

EEZ DIB AUX-PS BOM (r3B5, 2020-11-25)
Project source code at <https://github.com/eez-open/modular-psu>

#	Farnell / Element14								Digi-Key			Mouser		
	Qty	Part name	Package	Reference designator	Code	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ
1	2	2n2 (Y2)	THT; 10x4mm; RM7.5, film or ceramic, min. 230 Vac	C1, C6	-				VY2222M31Y5V S63V7	0,155	10	81-DE2E3SA222MA 3BT2F	0,194	10
2	2	100n	0603	C17, C18	2522597	C0603C104K4RAC 7081	0,011	10	490-4774-1-ND	0,029	100	80-C0603C104M4R	0,007	100
3	3	100n (X2)	THT; 18x5mm; RM15, min. 230 Vac	C2, C3, C4	2763161	R46KI310000M1M	0,315	1	399-6806-ND	0,380	1	80-R46KI310000M1 M	0,333	1
4	1	47n/400V (X2)	THT; 13x5mm; RM10	C5	2728564	B32921C3473K000	0,452	1	399-11478-ND	0,319	10	871-B32921C3473K	0,264	10
5	5	1u	0805	C7, C10, C11, C15, C16	2896566	VJ0805Y105KXXT W1BC	0,084	5	587-1283-1-ND	0,090	10	603-CC805MKX7R7B B105	0,062	10
6	3	EEEFK1V470P		C8, C9, C14	9695850	EEEFK1V470P	0,344	1	PCE3842CT-ND	0,312	10	667-EEE-FK1V470P	0,238	10
7	2	BAS316	SOD-323	D2, D3	8734275	BAS316,115	0,193	5	1727-7370-1-ND	0,120	1	771-BAS316-T/R	0,179	1
8	1	SKL14	SOD-123	D5	2760412	PMEG4010EGWX	0,204	5	1727-7335-1-ND	0,243	10	841-PMEG4010EGW X	0,188	10
9	1	BD00FC0WFP-E2	TO-252-5	IC1	3010961	BD00FC0WFP-E2	0,736	1	BD00FC0WFP-E2CT-ND	0,830	1	755-BD00FC0WFP-E2	0,786	1
10	1	MAX31760AEE+	QSOP-16	IC2	2528719	MAX31760AEE+	1,210	1	MAX31760AEE+-ND	2,400	1	700-MAX31760AEE+	1,210	1
11	1	PF0030/PC	THT; AC inlet	J1	428784	PF0030/PC	3,700	1	708-1914-ND	5,730	1	161-PF0030/PC	6,050	1
12	2	1-726388-2	THT; PCB terminal; 4.8mm	J2, J3	2308760	1-726388-2	0,167	100	A121493-ND	0,178	10	571-726388-2	0,133	10
13	1	SWEB 8094 AU/GN	THT; 4mm PE connector	J4	-				-			-		
14	2	RT424005	THT; 8A relay	K1, K2	1629052	RT424005	2,900	1	PB1998-ND	3,620	1	655-RT424005	2,820	1
15	1	2200HT-221-V-RC	THT; differential mode choke	L1	2519581	2200HT-221-V-RC	2,640	1	2200HT-221-V-RC-ND	2,830	1	542-2200HT-221V-RC	2,250	1
16	1	RN222-4-02-3M3	THT; common mode choke	L2	2851207	RN222-4-02-3M3	2,120	1	817-2209-ND	2,140	1	631-RN222-4-02-3M3	2,050	1
17	2	VLS6045AF-3R3N	Power inductor 6.7x6.7x2.8mm	L3, L4	1741325	IHLP2020CZER3R 3M11	1,940	5	445-180834-1-ND	0,510	1	810-VLS6045AF-3R3N	0,510	1
18	1	WP934CB/YD	THT; LED 3mm; yellow	LED1	-				754-1300-ND	0,420	1	604-WP934CB/YD	0,390	1
19	1	B57236S0200M	THT; NTC; 11.5 X 6 mm	NTC1	9751890	B57236S0200M	0,872	1	495-3047-ND	0,780	1	871-B57236S200M	0,757	1
20	2	MMBT5551	SOT-23	Q1, Q2	1459109	MMBT5551LT1G	0,154	5	MMBT5551LT1G OSCT-ND	0,180	1	863-MMBT5551LT1G	0,170	1
21	1	2N7002	SOT-23	Q3	1713823	2N7002-7-F	0,118	5	2N7002LT1GOS CT-ND	0,150	1	863-2N7002LT1G	0,128	1

#	RS Components						TME			THT	SMD	Price calculation for 1 set			
	Qty	Part name	Code	Part Number	Unit price €	MOQ	Code / Part Number	Unit price €	MOQ			Best Supplier	Lowest unit price €	Order Qty	Line Cost €
1	2	2n2 (Y2)	-				CY2Y-2N2	0,107	10	2		TME	0,107 €	2	0,214
2	2	100n	393-6952	VJ0603Y104KXJ AT	0,069	25	CL10B104KA8NNNC	0,098	100		2	Mouser	0,007 €	2	0,014
3	3	100n (X2)	144-7753	F863BC104K31 0Z	0,131	20	R46KI310000M1M	0,129	10	3		TME	0,129 €	3	0,387
4	1	47n/400V (X2)	882-9483	B32921C3473M 000	0,272	25	MKP-X2-47NR10/310	0,077	10	1		TME	0,077 €	1	0,077
5	5	1u	451-5770	C0805C105K4R ACTU	0,028	25	CL21B105KOFNNNE	0,010	100		5	TME	0,010 €	5	0,052
6	3	EEEFK1V470P	537-0657	EEEFK1V470P	0,394	5	EEEFK1V470P	0,130	5		3	TME	0,130 €	3	0,390
7	2	BAS316	397-2914	BAS316,115	0,122	50	BAS316,115	0,026	25		2	TME	0,026 €	2	0,053
8	1	SKL14	153-0632	PMEG4010EGW X	0,078	100	SKL14-DIO	0,053	10		1	TME	0,053 €	1	0,053
9	1	BD00FC0WFP-E2	184-7499	BD00FC0WFP- E2	0,876	10	-				1	Farnell	0,736 €	1	0,736
10	1	MAX31760AEE+	-				-				1	Farnell	1,210 €	1	1,210
11	1	PF0030/PC	261-5834	PF0030/PC	3,700	1	PF0030/PC	2,360	1	1		TME	2,360 €	1	2,360
12	2	1-726388-2	680-5772	1-726388-2	0,055	100	61-3162-11/0030	0,033	50	2		TME	0,033 €	2	0,066
13	1	SWEB 8094 AU/GN	-				SWEB 8094 AU/GN	2,130	1	1		TME	2,130 €	1	2,130
14	2	RT424005	-				RT424005	1,150	5	2		TME	1,150 €	2	2,300
15	1	2200HT-221-V-RC	-				-			1		Mouser	2,250 €	1	2,250
16	1	RN222-4-02-3M3	219-3429	RN222-4-02- 3M3	2,420	1	-			1		Mouser	2,050 €	1	2,050
17	2	VLS6045AF-3R3N	-				HPI0630-3R3	0,335	1		2	TME	0,335 €	2	0,670
18	1	WP934CB/YD	-				L-934CB/1YD	0,206	5	1		TME	0,206 €	1	0,206
19	1	B57236S0200M	-				B57236S0200	0,370	5	1		TME	0,370 €	1	0,370
20	2	MMBT5551	545-0400	MMBT5551LT1 G	0,146	10	MMBT5551	0,024	25		2	TME	0,024 €	2	0,048
21	1	2N7002	545-0012	2N7002LT1G	0,126	50	2N7002LT1G	0,025	25		1	TME	0,025 €	1	0,025

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	Qty	Part name	Package	Reference designator	Code	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ
22	2	470K	1206, min. 150V, 1% or 5%	R1, R2	2447519	MCWR12X4703FT L	0,014	10	CRGCQ1206F47 0K	0,064	10	652-CR1206JW- 474ELF	0,037	10
23	2	4K7	0805	R12, R15	2861530	CRGCQ0805F4K7	0,009	10	311-4.70KCRCT- ND	0,090	1	603-RC0805FR- 074K7L	0,026	10
24	1	10R	0805	R13	9236643	RC1206FR- 0710RL	0,050	10	311-10.0CRCT- ND	0,071	10	603-RC1206FR- 0710RL	0,034	10
25	5	1K	0805	R3, R4, R10, R11, R14	1099800	WCR0805-1K0FI	0,019	10	RC0805FR- 071KL	0,039	10	603-RC0805FR- 071KL	0,015	10
26	2	39K	0805	R5, R7	2447646	MCWR08X3902FT L	0,010	10	RMCF0805FT39 K0CT-ND	0,024	10	652-CR0805FX- 3902ELF	0,017	10
27	1	470R	0805	R6	1099798	WCR0805-470RFI	0,019	10	311-470CRCT- ND	0,039	10	71- CRCW0805470R FKEB	0,041	10
28	2	3K3	0805	R8, R9	2447651	MCWR08X3301FT L	0,010	10	A129755CT-ND	0,045	10			
29	1	2051-47-SM-RPLF	Surge arrester	SAR1	-				2051-47-SM- RPLFCT-ND	0,700	1	652-2051-47-SM- RPLF	0,684	1
30	1	DF62J12S2AHQA	THT; PCB AC switch	SW1	2435277	DF62J12S2AHQA	4,680	1	CKN2062-ND	4,520	1	611- DF62J12S2AHQ A	5,310	1
31	1	IRM-10-5	THT; AC/DC Power Module 5V/2A 20W; 85-264Vin	TR1	2815498	IRM-10-5	8,440	1	1866-3032-ND	8,220	1	709-IRM10-5	8,520	1
32	1	IRM-10-12	THT; AC/DC Power Module 12V/0.85A 10W; 85-264Vin	TR2	2815494	IRM-10-12	8,440	1	1866-3028-ND	8,220	1	709-IRM10-12	8,520	1
33	3	ERZE14A431 or V275LA20AP	THT; Varistor RM7.5	VAR1, VAR2, VAR3	2291831	ERZE11A431	0,678	1	P16688-ND	0,460	1	667-ERZ- E11A431	0,468	1
34	1	39-28-1063	THT; Mini-Fit Jr.; 4.2mm, 6-pin	X1	9732101	39-28-1063	0,688	1	WM3802-ND	0,860	1	538-39-28-1063	0,760	1
35	1	39-30-1039	THT; Mini-Fit Jr.; 4.2mm, 3-pin	X2	1829076	39-30-1039	0,585	1	WM18442-ND	0,570	1	538-39-30-1039	0,430	1
36	1	DS1013-16SSIB1	THT; 16-pin IDC socket; male	X3	2843530	MC-254-16-00-ST- DIP	0,220	1	ED10523-ND	0,350	1	710- 61201621621	0,540	1
37	1	22-27-2031	THT; 3-pin 0.1"	X4; fan connector	9731156	22-27-2031	0,212	100	WM4112-ND	0,330	1	538-22-27-2031	0,323	1
38	1	MM3Z18VT1G	SOD-323	ZD1	1431193	MM3Z18VT1G	0,109	10	MM3Z18VT1GO SCT-ND	0,103	10	863- MM3Z18VT1G	0,108	10

Not installed														
1	N.C.	0805		C12, C13										
1	N.C.	0603		C19										
1	N.C.	THT; 18x5mm; RM15, min. 230 Vac		C20										
1	SMBJ5.0CA	DO-214AA		D1										

#	RS Components						TME					Price calculation for 1 set			
	Qty	Part name	Code	Part Number	Unit price €	MOQ	Code / Part Number	Unit price €	MOQ			Best Supplier	Lowest unit price €	Order Qty	Line Cost €
22	2	470K	223-2619	CRG1206F470K	0,013	50	1206S4J0474T5E	0,012	100	2	TME	0,012 €	2	0,024	
23	2	4K7	223-0528	CRG0805F4K7	0,010	50	0805S8F4701T5E	0,022	100	2	Farnell	0,009 €	2	0,017	
24	1	10R	740-9085	CR1206-FX-10R0ELF	0,036	50	CRCW120610R0FKTA BC	0,031	100	1	TME	0,031 €	1	0,031	
25	5	1K	223-0427	CRG0805F1K0	0,017	50	RC0805FR-071K	0,022	100	5	Mouser	0,015 €	5	0,075	
26	2	39K	679-1336	CRCW080539K 0FKEA	0,038	50	0805S8J0393T5E	0,013	100	2	Farnell	0,010 €	2	0,019	
27	1	470R	223-0376	CRG0805F470R	0,021	50	RC0805FR-07470R	0,022	100	1	Farnell	0,019 €	2	0,038	
28	2	3K3	223-0499	CRG0805F3K3	0,027	50	805S8F3301T5E	0,015	100	2	Farnell	0,010 €	2	0,019	
29	1	2051-47-SM-RPLF	-				-			1	Mouser	0,684 €	1	0,684	
30	1	DF62J12S2AHQA	154-3601	DF62J12S2AHQ A	4,920	1	DF62J12S2AHQA	3,869	1	1	TME	3,869 €	1	3,869	
31	1	IRM-10-5	135-8929	IRM-10-5	8,440	1	IRM-10-5	6,100	1	1	TME	6,100 €	1	6,100	
32	1	IRM-10-12	135-8930	IRM-10-12	8,440	1	IRM-10-12	6,100	1	1	TME	6,100 €	1	6,100	
33	3	ERZE14A431 or V275LA20AP	785-8904	ERZE11A431	0,251	25	V275LA20AP	0,201	5	3	TME	0,201 €	3	0,603	
34	1	39-28-1063	484-1906	39-28-1063	0,696	1	MX-5566-06A	0,272	2	1	TME	0,272 €	1	0,272	
35	1	39-30-1039	670-5751	39-30-1039	0,584	5	MX-5566-03A3	0,548	1	1	Mouser	0,430 €	1	0,430	
36	1	DS1013-16SSIB1	771-8357	61201621621	0,540	1	DS1013-16SSIB	0,130	5	1	TME	0,130 €	1	0,130	
37	1	22-27-2031	483-8477	22-27-2031	0,226	10	MX-6410-03A	0,112	13	1	TME	0,112 €	1	0,112	
38	1	MM3Z18VT1G	802-4574	MM3Z18VT1G	0,038	200	MM3Z18VT1G	0,025	25	1	TME	0,025 €	1	0,025	
										21	35				33,59 €

Not installed															
1	N.C.										1	Farnell	0,000 €	1	0,000
1	N.C.										1	Farnell	0,000 €	1	0,000
1	N.C.									1		Farnell	0,000 €	1	0,000
1	SMBJ5.0CA										1	Farnell	0,000 €	1	0,000

#	Farnell / Element14								Digi-Key			Mouser		
	Qty	Part name	Package	Reference designator	Code	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ
1		SMBJ12CA	DO-214AA	D4										
1		BAS316	SOD-323	D6										
1		TLP291(GB.SE(T	SOIC-4	OK1	2524307	TLP291(GB,SE	0,318	1	TLP291(GBSE-ND	0,370	1	757-TLP291GBSE	0,364	1
2		N.C.	0805	R16, R17										
2		4K7	0805	R18, R19	2861530	CRGCQ0805F4K7	0,009	10	311-4.70KCRCT-ND	0,090	1	603-RC0805FR-074K7L	0,026	10
3		Test points		TP1	-									
1		22-27-2031	THT; 3-pin 0.1"	X5; fan connector	9731156	22-27-2031	0,212	100	WM4112-ND	0,330	1	538-22-27-2031	0,323	1
2		N.C.	SOD-123	ZD2, ZD3										

Custom made components

- | | | | |
|---|--|------------|---|
| 1 | PCB 2-layer 230.5 x 60 mm, recommended copper thickness: 70 µm (2 oz) | ALLPCB.com | - |
|---|--|------------|---|

All prices are net prices (without VAT)

Please note that BOM does not contain ordering number for parts on reels or that which includes re-reeling fee. Take also into account that total cost is higher because min. quantity (MOQ) for many parts is larger then what is needed for single unit.

All resistors are 1% 0805 and all capacitors are X7R 0805 if not otherwise specified.

#	RS Components						TME			Price calculation for 1 set						
	Qty	Part name	Code	Part Number	Unit price €	MOQ	Code / Part Number	Unit price €	MOQ	THT	SMD	Best Supplier	Lowest unit price €	Order Qty	Line Cost €	
1	SMBJ12CA										1	Farnell	0,000 €	1	0,000	
1	BAS316										1	Farnell	0,000 €	1	0,000	
1	TLP291(GB.SE(T		885-0960	TLP291(GB,SE(T	0,176	50	TLP291-GB.SE-T	0,146	5		1	TME	0,146 €	1	0,146	
2	N.C.										2	Farnell	0,000 €	2	0,000	
2	4K7		223-0528	CRG0805F4K7	0,010	50	0805S8F4701T5E	0,022	100		2	Farnell	0,009 €	2	0,017	
3	Test points						TEST-5			0,082	10	3	TME	0,082 €	3	0,246
1	22-27-2031		483-8477	22-27-2031	0,226	10	MX-6410-03A	0,112	13		1	TME	0,112 €	1	0,112	
2	N.C.										2	Farnell	0,000 €	2	0,000	
Custom made componer																
1	PCB 2-layer 230.5 x 60 mm, recommended copper thickness: 70 µm (2 oz)												ALLPCB	6,400 €	1	6,400
															6,40 €	
															Total	39,99 €