EEZ PSU H24005 BOM (r5B10, 2016-11-04)

Project source code at https://github.com/eez-open

#	Qty	Part name	Package	Reference designator	Board name	Qty	Farnell / Element14 Code	Part Number	Unit price €	MOQ	Digi-Key Part Number	Unit price €	MOQ	Mouser Part Number	Unit price €	MOQ
1	1	2x3-pin socket	THT; 2x3-pin socket	MCU-ICSP	Arduino Shield	1	7991983	M20-7830346	1,210	10	M20-7830346	1,000		M20-7830346	0,940	
2	20	100n 16V X7R	0603	C11, C26, C30, C37, C42, C54, C55, C56, C60, C61, C62, C65, C69, C70, C73, C75, C79, C82, C83, C159	Power board	40										
	1	100n 16V X7R	0603	C91	AUX PS	1										
	26	100n 16V X7R	0603	C113, C114, C115, C116, C117, C118, C121, C122, C123, C124, C126, C128, C129, C136, C137, C138, C139, C140, C141, C142, C143, C147, C149, C150, C151, C156	Arduino Shield	26										
						67	2496832	0603B104K160CT	0,012	10	0603YC104KAT2A	0,010		06033C104K4T4A	0,025	
3	1	220u 16V	SMD ELCO; Ø6.3 x 7.7mm	C97	AUX PS	1	1870605	MCESL16V227M6.3X7.7	0,213	10	399-6679-1-ND	0,410	1	80-EDK227M016A9	0,407	1
4	4	10n 50V X7R	0805	C133, C146, C154, C155	Arduino Shield	4										
	6	10n 50V X7R	0805	C34, C45, C53, C58, C80, C84	Power board	12										
						16	1759246	MC0805B103K500CT	0,009	10	CL21B103KBCNNNC	0,027		GRM216R71H103KA01D	0,014	
5	2	10u 50V X7R	1210	C107, C125	Arduino Shield	2										
	3	10u 50V X7R	1210	C12, C20, C66	Power board	6										
						8	2362133	GRM32ER71H106KA12L	0,748	1	CL32B106KBJNNWE	0,335		GRM32ER71H106KA12L	0,376	
6	1	10u 35V	SMD ELCO; Ø5 x 5.8mm	C120	Arduino Shield	1	1850112	EEEFK1V100R	0,436	1	EEEFK1V100R	0,430		EEEFK1V100R	0,434	
7	1	10u 10V	1206, Tantalum	C144	Arduino Shield	1										
	1	10u 10V	1206, Tantalum	C67	Power board	2										
						3	1457413	T491A106K010AT	0,260	5	T491A106K010AT	0,340		T491A106K010AT	0,344	
8	2	120p 50V NP0	0805 / 0603	C21, C50	Power board	4	1414667	C0805C121J5GACTU	0,044	10	CL21C121JBANNNC	0,058		C0805C121J5GACTU	0,031	
9	2	18p 50V NP0	0805 / 0603	C131, C135	Arduino Shield	2	2320820	MC0805N180J101CT	0,026	10	CL21C180JBANNNC	0,090		C0805C180J5GACTU	0,100	
10	3	1n 50V NP0	0805 / 0603	C41, C63, C64	Power board	6										
	1	1n 50V NP0	0805 / 0603	C94	AUX PS	1										
						7	1759227	MC0805N102J500CT	0,029	10	CL21C102JBCNNNC	0,065		C0805C102J5GACTU	0,038	
11	4	1u 100V X7R	1206, 100V	C10, C28, C31, C44	Power board	8										
	2	1u 100V X7R	1206, 100V	C104A, C109A	Arduino Shield	2										
						10	2320876	MC1206B105K101CT	0,200	5	CL31B105KCHNNNE	0,253		GRM31CR72A105KA01L	0,227	
12	6	1u 50V X7R	0805, 50V	C13, C57, C59, C68, C74, C76	Power board	12	2118131	C0805C105K5RACTU	0,215	5	CL21B105KBFNNNE	0,129		08055C105K4T2A	0,135	
13	1	22n 50V X7R	0805	C130	Arduino Shield	1										
	1	22n 50V X7R	0805	C29	Power board	2										

#	Qty	Part name	RS Components Code	Part Number	Unit price €	MOQ	TME Code / Part Number	Unit price €	MOQ	THT	SMD	Best Supplier	Best Line Price €	Order Qty	Line Cost €
1	1	2x3-pin socket	681-6832	M20-7830346	0,899	5	ZL262-6DG	0,070	10	1		TME	0,070 €	1	0,070
2	20	100n 16V X7R													
	1	100n 16V X7R													
	26	100n 16V X7R	391-246	0603YC104JAT2A	0,004	50	CL10B104KO8NNNC	0,004	100		67	RS	0,004 €	100	0,400
3	1	220u 16V	839-1770	865080345012	0,280	10	SC1C227M6L07KVR	0,061	10		1	TME	0,061 €	1	0,061
4	4	10n 50V X7R													
	6	10n 50V X7R	461-4013	CC0805KRX7R9BB103	0,007	50	CL21B103JBANNNC	0,006	100		16	TME	0,006 €	20	0,120
5	2	10u 50V X7R													
	3	10u 50V X7R	766-1214	CL32B106KBJNNNE	0,601	10	CL32B106KBJNNNE	0,201	10		8	TME	0,201 €	10	2,010
6	1	10u 35V	708-3443	EEEFK1V100R	0,274	25	EEEFK1V100R	0,200	5		1	TME	0,200 €	1	0,200
7	1	10u 10V													
	1	10u 10V	538-2278	T491A106K010AT	0,196	10	T491A106K010AT	0,085	10		3	TME	0,085 €	3	0,254
8	2	120p 50V NP0	723-6209	GRM2165C1H121JA01D	0,035	100	CL21C121JBANNNP	0,007	100		4	TME	0,007 €	10	0,069
9	2	18p 50V NP0	648-0935	C0805C180J5GACTU	0,157	10	CL21C180JBANNNC	0,071	100		2	Farnell	0,026 €	2	0,053
10	3	1n 50V NP0													
	1	1n 50V NP0	378-710	0805CG102J9BB	0,021	25	CL21C102JBCNNNC	0,010	100		7	TME	0,010 €	10	0,097
11	4	1u 100V X7R													
	2	1u 100V X7R	740-7590	C3216X7R2A105K160AA	0,174	10	GRM31CR72A105KA01L	0,128	10		10	TME	0,128 €	10	1,279
12	6	1u 50V X7R	766-1062	CL21B105KBFNNNF	0,041	100	CL21B105KBFNNNG	0,014	100		12	TME	0,014 €	15	0,214
13	1	22n 50V X7R													
	1	22n 50V X7R													

#	Qty	Part name	Package	Reference designator	Board name	Qty	Farnell / Element14				Digi-Key			Mouser		
							Code	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ
	2	22n 50V X7R	0805	C87, C90	AUX PS	2										
						5	1759252	MC0805B223K500CT	0,016	10	CL21B223KBANNNC	0,058		C0805C223K5RAC	0,031	
14	5	2n2 50V NP0	0805 / 0603	C47, C48, C49, C51, C81	Power board	10	1759236	MC0805N222J500CT	0,052	10	CL21C222JBFNNNG	0,078		GRM2165C1H222JA01D	0,076	
15	3	2u2 25V X7R	0805	C24, C36, C38	Power board	6	2320829	MC0805B225K250CT	0,106	10	CL21B225KAFNNWE	0,126		GRM21BR71E225KA73L	0,101	
16	2	330p 50V NP0	0805 / 0603	C17, C33	Power board	4										
	1	330p 50V NP0	0805 / 0603	C89	AUX PS	1										
						5	1759213	MC0805N331J500CT	0,027	10	CL21C331JBANNNC	0,029		C0805C331J5GAC	0,029	
17	5	3n3 50V X7R or NP0	0805 / 0603	C40, C71, C72, C77, C78	Power board	10	1759291	MC0805B332K101CT	0,015	10	CL21B332KBANNNC	0,045		C0805C332K5RAC	0,024	
18	1	3n9 50V X7R or NP0	0805 / 0603	C95	AUX PS	1	1759240	MC0805B392K500CT	0,022	10	CL21B392KBANNNC	0,090		C0805C392K5RACTU	0,091	
19	3	470n 50V X7R	0805, 50V	C9, C25, C32	Power board	6										
	2	470n 50V X7R	0805, 50V	C104, C109	Arduino Shield	2										
						8	2470492	GRM21BR71H474KA88L	0,163	5	CL21B474KBFNFNE	0,139		C0805C474K5RACTU	0,103	
20	1	470p 50V NP0	0805 / 0603	C23	Power board	2	1759217	MC0805N471J500CT	0,023	10	CL21C471JBANNNC	0,090		08055A471JAT2A	0,091	
21	2	47n 50V X7R	0805	C148, C152	Arduino Shield	2										
	1	47n 50V X7R	0805	C98	AUX PS	1										
						3	2496983	0805B473K500CT	0,023	10	CL21B473KBCNNNC	0,090		08055C473KAT2A	0,091	
22	1	47n 400V Polyester Film	THT R=7,5mm	C86	AUX PS	1	2468839	B32520E6473K000	0,358	1	-			-		
23	2	47p 50V NP0	0805 / 0603	C46, C52	Power board	4	1414692	C0805C470J5GACTU	0,028	10	CL21C470JBANNNC	0,043		C0805C470J5GACTU	0,029	
24	1	47u 35V	SMD ELCO, Ø6.3 x 5.8mm	C119	Arduino Shield	1										
	2	47u 35V	SMD ELCO, Ø6.3 x 5.8mm	C27, C35	Power board	4										
						5	9695850	EEEFK1V470P	0,493	1	EEEFK1V470P	0,440		EEEFK1V470P	0,443	
25	4	4n7 100V X7R	0805	C1, C2, C3, C22	Power board	8										
	4	4n7 100V X7R	0805	C105, C108, C110, C112	Arduino board	4										
						12	1759293	MC0805B472K101CT	0,019	10	CL21B472KCANNNC	0,065		GRM21AR72D472KW01D	0,050	
26	1	4u7 10V	1206, Tantalum	C145	Arduino Shield	1										
	1	4u7 10V	1206, Tantalum	C43	Power board	2										
						3	1457428	T491A475K016AT	0,238	5	T491A475K010AT	0,310		T491A475K010AT	0,299	
27	3	4u7 100V X7R	1210, 100V, X7R	C6, C7, C8	Power board	6	2211140	CGA6M3X7S2A475K200AB	1,560	1	GRJ32DC72A475KE11L	1,240		GRJ32DC72A475KE11L	1,250	
28	3	4u7 25V X7R	1210, 25V	C88, C92, C93	AUX PS	3	1907365	C3225X7R1E475K200AA	0,484	1	C3225X7R1E475K200AA	0,390		C3225X7R1E475K200AA	0,389	

#	Qty	Part name	RS Components				TME			THT	SMD	Price calculation for 1 set			
			Code	Part Number	Unit price €	MOQ	Code / Part Number	Unit price €	MOQ			Best Supplier	Best Line Price €	Order Qty	Line Cost €
	2	22n 50V X7R													
			464-6701	08055C223KAT2A	0,015	50	CL21B223KBANNNC	0,008	100		5	TME	0,008 €	10	0,084
14	5	2n2 50V NP0	802-9905	C0805C222J5GACTU	0,043	100	GRM2165C1H222JA01D	0,015	100		10	TME	0,015 €	10	0,145
15	3	2u2 25V X7R	766-1031	CL21B225KAFNNNF	0,057	100	CL21B225KAFNNNG	0,027	50		6	TME	0,027 €	10	0,274
16	2	330p 50V NP0													
	1	330p 50V NP0													
			723-6271	GRM2165C1H331JA01D	0,042	100	CL21C331JBANNNC	0,014	100		5	TME	0,014 €	10	0,138
												Farnell			
17	5	3n3 50V X7R or NP0	237-7009	GRM216R71H332KA01D	0,038	50	CL21B332KBANNNC	0,007	100		10	TME	0,007 €	10	0,069
18	1	3n9 50V X7R or NP0	766-1047	CL21C392JBFNNNF	0,074	50	CL21B392KBANNNC	0,009	100		1	TME	0,009 €	1	0,009
19	3	470n 50V X7R													
	2	470n 50V X7R													
			766-1053	CL21B474KBF4PNG	0,085	50	CL21B474KBFNNNG	0,015	100		8	TME	0,015 €	10	0,153
												Farnell			
20	1	470p 50V NP0	378-700	0805CG471J9BB	0,021	25	CL21C471JBANNNC	0,009	100		2	TME	0,009 €	2	0,018
21	2	47n 50V X7R													
	1	47n 50V X7R													
			391-303	08055C473KAT2A	0,011	50	CC0805KRX7R9473	0,008	100		3	TME	0,008 €	3	0,025
22	1	47n 400V Polyester Film	668-9993	B32520C6473K189	0,241	10	-			1		RS	0,241 €	1	0,241
23	2	47p 50V NP0	264-4270	C0805C470J5GACTU	0,014	25	CC0805JRNPO9470	0,007	100		4	TME	0,007 €	10	0,074
24	1	47u 35V													
	2	47u 35V													
			565-623	EEEFK1V470AP	0,165	5	EEEFK1V470P	0,157	5		5	TME	0,157 €	5	0,786
25	4	4n7 100V X7R													
	4	4n7 100V X7R													
			698-3364	08051C472KAZ2A	0,036	25	CL21B472KCANNNC	0,006	100		12	TME	0,006 €	20	0,126
26	1	4u7 10V													
	1	4u7 10V													
			538-2341	T491A475K016AT	0,179	10	T491A475M010AT	0,128	5		3	TME	0,128 €	5	0,640
27	3	4u7 100V X7R	915-5415	CGA6M3X7S2A475K200AB	0,686	5	-				6	RS	0,686 €	6	4,116
28	3	4u7 25V X7R	515-8508	GRM32ER71H475KA88L	0,608	10	CL32A475KAULNNE	0,119	10		3	TME	0,119 €	3	0,358

#	Qty	Part name	Package	Reference designator	Board name	Qty	Farnell / Element14 Code	Part Number	Unit price €	MOQ	Digi-Key Part Number	Unit price €	MOQ	Mouser Part Number	Unit price €	MOQ
29	2	6n8 50V X7R or NP0	0603	C132, C134	Arduino Shield	2	1759100	MC0603B682K500CT	0,007	10	CL10B682KB8NNNC	0,090		GRM188R71H682KA01J	0,091	
30	1	6n8 (X1 / Y2) PP Film 300Vac 1000Vdc	THT R=10mm	C85	AUX PS	1	2478385	R413F16804000M	0,528	1	R413F16804000M	0,520		R413F16804000M	0,525	
31	1	1F 5,5V Backup Cap	THT	C127	Arduino Shield	1	9697497	EEC-S5R5H105	4,660	1	EEC-S5R5H105	3,480		EEC-S5R5H105	3,510	
32	1	100u 63V	SMD ELCO; Ø10 x 10.2mm	C18	Power board	2	9696040	EEEFK1J101P	0,846	1	EEE-FK1J101P	0,930		EEE-FK1J101P	0,932	
33	1	47u 63V	SMD ELCO; Ø8x10.2mm	C16	Power board	2	9696032	EEEFK1J470P	1,040	1	EEE-FK1J470P	0,880		EEE-FK1J470P	0,887	
34	2	22u 50V	SMD ELCO; Ø6.3x5.8mm	C106, C111	Arduino Shield	2	9696016	EEEFK1J220P	0,537	1	PCE3820CT-ND	0,760		667-EEE-FK1J220P	0,760	
35	1	BAS316	SOD-323	D21	AUX PS	1										
	5	BAS316	SOD-323	D22, D23, D24, D25, D27	Arduino Shield	5										
	9	BAS316	SOD-323	D6, D11, D12, D13, D14, D15, D16, D17, D18	Power board	18										
						24	8734275	BAS316,115	0,192	5	BAS316,115	0,175		BAS316,115	0,174	
36	1	BAT54S	SOT-23	D28	Arduino Shield	1	1621835	BAT54S	0,125	10	BAT54SLT1G	0,150		BAT54SLT1G	0,145	
37	1	DFLS1100-7	PowerDi 123	D19	AUX PS	1										
	2	DFLS1100-7	PowerDi 123	D7, D10	Power board	4										
						5	1713889	DFLS1100-7	0,424	1	DFLS1100-7	0,370		DFLS1100-7	0,476	
38	1	SKL16	SOD-323	D20	AUX PS	1										
	1	SKL16	SOD-323	D29	Arduino Shield	1										
	2	SKL16	SOD-323	D8, D9	Power board	4										
						6	8738025	PMEG4005AEA	0,104	5	PMEG4005AEA	0,325		PMEG4005AEA	0,286	
39	1	SMBJ5.0A-TR	DO-214AA	D26	Arduino Shield	1	9886311	SMBJ5.0A-TR	0,088	10	SMBJ5.0A-TR	0,380		SMBJ5.0A	0,302	
40	1	STPS15H100	TO-252	D5	Power board	2	2344052	STPS15H100CB-TR	1,070	1	STPS15H100CB	0,900		STPS15H100CB	0,896	
41	3	60R@100MHz	0603 Ferrite Bead	FB1, FB2, FB3	Power board	6										
	1	60R@100MHz	0603 Ferrite Bead	FB4	AUX PS	1										
	1	60R@100MHz	0603 Ferrite Bead	FB7	Arduino Shield	1										
		Würth 742792602	0603 Ferrite Bead			8	1635704	742792602	0,210	1	742792602	0,210		742792602	0,160	
42	1	LTC3864EMSE#PBF	MSOP-12	IC1	Power board	2	2293128	LTC3864EMSE#PBF	4,520	1	LTC3864EMSE#PBF	3,960		-		
43	1	REF5025AIDG4	SOIC-8	IC10	Power board	2	1439622	REF5025AIDG4	3,720	1	REF5025AIDR	2,990		REF5025AIDR	2,910	
44	1	DAC8552IDGKTG4	MSOP-8 (VSSOP-8)	IC11	Power board	2	1329584	DAC8552IDGKTG4	6,420	1	DAC8552IDGKT	7,660		DAC8552IDGKR	6,510	
45	1	ADG465BRTZ	SOT-23	IC12	Power board	2	2376952	ADG465BRTZ-REEL7	1,690	1	Discontinued			Discontinued		
46	1	TS5A9411DCKT	SC-70	IC13	Power board	2	1755582	TS5A9411DCKT	1,050	1	TS5A9411DCKR	0,560		TS5A9411DCKR	0,534	
47	1	ADS1120IPWR	TSSOP-16	IC14	Power board	2	2402249	ADS1120IPWR	6,760	1	ADS1120IPWR	6,250		ADS1120IPWR	6,100	
48	1	LP339D	SOIC-14	IC15	Power board	2	9589686	LP339D	0,573	1	LP339DR	0,520		LP339DR	0,498	
49	1	LM25575MH/NOPB	HTSSOP-16	IC16	AUX PS	1	1564783	LM25575MH/NOPB	4,360	1	LM25575MHX/NOPB	3,540		LM25575MHX/NOPB	3,450	
50	1	MC79L05	SOIC-8	IC2	Power board	2	2323583	MC79L05ACD	0,428	1	MC79L05ACD	0,380		MC79L05ACD	0,371	
51	1	TLC5925IDBQR	SSOP-24	IC20	Arduino Shield	1	1694438	TLC5925IDBQR	1,520	1	TLC5925IDBQR	1,370		TLC5925IDBQR	1,330	
52	2	Si8641EC-B-IS1	SOIC-16	IC21, IC24	Arduino Shield	2	2423294	Si8641EC-B-IS1	3,210	1	Si8641EC-B-IS1	2,780		Si8641EC-B-IS1	2,720	

#	Qty	Part name	Code	Part Number	Unit price €	MOQ	Code / Part Number	Unit price €	MOQ	THT	SMD	Best Supplier	Best Line Price €	Order Qty	Line Cost €
	2	6n8 50V X7R or NP0	147-825	C0603C682K5R ACTU	0,007	50	CL10B682JB8NNNC	0,004	100		2	TME	0,004 €	10	0,042
29	1	6n8 (X1 / Y2) PP Film 300Vac 1000Vdc	871-2489	890334023003C S	0,420	10	MKP-Y2-6N8	0,158	5	1		TME	0,158 €	1	0,158
30															
31	1	1F 5,5V Backup Cap	339-6843	EECS5R5H105	3,556	1	EECS5R5H105	2,190	1	1		TME	2,190 €	1	2,190
32	1	100u 63V	708-3623	EEEFK1J101P	0,641	5	EEEFK1J101P	0,380	5		2	TME	0,380 €	2	0,760
33	1	47u 63V	708-3614	EEEFK1J470P	0,784	5	EEEFK1J470P	0,456	1		2	TME	0,456 €	2	0,911
34	2	22u 50V	708-3598	EEEFK1J220P	0,255	5	EEEFK1J220P	0,260	5		2	RS	0,255 €	2	0,510
35	1	BAS316													
	5	BAS316													
	9	BAS316													
			397-2914	BAS316,115	0,195	50	BAS316,115	0,019	25		24	TME	0,019 €	25	0,463
36	1	BAT54S	670-8797	BAT54S	0,202	10	BAT54S.215	0,017	50		1	TME	0,017 €	1	0,017
37	1	DFLS1100-7													
	2	DFLS1100-7													
			708-2292	DFLS1100-7	0,392	25	-				5	Digikey	0,370 €	5	1,850
38	1	SKL16													
	1	SKL16													
	2	SKL16													
			485-729	PMEG4005AEA, 115	0,325	20	SKL16	0,095	5		6	TME	0,095 €	10	0,952
39	1	SMBJ5.0A-TR	714-7210	SMBJ5.0A-TR	0,245	25	SMBJ5.0A-TR	0,094	5		1	Farnell	0,088 €	1	0,088
40	1	STPS15H100	795-9075	STPS15H100CB -TR	0,924	5	-				2	Mouser	0,896 €	2	1,792
41	3	60R@100MHz													
	1	60R@100MHz													
	1	60R@100MHz													
		Würth 742792602	669-4049	742792602	0,172	10	LCBA-600	0,027	25		8	TME	0,027 €	10	0,269
42	1	LTC3864EMSE#PBF	-				-					2	Digikey	3,960 €	2	7,920
43	1	REF5025AIDG4	404-304	REF5025AID	3,500	1	-				2	Mouser	2,910 €	2	5,820
44	1	DAC8552IDGKTG4	662-1498	DAC8552IDGKT	6,524	1	-				2	Farnell	6,420 €	2	12,840
45	1	ADG465BRTZ	-				-					2	Farnell	1,690 €	2	3,380
46	1	TS5A9411DCKT	459-459	TS5A9411DCKT	0,570	10	-				2	Mouser	0,534 €	2	1,068
47	1	ADS1120IPWR	-				-					2	Mouser	6,100 €	2	12,200
48	1	LP339D	661-2659	LP339DR	0,175	10	LP339D	0,244	3		2	RS	0,175 €	3	0,525
49	1	LM25575MH/NOPB	288-774	LM25575MH/NO PB	4,060	1	-				1	Mouser	3,450 €	1	3,450
50	1	MC79L05	661-6131	MC79L05ACD	0,308	10	MC79L05ACD	0,202	3		2	TME	0,202 €	3	0,606
51	1	TLC5925IDBQR	812-3984	TLC5925IDBQR	1,109	10	-				1	RS	1,109 €	1	1,109
52	2	Si8641EC-B-IS1	753-2438	Out of stock			-				2	Mouser	2,720 €	2	5,440

#	Qty	Part name	Package	Reference designator	Board name	Qty	Farnell / Element14				Digi-Key			Mouser		
							Code	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ
53	2	SI8651EC-B-IS1	SOIC-16	IC22, IC23	Arduino Shield	2	2423323	SI8651EC-B-IS1	3,150	1	SI8651EC-B-IS1	3,190		SI8651EC-B-IS1	3,060	
54	1	LD1117ADT33TR	TO-252	IC24	Arduino Shield	1	1087169	LD1117DT33	0,358	5	LD1117ADT33TR	0,590		LD1117ADT33TR	0,570	
55	1	PCA21125T/Q900/1,1	TSSOP-14	IC26	Arduino Shield	1	2400445	PCA21125T/Q900/1,1	1,870	1	PCA21125T/Q900/1,1	1,610		PCA21125T/Q900/1,1	1,660	
56	1	AT25256B	SOIC-8	IC27	Arduino Shield	1	1841577	AT25256B-SSHL-B	1,190	1	AT25256B-SSHL-B	1,300		AT25256B-SSHL-B	1,290	
57	1	W5500	LQFP-48	IC28	Arduino Shield	1	-				W5500	3,750		W5500	2,390	
58	1	MC78L05	SOIC-8	IC3	Power board	2	9593845	UA78L05ACDR	0,488	1	MC78L05ACD	0,360		MC78L05ACD	0,366	
59	1	BC857BS	SOT-363	IC29	Arduino Shield	1	1653608	BC857BDW1T1G	0,141	1	BC857BDW1T1G	0,210		BC857BDW1T1G	0,199	
60	1	TLC555	SOIC-8	IC30	Arduino Shield	1	9589880	NE555DR	0,300	1	NE555D	0,350		NE555D	0,353	
61	1	SN74LVC2G08DCTR	SSOP-8	IC31	Arduino Shield	1	1470871	SN74LVC2G08DCTR	0,414	1	SN74LVC2G08DCTR	0,530		SN74LVC2G08DCTR	0,516	
62	1	TPS3705-33D	SOIC-8	IC32	Arduino Shield	1	2296066	TPS3705-33D	1,330	1	TPS3705-33DR	1,580		TPS3705-33D	1,840	
63	1	SN74LV1T34DBVR	SOT-23	IC33	Arduino Shield	1	2499914	SN74LV1T34DBVR	0,457	1	SN74LV1T34DBVR	0,410		SN74LV1T34DBVR	0,398	
64	1	SN74LVC2G02DCTR	SSOP-8	IC34	Arduino Shield	1	1236358	SN74LVC2G02DCTR	0,452	1	SN74LVC2G02DCTR	0,590		SN74LVC2G02DCTR	0,570	
65	1	LM5574MTX/NOPB	TSSOP-16	IC4	Power board	2	2323534	LM5574MTX/NOPB	3,930	1	LM5574MTX/NOPB	3,430		LM5574MTX/NOPB	3,340	
66	1	LP2951D	SOIC-8	IC5	Power board	2	1755066	LP2951D	0,573	1	LP2951DR	0,520		LP2951DR	0,498	
67	2	TL072CD	SOIC-8	IC6, IC7	Power board	4	1467663	TL072CDT	0,252	5	TL072CDT	0,430		TL072CDT	0,416	
68	1	OP27GSZ	SOIC-8	IC8	Power board	2	9426124	OP27GSZ	2,810	1	OP27GSZ	3,140		OP27GSZ	3,080	
69	1	MCP23S08-E/SO	SOIC-18	IC9	Power board	2	1332092	MCP23S08-E/SO	1,030	1	MCP23S08-E/SO	0,960		MCP23S08-E/SO	1,030	
70	1	1-726388-2	THT	J6	Arduino board	1	2308760	1-726388-2	0,085	10	A121493-ND	0,210	1	571-1-726388-2	0,235	1
71	2	RT424005	THT	K_PAR, K_SER	Arduino Shield	2	9950168	G2RL-2 5DC	3,940	1	RTE24005	2,920		RTE24005	2,850	
72	2	G6K-2F-5DC	SMD, relay	K_S1, K_S2	Arduino Shield	2	4446185	G6K-2F 5DC	5,870	1	G6K-2F DC5	3,860		G6K-2F-5DC	4,000	
73	1	SK 145/37,5	THT Heatsink	KK1	AUX PS	1	4621414	SK 145/37,5 STS-220	3,530	1	-			-		
74	1	RN114-4/02	THT, **solder on bottom layer!**	L1	Power board	2	1191484	RN114-4-02	3,720	1	RN114-4/02	2,870		RN114-4/02	2,600	
75	1	470uH	SMD; 7.3mm x 7.3mm	L10	AUX PS	1	2455059	SRR0745A-471M	0,918	1	SRR0745A-471M	0,770		SRR0745A-471M	0,814	
76	1	33uH - 7443551331	SMD; 13.2mm x 12.8mm	L2	Power board	2	2211631	Würth - 7443551331	3,070	1	7443551331	3,380		7443551331	2,970	
77	2	IHLP2020CZER3R3M11	SMD; 5.49mm x 5.18mm	L3, L4	Power board	4	1741325	IHLP2020CZER3R3M11	1,410	5	IHLP2020CZER3R3M11	2,160		IHLP2020CZER3R3M11	1,030	
78	3	2u2	0805	L5, L6, L7	Power board	6										
	1	2u2	0805	L8	AUX PS	1										
						7	2215643	MLZ2012A2R2WT	0,118	10	445-3168-1-ND	0,110	1	810-MLZ2012A2R2MT	0,109	1
78	1	100uH	SMD, 12mm x 12mm	L9	AUX PS	1	2113014	SRU1038-101Y	1,010	1	SRU1038-101Y	0,720		SRU1038-101Y	0,758	
79	1	TFT_320QVT	THT; 2x20-pin socket	LCD1	Arduino Shield	1	7992033	M20-7832046	2,750	1	M20-7832046	3,160		M20-7832046	2,530	
80	2	HSMG-C170	0805 Green	LED_O1, LED_O2	Arduino Shield	2	5790852	HSMG-C170	0,204	10	HSMG-C170	0,490		HSMG-C170	0,060	

#	Qty	Part name (RS Components)	Code	Part Number	Unit price €	MOQ	Code / Part Number (TME)	Unit price €	MOQ	THT	SMD	Best Supplier	Best Line Price €	Order Qty	Line Cost €
53	2	SI8651EC-B-IS1	753-2497	Si8651EC-B-IS1	3,038	1	-				2	RS	3,038 €	2	6,076
54	1	LD1117ADT33TR	686-9123	LD1117ADT33TR	0,294	10	LD1117ADT33	0,315	3		1	RS	0,294 €	1	0,294
55	1	PCA21125T/Q900/1,1	-				-				1	Digikey	1,610 €	1	1,610
56	1	AT25256B	738-0079	AT25256B-SSHL-B	1,267	2	25AA256-I/SN	1,290	1		1	Farnell	1,190 €	1	1,190
57	1	W5500	-				W5500	2,190	1		1	TME	2,190 €	1	2,190
58	1	MC78L05	688-9269	MC78L05ABDR2G	0,245	2	MC78L05ABDG	0,165	3		2	TME	0,165 €	3	0,495
59	1	BC857BS	690-0101	BC857BDW1T1G	0,022	25	BC857BS	0,027	25		1	RS	0,022 €	1	0,022
60	1	TLC555	662-4006	TLC555CDR	0,218	10	TLC555CDR	0,384	3		1	RS	0,218 €	1	0,218
61	1	SN74LVC2G08DCTR	662-8910	SN74LVC2G08DCTR	0,465	5	-				1	Farnell	0,414 €	1	0,414
62	1	TPS3705-33D	662-3331	Out of stock	1,114	5	-				1	RS	1,114 €	1	1,114
63	1	SN74LV1T34DBVR	-				-				1	Mouser	0,398 €	1	0,398
64	1	SN74LVC2G02DCTR	-				SN74LVC2G02DCTR	0,252	5		1	TME	0,252 €	1	0,252
65	1	LM5574MTX/NOPB	288-960	LM5574MT/NOPB	3,948	1	LM5574MT	4,150	1		2	Mouser	3,340 €	2	6,680
66	1	LP2951D	796-8095	LP2951D	0,613	5	LP2951CM/NOPB	0,495	1		2	TME	0,495 €	2	0,990
67	2	TL072CD	857-907P	TL072CD	0,252	1	TL072CD	0,164	3		4	TME	0,164 €	6	0,981
68	1	OP27GSZ	522-8304	OP27GSZ	3,024	1	OP27GSZ	1,550	1		2	TME	1,550 €	2	3,100
69	1	MCP23S08-E/SO	403-812	MCP23S08-E/SO	1,249	5	MCP23S08-E/SO	1,060	1		2	Digikey	0,960 €	2	1,920
70	1	1-726388-2	680-5772	1-726388-2	0,060	100	1-726388-2	0,082	10	1		RS	0,060 €	2	0,120
71	2	RT424005	198-6898	RTE24005	4,676	1	RT424005	1,260	1	2		TME	1,260 €	2	2,520
72	2	G6K-2F-5DC	683-9633	G6K2F5DC	4,928	1	G6K-2F-5DC	2,490	1		2	TME	2,490 €	2	4,980
73	1	SK 145/37,5	-				-			1		Farnell	3,530 €	1	3,530
74	1	RN114-4/02	525-3697	RN114-4-02	2,912	1	CAF-3.1-1.2	1,820	1	2		TME	1,820 €	2	3,640
75	1	470uH	770-1182	DR74-471-R	0,977	5	DE0704-470	0,254	5		1	TME	0,254 €	1	0,254
76	1	33uH - 7443551331	-				-				2	Mouser	2,970 €	2	5,940
77	2	IHLP2020CZER3R3M11	748-6912	IHLP2020CZER3R3M01	1,518	5	-				4	Mouser	1,030 €	4	4,120
78	3	2u2													
	1	2u2													
			604-1524	MLZ2012A2R2MT	0,083	10	-				7	RS	0,083 €	10	0,830
78	1	100uH	692-0644	SRU1048-101Y	0,756	1	DE1205-100	0,299	5		1	TME	0,299 €	1	0,299
79	1	TFT_320QVT	681-6851	M20-7832046	3,027	5	ZL262-40DG	0,329	2	1		TME	0,329 €	2	0,658
80	2	HSMG-C170	435-6767	HSMG-C170	0,206	50	HSMG-C170	0,095	5		2	Mouser	0,060 €	2	0,120

#	Qty	Part name	Package	Reference designator	Board name	Qty	Farnell / Element14				Digi-Key			Mouser		
							Code	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ
81	5	HSMH-C170	0805 Red	LED_CC1, LED_CC2, LED_PROG1, LED_PROG2, LED_SP	Arduino Shield	5	5790840	HSMH-C170	0,488	5	HSMH-C170	0,440		HSMH-C170	0,060	
82	1	HSMD-C170	0805 Orange	LED_PWR	Arduino Shield	1	5790864	HSMD-C170	0,240	5	HSMD-C170	0,440		HSMD-C170	0,060	
83	4	HSMY-C170	0805 Yellow	LED_CV1, LED_CV2, LED_S1, LED_S2	Arduino Shield	4										
84	1	HSMY-C170	0805 Yellow	LED1	Power board	2										
						6	5790876	HSMY-C170	0,330	5	HSMY-C170	0,440		HSMY-C170	0,060	
	1	10K/Beta:3570K	0805	NTC1	Power board	2	1612623	NTCS0805E3103JMT	0,413	1	NTCS0805E3103JMT	0,250		NTCS0805E3103JMT	0,145	
85	1	MOC3052	SMD; SDIP-6	OK1	AUX PS	1	2453236	MOC3052SM	0,884	1	MOC3052SM	0,910		MOC3052SM	0,750	
86	1	MOC3062	SMD; SDIP-6	OK2	AUX PS	1	2322554	MOC3062SR2VM	0,977	1	MOC3062SM	1,110		MOC3062SM	0,924	
87	1	HCPL-181	SOIC-4	OK3	Arduino Shield	1	1244525	HCPL-181-000E	0,342	1	HCPL-181-000E	0,560		HCPL-181-000E	0,150	
88	1	IRFR5305	TO-252	Q1	Power board	2	8649820	IRFR5305PBF	0,994	1	IRFR5305PBF-ND	0,810		942-IRFR5305PBF	0,805	
		Option #1: SPD30P06P	TO-252	Q1	Power board	0	2480881	SPD30P06P G	0,980	1	SPD30P06P GCT-ND	1,030		726-SPD30P06PG	1,020	
		Option #2: SUD19P06-60	TO-252	Q1	Power board	0	2101465	SUD19P06-60-GE3	1,590	5	SUD19P06-60-GE3	0,950		SUD19P06-60-GE3	1,070	
89	5	MMBT5551	SOT-23	Q12, Q13, Q16, Q18, Q19	Power board	10	1459109	MMBT5551LT1G	0,167	5	MMBT5551LT1G	0,180		MMBT5551LT1G	0,163	
90	1	BSS84P	SOT-23	Q14	Power board	2	1056526	BSS84P H6327	0,110	5	BSS84PH6433XTMA1	0,180		BSS84PH6433XTMA1	0,177	
91	4	MMBT5401	SOT-23	Q2, Q10, Q11, Q17	Power board	8	1459108	MMBT5401LT1G	0,167	10	MMBT5401LT1G	0,180		MMBT5401LT1G	0,163	
92	2	BTA26-600	THT	Q20, Q21	AUX PS	2	1057286	BTA26-600BRG	2,840	1	BTA26-600BRG	2,930		BTA26-600BRG	3,110	
93	1	IRLL014N	SOT-223	Q22	AUX PS	1	8651183	IRLL014NPBF	0,539	1	IRLL014NTRPBF	0,580		IRLL014NTRPBF	0,561	
94	5	IRLML2246TRPBF	SOT-23	Q23, Q24, Q25, Q26, Q28	Arduino Shield	5	1888166	IRLML2246TRPBF	0,287	1	IRLML2246TRPBF	0,400		IRLML2246TRPBF	0,389	
95	3	2N7002	SOT-23	Q27, Q29, Q30	Arduino Shield	3										
	2	2N7002	SOT-23	Q3, Q15	Power board	4										
						7	1713823	2N7002-7-F	0,135	5	2N7002LT1G	0,130		2N7002LT1G	0,118	
96	1	IRFP250N	THT, **solder on bottom layer!**	Q4	Power board	2	8649260	IRFP250NPBF	2,080	1	IRFP250NPBF	1,870		IRFP250NPBF	1,870	
97	1	BC857C	SOT-23	Q5	Power board	2	8734771	BC857C,215	0,022	10	BC857CLT1G	0,120		BC857CLT1G	0,109	
98	1	BC846C	SOT-23	Q6	Power board	2	2453325	BC846CMTF	0,055	5	BC846CMTF	0,150		BC846CMTF	0,146	
99	2	BCP56-16.115	SOT-223	Q7, Q9	Power board	4	1081258	BCP56-16,115	0,256	5	BCP56-16T1G	0,360		BCP56-16,115	0,340	
100	1	IRFR5410	TO-252	Q8	Power board	2	2468040	IRFR5410TRPBF	1,050	1	IRFR5410PBF	0,850		IRFR5410PBF	0,842	
101	3	0R	0805	R3, R21, R57	Power board	6										
	4	0R	0805	JP1, JP2, JP9, JP73	Power board	8										
	1	0R	0805	R173	AUX PS	1										
	5	0R	0805	JP4, JP5, JP6, JP7, JP8	Arduino Shield	5										
						20	9233750	RC0805JR-070RL	0,010	10	RC2012J000CS	0,014		RC0805JR-070RL	0,012	
102	4	100K 1%	0805	R11, R14, R77, R79	Power board	8										
	2	100K 1%	0805	R143, R154	Arduino Shield	2										
						10	2352619	RCV0805100KFKEA	0,080	10	RC0805FR-07100KL	0,019		RC0805FR-07100KL	0,015	

#	Qty	Part name	Code	Part Number	Unit price €	MOQ	Code / Part Number	Unit price €	MOQ	THT	SMD	Best Supplier	Best Line Price €	Order Qty	Line Cost €
					RS Components			TME					Price calculation for 1 set		
	5	HSMH-C170	486-0468	HSMH-C170	0,188	25	HSMH-C170	0,057	10		5	TME	0,057 €	5	0,287
81															
82	1	HSMD-C170	486-0525	HSMD-C170	0,231	25	HSMD-C170	0,059	10		1	TME	0,059 €	1	0,059
83	4	HSMY-C170													
84	1	HSMY-C170													
			486-0519	HSMY-C170	0,248	25	HSMY-C170	0,060	10		6	Mouser	0,060 €	6	0,360
	1	10K/Beta:3570K	697-4601	NB12K00103JBB	0,392	5	NTCS0805E3103JMT	0,190	5		2	Mouser	0,145 €	2	0,290
85	1	MOC3052	761-3690	MOC3052SM	0,739	5	MOC3052SR2VM	0,380	2		1	TME	0,380 €	1	0,380
86	1	MOC3062	806-6064	MOC3062SM	0,718	10	MOC3062XSM	0,410	1		1	TME	0,410 €	1	0,410
87	1	HCPL-181	693-5277	HCPL-181-000E	0,343	10	HCPL-181-000E	0,250	2		1	Mouser	0,150 €	1	0,150
88	1	IRFR5305	543-2496	IRFR5305PBF	0,994	1	IRFR5305PBF	0,540	1		2	TME	0,540 €	2	1,080
		Option #1: SPD30P06P	898-6864	SPD30P06P G	0,861	1	SPD30P06PGBTMA1	0,780	1						
		Option #2: SUD19P06-60	-				-								
89	5	MMBT5551	545-0400	MMBT5551LT1G	0,129	10	MMBT5551	0,020	25		10	TME	0,020 €	25	0,510
90	1	BSS84P	653-2288	BSS84P	0,157	10	BSS84P	0,048	10		2	TME	0,048 €	2	0,096
91	4	MMBT5401	545-0393	MMBT5401LT1G	0,151	10	MMBT5401	0,021	25		8	TME	0,021 €	25	0,513
92	2	BTA26-600	714-0515	BTA26-600BRG	3,038	1	BTA26-600BRG	2,540	1	2		TME	2,540 €	2	5,080
93	1	IRLL014N	302-000	IRLL014NPBF	0,552	5	IRLL014NPBF	0,214	3		1	TME	0,214 €	1	0,214
94	5	IRLML2246TRPBF	760-4432	IRLML2246TRPBF	0,322	5	IRLML2246TRPBF	0,100	5		5	TME	0,100 €	5	0,500
95	3	2N7002													
	2	2N7002													
			545-0012	2N7002LT1G	0,108	50	2N7002LT1G	0,019	25		7	TME	0,019 €	25	0,475
96	1	IRFP250N	541-0042	IRFP250NPBF	2,100	1	IRFP250NPBF	1,060	1	2		TME	1,060 €	2	2,120
97	1	BC857C	690-0105	BC857CLT1G	0,102	25	BC857C-DIO	0,020	25		2	TME	0,020 €	2	0,040
98	1	BC846C	761-3509	BC846CMTF	0,048	100	BC846C-DIO	0,019	25		2	TME	0,019 €	2	0,038
99	2	BCP56-16.115	773-7633	BCP56-16T3G	0,242	10	BCP56-16.115	0,106	5		4	TME	0,106 €	4	0,424
100	1	IRFR5410	784-0303	IRFR5410PBF	0,977	5	IRFR5410PBF	0,550	1		2	TME	0,550 €	2	1,100
101	3	0R													
	4	0R													
	1	0R													
	5	0R													
			679-0800	CRCW080500000Z0EA	0,020	50	SMD0805-0R	0,006	100		20	TME	0,006 €	15	0,090
102	4	100K 1%													
	2	100K 1%													
			223-0691	CRG0805F100K	0,007	50	SMD0805-100K-1%	0,008	100		10	RS	0,007 €	10	0,070

#	Qty	Part name	Package	Reference designator	Board name	Qty	Farnell / Element14		Unit price €	MOQ	Digi-Key	Unit price €	MOQ	Mouser	Unit price €	MOQ
							Code	Part Number			Part Number			Part Number		
103	2	100K 0.1%	0805	R49, R59	Power board	4	1577686	ERA6AEB104V	0,205	5	RT0805BRD07100KL	0,350		CPF0805B100KE	0,095	
104	1	100R 1%	0805	R127	AUX PS	1										
	1	100R 1%	0805	R164	Arduino Shield	1										
	3	100R 1%	0805	R5, R6, R43	Power board	6										
						8	9332375	MC01W08051100R	0,002	10	RC0805FR-07100RL	0,019		RC0805FR-07100RL	0,015	
105	2	10K 1%	0805	R125, R131	AUX PS	2										
	5	10K 1%	0805	R147, R153, R157, R170, R172	Arduino Shield	5										
	16	10K 1%	0805	R9, R10, R22, R23, R29, R45, R52, R54, R61, R75, R76, R78, R86, R98, R99, R106	Power board	32										
						39	9237755	RC0805FR-0710KL	0,011	10	RC0805FR-0710KL	0,019		RC0805FR-0710KL	0,015	
106	1	10R 1%	1206	R120	AUX PS	1										
	1	10R 1%	1206	R151	Arduino Shield	1										
	4	10R 1%	1206	R8, R18, R85, R174	Power board	8										
						10	9236643	RC1206FR-0710RL	0,017	10	RC1206FR-0710RL	0,029		RC1206FR-0710RL	0,022	
107	1	12K4 1%	0805	R152	Arduino Shield	1	2141850	MC01W0805112K4	0,002	10	RC0805FR-0712K4L	0,090		RC0805FR-0712K4L	0,091	
108	1	18-22R / 7W	THT, RM 5mm, radial, max. Height 40 mm	R107	AUX PS	1	1687978	SQM7-22RJI	0,474	1	SQMW722RJ	0,590		280-PRM7-20-RC	0,378	
109	2	16K 1%	0805	R118, R123	AUX PS	2										
	2	16K 1%	0805	R25, R36	Power board	4										
						6	9332677	MC01W0805116K	0,002	10	RC0805FR-0716KL	0,019		RC0805FR-0716KL	0,015	
110	4	180R 1%	0805	R142, R155, R156, R158	Arduino Shield	4	2447583	MCWR08X1800FTL	0,006	10	RC0805FR-07180RL	0,019		RC0805FR-07180RL	0,015	
111	1	1K 1%	0805	R129	AUX PS	1										
	2	1K 1%	0805	R167, R168	Arduino Shield	2										
	6	1K 1%	0805	R4, R33, R41, R74, R82, R95	Power board	12										
						15	1099800	WCR0805-1K0FI	0,018	10	RC0805FR-071KL	0,019		RC0805FR-071KL	0,015	
112	1	1K8 1%	0805	R126	AUX PS	1										
	2	1K8 1%	0805	R28, R56	Power board	4										
	2	1K8 1%	0805	R138, R159	Arduino Shield	2										
						7	2447595	MCWR08X1801FTL	0,006	10	RC0805FR-071K8L	0,019		RC0805FR-071K8L	0,015	
113	4	1R 1%	0805	R136, R136A, R140, R140A	Arduino Shield	4	2141629	MC01W080511R0	0,002	10	RC0805FR-071RL	0,090		RC0805FR-071RL	0,091	
114	2	22K 0.1%	0805	R50, R60	Power board	4	1653299	RR1220P-223-B-T5	0,330	10	RG20P22KBCT-ND	0,360	1	279-CPF0805B22KE1	0,162	1

#	Qty	Part name	Code	Part Number	Unit price €	MOQ	Code / Part Number	Unit price €	MOQ	THT	SMD	Best Supplier	Best Line Price €	Order Qty	Line Cost €
			RS Components				**TME**					**Price calculation for 1 set**			
103	2	100K 0.1%	666-2673	CPF0805B100KE	0,112	5	RN73C2A100KBTDF	0,513	2		4	Mouser	0,095 €	4	0,380
104	1	100R 1%													
	1	100R 1%													
	3	100R 1%													
			679-0807	CRCW0805100RFKEA	0,031	50	RC0805FR-07100R	0,008	100		8	Farnell	0,002 €	10	0,020
105	2	10K 1%													
	5	10K 1%													
	16	10K 1%													
			223-0562	CRG0805F10K	0,021	50	RC0805FR-0710K	0,008	100		39	TME	0,008 €	40	0,308
106	1	10R 1%													
	1	10R 1%													
	4	10R 1%													
			740-9085	CR1206-FX-10R0ELF	0,028	50	CRCW120610R0FKTABC	0,014	100		10	TME	0,014 €	10	0,137
107	1	12K4 1%	679-0863	CRCW080512K4FKEA	0,008	50	-				1	Farnell	0,002 €	10	0,023
108	1	18-22R / 7W	199-8087	SQMW722RJ	0,725	5	-			1		Mouser	0,378 €	1	0,378
109	2	16K 1%													
	2	16K 1%													
			679-0920	CRCW080516K0FKEA	0,014	50	SMD0805-16K-1%	0,008	100		6	Farnell	0,002 €	10	0,020
110	4	180R 1%	223-0326	CRG0805F180R	0,006	50	SMD0805-180R-1%	0,008	100		4	Farnell	0,024 €	10	0,240
111	1	1K 1%													
	2	1K 1%													
	6	1K 1%													
			223-0427	CRG0805F1K0	0,013	50	RC0805FR-071K	0,008	100		15	TME	0,008 €	15	0,116
112	1	1K8 1%													
	2	1K8 1%													
	2	1K8 1%													
			679-1033	CRCW08051K80FKEA	0,011	50	SMD0805-1K8-1%	0,008	100		7	Farnell	0,006 €	10	0,063
113	4	1R 1%	721-5631	ERJ6BQF1R0V	0,246	5	RC0805FR-071R	0,009	100		4	Farnell	0,002 €	10	0,022
114	2	22K 0.1%	866-7349	CPF-A-0805B22KE1	0,196	10	AR05BTCW2202	0,107	10		4	TME	0,107 €	4	0,429

#	Qty	Part name	Package	Reference designator	Board name	Qty	Farnell / Element14				Digi-Key			Mouser		
							Code	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ
115	10	220R 1%	0805	R38, R39, R42, R48, R58, R66, R80, R81, R83, R84	Power board	20										
	2	220R 1%	0805	R114, R117	AUX PS	2										
						22	1099795	WCR0805-220RFI	0,024	10	RC0805FR-07220RL	0,019		RC0805FR-07220RL	0,015	
116	5	2K2 1%	0805	R110, R111, R119, R122, R124	AUX PS	5										
	11	2K2 1%	0805	R17, R32, R34, R35, R37, R46, R62, R65, R68, R94, R96	Power board	22										
						27	9237534	RC0805FR-072K2L	0,011	10	RC0805FR-072K2L	0,019		RC0805FR-072K2L	0,015	
117	2	2K55 0.1%	0805	R64, R72	Power board	4	1575837	MCTC0525B2551T5E	0,483	10	P2.55KDACT-ND	0,570	1	667-ERA-6AEB2551V	0,570	1
118	1	2R2 5% / 2W	2512	R31	Power board	2	1376975	RC2512JK-7W2R2L	0,557	10	CRM2512-JW-2R2ELF	0,320		CRM2512-JW-2R2ELF	0,341	
119	1	330K 1%	0805	R12	Power board	2	9333070	MC01W08051330K	0,002	10	RC0805FR-07330KL	0,090		RC0805FR-07330KL	0,091	
120	2	330R 1%	0805	R87, R105	Power board	4	9333037	MC01W08051330R	0,002	10	RC0805FR-07330RL	0,090		RC0805FR-07330RL	0,091	
121	4	330R 5% / 2W	2512	R108, R109, R112, R115	AUX PS	4	1265196	3520330RJT	0,122	10	RHC2512FT330R	0,760		3521330RFT	0,580	
122	3	470R 1%	0805	R20, R40, R53	Power board	6	1099798	WCR0805-470RFI	0,024	10	RC0805FR-07470RL	0,019		RC0805FR-07470RL	0,015	
123	1	47K 1%	0805	R128	AUX PS	1										
	2	47K 1%	0805	R162, R163	Arduino Shield	2										
	7	47K 1%	0805	R7, R16, R19, R89, R90, R91, R103	Power board	14										
						17	2447664	MCWR08X4702FTL	0,006	10	RC0805FR-0747KL	0,019		RC0805FR-0747KL	0,015	
124	4	49R9 1%	0805	R146, R148, R149, R150	Arduino Shield	4										
	2	49R9 1%	0805	R113, R116	AUX PS	2										
						6	2141727	MC01W0805149R9	0,002	10	RC0805FR-0749R9L	0,019		RC0805FR-0749R9L	0,015	
125	9	4K7 1%	0805	R134, R135, R137, R139, R141, R144, R145, R169, R171	Arduino Shield	9										
	2	4K7 1%	0805	R15, R102	Power board	4										
						13	9333266	MC01W080514K7	0,002	10	RC0805FR-074K7L	0,019		RC0805FR-074K7L	0,015	
126	2	51K 1%	0805	R24, R51	Power board	4	9334653	MC01W0805551K	0,015	10	RC0805FR-0751KL	0,019		RC0805FR-0751KL	0,015	
127	2	102R 0.1%	0805	R67, R71	Power board	4	1575575	MCTC0525B1020T5E	0,447	10	985-1391-1-ND	0,800	1	667-ERA-6AEB1020V	0,570	1
128	4	5K1 1%	0805	R27, R70, R88, R101	Power board	8										
	2	5K1 1%	0805	R165, R166	Arduino Shield	2										
						10	9333320	MC01W080515K1	0,002	10	RC0805FR-075K1L	0,019		RC0805FR-075K1L	0,015	
129	2	5K6 1%	0805	R121, R130	AUX PS	2										
	4	5K6 1%	0805	R26, R92, R97, R104	Power board	8										

#	Qty	Part name	RS Components Code	RS Components Part Number	Unit price €	MOQ	TME Code / Part Number	TME Unit price €	MOQ	THT	SMD	Best Supplier	Best Line Price €	Order Qty	Line Cost €
115	10	220R 1%													
	2	220R 1%													
			223-0332	CRG0805F220R	0,024	50	RC0805FR-07220R	0,007	100		22	TME	0,007 €	20	0,143
116	5	2K2 1%													
	11	2K2 1%													
			679-1207	CRCW08052K2 0FKEA	0,027	50	SMD0805-2K2-1%	0,008	100		27	TME	0,008 €	30	0,242
117	2	2K55 0.1%	708-6240	ERA6AEB2551V	0,040	5	-				4	RS	0,040 €	5	0,200
118	1	2R2 5% / 2W	720-3231	CRM2512-JW-2R2ELF	0,406	5	WF25P-2R2-5%	0,042	50		2	TME	0,042 €	2	0,084
119	1	330K 1%	679-1272	CRCW0805330 KFKEA	0,024	50	RC0805FR-07330K	0,007	100		2	Farnell	0,002 €	10	0,020
120	2	330R 1%	740-9022	CR0805-FX-3300GLF	0,025	50	RC0805FR-07330R	0,007	100		4	Farnell	0,002 €	10	0,020
121	4	330R 5% / 2W	755-1224	3521330RFT	0,182	10	WF25P-330R-5%	0,042	50		4	TME	0,042 €	10	0,419
122	3	470R 1%	223-0376	CRG0805F470R	0,024	50	RC0805FR-07470R	0,007	100		6	TME	0,007 €	10	0,073
123	1	47K 1%													
	2	47K 1%													
	7	47K 1%													
			679-1434	CRCW080547K 0FKEA	0,010	50	RC0805FR-0747K	0,007	100		17	Farnell	0,006 €	20	0,126
124	4	49R9 1%													
	2	49R9 1%													
			679-1462	CRCW080549R 9FKEA	0,011	50	RC0805FR-0749R9	0,007	100		6	Farnell	0,002 €	10	0,020
125	9	4K7 1%													
	2	4K7 1%													
			223-0528	CRG0805F4K7	0,011	50	RC0805FR-074K7	0,008	100		13	Farnell	0,002 €	20	0,040
126	2	51K 1%	679-1525	CRCW080551K 0FKEA	0,020	50	RC0805FR-0751K	0,006	100		4	TME	0,006 €	10	0,061
127	2	102R 0.1%	708-9271	ERA6AEB1020V	0,210	5	-				4	RS	0,210 €	10	2,100
128	4	5K1 1%													
	2	5K1 1%													
			679-1569	CRCW08055K1 0FKEA	0,027	50	RC0805FR-075K1	0,007	100		10	Farnell	0,002 €	10	0,021
129	2	5K6 1%													
	4	5K6 1%													

#	Qty	Part name	Package	Reference designator	Board name	Qty	Farnell / Element14				Digi-Key			Mouser		
							Code	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ
						10	2447693	MCWR08X5601FTL	0,006	10	RC0805FR-075K6L	0,019		RC0805FR-075K6L	0,015	
130	3	750R 1%	0805	R47, R93, R100	Power board	6										
	2	750R 1%	0805	R160, R161	Arduino Shield	2										
						8	9333525	MC01W08051750R	0,002	10	RC0805FR-07750RL	0,019		RC0805FR-07750RL	0,015	
131	2	7K5 0.1%	0805	R44, R55	Power board	4	1670239	ERA6AEB752V	0,312	10	RT0805BRD077K5L	0,350		RT0805BRD077K5L	0,357	
132	1	R010 1% / 2W	2512, 2W	R2	Power board	2	1435947	CRA2512-FZ-R010ELF	0,484	10	CRA2512-FZ-R010ELF	0,540		CRA2512-FZ-R010ELF	0,568	
133	1	R020 1% / 2W	2512, 2W	R69	Power board	2	2079436	LRMAM2512-R02FT4	0,250	10	CRA2512-FZ-R020ELF	0,540		CRA2512-FZ-R020ELF	0,568	
134	1	R080 1% / 3W	2512, 3W	R30	Power board	2	1435951	CRA2512-FZ-R080ELF	0,669	10	CRA2512-FZ-R080ELF	0,540		CRA2512-FZ-R080ELF	0,568	
135	2	4x10K 5%	1206; resistor array	RN1, RN2	Arduino Shield	2	1770137	CAY16-103J4LF	0,110	10	CAY16-103J4LF	0,090		CAY16-103J4LF	0,095	
136	1	LD-BZEN-0903	THT	SP1 Buzzer	Arduino Shield	1	-							TE092703-6	2,200	
137	1	A101SYCQ04	THT	SW1	Arduino Shield	1	2292959	A101SYCQ04	2,760	1	A101SYCQ04	3,000		A101SYCQ04	2,640	
138	1	1301.9316	SMD; tactile switch	SW2	Arduino Shield	1	1217765	1301.9316	0,302	1	FSM6JSMA	0,210		1301.9316	0,270	
139	1	820uH Dual Coil	SMD; 7.6mm x 7.6mm	TR1	Power board	2	1852832	SRF0703-821M	0,893	1	SRF0703-821M	0,720		SRF0703-821M	0,758	
140	1	VTX-214-005-112	THT	TR2	AUX PS	1	2401044	VTX-214-005-112	8,120	1				-		
141	1	39-30-3035	THT 4,2mm 3pin	X1	Power board	2	9963545	39303035	0,914	1	39-30-3035	0,800		39-30-3035	0,603	
142	1	2411-01	THT, **solder on bottom layer!**	X11 USB Connector	AUX PS	1	1177884	2411-01	1,050	1	952-1767-ND	0,730		710-61400413321	1,200	
143	1	MC000006	THT, **solder on bottom layer!**	X12 Front Treminal	Arduino Shield	1	2007972	MC000006	1,900	1	-			-		
144	2	TSW-113-07-F-D	THT; 2x13-pin header	X13, X15	Arduino Shield	2	2025182	TSW-113-07-F-D	2,240	5	TSW-113-07-L-D	2,470		710-61302621121	1,410	
145	1	MC000005	THT, **solder on bottom layer!**	X14 Front Treminal	Arduino Shield	1	2007971	MC000005	1,640	1	-			-		
146	1	22-23-2021	THT	X17 Optional TEMP	Arduino Shield	1	1462926	22-23-2021	0,100	1	22-23-2021	0,140		22-23-2021	0,141	
147	1	MC34753	THT	X18	Arduino Shield	1	1593431	MC34753	0,422	10	M20-9750846	0,230		710-61300811021	0,670	
148	1	22-23-2041	THT	X19 Optional Encoder	Arduino Shield	1	1462920	22-23-2041	0,165	10	22-23-2041	0,240		22-23-2041	0,217	
149	1	SSW-113-02-T-D-RA	THT; 2x13-pin socket	X3	Power board	2	1805583	SSW-113-02-G-D-RA	5,700	2	SSW-113-02-G-D-RA	5,340		-		
150	1	39-30-3055	THT 4,2mm 5pin	X4 AC In	AUX PS	1	9963561	39303055	0,530	1	39-30-3055	1,180		39-30-3055	0,923	
151	1	09185107324	THT; 2x5-pin header	X5	AUX PS	1										
	1	09185107324	THT; 2x5-pin header	X16	Arduino Shield	1										
						2	1096985	09 18 510 7324	1,220	1	09185107324	1,460		09185107324	1,460	
152	1	22-23-2031	THT	X6 FAN Connector	AUX PS	1	1462950	22-23-2031	0,081	1	22-23-2031	0,210		22-23-2031	0,198	
153	1	LMJ2138814S0L1T1C	THT, **solder on bottom layer!**	X7 RJ45 Connector	AUX PS	1	-				-			-		
154	1	826629-8	THT 8-Pin Header	X8	AUX PS	1										
	6	826629-8	THT 8-Pin Header	MCU-ADCL, MCU-ADCH, MCU-COMM, MCU-PWML, MCU-PWMH	Arduino Shield	6										
						7	1022256	M20-9990845	0,117	10	M20-9990845	0,240		M20-9990845	0,317	

#	Qty	Part name	RS Components				TME			THT	SMD	Price calculation for 1 set			
			Code	Part Number	Unit price €	MOQ	Code / Part Number	Unit price €	MOQ			Best Supplier	Best Line Price €	Order Qty	Line Cost €
			679-1572	CRCW08055K60FKEA	0,021	50	SMD0805-5K6-1%	0,008	100		10	Farnell	0,006 €	10	0,063
130	3	750R 1%													
	2	750R 1%													
			679-1660	CRCW0805750 RFKEA	0,010	50	CRCW0805750RFKTA BC	0,012	100		8	Farnell	0,002 €	20	0,040
131	2	7K5 0.1%	666-2588	CPF0805B7K5E	0,280	5	RN73C2A7K5BTDF	0,520	2		4	RS	0,280 €	5	1,400
132	1	R010 1% / 2W	693-4381	CRA2512-FZ-R010ELF	0,515	5	WW25RR010FTL	0,189	5		2	TME	0,189 €	5	0,945
133	1	R020 1% / 2W	693-4384	CRA2512-FZ-R020ELF	0,507	5	WW25NR020FTL	0,189	5		2	TME	0,189 €	5	0,945
134	1	R080 1% / 3W	693-4390	CRA2512-FZ-R080ELF	0,327	5	-				2	RS	0,327 €	5	1,635
135	2	4x10K 5%	522-5585	CAY16-103J4LF	0,020	50	DR1206-10K-4/8	0,007	100		2	TME	0,007 €	2	0,013
136	1	LD-BZEN-0903	-				LD-BZEN-0903	0,504	3	1		TME	0,504 €	3	1,512
137	1	A101SYCQ04	710-9788	A101SYCQ04	2,576	1	-			1		RS	2,576 €	1	2,576
138	1	1301.9316	718-2443	FSM6JSMATR	0,818	5	1301.9316	0,220	5		1	Digikey	0,210 €	1	0,210
139	1	820uH Dual Coil	-				-				2	Digikey	0,720 €	2	1,440
140	1	VTX-214-005-112	792-4372	Myrra 47154	10,140	1	-			1		Farnell	8,120 €	1	8,120
141	1	39-30-3035	670-5849	39-30-3035	0,969	5	MX-5569-03A4	0,476	1	2		TME	0,476 €	2	0,952
142	1	2411-01	-				2411-01	0,660	1	1		TME	0,660 €	1	0,660
143	1	MC000006	-				-			1		Farnell	1,900 €	1	1,900
144	2	TSW-113-07-F-D	-				-			2		Mouser	1,410 €	2	2,820
145	1	MC000005	-				-			1		Farnell	1,640 €	1	1,640
146	1	22-23-2021	679-5583	22-23-2021	0,087	10	MX-22-23-2021	0,070	10	1		TME	0,070 €	1	0,070
147	1	MC34753	828-1673	61300811021	0,759	5				1		Digikey	0,230 €	1	0,230
148	1	22-23-2041	679-5596	22-23-2041	0,197	10	MX-22-23-2041	0,106	5	1		TME	0,106 €	1	0,106
149	1	SSW-113-02-T-D-RA	-				ZL263-26DG	0,399	2	2		TME	0,399 €	2	0,798
150	1	39-30-3055	670-5861	39-30-3055	0,563	5	-			1		Farnell	0,530 €	1	0,530
151	1	09185107324													
	1	09185107324													
			740-7108	09185107324	1,442	1	T821-1-10-S1	0,290	2	2		TME	0,290 €	2	0,580
152	1	22-23-2031	679-5587	22-23-2031	0,083	10	MX-22-23-2031	0,080	10	1		TME	0,080 €	1	0,080
153	1	LMJ2138814S0L1T1C	-				RJ45-TRAFO-LP	2,820	1	1		TME	2,820 €	1	2,820
154	1	826629-8													
	6	826629-8													
			681-2997	M20-9990845	0,125	10	ZL201-08G	0,065	10	7		TME	0,065 €	10	0,649

#	Qty	Part name	Package	Reference designator	Board name	Qty	Farnell / Element14				Digi-Key			Mouser		
							Code	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ
155	1	826629-5	THT 5-Pin Header	X9	AUX PS	1	2452473	826629-5	0,631	50	826629-5	0,660		M20-9990545	0,217	
156	1	32,768kHz	THT	Y1	Arduino Shield	1	1611828	AB38T-32.768KHZ	0,185	1	AB38T-32.768KHZ	0,150		AB38T-32.768KHZ	0,155	
157	1	25MHz	SMD, 11.5mm x 4.7mm	Y2	Arduino Shield	1	2467741	ABLS-25.000MHZ-B4-F-T	0,393	1	ABLS-25.000MHZ-B4-F-T	0,240		ABLS-25.0M-F-T	0,260	
158	2	SMAJ18A	DO-214AC	ZD10, ZD11	Arduino Shield	2	1749305	SMAJ18A-TR	0,070	10	SMA6J18A-TR	0,340		SMA6J18A-TR	0,407	
159	1	BZX384-C4V3	SOD-323	ZD12	Arduino Shield	1	8735697	BZX384-C4V3	0,182	5	MM3Z4V3T1G	0,130		BZX384-C4V3,115	0,110	
160	1	BZX384-C15.115	SOD-323	ZD4	Power board	2	8735506	BZX384-C15	0,182	5	MM3Z15VT1G	0,130		MM3Z15VT1G	0,118	
161	1	PDZ6.2B	SOD-323	ZD5	Power board	2	1757863	PDZ6.2B,115	0,266	5	MM3Z6V2T1G	0,130		MM3Z6V2T1G	0,118	
162	2	P4SMAJ48A	DO-214AC	ZD8, ZD9	Arduino Shield	2	1749310	SMAJ48A-TR	0,264	1	SMAJ48A-TR	0,340		SMAJ48A-TR	0,340	
		AUX PS 230 V protection														
163	1	CG2-470L	THT	SAR1	AUX PS	1	1846854	2027-47-BLF	1,850	1	2027-47-BLF	1,270		2027-47-BLF	1,340	
164	2	S20K250	THT	VAR1, VAR2	AUX PS	2	1004357	B72220S0251K101	0,650	1	B72220S0251K101	0,850		B72220S0251K101	0,936	
165	2	1.5KE400CA	THT	ZD6, ZD7	AUX PS	2	2341650	1.5KE400CARL	0,777	1	1.5KE400CA-TP	0,560		1.5KE400CA-TP	0,549	
		Not installed														
	1	1u	1206	C14	Power board	2	-									
	2	100n	0805	C15, C19	Power board	4	-									
	1	n.c.	0805	C158	Power board	2	-									
	1	n.c.	0805	C160	Power board	2	-									
	4	1n	0805	C200, C201, C202, C203	Power board	8	-									
	1	n.c.	0805	C39	Power board	2	-									
	2	2m2	THT, Ø18mm, **solder on bottom layer!**	C4, C5	Power board	4	-									
	1	n.c.	0805	C96	AUX PS	1	-									
	5	100n	0603	C99, C100, C101, C102, C103	AUX PS	5	-									
	4	STPS15H100	TO-252	D1, D2, D3, D4	Power board	8	-									
	2	60R@100MHz	0603	FB5, FB6	AUX PS	2	-									
	2	S1751-46R	0805	GND, SW	Power board	4	-									
	1	TPD4E002DRLR		IC17	AUX PS	1	-									
	1	TPD2E001DZDR		IC18	AUX PS	1	-									
	1	ADUM3160BRWZ		IC19	AUX PS	1	-									
	1	901210762	THT	JP3	Arduino Shield	1	-									
	1	12K	1208	R1	Power board	2	-									
	2	n.c.	0805	R13, R175	Power board	4	-									
	2	22R	0805	R132, R133	AUX PS	2	-									
	1	n.c.	1206	R63	Power board	2	-									
	1	826629-5	THT	X10	AUX PS	1	-									
	1	282836-2	THT	X2	Power board	2	-									
	1	SSW-105-02-S-D	THT	X20	Arduino Shield	1	-									
	2	n.c.		ZD1, ZD2	Power board	4	-									
	1	See Note 3.2		ZD3	Power board	2	-									
		Power module AC input option														

#	Qty	Part name	Code	Part Number	Unit price €	MOQ	Code / Part Number	Unit price €	MOQ	THT	SMD	Best Supplier	Best Line Price €	Order Qty	Line Cost €
			RS Components				**TME**					**Price calculation for 1 set**			
155	1	826629-5	681-2981	M20-9990545	0,160	10	ZL201-05G	0,032	25	1		TME	0,032 €	1	0,032
156	1	32,768kHz	226-1443	LFXTAL002995	0,532	1	32.768K-TC38	0,144	5	1		TME	0,144 €	1	0,144
157	1	25MHz	814-9550	QCS25.0000F18B23R	0,217	10	25.00M-SMDHC49S	0,373	2		1	RS	0,217 €	1	0,217
158	2	SMAJ18A	795-9268	SMA6J18A-TR	0,112	25	P4SMAJ18A-DIO	0,105	5		2	Farnell	0,070 €	5	0,350
159	1	BZX384-C4V3	508-696	BZX384-C4V3	0,013	100	BZT52C4V3-DIO	0,019	25		1	RS	0,013 €	1	0,013
160	1	BZX384-C15.115	802-4568	MM3Z15VST1G	0,013	200	BZX384-C15.115	0,019	25		2	RS	0,013 €	2	0,026
161	1	PDZ6.2B	725-8247	PDZ6.2B,115	0,014	100	PDZ6.2B	0,019	25		2	RS	0,014 €	2	0,028
162	2	P4SMAJ48A	687-3286	SMAJ48A	0,098	25	P4SMAJ48A-DIO	0,102	5		2	RS	0,098 €	2	0,196
									75						**185,13 €**
	AUX PS 230 V protection														
163	1	CG2-470L	878-3652	CG2-470L	2,279	10	CG2-470L	1,450	1	1		Digikey	1,270 €	1	1,270
164	2	S20K250	289-7301	B72220S0251K101	0,745	5	SIOV-S20K250	0,524	1	2		TME	0,524 €	2	1,048
165	2	1.5KE400CA	486-4381	1.5KE400CA	0,781	5	1.5KE400CA	0,256	3	2		TME	0,256 €	3	0,768
									3	50	696				**3,09 €**
	Not installed														
	1	1u					-				2				
	2	100n					-				4				
	1	n.c.									2				
	1	n.c.									2				
	4	1n									8				
	1	n.c.					-				2				
	2	2m2					-				4				
	1	n.c.													
	5	100n					-				5				
	4	STPS15H100					-				8				
	2	60R@100MHz					-				2				
	2	S1751-46R					-				4				
	1	TPD4E002DRLR					-				1				
	1	TPD2E001DZDR					-				1				
	1	ADUM3160BRWZ					-				1				
	1	901210762					-			1					
	1	12K					-				2				
	2	n.c.					-				4				
	2	22R					-				2				
	1	n.c.					-				2				
	1	826629-5					-			1					
	1	282836-2					-			2					
	1	SSW-105-02-S-D					-			1					
	2	n.c.					-				4				
	1	See Note 3.2					-				2				
	Power module AC input														

#	Qty	Part name	Package	Reference designator	Board name	Qty	Farnell / Element14				Digi-Key			Mouser		
							Code	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ
	2	2200uF 63V	THT, **solder on bottom layer!**	C4, C5	Power board	4	1822562	UVR1J222MHD	2,540	1	UVR1H222MHD	1,680		UVR1H222MHD	1,710	
		Option #1: UVZ1H222MHD	THT, **solder on bottom layer!**	C4, C5	Power board	0	1822570	UVZ1H222MHD	2,420	1	UVZ1H222MHD	1,500		UVZ1H222MHD	1,690	
		Option #2: UVZ1J222MHD	THT, **solder on bottom layer!**	C4, C5	Power board	0	1822575	UVZ1J222MHD	2,420	1	UVZ1J222MHD	2,210		UVZ1J222MHD	2,780	
	4	STPS15H100	TO-252	D1, D2, D3, D4	Power board	8	2344052	STPS15H100CB-TR	1,070	1	STPS15H100CB	0,900		STPS15H100CB	0,896	
	1	12K 1%	1206	R1	Power board	2	1100220	WCR1206-12KFI	0,026	10	RC1206FR-0712KL	0,090		RC1206FR-0712KL	0,091	
	1	282836-2	THT, Terminal Block	X2	Power board	2	3089034	282836-2	0,452	1	282836-2	0,830		282836-2	0,385	
	1	INDEL TST450/014	-	Transformer: toroidal; 450VA; 230VAC; 2x40V; 2x5.62A; 4kg	Enclosure	1	-				VPT100-5000	81,040		VPM100-5000	129,850	
		Other														
	1	10K NTC	Main temperature sensor		Arduino Shield	1	1187031		0,271							
	2	BS-244DSM-R	Binding post 4mm, red	J1, J4	Arduino Shield	2	1815818	TP1 RED	3,100	1	CT2232-2	3,690		164-4205	2,220	
	1	BS-244DSM-G	Binding post 4mm, green	J2	Arduino Shield	1	1815820	TP1 GREEN	3,190	1	CT2232-5	3,690		164-4204	2,220	
	2	BS-244DSM-B	Binding post 4mm, black	J3, J5	Arduino Shield	2	1815819	TP1 BLACK	3,330	1	CT2232-0	3,690		164-4201	2,220	
	1	MEAN WELL LRS-150-48	Power module 48VDC; 3.3A		Power board	2	-				-			LRS-150-48	23,980	1
		Option #1: MEAN WELL LRS-150F-48	Power module 48VDC; 3.3A (**auto-range**)		Power board	0	-				-			LRS-150F-48	28,190	1
	1	TFF-M3X40/DR124	40 mm metal spacer, M3 (a pair is required for dual channel)		Power board	2	-									
	0	Heatsink 70 x 120 mm	(Heatsink included with Varisom enclosure)		Power board	0	-				-			-		
	4	Screwed spacer sleeve; M3; 6 mm	Dremec 213x6		Power board	8	-									
	1	12V fan 60x60mm			Enclosure	1	-				-			-		
	4	FSP-2	Fastener for fan		Enclosure	4	-				-			-		
	1	FG-06	Finger guard, 60x60mm, metal		Enclosure	1	2292912	MC32696	0,567	1	-			-		
	5	Screwed spacer sleeve; hexagonal	14 mm, M3		AUX PS	5	1466812	05.03.143	0,397	4						
	1	Schurter 4304.6090	C14 IEC inlet, switch, 2 fuse drawer is included		Enclosure	1	2080294	4304.6090	9,960	1	4304.6090	12,230		4304.6090	9,630	
	1	Arduino Due			Arduino Shield	1	2250861	A000062	40,660	1						
	1	3.2" TFT LCD			Arduino Shield	1	-									
	9	Screwed spacer sleeve; M5; 8mm; brass	Extend binding post for PCB mounting		Arduino Shield	9	-									
	4	Spacer sleeve; 5mm; cylindrical; brass	5 mm between TFT display and front panel		Arduino Shield	4	1733405	D01475	0,106	10						
	4	Screwed spacer sleeve; hexagonal; polyamide; M3	11 mm between TFT display and PCB		Arduino Shield	4	2494576	05.03.111	0,332	10						
	4	Plastic washer; round; M3			Arduino Shield	4	-									
	12	Light pipe for LED	Round; Ø3mm; Front: convex; straight		Arduino Shield	12	2293496	PLP2-500	0,824	1	PLP2-500	0,658		PLP2-500	0,515	

#	Qty	Part name	Code (RS)	Part Number (RS)	Unit price € (RS)	MOQ (RS)	Code / Part Number (TME)	Unit price € (TME)	MOQ (TME)	THT	SMD	Best Supplier	Best Line Price €	Order Qty	Line Cost €
	2	2200uF 63V	862-3229	UVR1H222MHD	2,156	1	UVR1H222MHD	1,100	1						
		Option #1: UVZ1H222MHD	845-4755	UVZ1H222MHD	1,218	5	UVZ1H222MHD	0,973	1						
		Option #2: UVZ1J222MHD	862-1759	UVZ1J222MHD	2,814	1	UVZ1J222MHD	1,593	1	4		TME	1,593 €	4	6,372
	4	STPS15H100	795-9075	STPS15H100CB-TR	0,924	5	-				8	Mouser	0,896 €	8	7,168
	1	12K 1%	223-2401	CRG1206F12K	0,008	50	RC1206JR-0712K	0,006	100		2	TME	0,006 €	2	0,013
	1	282836-2	361-7667	282836-2	0,414	5	282836-2	0,280	2	2		TME	0,280 €	2	0,560
	1	INDEL TST450/014					TST450/014	36,500	1	1		TME	36,500 €	1	36,500
															50,61 €

		Other													
	1	10K NTC					NTCLE100E3103JB0	0,269				TME	0,269 €	1	0,269
	2	BS-244DSM-R	738-351	930103101	3,136	1	BS-244DSM-R	1,160	1	-		TME	1,160 €	2	2,320
	1	BS-244DSM-G	738-389	930103104	3,542	1	BS-244DSM-G	1,160	1	-		TME	1,160 €	1	1,160
	2	BS-244DSM-B	738-345	930103100	3,136	1	BS-244DSM-B	1,160	1	-		TME	1,160 €	2	2,320
	1	MEAN WELL LRS-150-48	-				LRS-150-48	15,100	1	-		TME	15,100 €	2	30,200
		Option #1: MEAN WELL LRS-150F-48	-				LRS-150F-48	18,000	1	-		TME	18,000 €	2	36,000
	1	TFF-M3X40/DR124	-				TFF-M3X40/DR124	0,156	10	-		TME	0,156 €	10	1,558
	0	Heatsink 70 x 120 mm	-				RAD-A4463/120	1,370	1	-					0,000
	4	Screwed spacer sleeve; M3; 6 mm					TFM-M3X6/DR213	0,089	10	-		TME	0,089 €	10	0,891
	1	12V fan 60x60mm	-				MB60251V1-G99	2,590	1	-		TME	2,590 €	1	2,590
	4	FSP-2	-				FSP-2	0,140	5	-		TME	0,140 €	1	0,140
	1	FG-06	-				FG-06	0,513	1	-		TME	0,513 €	1	0,513
	5	Screwed spacer sleeve; hexagonal	-				B3X14/BN3320	0,309	10	-		TME	0,309 €	10	3,094
	1	Schurter 4304.6090	867-7308	4304.6090	10,000	1	4304.6090	5,190	1	-		TME	5,190 €	1	5,190
	1	Arduino Due	769-7412	A000062	33,680	1	Itead/Eckstein	19,480		-					
	1	3.2" TFT LCD					Itead/Eckstein	12,140		-					
	9	Screwed spacer sleeve; M5; 8mm; brass					TFM-M5X8/DR218	0,200	10			TME	0,200 €	10	1,998
	4	Spacer sleeve; 5mm; cylindrical; brass					DR316/3.2X5	0,057	10	-		TME	0,057 €	10	0,570
	4	Screwed spacer sleeve; hexagonal; polyamide; M3					-	0,128		-		TME	0,128 €	10	1,280
	4	Plastic washer; round; M3					B3/BN1074	0,008	100	-		TME	0,008 €	100	0,790
	12	Light pipe for LED	713-4728	PLP2-500	0,809	5	PLP2-625	0,490	5	-		TME	0,490 €	15	7,355

#	Qty	Part name	Package	Reference designator	Board name	Qty	Farnell / Element14				Digi-Key			Mouser		
							Code	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ
	1	0.4 mm thermal silicone pad	for Q4		Power board	2				1						
	1	5 mm thick thermal silicone pad (20 x 75 mm)	Mounted below power pre-regulator	Search AliExpress, eBay, etc.	Power board	2										
	1	Custom enclosure			Enclosure	1	-									
	1	PCB+PCBA			Enclosure	1	-									
	Wire harness															
	1	39-01-4030	Receptacle for X1	DC power input	Power board	2	9963480	39-01-4030	0,219	1	39-01-4030	0,300		39-01-4030	0,292	
	1	39-01-4050	Receptacle for X4	AC power input	AUX PS	1	9963502	39-01-4050	0,327	1	39-01-4050	0,360		39-01-4050	0,358	
	1	22-01-2035	Receptacle for X6	Cooling fan	AUX PS	1	143127	22-01-2035	0,192	10	22-01-2035	0,310		22-01-2035	0,290	
	2	NSR-08	Receptacle for X8, X18	Ethernet cable	AUX PS	2										
	3	39-00-0078	Pins for X1	DC power input	Power board	6										
	5	39-00-0078	Pins for X4	AC power input	AUX PS	5										
						11	9732675	39-00-0078 100pc	13,300	1	39-00-0078	0,144		39-00-0078	0,112	
	3	08-50-0114	Pins for X6	Cooling fan	AUX PS	3										
	2	08-50-0114	Pins for X17	MAIN temperature sensor	Arduino board	2										
						5	2063734	08-50-0114	0,030	10	08-50-0114	0,170		08-50-0114	0,141	
	21	NDR-T	Contact; female; 28÷22AWG; NSR/NDR; tinned	X8, X18	Arduino Shield	21	1022219	M20-1180042 100pc	6,430	1	952-2158-ND	0,130		855-M20-1180042 100pc	0,127	
	1		Ring terminal; M4; 1÷2.5mm2		Enclosure	1	-									
	4	ST-003/05-20T	Female quick disconnect	AC switch patch cables	Enclosure	4										
	1	ST-003/05-20T	Female quick disconnect	AC inlet Earth (Side B)	Enclosure	1										
	2	ST-003/05-20T	Female quick disconnect	Lower AC/DC module power input (Side B)	Enclosure	2										
	1	ST-003/05-20T	Female quick disconnect	Cable set #1	Arduino board	1										
						8	2060332	5-160433-6	0,063	50						
	2	H1.5/14D/BK	Bootlace ferrule; insulated, 1.5mm2	Cable set #1	Enclosure	2										
	4	H1.5/14D/BK	Bootlace ferrule; insulated, 1.5mm2	Cable set #2	Enclosure	4										
						6	9972307	E1508-RED	0,028	100						
	2	H1.5/16D2/BK	Bootlace ferrule, twin entry; insulated, 1.5mm2	Cable set #1	Enclosure	2										
	3	H1.5/16D2/BK	Bootlace ferrule, twin entry; insulated, 1.5mm2	Cable set #2	Enclosure	3										
						5	1121754	9037470000	0,112	100						
	1	Cat5E cable, stranded wire		Ethernet cable	Enclosure	1	1734894	PS11029	1,120	1						
	0,09	LGY1.5/10-BR	Insulated wire, stranded, **brown**, 1.5 mm2	AC switch patch cables	Enclosure	0,09										

#	Qty	Part name	Code	Part Number	Unit price €	MOQ	Code / Part Number	Unit price €	MOQ	THT	SMD	Best Supplier	Best Line Price €	Order Qty	Line Cost €
			RS Components				**TME**					**Price calculation for 1 set**			
	1	0.4 mm thermal silicone pad					SMICA-SOT93		10	-		Farnell	0,000 €	20	0,000
	1	5 mm thick thermal silicone pad (20 x 75 mm)								-					
	1	Custom enclosure								-					
	1	PCB+PCBA								-					
		Wire harness													
	1	39-01-4030	510-9685	39-01-4030	0,232	5	MX-5557-03R2	0,132	5	-		TME	0,132 €	2	0,264
	1	39-01-4050	510-9708	39-01-4050	0,188	5	MX-5557-05R2	0,240	2	-		RS	0,188 €	1	0,188
	1	22-01-2035	296-4940	22-01-2035	0,204	5	MX-6471-031	0,050	10	-		TME	0,050 €	1	0,050
	2	NSR-08					NSR-08	0,087	10	-					
	3	39-00-0078													
	5	39-00-0078													
			215-5887	39-00-0078 100pc	14,100	1	MX-5556-T3L	0,074	10	-		TME	0,074 €	20	1,484
	3	08-50-0114													
	2	08-50-0114										Farnell	0,000 €		
			172-9178	08-50-0114	0,085	100	MX-0850-0114	0,047	10	-		Farnell	0,030 €	10	0,299
	21	NDR-T	681-2887	122-4777	0,041	100	NDR-T	0,027	25			TME	0,027 €	25	0,674
	1						3804/M.05.00.9	0,025	20			TME	0,025 €		0,000
	4	ST-003/05-20T								-					0,000
	1	ST-003/05-20T								-					0,000
	2	ST-003/05-20T								-					0,000
	1	ST-003/05-20T													
							ST-003/05-20	0,051		-		TME	0,051 €	7	0,356
	2	H1.5/14D/BK													
	4	H1.5/14D/BK													
							H1.5/14D/BK	0,024	20	-		TME	0,024 €	10	0,236
	2	H1.5/16D2/BK													
	3	H1.5/16D2/BK													
							H1.5/16D2/BK	0,047	10			TME	0,047 €	10	
	1	Cat5E cable, stranded wire					CA00600.00C01	6,800	1	-		Farnell	1,120 €	1	1,120
	0,09	LGY1.5/10-BR													

#	Qty	Part name	Package	Reference designator	Board name	Qty	Farnell / Element14				Digi-Key			Mouser		
							Code	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ
	0,2	LGY1.5/10-BR	Insulated wire, stranded, **brown**, 1.5 mm2	Lower AC/DC module power input	Enclosure	0,2										
	0,07	LGY1.5/10-BR	Insulated wire, stranded, **brown**, 1.5 mm2	Upper AC/DC module power input	Enclosure	0,07										
	0,11	LGY1.5/10-BR	Insulated wire, stranded, **brown**, 1.5 mm2	AUX PS module power input	Enclosure	0,11										
						0,47	1764967	6716 BR005	0,757	31						
	0,09	LGY1.5/10-BL	Insulated wire, stranded, **blue**, 1.5 mm2	AC switch patch cables	Enclosure	0,09										
	0,2	LGY1.5/10-BL	Insulated wire, stranded, **blue**, 1.5 mm2	Lower AC/DC module power input	Enclosure	0,2										
	0,07	LGY1.5/10-BL	Insulated wire, stranded, **blue**, 1.5 mm2	Upper AC/DC module power input	Enclosure	0,07										
	0,11	LGY1.5/10-BL	Insulated wire, stranded, **blue**, 1.5 mm2	AUX PS module power input	Enclosure	0,11										
						0,47	1764966	6716 BL005	0,779	31						
	0,4	LGY1.5/10-RD	Insulated wire, stranded, **red**, 1.5 mm2	Cable set #1, Power board X1 cable	Enclosure	0,4										
	0,33	LGY1.5/10-RD	Insulated wire, stranded, **red**, 1.5 mm2	Cable set #2, Power board X1 cable	Enclosure	0,33										
						0,73	1764971	6716 RD005	0,740	31						
	0,4	LGY1.5/10-BK	Insulated wire, stranded, **black**, 1.5 mm2	Cable set #1, Power board X1 cable	Enclosure	0,4										
	0,33	LGY1.5/10-BK	Insulated wire, stranded, **black**, 1.5 mm2	Cable set #2, Power board X1 cable	Enclosure	0,33										
						0,73	1764965	6716 BK005	0,583	31						
	0,4	GY1.5/10-YL/GR	Insulated wire, stranded, **green-yellow**, 1.5 mm2	Cable set #1, Power board X1 cable	Enclosure	0,4										
	0,07	GY1.5/10-YL/GR	Insulated wire, stranded, **green-yellow**, 1.5 mm2	Cable set #1, AC/DC module Earth	Enclosure	0,07										
	0,17	GY1.5/10-YL/GR	Insulated wire, stranded, **green-yellow**, 1.5 mm2	Chassis Earth	Enclosure	0,17										
	0,5	GY1.5/10-YL/GR	Insulated wire, stranded, **green-yellow**, 1.5 mm2	Arduino Shield Earth	Enclosure	0,5										
	0,33	GY1.5/10-YL/GR	Insulated wire, stranded, **green-yellow**, 1.5 mm2	Cable set #2, Power board X1 cable	Enclosure	0,33										
	0,15	GY1.5/10-YL/GR	Insulated wire, stranded, **green-yellow**, 1.5 mm2	Cable set #2, AC/DC module Earth	Enclosure	0,15										
	0,15	GY1.5/10-YL/GR	Insulated wire, stranded, **green-yellow**, 1.5 mm2	AUX PS module Earth	Enclosure	0,15										
						1,77	1764969	6716 GY005	0,818	31						
	1	Arduino USB cable	USB micro to 5-pin receptacle cable, 30 or 50 cm	Search e.g. AliExpress		1	-									
	1	FC10300-0	Ribbon cable with IDC connectors, 30 cm		Arduino Shield	1	-									

All prices are net prices (without VAT)

#	Qty	Part name	Code	Part Number	Unit price €	MOQ	Code / Part Number	Unit price €	MOQ	THT	SMD	Best Supplier	Best Line Price €	Order Qty	Line Cost €
			RS Components				TME					Price calculation for 1 set			
	0,2	LGY1.5/10-BR													
	0,07	LGY1.5/10-BR													
	0,11	LGY1.5/10-BR													
							LGY1.5/10-BR	0,620	10	-		TME	0,620 €	1	0,620
	0,09	LGY1.5/10-BL													
	0,2	LGY1.5/10-BL													
	0,07	LGY1.5/10-BL													
	0,11	LGY1.5/10-BL													
							LGY1.5/10-BL	0,620	10	-		TME	0,620 €	1	0,620
	0,4	LGY1.5/10-RD													
	0,33	LGY1.5/10-RD													
							LGY1.5/10-RD	0,620	10	-		TME	0,620 €	1	0,620
	0,4	LGY1.5/10-BK													
	0,33	LGY1.5/10-BK													
							LGY1.5/10-BK	0,620	10	-		Farnell	0,583 €	1	0,583
	0,4	GY1.5/10-YL/GR													
	0,07	GY1.5/10-YL/GR													
	0,17	GY1.5/10-YL/GR													
	0,5	GY1.5/10-YL/GR													
	0,33	GY1.5/10-YL/GR													
	0,15	GY1.5/10-YL/GR													
	0,15	GY1.5/10-YL/GR													
							GY1.5/10-YL/GR	0,620	10	-		TME	0,620 €	2	1,240
	1	Arduino USB cable					-			-		Farnell	0,000 €		0,000
	1	FC10300-0					FC10300-0	1,040	1	-		TME	1,040 €		0,000

106,59 €

Total **294,80 €**

#	Qty	Part name	Package	Reference designator	Board name	Qty	Farnell / Element14				Digi-Key			Mouser		
							Code	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ

Please note that this BOM does *not* contain ordering number for parts on reels or that which include re-reeling fee.

#	Qty	Part name	RS Components				TME			THT	SMD	Price calculation for 1 set			
			Code	Part Number	Unit price €	MOQ	Code / Part Number	Unit price €	MOQ			Best Supplier	Best Line Price €	Order Qty	Line Cost €

PCBs	20,00
TFT Display	15,00
Arduino	20,00
Enclosure	51,00
	106,00
Estimated total:	**400,80 €**