## /home/moinocencio/Universidade/E4/Pratica/E4SC/KiCad Files/ESC.sch

Mon 21 May 2018 06:58:22 AM WEST

Eeschema 4.0.7

**Component Count:**100

Ref Qn	ty Value	Part	Footprint	Desc		
10k1 1	POT_TRIM	device:POT_TRIM	Potentiometers:Potentiometer_WirePads_Small	Trim-		
IONII	101_111111	device.i o1_iiiiii	rotentionicters.i otentionicter_wirer ads_simair	Poten		
BT1 1	Battery	device:Battery	Wire_Connections_Bridges:WireConnection_2.50mmDrill_LargePad	Batte (mult cells)		
C1 1	1u	device:CP1_Small	Capacitors_THT:CP_Radial_D4.0mm_P2.00mm	Polari capac		
C2, C24 2	100n	device:C_Small	Capacitors_SMD:C_1206_HandSoldering	Unpo capac		
C3 1	330u	device:CP1_Small	Capacitors_THT:CP_Radial_D12.5mm_P7.50mm	Polari capac		
C4, C15, 4 C16, C17	33n	device:C_Small	Capacitors_SMD:C_1206_HandSoldering	Unpo capac		
C5, C6, C7, C8	1n	device:C_Small	Capacitors_SMD:C_1206_HandSoldering	Unpo capac		
C9, C10 <sup>2</sup>	5.6n	device:C_Small	Capacitors_SMD:C_1206_HandSoldering	Unpo capac		
C11 1	6.8n	device:C_Small	Capacitors_SMD:C_1206_HandSoldering	Unpo capac		
C12, C13, 3 C14 C18,	10n	device:C_Small	Capacitors_SMD:C_1206_HandSoldering	Unpo capac		
C19, 3 C20 C21,	1u	device:C_Small	Capacitors_SMD:C_1206_HandSoldering	Unpo capac		
C22, 3 C23	1u	device:C_Small	Capacitors_THT:C_Disc_D4.3mm_W1.9mm_P5.00mm	Unpo capac Shun		
D1 1	TL431LP	references:TL431LP	TO_SOT_Packages_THT:TO-92_Inline_Narrow_Oval	Regu TO-92		
D2, D3, 3 D4	IN4148	device:D	Diodes_THT:D_DO-35_SOD27_P7.62mm_Horizontal	Diod€		
F1 1	Fuse	device:Fuse	Fuse_Holders_and_Fuses:Fuseholder_ATO_Blade_littlefuse_Pudenz_2_	Pin Fuse,		
F2 1	Fuse	device:Fuse	Fuse_Holders_and_Fuses:Fuseholder5x20_horiz_open_inline_Type-I	Fuse,		
J1, J6, J9, J10	Conn_01x03	conn:Conn_01x03	Socket_Strips:Socket_Strip_Straight_1x03_Pitch2.54mm	Gene conne single 01x0:		
J2 1	Conn_01x06_Fema	ale conn:Conn_01x06_Fem	ale Socket_Strips:Socket_Strip_Angled_1x06_Pitch2.54mm	Gene conne single 01x0		
J3, J4, J5 <sup>3</sup>	Conn_01x01	conn:Conn_01x01	Mounting_Holes:MountingHole_4.3mm_M4_Pad	Gene conne single 01x0		
J7 1	Conn_01x02	conn:Conn_01x02	Socket_Strips:Socket_Strip_Straight_1x02_Pitch2.54mm	Gene conne single 01x0:		
J8, 2 J11	Conn_01x04	conn:Conn_01x04	Socket_Strips:Socket_Strip_Straight_1x04_Pitch2.54mm	Gene conne single 01x0		
file:///home/moinocencio/Universidade/E4/Pratica/E4SC/KiCad%20Files/ESC.html						

3/21/2	010			Ricad Bolli Example 5	
JP1	1	Jumper_NC_Small	device:Jumper_NC_Small	Capacitors_Tantalum_SMD:CP_Tantalum_Case-A_EIA-3216-18_Hand	Jump norm close
Q1, Q2, Q3, Q4,	6	IRF3205	transistors:IRF3205	Power_Integrations:TO-220	50V \ Id, N- Powe
Q5, Q6 R1, R5,					MOSF 220
R13, R14 R2,	4	220k	device:R	Resistors_SMD:R_1206_HandSoldering	Resis
R6, R17 R3, R9, R20,		6.8k	device:R	Resistors_SMD:R_1206_HandSoldering	Resis
R22, R37, R38, R39, R40, R41,	10	10k	device:R	Resistors_SMD:R_1206_HandSoldering	Resis
R4, R7, R10, R11, R16, R19,	8	100k	device:R	Resistors_SMD:R_1206_HandSoldering	Resis
R30 R8 R12,		4k7	device:R	Resistors_SMD:R_1206_HandSoldering	Resis
R25, R27, R28	4	6k8	device:R	Resistors_SMD:R_1206_HandSoldering	Resis
R15, R26		8k2	device:R	Resistors_SMD:R_1206_HandSoldering	Resis
R18, R23	2	3k	device:R	Resistors_SMD:R_1206_HandSoldering	Resis
R21 R24 R31,	1	5m 330	device:R device:R	Resistors_THT:R_Axial_Power_L25.0mm_W9.0mm_P30.48mm Resistors_SMD:R_1206_HandSoldering	Resis <sup>-</sup>
R32, R33, R34, R35, R36	6	22	device:R	Resistors_SMD:R_1206_HandSoldering	Resis
R43	1	3.3k	device:R	Resistors_SMD:R_1206_HandSoldering	Resis
R44 U1	1	8.2k LM339	device:R linear:LM339	Resistors_SMD:R_1206_HandSoldering  Housings_DIP:DIP-14_W7.62mm_Socket	Resis Quad Differ Comp
					DIP-1 14/SS Positi 35V L Regu
U2	1	L7809	regul:L7809	TO_SOT_Packages_THT:TO-220-3_Vertical	Fixed 5V, T 220/T 263/T Single 6.0V
U3	1	MCP601-xP	linear:MCP601-xP	Housings_DIP:DIP-8_W7.62mm_Socket	Supp Op Ar DIP-8
U4, U5, U6	3	IR2110	ir:IR2110	Housings_DIP:DIP-14_W7.62mm	High Side I 200V
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