

Source:	D:\Git\UltiSteel_electronics\Advanced_power_control\APC\APC.sch		
Date:	26.05.2021 9:12		
Tool:	Eeschema (5.1.6)-1		
Generator:	C:\Program Files\KiCad\bin\scripting\plugins\bom_csv_grouped_by_value_with_fp.py		
Component Count:	51		
Ref	Qty	Value	Description
BZ1,	1	Buzzer	Buzzer, polarized
C1, C2, C4, C7, C8,	5	0.01uF	Unpolarized capacitor, small symbol
C3, C5, C6,	3	0.1uF	Unpolarized capacitor, small symbol
C9,	1	10uF 16V	Polarized capacitor, small symbol
D1,	1	1N4148	100V 0.15A standard switching diode, DO-35
J1,	1	AVR-JTAG-10	Atmel 10-pin JTAG connector
J2,	1	EM_STOP_INT	Generic connector, single row, 01x02, script generated (kicad-library-utils/schlib/autogen/connector/)
J3,	1	STATUS_LED	Generic connector, single row, 01x02, script generated (kicad-library-utils/schlib/autogen/connector/)
J4,	1	EM_STOP	Generic connector, single row, 01x02, script generated (kicad-library-utils/schlib/autogen/connector/)
J5,	1	POWER_BUTTON	Generic connector, single row, 01x02, script generated (kicad-library-utils/schlib/autogen/connector/)
J6,	1	POWER_LED	Generic connector, single row, 01x02, script generated (kicad-library-utils/schlib/autogen/connector/)
J7,	1	220 IN	Generic screw terminal, single row, 01x03, script generated (kicad-library-utils/schlib/autogen/connector/)
J8,	1	CMD_OUT	Generic connector, single row, 01x03, script generated (kicad-library-utils/schlib/autogen/connector/)
J9,	1	CMD_V_SEL	Generic connector, single row, 01x03, script generated (kicad-library-utils/schlib/autogen/connector/)
J10,	1	CMD_IN	Generic connector, single row, 01x03, script generated (kicad-library-utils/schlib/autogen/connector/)
J11,	1	PWR_V_SEL	Generic connector, single row, 01x03, script generated (kicad-library-utils/schlib/autogen/connector/)
J12,	1	12/24 V_IN	Generic connector, single row, 01x02, script generated (kicad-library-utils/schlib/autogen/connector/)
J13,	1	220_OUT	Generic screw terminal, single row, 01x03, script generated (kicad-library-utils/schlib/autogen/connector/)
K1,	1	G5LE-1	Omron G5LE relay, Miniature Single Pole, SPDT, 10A
PS1,	1	IRM-03-5	5V, 600mA, 3W, Isolated, AC-DC, IRM03
Q1, Q2, Q3,	3	IRLML0030	5.3A Id, 30V Vds, 27mOhm Rds, N-Channel HEXFET Power MOSFET, SOT-23
R1, R3, R6, R7, R9, R10, R11, R12, R18,	9	4k7	Resistor, small symbol
R2, R4, R5, R13, R15,	5	200	Resistor, small symbol
R8,	1	390	Resistor, small symbol
R14,	1	100	Resistor, small symbol
R16,	1	560	Resistor, small symbol
R17,	1	1k2	Resistor, small symbol
U1,	1	ATmega164PA-AU	20MHz, 16kB Flash, 1kB SRAM, 512B EEPROM, JTAG, TQFP-44
U2, U3, U4,	3	LTV-817	DC Optocoupler, Vce 35V, CTR 50%, DIP-4