

#	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	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	0603YC104KAT2 A	0,010		06033C104K4T4 A	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	2	10n 50V X7R	0805	C133, C146	Arduino Shield	2										
	6	10n 50V X7R	0805	C34, C45, C53, C58, C80, C84	Power board	12										
						14	1759246	MC0805B103K500 CT	0,009	10	CL21B103KBCN NNC	0,027		GRM216R71H10 3KA01D	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	GRM32ER71H106 KA12L	0,748	1	CL32B106KBJN NWE	0,335		GRM32ER71H10 6KA12L	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	T491A106K010A T	0,340		T491A106K010A T	0,344	
8	2	120p 50V NP0	0805 / 0603	C21, C50	Power board	4	1414667	C0805C121J5GAC TU	0,044	10	CL21C121JBAN NNC	0,058		C0805C121J5GA CTU	0,031	
9	2	18p 50V NP0	0805 / 0603	C131, C135	Arduino Shield	2	2320820	MC0805N180J101 CT	0,026	10	CL21C180JBAN NNC	0,090		C0805C180J5GA CTU	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	MC0805N102J500 CT	0,029	10	CL21C102JBCN NNC	0,065		C0805C102J5GA CTU	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	MC1206B105K101 CT	0,200	5	CL31B105KCHN NNE	0,253		GRM31CR72A10 5KA01L	0,227	
12	6	1u 50V X7R	0805, 50V	C13, C57, C59, C68, C74, C76	Power board	12	2118131	C0805C105K5RAC TU	0,215	5	CL21B105KBFN NNE	0,129		08055C105K4T2 A	0,135	
13	1	22n 50V X7R	0805	C130	Arduino Shield	1										
	1	22n 50V X7R	0805	C29	Power board	2										

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	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	0603YC104JAT2 A	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	2	10n 50V X7R													
	6	10n 50V X7R													
			461-4013	CC0805KRX7R9 BB103	0,007	50	CL21B103JBANNNC	0,006	100		14	TME	0,006 €	20	0,120
5	2	10u 50V X7R													
	3	10u 50V X7R													
			766-1214	CL32B106KBJN NNE	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	T491A106K010A T	0,196	10	T491A106K010AT	0,085	10		3	TME	0,085 €	3	0,254
8	2	120p 50V NP0	723-6209	GRM2165C1H1 21JA01D	0,035	100	CL21C121JBANNNP	0,007	100		4	TME	0,007 €	10	0,069
9	2	18p 50V NP0	648-0935	C0805C180J5G ACTU	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	0805CG102J9B B	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	C3216X7R2A10 5K160AA	0,174	10	GRM31CR72A105KA0 1L	0,128	10		10	TME	0,128 €	10	1,279
12	6	1u 50V X7R	766-1062	CL21B105KBFN NNF	0,041	100	CL21B105KBFNNG	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					5	1759252	MC0805B223K500 CT	0,016	10	CL21B223KBAN NNC	0,058		C0805C223K5R AC	0,031	
14	5	2n2 50V NP0	0805 / 0603	C47, C48, C49, C51, C81	Power board	10	1759236	MC0805N222J500 CT	0,052	10	CL21C222JBFN NNG	0,078		GRM2165C1H22 2JA01D	0,076	
15	3	2u2 25V X7R	0805	C24, C36, C38	Power board	6	2320829	MC0805B225K250 CT	0,106	10	CL21B225KAFN NWE	0,126		GRM21BR71E22 5KA73L	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					5	1759213	MC0805N331J500 CT	0,027	10	CL21C331JBAN NNC	0,029		C0805C331J5GA C	0,029	
17	5	3n3 50V X7R or NP0	0805 / 0603	C40, C71, C72, C77, C78	Power board	10										
	1	3n3 50V X7R or NP0	0805 / 0603	C95	AUX PS	1										
	11					11	1759291	MC0805B332K101 CT	0,015	10	CL21B332KBAN NNC	0,045		C0805C332K5R AC	0,024	
18	3	470n 50V X7R	0805, 50V	C9, C25, C32	Power board	6										
	2	470n 50V X7R	0805, 50V	C104, C109	Arduino Shield	2										
	8					8	2470492	GRM21BR71H474 KA88L	0,163	5	CL21B474KBFN FNE	0,139		C0805C474K5R ACTU	0,103	
19	1	470p 50V NP0	0805 / 0603	C23	Power board	2	1759217	MC0805N471J500 CT	0,023	10	CL21C471JBAN NNC	0,090		08055A471JAT2 A	0,091	
20	2	47n 50V X7R	0805	C148, C152	Arduino Shield	2										
	1	47n 50V X7R	0805	C98	AUX PS	1										
	3					3	2496983	0805B473K500CT	0,023	10	CL21B473KBCN NNC	0,090		08055C473KAT2 A	0,091	
21	1	47n 400V Polyester Film	THT R=7,5mm	C86	AUX PS	1	2468839	B32520E6473K000	0,358	1	-			-		
22	2	47p 50V NP0	0805 / 0603	C46, C52	Power board	4	1414692	C0805C470J5GAC TU	0,028	10	CL21C470JBAN NNC	0,043		C0805C470J5GA CTU	0,029	
23	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					5	9695850	EEEFK1V470P	0,493	1	EEEFK1V470P	0,440		EEEFK1V470P	0,443	
24	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					12	1759293	MC0805B472K101 CT	0,019	10	CL21B472KCAN NNC	0,065		GRM21AR72D47 2KW01D	0,050	
25	1	4u7 10V	1206, Tantalum	C145	Arduino Shield	1										
	1	4u7 10V	1206, Tantalum	C43	Power board	2										
	3					3	1457428	T491A475K016AT	0,238	5	T491A475K010A T	0,310		T491A475K010A T	0,299	

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	Best Line Price €	Order Qty	Line Cost €
	2	22n 50V X7R													
			464-6701	08055C223KAT2 A	0,015	50	CL21B223KBANNNC	0,008	100		5	TME	0,008 €	10	0,084
14	5	2n2 50V NP0	802-9905	C0805C222J5G ACTU	0,043	100	GRM2165C1H222JA0 1D	0,015	100		10	TME	0,015 €	10	0,145
15	3	2u2 25V X7R	766-1031	CL21B225KAFN NNF	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	GRM2165C1H3 31JA01D	0,042	100	CL21C331JBANNNC	0,014	100		5	TME	0,014 €	10	0,138
17	5	3n3 50V X7R or NP0													
	1	3n3 50V X7R or NP0													
			237-7009	GRM216R71H3 32KA01D	0,038	50	CL21B332KBANNNC	0,007	100		10	TME	0,007 €	11	0,076
18	3	470n 50V X7R													
	2	470n 50V X7R													
			766-1053	CL21B474KBF4 PNG	0,085	50	CL21B474KBFNNNG	0,015	100		8	TME	0,015 €	10	0,153
19	1	470p 50V NP0	378-700	0805CG471J9B B	0,021	25	CL21C471JBANNNC	0,009	100		2	Farnell TME	0,009 €	2	0,018
20	2	47n 50V X7R													
	1	47n 50V X7R													
			391-303	08055C473KAT2 A	0,011	50	CC0805KRX7R9473	0,008	100		3	TME	0,008 €	3	0,025
21	1	47n 400V Polyester Film	668-9993	B32520C6473K1 89	0,241	10	-			1		RS	0,241 €	1	0,241
22	2	47p 50V NP0	264-4270	C0805C470J5G ACTU	0,014	25	CC0805JRNPO9470	0,007	100		4	TME	0,007 €	10	0,074
23	1	47u 35V													
	2	47u 35V													
			565-623	EEEFK1V470AP	0,165	5	EEEFK1V470P	0,157	5		5	TME	0,157 €	5	0,786
24	4	4n7 100V X7R													
	4	4n7 100V X7R													
			698-3364	08051C472KAZ 2A	0,036	25	CL21B472KCANNNC	0,006	100		12	TME	0,006 €	20	0,126
25	1	4u7 10V													
	1	4u7 10V													
			538-2341	T491A475K016A T	0,179	10	T491A475M010AT	0,128	5		3	TME	0,128 €	5	0,640

EEZ PSU H24005 BOM (r5B11, 2017-01-03)
Project source code at <https://github.com/eez-open>

#	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
26	3	4u7 100V X7R	1210, 100V, X7R	C6, C7, C8	Power board	6	2211140	CGA6M3X7S2A47 5K200AB	1,560	1	GRJ32DC72A47 5KE11L	1,240		GRJ32DC72A47 5KE11L	1,250	
27	3	4u7 25V X7R	1210, 25V	C88, C92, C93	AUX PS	3	1907365	C3225X7R1E475K 200AA	0,484	1	C3225X7R1E475 K200AA	0,390		C3225X7R1E475 K200AA	0,389	
28	2	6n8 50V X7R or NP0	0603	C132, C134	Arduino Shield	2	1759100	MC0603B682K500 CT	0,007	10	CL10B682KB8N NNC	0,090		GRM188R71H68 2KA01J	0,091	
29	1	6n8 (X1 / Y2) PP Film 300Vac 1000Vdc	THT R=10mm	C85	AUX PS	1	2478385	R413F16804000M	0,528	1	R413F16804000 M	0,520		R413F16804000 M	0,525	
30	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	
31	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	
32	1	47u 63V	SMD ELCO; Ø8x10.2mm	C16	Power board	2	9696032	EEEFK1J470P	1,040	1	EEE-FK1J470P	0,880		EEE-FK1J470P	0,887	
33	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	
34	1	BAS316	SOD-323	D21	AUX PS	1										
	6	BAS316	SOD-323	D22, D23, D24, D25, D27, D33	Arduino Shield	6										
	9	BAS316	SOD-323	D6, D11, D12, D13, D14, D15, D16, D17, D18	Power board	18										
						25	8734275	BAS316,115	0,192	5	BAS316,115	0,175		BAS316,115	0,174	
35	1	BAT54S	SOT-23	D28	Arduino Shield	1	1621835	BAT54S	0,125	10	BAT54SLT1G	0,150		BAT54SLT1G	0,145	
36	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	
37	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	
38	1	STPS15H100	TO-252	D5	Power board	2	2344052	STPS15H100CB- TR	1,070	1	STPS15H100CB	0,900		STPS15H100CB	0,896	
39	1	50mA, polyfuse	1210	F1	Arduino board	1	1861176	MC36203	0,163	5	507-1476-1-ND	0,200	1	530- 0ZCJ0005FF2E	0,101	1
40	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										
			0603 Ferrite Bead			8	1635704	742792602	0,210	1	742792602	0,210		742792602	0,160	
41	1	LTC3864EMSE#PBF	MSOP-12	IC1	Power board	2	2293128	LTC3864EMSE#PB F	4,520	1	LTC3864EMSE# PBF	3,960		-		
42	1	REF5025AIDG4	SOIC-8	IC10	Power board	2	1439622	REF5025AIDG4	3,720	1	REF5025AIDR	2,990		REF5025AIDR	2,910	
43	1	DAC8552IDGKTG4	MSOP-8 (VSSOP-8)	IC11	Power board	2	1329584	DAC8552IDGKTG4	6,420	1	DAC8552IDGKT	7,660		DAC8552IDGKR	6,510	
44	1	ADG465BRTZ	SOT-23	IC12	Power board	2	2376952	ADG465BRTZ- REEL7	1,690	1	Discontinued			Discontinued		
45	1	TS5A9411DCKT	SC-70	IC13	Power board	2	1755582	TS5A9411DCKT	1,050	1	TS5A9411DCKR	0,560		TS5A9411DCKR	0,534	
46	1	ADS1120IPWR	TSSOP-16	IC14	Power board	2	2402249	ADS1120IPWR	6,760	1	ADS1120IPWR	6,250		ADS1120IPWR	6,100	
47	1	LP339D	SOIC-14	IC15	Power board	2	9589686	LP339D	0,573	1	LP339DR	0,520		LP339DR	0,498	

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	Best Line Price €	Order Qty	Line Cost €
26	3	4u7 100V X7R	915-5415	CGA6M3X7S2A 475K200AB	0,686	5	-				6	RS	0,686 €	6	4,116
27	3	4u7 25V X7R	515-8508	GRM32ER71H4 75KA88L	0,608	10	CL32A475KAULNNE	0,119	10		3	TME	0,119 €	3	0,358
28	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	1	1F 5,5V Backup Cap	339-6843	EECS5R5H105	3,556	1	EECS5R5H105	2,190	1	1		TME	2,190 €	1	2,190
31	1	100u 63V	708-3623	EEEFK1J101P	0,641	5	EEEFK1J101P	0,380	5		2	TME	0,380 €	2	0,760
32	1	47u 63V	708-3614	EEEFK1J470P	0,784	5	EEEFK1J470P	0,456	1		2	TME	0,456 €	2	0,911
33	2	22u 50V	708-3598	EEEFK1J220P	0,255	5	EEEFK1J220P	0,260	5		2	RS	0,255 €	2	0,510
34	1	BAS316													
	6	BAS316													
	9	BAS316													
			397-2914	BAS316,115	0,195	50	BAS316,115	0,019	25		25	TME	0,019 €	25	0,463
35	1	BAT54S	670-8797	BAT54S	0,202	10	BAT54S.215	0,017	50		1	TME	0,017 €	1	0,017
36	1	DFLS1100-7													
	2	DFLS1100-7													
			708-2292	DFLS1100-7	0,392	25	-				5	Digikey	0,370 €	5	1,850
37															
	1	SKL16													
	1	SKL16													
	2	SKL16													
			485-729	PMEG4005AEA, 115	0,325	20	SKL16	0,095	5		6	TME	0,095 €	10	0,952
38	1	STPS15H100	795-9075	STPS15H100CB -TR	0,924	5	-				2	Mouser	0,896 €	2	1,792
39	1	50mA, polyfuse	-				SM005-60	0,092	10		1	TME	0,092 €	1	0,092
40	3	60R@100MHz													
	1	60R@100MHz													
	1	60R@100MHz													
			669-4049	742792602	0,172	10	LCBA-600	0,027	25		8	TME	0,027 €	10	0,269
41	1	LTC3864EMSE#PBF	-				-				2	Digikey	3,960 €	2	7,920
42	1	REF5025AIDG4	404-304	REF5025AID	3,500	1	-				2	Mouser	2,910 €	2	5,820
43	1	DAC8552IDGKTG4	662-1498	DAC8552IDGKT	6,524	1	-				2	Farnell	6,420 €	2	12,840
44	1	ADG465BRTZ	-				-				2	Farnell	1,690 €	2	3,380
45	1	TS5A9411DCKT	459-459	TS5A9411DCKT	0,570	10	-				2	Mouser	0,534 €	2	1,068
46	1	ADS1120IPWR	-				-				2	Mouser	6,100 €	2	12,200
47	1	LP339D	661-2659	LP339DR	0,175	10	LP339D	0,244	3		2	RS	0,175 €	3	0,525

#	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
48	1	LM25575MH/NOPB	HTSSOP-16	IC16	AUX PS	1	1564783	LM25575MH/NOPB	4,360	1	LM25575MHX/N OPB	3,540		LM25575MHX/N OPB	3,450	
49	1	MC79L05	SOIC-8	IC2	Power board	2	2323583	MC79L05ACD	0,428	1	MC79L05ACD	0,380		MC79L05ACD	0,371	
50	1	TLC5925IDBQR	SSOP-24	IC20	Arduino Shield	1	1694438	TLC5925IDBQR	1,520	1	TLC5925IDBQR	1,370		TLC5925IDBQR	1,330	
51	2	Si8641EC-B-IS1	SOIC-16	IC21, IC25	Arduino Shield	2	2423294	Si8641EC-B-IS1	3,210	1	Si8641EC-B-IS1	2,780		Si8641EC-B-IS1	2,720	
52	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	
53	1	LD1117ADT33TR	TO-252	IC24	Arduino Shield	1	1087169	LD1117DT33	0,358	5	LD1117ADT33TR	0,590		LD1117ADT33TR	0,570	
54	1	PCA21125T/Q900/1,1	TSSOP-14	IC26	Arduino Shield	1	2400445	PCA21125T/Q900/ 1,1	1,870	1	PCA21125T/Q90 0/1,1	1,610		PCA21125T/Q90 0/1,1	1,660	
55	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	
56	1	W5500	LQFP-48	IC28	Arduino Shield	1	-				W5500	3,750		W5500	2,390	
57	1	BC857BS	SOT-363	IC29	Arduino Shield	1	1653608	BC857BDW1T1G	0,141	1	BC857BDW1T1G	0,210		BC857BDW1T1G	0,199	
58	1	MC78L05	SOIC-8	IC3	Power board	2	9593845	UA78L05ACDR	0,488	1	MC78L05ACD	0,360		MC78L05ACD	0,366	
59	1	TLC555	SOIC-8	IC30	Arduino Shield	1	9589880	NE555DR	0,300	1	NE555D	0,350		NE555D	0,353	
60	1	SN74LVC08APWR	SSOP-8	IC31	Arduino Shield	1	1102978	SN74LVC08APWR	0,236	1	296-1221-1-ND	0,350	1	595- SN74LVC08APW	0,335	1
61	1	TPS3705-33D	SOIC-8	IC32	Arduino Shield	1	2296066	TPS3705-33D	1,330	1	TPS3705-33DR	1,580		TPS3705-33D	1,840	
62	1	SN74LV1T34DBVR	SOT-23	IC33	Arduino Shield	1	2499914	SN74LV1T34DBVR	0,457	1	SN74LV1T34DB VR	0,410		SN74LV1T34DB VR	0,398	
63	1	SN74LVC2G02DCTR	SSOP-8	IC34	Arduino Shield	1	1236358	SN74LVC2G02DC TR	0,452	1	SN74LVC2G02D CTR	0,590		SN74LVC2G02D CTR	0,570	
64	1	LM5574MTX/NOPB	TSSOP-16	IC4	Power board	2	2323534	LM5574MTX/NOPB	3,930	1	LM5574MTX/NO PB	3,430		LM5574MTX/NO PB	3,340	
65	1	LP2951D	SOIC-8	IC5	Power board	2	1755066	LP2951D	0,573	1	LP2951DR	0,520		LP2951DR	0,498	
66	2	TL072CD	SOIC-8	IC6, IC7	Power board	4	1467663	TL072CDT	0,252	5	TL072CDT	0,430		TL072CDT	0,416	
67	1	OP27GSZ	SOIC-8	IC8	Power board	2	9426124	OP27GSZ	2,810	1	OP27GSZ	3,140		OP27GSZ	3,080	
68	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	
69	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
70	2	RT424005	THT	K_PAR, K_SER	Arduino Shield	2	9950168	G2RL-2 5DC	3,940	1	RTE24005	2,920		RTE24005	2,850	
71	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	
72	1	SK 145/37,5	THT Heatsink	KK1	AUX PS	1	4621414	SK 145/37,5 STS- 220	3,530	1	-			-		
73	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	
74	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	
75	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	
76	2	IHLP2020CZER3R3M11	SMD; 5.49mm x 5.18mm	L3, L4	Power board	4	1741325	IHLP2020CZER3R 3M11	1,410	5	IHLP2020CZER3 R3M11	2,160		IHLP2020CZER3 R3M11	1,030	
77	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- MLZ2012A2R2M T	0,109	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	THT	SMD	Best Supplier	Best Line Price €	Order Qty	Line Cost €
48	1	LM25575MH/NOPB	288-774	LM25575MH/NO PB	4,060	1	-				1	Mouser	3,450 €	1	3,450
49	1	MC79L05	661-6131	MC79L05ACD	0,308	10	MC79L05ACD	0,202	3		2	TME	0,202 €	3	0,606
50	1	TLC5925IDBQR	812-3984	TLC5925IDBQR	1,109	10	-				1	RS	1,109 €	1	1,109
51	2	Si8641EC-B-IS1	753-2438	Out of stock			-				2	Mouser	2,720 €	2	5,440
52	2	Si8651EC-B-IS1	753-2497	Si8651EC-B-IS1	3,038	1	-				2	RS	3,038 €	2	6,076
53	1	LD1117ADT33TR	686-9123	LD1117ADT33T R	0,294	10	LD1117ADT33	0,315	3		1	RS	0,294 €	1	0,294
54	1	PCA21125T/Q900/1,1	-				-				1	Digikey	1,610 €	1	1,610
55	1	AT25256B	738-0079	AT25256B-SSHL-B	1,267	2	25AA256-I/SN	1,290	1		1	Farnell	1,190 €	1	1,190
56	1	W5500	-				W5500	2,190	1		1	TME	2,190 €	1	2,190
57	1	BC857BS	690-0101	BC857BDW1T1 G	0,022	25	BC857BS	0,027	25		1	RS	0,022 €	1	0,022
58	1	MC78L05	688-9269	MC78L05ABDR 2G	0,245	2	MC78L05ABDG	0,165	3		2	TME	0,165 €	3	0,495
59	1	TLC555	662-4006	TLC555CDR	0,218	10	TLC555CDR	0,384	3		1	RS	0,218 €	1	0,218
60	1	SN74LVC08APWR	662-8588	SN74LVC08AP WR	0,240	10	-				1	Farnell	0,236 €	1	0,236
61	1	TPS3705-33D	662-3331	TPS3705-33D	0,528	5	-				1	RS	0,528 €	1	0,528
62	1	SN74LV1T34DBVR	-				-				1	Mouser	0,398 €	1	0,398
63	1	SN74LVC2G02DCTR	-				SN74LVC2G02DCTR	0,252	5		1	TME	0,252 €	1	0,252
64	1	LM5574MTX/NOPB	288-960	LM5574MT/NOP B	3,948	1	LM5574MT	4,150	1		2	Mouser	3,340 €	2	6,680
65	1	LP2951D	796-8095	LP2951D	0,613	5	LP2951CM/NOPB	0,495	1		2	TME	0,495 €	2	0,990
66	2	TL072CD	857-907P	TL072CD	0,252	1	TL072CD	0,164	3		4	TME	0,164 €	6	0,981
67	1	OP27GSZ	522-8304	OP27GSZ	3,024	1	OP27GSZ	1,550	1		2	TME	1,550 €	2	3,100
68	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
69	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
70	2	RT424005	198-6898	RTE24005	4,676	1	RT424005	1,260	1		2	TME	1,260 €	2	2,520
71	2	G6K-2F-5DC	683-9633	G6K2F5DC	4,928	1	G6K-2F-5DC	2,490	1		2	TME	2,490 €	2	4,980
72	1	SK 145/37,5	-				-				1	Farnell	3,530 €	1	3,530
73	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
74	1	470uH	770-1182	DR74-471-R	0,977	5	DE0704-470	0,254	5		1	TME	0,254 €	1	0,254
75	1	33uH - 7443551331	-				-				2	Mouser	2,970 €	2	5,940
76	2	IHLP2020CZER3R3M11	748-6912	IHLP2020CZER 3R3M01	1,518	5	-				4	Mouser	1,030 €	4	4,120
77	3	2u2													
	1	2u2	604-1524	MLZ2012A2R2M T	0,083	10	-				7	RS	0,083 €	10	0,830

#	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
78	1	100uH	SMD, 12mm x 12mm	L9	AUX PS	1	2113014	SRU1038-101Y	1,010	1	SRU1038-101Y	0,720		652-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		630-HSMG-C170	0,060	
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		630-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		630-HSMD-C170	0,060	
83	4	HSMY-C170	0805 Yellow	LED_CV1, LED_CV2, LED_S1, LED_S2	Arduino Shield	4										
	1	HSMY-C170	0805 Yellow	LED1	Power board	2										
						6	5790876	HSMY-C170	0,330	5	HSMY-C170	0,440		630-HSMY-C170	0,060	
84	1	10K/Beta:3570K	0805	NTC1	Power board	2	1612623	NTCS0805E3103J MT	0,413	1	NTCS0805E3103 JMT	0,250		NTCS0805E3103 JMT	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	2	HCPL-181	SOIC-4	OK3, OK4	Arduino Shield	2	1244525	HCPL-181-000E	0,342	1	HCPL-181-000E	0,560		HCPL-181-000E	0,150	
88	2	IRFR5305	TO-252	Q1, Q8	Power board	4	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	BSS84PH6433X TMA1	0,180		BSS84PH6433X TMA1	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	IRLML2246TRPB F	0,400		IRLML2246TRPB F	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	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	
99	7	0R	0805	JP1, JP2, JP9, R3, R21, R57, R73	Power board	14										
	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	

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	Best Line Price €	Order Qty	Line Cost €
78	1	100uH	122-9186	SRU1038-101Y	0,607	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
81	5	HSMH-C170	486-0468	HSMH-C170	0,188	25	HSMH-C170	0,057	10		5	TME	0,057 €	5	0,287
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													
	1	HSMY-C170													
			486-0519	HSMY-C170	0,248	25	HSMY-C170	0,060	10		6	Mouser	0,060 €	6	0,360
84	1	10K/Beta:3570K	697-4601	NB12K00103JB B	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	2	HCPL-181	693-5277	HCPL-181-000E	0,343	10	HCPL-181-000E	0,250	2		2	Mouser	0,150 €	1	0,150
88	2	IRFR5305	543-2496	IRFR5305PBF	0,994	1	IRFR5305PBF	0,540	1		4	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	IRLML2246TRP BF	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	2	BCP56-16.115	773-7633	BCP56-16T3G	0,242	10	BCP56-16.115	0,106	5		4	TME	0,106 €	4	0,424
99	7	0R													
	1	0R													
	5	0R													
			679-0800	CRCW08050000 Z0EA	0,020	50	SMD0805-0R	0,006	100		20	TME	0,006 €	15	0,090

#	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
100	4	100K 1%	0805	R11, R14, R77, R79	Power board	8										
	2	100K 1%	0805	R143, R154	Arduino Shield	2										
						10	2352619	RCV0805100KFKE A	0,080	10	RC0805FR-07100KL	0,019		RC0805FR-07100KL	0,015	
101	2	100K 0.1%	0805	R49, R59	Power board	4	1577686	ERA6AEB104V	0,205	5	RT0805BRD0710 0KL	0,350		CPF0805B100KE	0,095	
102	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	
103	2	10K 1%	0805	R125, R131	AUX PS	2										
	3	10K 1%	0805	R147, R153, R157	Arduino Shield	3										
	17	10K 1%	0805	R9, R10, R22, R23, R29, R45, R52, R54, R61, R70, R75, R76, R78, R86, R98, R99, R106	Power board	34										
						39	9237755	RC0805FR-0710KL	0,011	10	RC0805FR-0710KL	0,019		RC0805FR-0710KL	0,015	
104	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	
105	1	12K4 1%	0805	R152	Arduino Shield	1	2141850	MC01W0805112K4	0,002	10	RC0805FR-0712K4L	0,090		RC0805FR-0712K4L	0,091	
106	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	
107	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	
108	5	180R 1%	0805	R30, R142, R155, R156, R158	Arduino Shield	5	2447583	MCWR08X1800FT L	0,006	10	RC0805FR-07180RL	0,019		RC0805FR-07180RL	0,015	
109	1	1K 1%	0805	R129	AUX PS	1										
	2	1K 1%	0805	R167, R168	Arduino Shield	2										
	6	1K 1%	0805	R4, R32, R41, R74, R82, R95	Power board	12										
						15	1099800	WCR0805-1K0FI	0,018	10	RC0805FR-071KL	0,019		RC0805FR-071KL	0,015	
110	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	MCWR08X1801FT L	0,006	10	RC0805FR-071K8L	0,019		RC0805FR-071K8L	0,015	

#	Qty	RS Components					TME			THT		Price calculation for 1 set			
		Part name	Code	Part Number	Unit price €	MOQ	Code / Part Number	Unit price €	MOQ		SMD	Best Supplier	Best Line Price €	Order Qty	Line Cost €
100	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
101	2	100K 0.1%	666-2673	CPF0805B100K E	0,112	5	RN73C2A100KBTFD	0,513	2		4	Mouser	0,095 €	4	0,380
102	1	100R 1%													
	1	100R 1%													
	3	100R 1%													
			679-0807	CRCW0805100 RFKEA	0,031	50	RC0805FR-07100R	0,008	100		8	Farnell	0,002 €	10	0,020
103	2	10K 1%													
	3	10K 1%													
	17	10K 1%													
			223-0562	CRG0805F10K	0,021	50	RC0805FR-0710K	0,008	100		39	TME	0,008 €	40	0,308
104	1	10R 1%													
	1	10R 1%													
	4	10R 1%													
			740-9085	CR1206-FX- 10R0ELF	0,028	50	CRCW120610R0FKTA BC	0,014	100		10	TME	0,014 €	10	0,137
105	1	12K4 1%	679-0863	CRCW080512K 4FKEA	0,008	50	-				1	Farnell	0,002 €	10	0,023
106	1	18-22R / 7W	199-8087	SQMW722RJ	0,725	5	-				1	Mouser	0,378 €	1	0,378
107	2	16K 1%													
	2	16K 1%													
			679-0920	CRCW080516K 0FKEA	0,014	50	SMD0805-16K-1%	0,008	100		6	Farnell	0,002 €	10	0,020
108	5	180R 1%	223-0326	CRG0805F180R	0,006	50	SMD0805-180R-1%	0,008	100		5	Farnell	0,030 €	10	0,300
109	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
110	1	1K8 1%													
	2	1K8 1%													
	2	1K8 1%													
			679-1033	CRCW08051K8 0FKEA	0,011	50	SMD0805-1K8-1%	0,008	100		7	Farnell	0,006 €	10	0,063

#	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
111	4	1R 1%	0805	R136, R136A, R140, R140A	Arduino Shield	4	2141629	MC01W080511R0	0,002	10	RC0805FR-071RL	0,090		RC0805FR-071RL	0,091	
112	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
113	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	
114	5	2K2 1%	0805	R110, R111, R119, R122, R124	AUX PS	5										
	10	2K2 1%	0805	R17, R34, R35, R37, R46, R62, R65, R68, R94, R96	Power board	20										
						25	9237534	RC0805FR-072K2L	0,011	10	RC0805FR-072K2L	0,019		RC0805FR-072K2L	0,015	
115	2	2K 0.1%	0805	R64, R72	Power board	4	1670231	ERA6AEB202V	0,259	10	P2.0KDACT-ND	0,370	1	667-ERA-6AEB202V	0,547	1
116	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	
117	1	330K 1%	0805	R12	Power board	2	9333070	MC01W08051330K	0,002	10	RC0805FR-07330KL	0,090		RC0805FR-07330KL	0,091	
118	2	330R 1%	0805	R87, R105	Power board	4	9333037	MC01W08051330R	0,002	10	RC0805FR-07330RL	0,090		RC0805FR-07330RL	0,091	
119	4	330R 5% / 2W	2512	R108, R109, R112, R115	AUX PS	4	1265196	3520330RJT	0,122	10	RHC2512FT330R	0,760		3521330RFT	0,580	
120	3	470R 1%	0805	R20, R40, R53	Power board	6	1099798	WCR0805-470RFI	0,024	10	RC0805FR-07470RL	0,019		RC0805FR-07470RL	0,015	
121	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	MCWR08X4702FT L	0,006	10	RC0805FR-0747KL	0,019		RC0805FR-0747KL	0,015	
122	7	4K7 1%	0805	R134, R135, R137, R139, R141, R144, R145	Arduino Shield	7										
	2	4K7 1%	0805	R15, R102	Power board	4										
						11	9333266	MC01W080514K7	0,002	10	RC0805FR-074K7L	0,019		RC0805FR-074K7L	0,015	
123	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	
124	2	51K 1%	0805	R24, R51	Power board	4	9334653	MC01W0805551K	0,015	10	RC0805FR-0751KL	0,019		RC0805FR-0751KL	0,015	
125	3	5K1 1%	0805	R27, R88, R101	Power board	6										
	2	5K1 1%	0805	R165, R166	Arduino Shield	2										
						8	9333320	MC01W080515K1	0,002	10	RC0805FR-075K1L	0,019		RC0805FR-075K1L	0,015	

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	Best Line Price €	Order Qty	Line Cost €
111	4	1R 1%	721-5631	ERJ6BQF1R0V	0,246	5	RC0805FR-071R	0,009	100		4	Farnell	0,002 €	10	0,022
112	2	22K 0.1%	866-7349	CPF-A-0805B22KE1	0,196	10	AR05BTCW2202	0,107	10		4	TME	0,107 €	4	0,429
113	10	220R 1%													
	2	220R 1%													
			223-0332	CRG0805F220R	0,024	50	RC0805FR-07220R	0,007	100		22	TME	0,007 €	20	0,143
114	5	2K2 1%													
	10	2K2 1%													
			679-1207	CRCW08052K20FKEA	0,027	50	SMD0805-2K2-1%	0,008	100		25	TME	0,008 €	30	0,242
115	2	2K 0.1%	828-0554	ERA6AEB202V	0,230	5	AR0805-2K-0.1%	0,113	10		4	TME	0,113 €	5	0,565
116	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
117	1	330K 1%	679-1272	CRCW0805330KFKEA	0,024	50	RC0805FR-07330K	0,007	100		2	Farnell	0,002 €	10	0,020
118	2	330R 1%	740-9022	CR0805-FX-3300GLF	0,025	50	RC0805FR-07330R	0,007	100		4	Farnell	0,002 €	10	0,020
119	4	330R 5% / 2W	755-1224	3521330RFT	0,182	10	WF25P-330R-5%	0,042	50		4	TME	0,042 €	10	0,419
120	3	470R 1%	223-0376	CRG0805F470R	0,024	50	RC0805FR-07470R	0,007	100		6	TME	0,007 €	10	0,073
121	1	47K 1%													
	2	47K 1%													
	7	47K 1%													
			679-1434	CRCW080547K0FKEA	0,010	50	RC0805FR-0747K	0,007	100		17	Farnell	0,006 €	20	0,126
122	7	4K7 1%													
	2	4K7 1%													
			223-0528	CRG0805F4K7	0,011	50	RC0805FR-074K7	0,008	100		11	Farnell	0,002 €	20	0,040
123	4	49R9 1%													
	2	49R9 1%													
			679-1462	CRCW080549R9FKEA	0,011	50	RC0805FR-0749R9	0,007	100		6	Farnell	0,002 €	10	0,020
124	2	51K 1%	679-1525	CRCW080551K0FKEA	0,020	50	RC0805FR-0751K	0,006	100		4	TME	0,006 €	10	0,061
125	3	5K1 1%													
	2	5K1 1%													
			679-1569	CRCW08055K10FKEA	0,027	50	RC0805FR-075K1	0,007	100		8	Farnell	0,002 €	10	0,021

#	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
126	2	5K6 1%	0805	R121, R130	AUX PS	2										
	4	5K6 1%	0805	R26, R92, R97, R104	Power board	8										
						10	2447693	MCWR08X5601FT L	0,006	10	RC0805FR-075K6L	0,019		RC0805FR-075K6L	0,015	
127	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	
128	2	7K5 0.1%	0805	R44, R55	Power board	4	1670239	ERA6AEB752V	0,312	10	RT0805BRD077 K5L	0,350		RT0805BRD077 K5L	0,357	
129	2	82R 0.1%	0805 / 0603	R67, R71	Power board	4	1577592	ERA3AEB820V	0,185	10	P82DBCT-ND	0,370	1	667-ERA-6AEB820V	0,547	1
130	1	R010 1% / 2W	2512 or 1206 / min 1W	R2	Power board	2	1435947	CRA2512-FZ- R010ELF	0,484	10	CRA2512-FZ- R010ELF	0,540		CRA2512-FZ- R010ELF	0,568	
131	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	
132	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	
133	1	LD-BZEN-0903	THT	SP1 Buzzer	Arduino Shield	1	-				-			TE092703-6	2,200	
134	1	A101SYCQ04	THT	SW1	Arduino Shield	1	2292959	A101SYCQ04	2,760	1	A101SYCQ04	3,000		A101SYCQ04	2,640	
135	1	1301.9316	SMD; tactile switch	SW2	Arduino Shield	1	1217765	1301.9316	0,302	1	FSM6JSMA	0,210		1301.9316	0,270	
136	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	
137	1	VTX-214-005-112	THT	TR2	AUX PS	1	2401044	VTX-214-005-112	8,120	1	-			-		
138	1	39-30-3035	THT 4,2mm 3-pin	X1	Power board	2	9963545	39303035	0,914	1	39-30-3035	0,800		39-30-3035	0,603	
139	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	
140	2	MC000006	THT, do not solder. Insert into 2 x SIP sockets on bottom layer!	X12, X14 Front Treminal	Arduino Shield	2	2007972	MC000006	1,900	1	-			-		
141	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	
142	1	22-23-2021	THT	X17 AUX temp	Arduino Shield	1	1462926	22-23-2021	0,100	1	22-23-2021	0,140		22-23-2021	0,141	
143	1	MC34753	THT	X18	Arduino Shield	1	1593431	MC34753	0,422	10	M20-9750846	0,230		710-61300811021	0,670	
144	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		-		
145	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	
146	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	
147	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	
148	1	LMJ2138814S0L1T1C	THT, solder on bottom layer!	X7 RJ45 Connector	AUX PS	1	-				-			-		
149	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	

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	Best Line Price €	Order Qty	Line Cost €
126	2	5K6 1%													
	4	5K6 1%													
			679-1572	CRCW08055K6 0FKEA	0,021	50	SMD0805-5K6-1%	0,008	100		10	Farnell	0,006 €	10	0,063
127	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
128	2	7K5 0.1%	666-2588	CPF0805B7K5E	0,280	5	RN73C2A7K5BTDF	0,520	2		4	RS	0,280 €	5	1,400
129	2	82R 0.1%	565-863	ERA6AEB820V	0,046	5	AR0805-82R-0.1%	0,113	10		4	RS	0,046 €	10	0,460
130	1	R010 1% / 2W	693-4381	CRA2512-FZ- R010ELF	0,515	5	LRP2512-R010-1%	0,151	5		2	TME	0,151 €	5	0,754
131	1	R020 1% / 2W	693-4384	CRA2512-FZ- R020ELF	0,507	5	VW25NR020FTL	0,189	5		2	TME	0,189 €	5	0,945
132	2	4x10K 5%	522-5585	CAY16-103J4LF	0,020	50	DR1206-10K-4/8	0,007	100		2	TME	0,007 €	2	0,013
133	1	LD-BZEN-0903	-				LD-BZEN-0903	0,504	3	1		TME	0,504 €	3	1,512
134	1	A101SYCQ04	710-9788	A101SYCQ04	2,576	1	-			1		RS	2,576 €	1	2,576
135	1	1301.9316	718-2443	FSM6JSMATR	0,818	5	1301.9316	0,220	5		1	Digikey	0,210 €	1	0,210
136	1	820uH Dual Coil	-				-				2	Digikey	0,720 €	2	1,440
137	1	VTX-214-005-112	792-4372	Myrra 47154	10,140	1	-			1		Farnell	8,120 €	1	8,120
138	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
139	1	2411-01	-				2411-01	0,660	1	1		TME	0,660 €	1	0,660
140	2	MC000006	-				-			1		Farnell	1,900 €	1	1,900
141	2	TSW-113-07-F-D	-				-			2		Mouser	1,410 €	2	2,820
142	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
143	1	MC34753	828-1673	61300811021	0,759	5				1		Digikey	0,230 €	1	0,230
144	1	SSW-113-02-T-D-RA	-				ZL263-26DG	0,399	2	2		TME	0,399 €	2	0,798
145	1	39-30-3055	670-5861	39-30-3055	0,563	5	-			1		Farnell	0,530 €	1	0,530
146	1	09185107324													
	1	09185107324													
			740-7108	09185107324	1,442	1	T821-1-10-S1	0,290	2	2		TME	0,290 €	2	0,580
147	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
148	1	LMJ2138814SOL1T1C	-				RJ45-TRAFO-LP	2,820	1	1		TME	2,820 €	1	2,820
149	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
150	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	
151	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	
152	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	
153	3	SMAJ18A	DO-214AC	ZD3, ZD10, ZD11	Arduino Shield	3	1749305	SMAJ18A-TR	0,070	10	SMA6J18A-TR	0,340		SMA6J18A-TR	0,407	
154	1	BZX384-C4V3	SOD-323	ZD12	Arduino Shield	1	8735697	BZX384-C4V3	0,182	5	MM3Z4V3T1G	0,130		BZX384-C4V3,115	0,110	
155	1	BZX384-C15.115	SOD-323	ZD4	Power board	2	8735506	BZX384-C15	0,182	5	MM3Z15VT1G	0,130		MM3Z15VT1G	0,118	
156	1	PDZ6.2B	SOD-323	ZD5	Power board	2	1757863	PDZ6.2B,115	0,266	5	MM3Z6V2T1G	0,130		MM3Z6V2T1G	0,118	
157	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																
158	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	
159	2	S20K250	THT	VAR1, VAR2	AUX PS	2	1004357	B72220S0251K101	0,650	1	B72220S0251K101	0,850		B72220S0251K101	0,936	
160	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	-									
2	10n 50V X7R	0805		C154, C155	Arduino Shield	2	-									
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	-									
1	SMBJ5.0A-TR	DO-214AA		D26	Arduino Shield	1	-									
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	12K	1208		R1	Power board	2	-									
2	n.c.	0805		R13, R175	Power board	4	-									
2	22R	0805		R132, R133	AUX PS	2	-									
2	4K7 1%	0805		R169, R171	Arduino Shield	2	-									
2	10K 1%	0805		R170, R172	Arduino Shield	2	-									
1	47K	0805		R33	Arduino board	1	-									
1	n.c.	1206		R63	Power board	2	-									
1	826629-5	THT		X10	AUX PS	1	-									

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	Best Line Price €	Order Qty	Line Cost €
150	1	826629-5	681-2981	M20-9990545	0,160	10	ZL201-05G	0,032	25	1		TME	0,032 €	1	0,032
151	1	32.768kHz	226-1443	LFXTAL002995	0,532	1	32.768K-TC38	0,144	5	1		TME	0,144 €	1	0,144
152	1	25MHz	814-9550	QCS25.0000F18 B23R	0,217	10	25.00M-SMDHC49S	0,373	2		1	RS	0,217 €	1	0,217
153	3	SMAJ18A	795-9268	SMA6J18A-TR	0,112	25	P4SMAJ18A-DIO	0,105	5		3	Farnell	0,070 €	5	0,350
154	1	BZX384-C4V3	508-696	BZX384-C4V3	0,013	100	BZT52C4V3-DIO	0,019	25		1	RS	0,013 €	1	0,013
155	1	BZX384-C15.115	802-4568	MM3Z15VST1G	0,013	200	BZX384-C15.115	0,019	25		2	RS	0,013 €	2	0,026
156	1	PDZ6.2B	725-8247	PDZ6.2B,115	0,014	100	PDZ6.2B	0,019	25		2	RS	0,014 €	2	0,028
157	2	P4SMAJ48A	687-3286	SMAJ48A	0,098	25	P4SMAJ48A-DIO	0,102	5		2	RS	0,098 €	2	0,196
									75						
															178,44 €

AUX PS 230 V protection															
158	1	CG2-470L	878-3652	CG2-470L	2,279	10	CG2-470L	1,450	1	1	Digikey	1,270 €	1	1,270	
159	2	S20K250	289-7301	B72220S0251K101	0,745	5	SIOV-S20K250	0,524	1	2	TME	0,524 €	2	1,048	
160	2	1.5KE400CA	486-4381	1.5KE400CA	0,781	5	1.5KE400CA	0,256	3	2	TME	0,256 €	3	0,768	
									3	48	687	3,09 €			

Not installed														
1	1u				-					2				
2	100n				-					4				
2	10n 50V X7R													
1	n.c.									2				
1	n.c.													
4	1n									8				
1	n.c.				-					2				
2	2m2				-					4				
1	n.c.													
5	100n				-					5				
4	STPS15H100				-					8				
1	SMBJ5.0A-TR				-					1				
2	60R@100MHz				-					2				
2	S1751-46R				-					4				
1	TPD4E002DRLR				-					1				
1	TPD2E001DZDR				-					1				
1	ADUM3160BRWZ				-					1				
1	12K				-					2				
2	n.c.				-					4				
2	22R				-					2				
2	4K7 1%													
2	10K 1%													
1	47K									1				
1	n.c.				-					2				
1	826629-5				-					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
1	22-23-2041	THT		X19 Optional Encoder	Arduino Shield	1	-									
1	282836-2	THT		X2	Power board	2	-									
2	n.c.			ZD1, ZD2	Power board	4	-									
Power module AC input option																
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	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
0	Heatsink 70 x 120 mm	Not required if Varisom enclosure kit is purchased!			Power board	0	-				-			-		
1	Arduino Due				Arduino Shield	1	2250861	A000062	40,660	1						
1	3.2" TFT LCD				Arduino Shield	1	-									
1	Varisom enclosure kit	Enclosure, AC/DC mounting rail, TFT display mounting rail, handles, foot			Enclosure	1	-									
1	PCB+PCBA				Enclosure	1	-									
Nuts & bolts																
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	-			-		
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										
2	BS-244DSM-R	Binding post 4mm, red		J1, J4	Arduino Shield	2	1815818	2,12	4,240							
1	BS-244DSM-G	Binding post 4mm, green		J2	Arduino Shield	1	1815820	2,17	2,170							
2	BS-244DSM-B	Binding post 4mm, black		J3, J5	Arduino Shield	2	1815819	2,11	4,220							
1	12V fan 60x60mm				Enclosure	1	-									
4	FSP-2	Fastener for fan			Enclosure	4	-									
1	FG-06	Finger guard, 60x60mm, metal			Enclosure	1	2292912	0,453	0,453	1						

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	Best Line Price €	Order Qty	Line Cost €
	1	22-23-2041													
	1	282836-2					-			2					
	2	n.c.					-				4				
Power module AC input c															
	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
Other															
	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	-					
	0	Heatsink 70 x 120 mm -					RAD-A4463/120	1,370	1	-					0,000
	1	Arduino Due	769-7412	A000062	33,680	1	itead/Eckstein	19,480		-		TME	19,480 €	1	19,480
	1	3.2" TFT LCD					itead/Eckstein	12,140		-		TME	12,140 €	1	12,140
	1	Varisom enclosure kit								-					
	1	PCB+PCBA								-					
															61,82 €
Nuts & bolts															
	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
	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)								-					
	2	BS-244DSM-R					BS-244DSM-R	1,120				TME	1,120 €	2	2,240
	1	BS-244DSM-G					BS-244DSM-G	1,120				TME	1,120 €	1	1,120
	2	BS-244DSM-B					BS-244DSM-B	1,140				TME	1,140 €	2	2,280
	1	12V fan 60x60mm					MB60251V1-G99	4,110				TME	4,110 €		0,000
	4	FSP-2					FSP-2	0,140				TME	0,140 €		0,000
	1	FG-06					FG-06	0,513				Farnell	0,453 €	1	0,453

#	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	M3x5 countersunk, black finish	Rear and front panel		Enclosure	2										
	2	M3x5 countersunk, black finish	AC/DC mounting rail		Enclosure	2										
	2	M3x5 countersunk, black finish	AC inlet		Enclosure	2										
	8	M3x5 countersunk, black finish	Power board top and bottom plate mounting		Power board	16										
						22	-									
	4	M4x6	Front panel handles		Enclosure	4	-									
	1	Washer externally serrated M3, D=6mm	Earth connection		Enclosure	1										
	1	Washer externally serrated M3, D=6mm	Q4 mounting to heatsink		Power board	2										
						3	7096471	0,013	0,013							
	1	M3x12, cheese head	Q4 mounting to heatsink		Power board	2	-									
	4	Washer M3, 8mm	Enclosure feet		Enclosure	4	-									
	5	M3x8, black finish	AUX PS mounting, ext		AUX PS	5										
	8	M3x8, black finish	Top and bottom plates		Enclosure	8										
	1	M3x8, black finish	AC/DC mounting rail		Power board	2										
	4	M3x8, black finish	Power board heatsink		Power board	8										
						23	-									
	5	M3x5	AUX PS mounting, int		AUX PS	5										
	2	M3x5	AC/DC mounting rail		Power board	4										
						9	-									
	1	TFF-M3X40/DR124	40 mm metal spacer, M3 (a pair is required for dual channel)		Power board	2	-									
	4	Screwed spacer sleeve; hexagonal	14 mm, M3		AUX PS	4	1466812	0,326	1,304							
	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 PCB and heatsink		Power board	8	1733405	0,0652	0,522							
	4	???	Speacer between display and Arduino shield		Arduino Shield	4			0,000							
	12	Light pipe for LED	Round; Ø3mm; Front: convex; straight		Arduino Shield	12	2293496	0,636	7,632							
	1	Schurter 4304.6090	C14 IEC inlet, switch, 2 fuse drawer is included		Enclosure	1	2080294	8,65	8,650							
	2	4A Fuse			AUX PS	2	-									
	0,06	CB-HFT50.8/1M-BL	Heat shrink sleeve; 2:1, 50.8mm		AUX PS	0,06	-									
	0,09	Thermal pad 5mm		eBay, AliExpress	Power board	0,17	-									

Wire harness

1	10K NTC	Main temperature sensor	Arduino Shield	1	1187031	0,271										
---	---------	-------------------------	----------------	---	---------	-------	--	--	--	--	--	--	--	--	--	--

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	Best Line Price €	Order Qty	Line Cost €
	2	M3x5 countersunk, black finish													
	2	M3x5 countersunk, black finish													
	2	M3x5 countersunk, black finish													
	8	M3x5 countersunk, black finish													
				M3X5/D965B	0,013							TME	0,013 €	22	0,291
	4	M4x6		B4X6/BN3334	0,014							TME	0,014 €		0,000
	1	Washer externally serrated M3, D=6mm													
	1	Washer externally serrated M3, D=6mm													
				B3/BN789	0,008							TME	0,008 €	3	0,025
	1	M3x12, cheese head		B3X12/BN272	0,026							TME	0,026 €	2	0,051
	4	Washer M3, 8mm		B8X0.4/BN806	0,026							TME	0,026 €	4	0,103
	5	M3x8, black finish													
	8	M3x8, black finish													
	1	M3x8, black finish													
	4	M3x8, black finish													
				M3X8/D7985B	0,019							TME	0,019 €	23	0,426
	5	M3x5													
	2	M3x5													
				M3X5/D7985	0,013							TME	0,013 €	9	0,114
	1	TFF-M3X40/DR124		TFF-M3X40/DR124	0,156							TME	0,156 €	2	0,312
	4	Screwed spacer sleeve; hexagonal		B3X14/BN3320	0,309							TME	0,309 €	4	1,238
	9	Screwed spacer sleeve; M5; 8mm; brass		TFM-M5X8/DR218	0,187							TME	0,187 €	9	1,681
	4	Spacer sleeve; 5mm; cylindrical; brass		DR316/3.2X5	0,057							TME	0,057 €	8	0,456
	4	???										Farnell	0,000 €	4	0,000
	12	Light pipe for LED		PLP2-625	0,764							TME	0,764 €	12	9,173
	1	Schurter 4304.6090		4304.6090	3,594							TME	3,594 €	1	3,594
	2	4A Fuse		ZKT-4A	0,095	10						TME	0,095 €	2	0,189
	0,06	CB-HFT50.8/1M-BL		CB-HFT50.8/1M-BL	1,241							TME	1,241 €	1	1,241
	0,09	Thermal pad 5mm													0,000
															24,99 €
Wire harness															
	1	10K NTC		NTCLE100E3103JB0	0,269							TME	0,269 €	1	0,269

#	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	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	0,064	100	952-2158-ND	0,130		855-M20-1180042	0,127	1
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										
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						

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	Best Line Price €	Order Qty	Line Cost €
	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 €	11	0,816
	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 €	5	0,150
	21	NDR-T	681-2887	122-4777	0,041	100	NDR-T	0,027	25			TME	0,027 €	21	0,566
	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 €	8	0,406
	2	H1.5/14D/BK													
	4	H1.5/14D/BK													
							H1.5/14D/BK	0,024	20	-		TME	0,024 €	6	0,141
	2	H1.5/16D2/BK													
	3	H1.5/16D2/BK													
							H1.5/16D2/BK	0,047	10			TME	0,047 €	5	
	1	Cat5E cable, stranded wire					CA00600.00C01	6,800	1	-		Farnell	1,120 €	1	1,120
	0,09	LGY1.5/10-BR													
	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 €	0	0,291

#	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
0,09		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)

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.

RS Components								TME		THT		Price calculation for 1 set			
#	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 €
	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 €	0	0,291
	0,4	LGY1.5/10-RD													
	0,33	LGY1.5/10-RD													
				LGY1.5/10-RD	0,620	10	-					TME	0,620 €	1	0,453
	0,4	LGY1.5/10-BK													
	0,33	LGY1.5/10-BK													
				LGY1.5/10-BK	0,620	10	-					Farnell	0,583 €	1	0,425
	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	1,097
	1	Arduino USB cable		-			-					Farnell	0,000 €	1	0,000
	1	FC10300-0		FC10300-0	1,040	1	-					TME	1,040 €	1	1,040
															7,57 €

Total 275,90 €

PCBA Estimated 0,000
PCBs (min. 20 pcs) Estimated 25,00
Enclosure Estimated 51,00
76,00
Estimated total: 351,90 €