

EEZ DIB AUX-PS BOM (r3B3, 2020-03-11)
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	47n/400V (X2)	THT; 13x5mm; RM10	C1, C2	2728564	B32921C3473K000	0.452	1	399-11478-ND	0.319	10	871-B32921C3473K	0.264	10
2	3	1u	0805	C3, C7, C8	2896566	VJ0805Y105KXXT W1BC	0.084	5	587-1283-1-ND	0.090	10	603-CC805MKX7R7B B105	0.062	10
3	3	EEEFK1V470P		C6, C12, C13	9695850	EEEFK1V470P	0.344	1	PCE3842CT-ND	0.312	10	667-EEE-FK1V470P	0.238	10
4	2	100n	0603	C9, C10	2522597	C0603C104K4RAC 7081	0.011	10	490-4774-1-ND	0.029	100	80-C0603C104M4R	0.007	100
5	1	SKL14	SOD-123	D1	2760412	PMEG4010EGWX	0.204	5	1727-7335-1-ND	0.243	10	841-PMEG4010EGW X	0.188	10
6	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
7	1	MAX31760AEE+	QSOP-16	IC2	2528719	MAX31760AEE+	1.210	1	MAX31760AEE+-ND	2.400	1	700-MAX31760AEE+	1.210	1
8	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
9	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
10	1	SWEB 8094 AU/GN	THT; 4mm PE connector	J4	-	-	-	-	-	-	-	-	-	-
11	2	VLS6045AF-3R3N	6.7x6.7x2.8mm	L1, L2	1741325	IHLP2020CZER3R 3M11	1.940	5	445-180834-1-ND	0.510	1	810-VLS6045AF-3R3N	0.510	1
12	1	OSY5LU3E34X-3F1A	THT; LED 3mm; yellow	LED1	-	-	-	-	-	-	-	-	-	-
13	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
14	1	MOC3052	SMD; SDIP-6	OK1	2453236	MOC3052SM	0.668	1	MOC3052SM-ND	1.030	1	512-MOC3052SM	0.774	1
15	1	MOC3062	SMD; SDIP-6	OK2	2322554	MOC3062SR2VM	0.900	1	MOC3062SM-ND	1.270	1	512-MOC3062SM	0.944	1
16	2	BTA26-600	THT; triac 26 A, 600 V	Q1, Q2	1057286	BTA26-600BRG	3.000	1	497-2427-5-ND	3.370	1	511-BTA26-600B	3.360	1
17	3	2N7002	SOT-23	Q3, Q4, Q5	1713823	2N7002-7-F	0.118	5	2N7002LT1GOS CT-ND	0.150	1	863-2N7002LT1G	0.128	1
18	2	39K	0805	R11, R23	2447646	MCWR08X3902FT L	0.010	10	RMCF0805FT39 K0CT-ND	0.024	10	652-CR0805FX-3902ELF	0.017	10
19	2	3K3	0805	R12, R13	2447651	MCWR08X3301FT L	0.010	10	A129755CT-ND	0.045	10			
20	5	1K	0805	R1, R3, R14, R15, R18	1099800	WCR0805-1K0FI	0.019	10	RC0805FR-071KL	0.039	10	603-RC0805FR-071KL	0.015	10
21	1	10R	0805	R17	9236643	RC1206FR-0710RL	0.050	10	311-10.0CRCT-ND	0.071	10	603-RC1206FR-0710RL	0.034	10
22	2	270R	0805	R2, R9	2073716	MCMR08X271 JTL	0.009	10	RMCF0805FT27 0RCT-ND	0.025	10	652-CR0805FX-2700ELF	0.013	10
23	1	470R	0805	R22	1099798	WCR0805-470RFI	0.019	10	311-470CRCT-ND	0.039	10	71-CRCW0805470R FKEB	0.041	10
24	4	330R/2W	2512	R4, R6, R7, R8	1265196	3520330RJT	0.105	10	RMCF2512JT330 RCT-ND	0.227	10	279-3520330RJT	0.073	10
25	4	4K7	0805	R5, R10, R16, R19	2861530	CRGCQ0805F4K7	0.009	10	311-4.70KCRCT-ND	0.090	1	603-RC0805FR-074K7L	0.026	10

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#	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	2	47n/400V (X2)	882-9483	B32921C3473M000	0.272	25	MKP-X2-47NR10/310	0.077	10	2		TME	0.077 €	2	0.154
2	3	1u	451-5770	C0805C105K4R ACTU	0.028	25	CL21B105KOFNNNE	0.010	100		3	TME	0.010 €	3	0.031
3	3	EEEFK1V470P	537-0657	EEEFK1V470P	0.394	5	EEEFK1V470P	0.130	5		3	TME	0.130 €	3	0.390
4	2	100n	393-6952	VJ0603Y104KXJ AT	0.069	25	CL10B104KA8NNNC	0.098	100		2	Mouser	0.007 €	2	0.014
5	1	SKL14	153-0632	PMEG4010EGW X	0.078	100	SKL14-DIO	0.053	10		1	TME	0.053 €	1	0.053
6	1	BD00FC0WFP-E2	184-7499	BD00FC0WFP- E2	0.876	10	-				1	Farnell	0.736 €	1	0.736
7	1	MAX31760AEE+	-				-				1	Farnell	1.210 €	1	1.210
8	1	PF0030/PC	261-5834	PF0030/PC	3.700	1	PF0030/PC	2.360	1	1		TME	2.360 €	1	2.360
9	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
10	1	SWEB 8094 AU/GN	-				SWEB 8094 AU/GN	2.130	1	1		TME	2.130 €	1	2.130
11	2	VLS6045AF-3R3N	-				HPI0630-3R3	0.335	1		2	TME	0.335 €	2	0.670
12	1	OSY5LU3E34X-3F1A	-				OSY5LU3E34X-3F1A	0.115	5	1		TME	0.115 €	1	0.115
13	1	B57236S0200M	-				B57236S0200	0.370	5	1		TME	0.370 €	1	0.370
14	1	MOC3052	761-3690	MOC3052SM	1.030	5	MOC3052S	0.288	2		1	TME	0.288 €	1	0.288
15	1	MOC3062	806-6064	MOC3062SM	0.786	10	MOC3062XSM	0.500	1		1	TME	0.500 €	1	0.500
16	2	BTA26-600	714-0515	BTA26-600BRG	3.710	1	BTA26-600BRG	1.290	1	2		TME	1.290 €	2	2.580
17	3	2N7002	545-0012	2N7002LT1G	0.126	50	2N7002LT1G	0.025	25		3	TME	0.025 €	3	0.074
18	2	39K	679-1336	CRCW080539K 0FKEA	0.038	50	0805S8J0393T5E	0.013	100		2	Farnell	0.010 €	2	0.019
19	2	3K3	223-0499	CRG0805F3K3	0.027	50	805S8F3301T5E	0.015	100		2	Farnell	0.010 €	2	0.019
20	5	1K	223-0427	CRG0805F1K0	0.017	50	RC0805FR-071K	0.022	100		5	Mouser	0.015 €	5	0.075
21	1	10R	740-9085	CR1206-FX- 10R0ELF	0.036	50	CRCW120610R0FKTA BC	0.031	100		1	TME	0.031 €	1	0.031
22	2	270R	223-0348	CRG0805F270R	0.025	50	0805S8F2700T5E	0.023	100		2	Farnell	0.009 €	2	0.018
23	1	470R	223-0376	CRG0805F470R	0.021	50	RC0805FR-07470R	0.022	100		1	Farnell	0.019 €	2	0.038
24	4	330R/2W	755-1224	3521330RFT	0.281	10	WF25P-330R-5%	0.072	50		4	TME	0.072 €	4	0.286
25	4	4K7	223-0528	CRG0805F4K7	0.010	50	0805S8F4701T5E	0.022	100		4	Farnell	0.009 €	4	0.034

#	Qty	Part name	Package	Reference designator	Code	Farnell / Element14			Digi-Key			Mouser		
						Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ
26	1	CG2-470L	THT; Surge arrester	SAR1	1846854	2027-47-BLF	1.110	1	2027-47-BLF-ND	1.200	1	652-2027-47-BLF	1.160	1
27	1	DF62J12S2AHQA	THT; PCB AC switch	SW1	2435277	DF62J12S2AHQA	4.680	1	CKN2062-ND	4.520	1	611-DF62J12S2AHQA	5.310	1
28	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
29	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
30	2	ERZE14A431 or V275LA20AP	THT; Varistor RM7.5	VAR1, VAR2	2291831	ERZE11A431	0.678	1	P16688-ND	0.460	1	667-ERZ-E11A431	0.468	1
31	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
32	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
33	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
34	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
35	2	1.5KE400CA	THT; TVS bidirectional	ZD1, ZD2	2341650	1.5KE400CARL	0.722	1	1.5KE400CA-TPMSCT-ND	0.550	1	833-1.5KE400CA-TP	0.536	1

Not installed

1	N.C.	0805	C4, C5											
1	N.C.	0603	C11											
2	N.C.	0805	R20, R21											
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	ZD3, ZD4											
1	3248.1001	Enclosure handle												

Related parts and accessories

1	FC16150-S	16-pin IDC cable 15cm	-					H3CCS-1606G-ND	1.170	1	-			
1	MF80251V3-1000U-G99	80x80x25mm, 12Vdc fan												
4	FSP-2	Fastener for fans and protections												
1	FG-08	Finger guard; 80x80mm												
1	HS-142-25	THT; SK129-PAD	KK1	1319810	SK 129 25,4 STS	2.460	1	-			-			
1	22-01-3037	3-pin receptacle for X4		1462838	22-01-3037	0.093	100	WM2001-ND	0.170	1	538-22-01-3037	0.166	1	
3	08-50-0114	Pins for X4		1462641	08-50-0114	0.073	100	WM1114-ND	0.141	10	538-08-50-0114	0.100	10	
1	39-01-4030	Receptacle for X2		9963480	39-01-4030	0.204	10	WM18434-ND	0.260	1	538-39-01-4030	0.272	1	
1	39-01-2060	Receptacle for X1		151868	39-01-2060	0.277	100	WM3702-ND	0.330	1	538-39-01-2060	0.340	1	
9	39-00-0078	Pins for X1, X2		9732675	39-00-0078	0.094	100	WM9154-ND	0.137	10	538-39-00-0078	0.112	10	
3	ST-003/2	4.8mm terminal; flat for J2, J3, J4		-				A122464-ND	0.131	10	571-60196-3	0.132	10	

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26	1	CG2-470L	878-3652	CG2-470L	1.943	10	CG2-470L	1.480	1	1		Farnell	1.110 €	1	1.110
27	1	DF62J12S2AHQA	154-3601	DF62J12S2AHQA	4.920	1	DF62J12S2AHQA	3.869	1	1		TME	3.869 €	1	3.869
28	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
29	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
30	2	ERZE14A431 or V275LA20AP	785-8904	ERZE11A431	0.251	25	V275LA20AP	0.201	5	2		TME	0.201 €	2	0.402
31	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
32	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
33	1	DS1013-16SSIB1	771-8357	61201621621	0.540	1	DS1013-16SSIB	0.130	5	1		TME	0.130 €	1	0.130
34	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
35	2	1.5KE400CA	486-4381	1.5KE400CA	0.932	5	1.5KE400CA	0.316	3	2		TME	0.316 €	2	0.632
										22	39	31.42 €			

Not installed															
1	N.C.									1		Farnell	0.000 €	1	0.000
1	N.C.									1		Farnell	0.000 €	1	0.000
2	N.C.									2		Farnell	0.000 €	2	0.000
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
1	3248.1001						MR-3248.1001	4.350	1			TME	4.350 €	1	4.350

Related parts and acces:															
1	FC16150-S	-					FC16150-S	1.310	1			Digikey	1.170 €	1	1.170
1	MF80251V3-1000U-G99						MF80251V3-1000U-G99	2.040	1			TME	2.040 €	1	2.040
4	FSP-2						FSP-2	0.142	5			TME	0.142 €	4	0.566
1	FG-08						FG-08	0.524	1			TME	0.524 €	1	0.524
1	HS-142-25	189-8139	SK129-25,4-STS-220		2.820	1	HS-142-25	1.350	1			TME	1.350 €	1	1.350
1	22-01-3037	679-5375	22-01-3037		0.086	10	MX-22-01-3037	0.080	10			TME	0.080 €	1	0.080
3	08-50-0114	172-9178	08-50-0114		0.075	100	MX-0850-0114	0.058	10			TME	0.058 €	3	0.173
1	39-01-4030	510-9685	39-01-4030			5	MX-5557-03R2	0.159	5			TME	0.159 €	1	0.159
1	39-01-2060	484-1760	39-01-2060		0.280	5	MX-5557-06R	0.104	5			TME	0.104 €	1	0.104
9	39-00-0078	215-5887	39-00-0078		0.154	100	MX-5556-T3L	0.082	10			TME	0.082 €	9	0.735
3	ST-003/2	719-6987	60196-3		0.096	100	ST-003/2	0.030	20			TME	0.030 €	3	0.089

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						Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ
1		M3X8/D7985B	Screw; M3x8; cheese head; black; Phillips for heatsink		-				-			-		
1		B3/BN789	Washer; externally serrated; M3; D=6mm; h=0.4mm		-				-			-		
1		B3/BN117	Nut; hexagonal; M3; H: 2.4mm											

Custom made components

1	PCB 2-layer 230.5 x 60 mm	ALLPCB.com	-
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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 (e.g. Farnell). 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.

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1	M3X8/D7985B	-		M3X8/D7985B	0.018	100						TME	0.018 €	1	0.018
1	B3/BN789	-		B3/BN789	0.010	100						TME	0.010 €	1	0.010
1	B3/BN117			B3/BN117	0.005	100						TME	0.005 €	1	0.005
															7.02 €
Custom made componer															
1	PCB 2-layer 230.5 x 60 mm											ALLPCB	6.200 €	1	6.200
															6.20 €
														Total	44.64 €