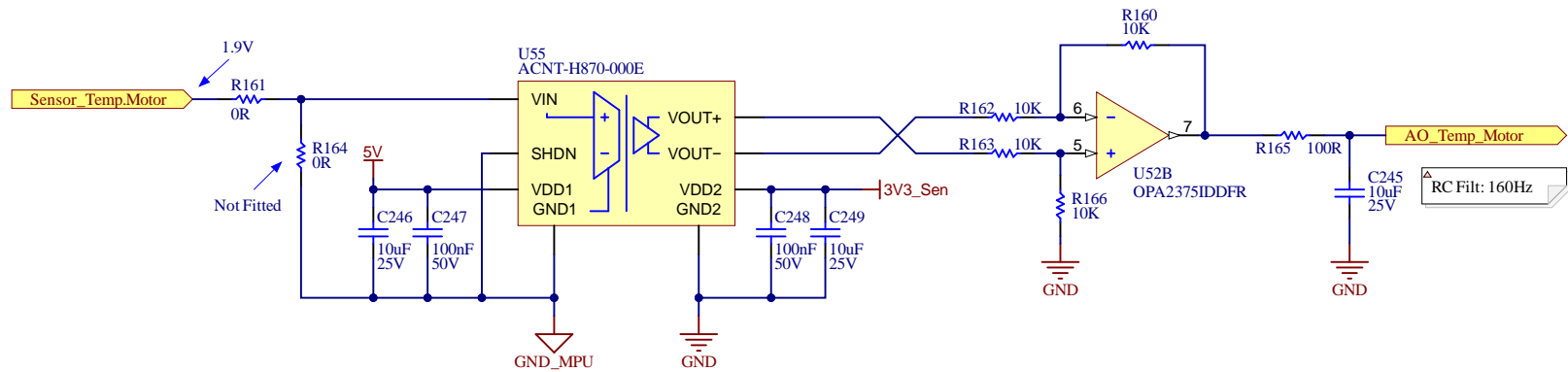
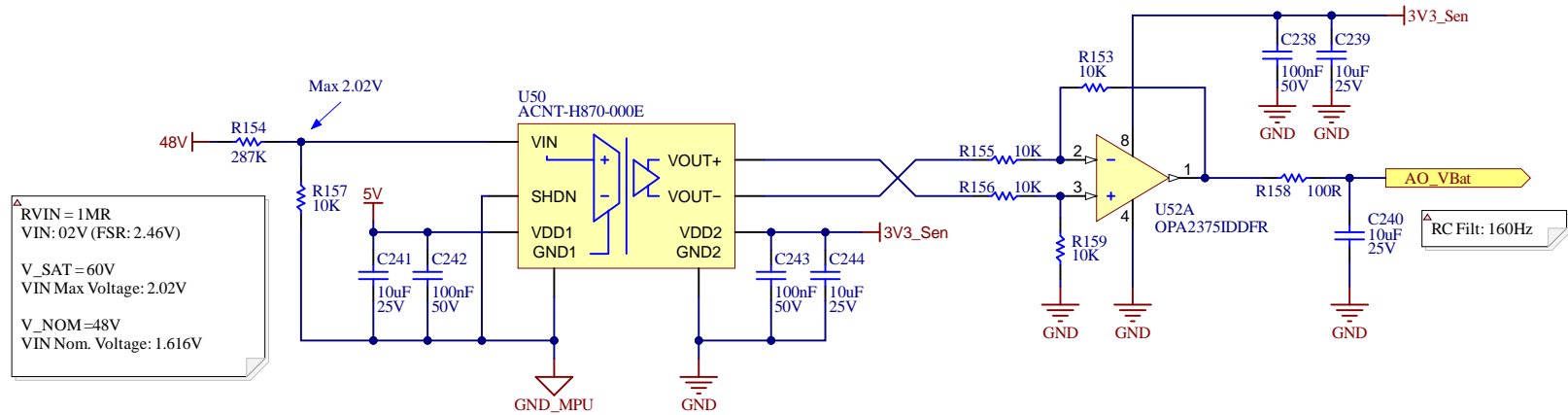


L7805ABD2T-TR
MC7805CD2TR4G
LM1084ISX-ADJ/NOPB

<https://www.mouser.com/new/omnipresense/omnipresense-ops243-radar-sensor/>

Título	Sch9 - Isoladores dos Radares.SchDoc			Autor:	Daniel Zidoi de Moura		
Tamanho:	A3	Registro:	-----	Revisão:	--	Verificado:	-----
Data:	22/02/2022	Hora:	15:05:34	Folha	11 de 12	Autorizado:	-----
File:	C:\Users\Tales\Documents\Somens\I&D_Hardware\projects\pixAFNGS\pixAFNGS\Sch9 - Isoladores dos Radares.SchDoc						

XMobots
Rodovia Washington Luiz, NORTE KM 226 + 738 m - Centro Logístico Modernur
São Carlos - SP
CEP 13566-970
Brasil



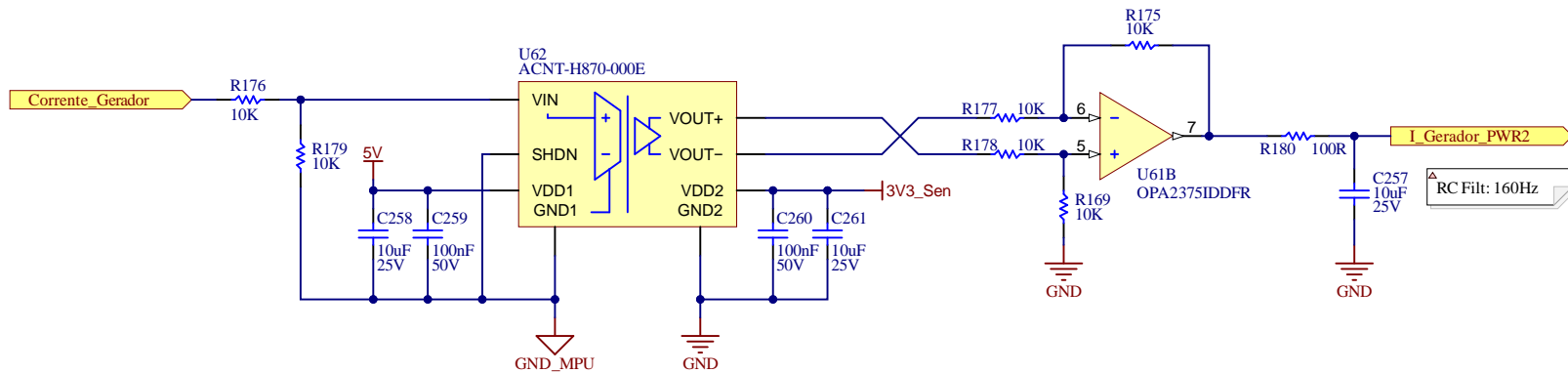
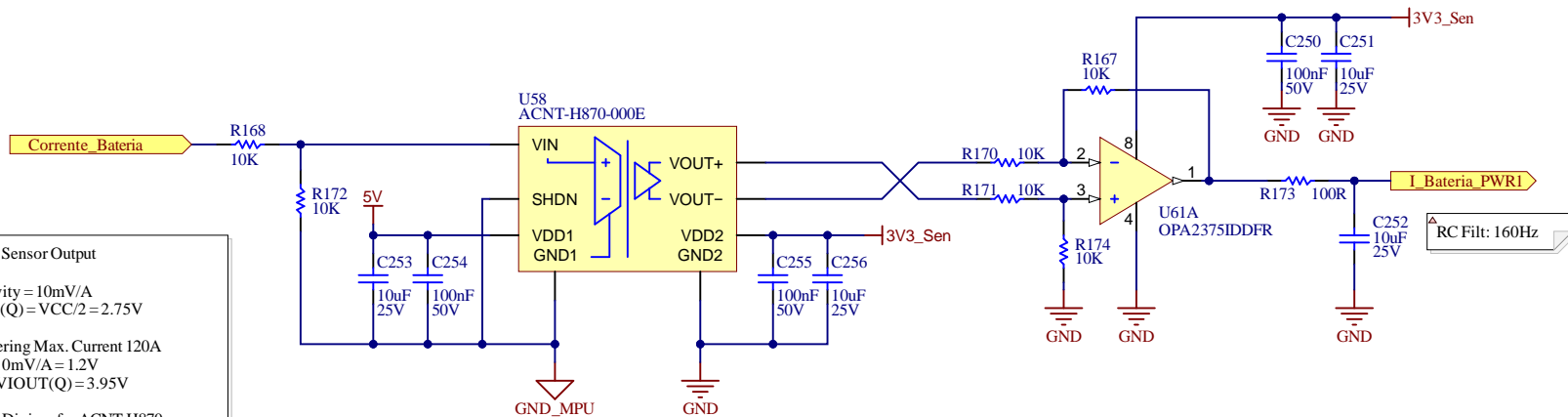
Prog. D25	Project Title pixAFNGS	Ver. 2.0.3
Sheet Title Analog Inputs: VBatery and Motor Temp Sensor	Sheet * of *	
Date 16 Nov 2021	Rev. Date *	
Author Tales S. Somensi	Reviser *	

Current Sensor Output

Sensitivity = 10mV/A
 $V_{IOUT}(Q) = V_{CC}/2 = 2.75V$

Considering Max. Current 120A
 $120A * 10mV/A = 1.2V$
 $1.2V + V_{IOUT}(Q) = 3.95V$

Voltage Divisor for ACNT-H870:
 With 4V, $V_{IN} = 2V$



Prog. D25	Project Title pixAFNGS	Ver. 2.0.3
Sheet Title Analog Inputs: Bat and Generator Current Sense	Sheet * of *	
Date 16 Nov 2021	Rev. Date *	
Author Tales S. Somensi	Reviser *	