EEZ PSU H24005 BOM (r5B12, 2017-02-21)
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
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	17	100n 16V X7R	0603	C9, C20, C32, C43, C44, C45, C49, C50, C51, C54, C56, C59, C63, C65, C69, C72, C73	Power board	34										
	5	100n 16V X7R	0603	C81, C82, C83, C84, C85	AUX PS	5										
	27	100n 16V X7R	0603	C97, C98, C99, C100, C101, C102, C104, C106, C107, C108, C109, C111, C113, C114, C121, C122, C123, C124, C125, C126, C127, C128, C132, C134, C136, C139, C141	Arduino Shield	27										
						66	2496832	0603B104K160CT	0,012	10	0603YC104KAT2A	0,010		06033C104K4T4A	0,025	
3	1	220u 16V	SMD ELCO; Ø6.3 x 7.7mm	C78	AUX PS	1	1870605	MCESL16V227M6.3X7.7	0,213	10	399-6679-1-ND	0,410	1	80-EDK227M016A9	0,407	1
4	5	10n 50V X7R	0805	C118, C131, C135, C137, C138	Arduino Shield	5										
	7	10n 50V X7R	0805	C25, C28, C35, C42, C47, C70, C74	Power board	14										
						19	1759246	MC0805B103K500CT	0,009	10	CL21B103KBCNNNC	0,027		GRM216R71H103KA01D	0,014	
5	2	10u 50V X7R	1210	C90, C110	Arduino Shield	2										
	7	10u 50V X7R	1210	C10, C16, C22, C24, C29, C30, C55	Power board	14										
						16	2362133	GRM32ER71H106KA12L	0,748	1	CL32B106KBJNNWE	0,335		GRM32ER71H106KA12L	0,376	
6	2	10u 10V	1206, Tantalum	C105, C129	Arduino Shield	2										
	3	10u 10V	1206, Tantalum	C23, C31, C57	Power board	6										
						8	1457413	T491A106K010AT	0,260	5	T491A106K010AT	0,340		T491A106K010AT	0,344	
7	2	120p 50V NP0	0805 / 0603	C17, C39	Power board	4	1414667	C0805C121J5GACTU	0,044	10	CL21C121JBANNNC	0,058		C0805C121J5GACTU	0,031	
8	2	18p 50V NP0	0805 / 0603	C116, C120	Arduino Shield	2	2320820	MC0805N180J101CT	0,026	10	CL21C180JBANNNC	0,090		C0805C180J5GACTU	0,100	
9	2	1n 50V NP0	0805 / 0603	C52, C53	Power board	4	1759227	MC0805N102J500CT	0,029	10	CL21C102JBCNNNC	0,065		C0805C102J5GACTU	0,038	
10	2	1u 100V X7R	1206, 100V	C8, C33	Power board	4	2320876	MC1206B105K101CT	0,200	5	CL31B105KCHNNNE	0,253		GRM31CR72A105KA01L	0,227	
11	7	1u 50V X7R	0805, 50V	C11, C26, C46, C48, C58, C64, C66	Power board	14	2118131	C0805C105K5RACTU	0,215	5	CL21B105KBFNNNE	0,129		08055C105K4T2A	0,135	
12	1	22n 50V X7R	0805	C115	Arduino Shield	1	1759252	MC0805B223K500CT	0,016	10	CL21B223KBANNNC	0,058		C0805C223K5RAC	0,031	
13	5	2n2 50V NP0	0805 / 0603	C36, C37, C38, C40, C71	Power board	10	1759236	MC0805N222J500CT	0,052	10	CL21C222JBFNNNG	0,078		GRM2165C1H222JA01D	0,076	
14	4	3n3 50V X7R or NP0	0805 / 0603	C60, C61, C67, C68	Power board	8	1759291	MC0805B332K101CT	0,015	10	CL21B332KBANNNC	0,045		C0805C332K5RAC	0,024	
15	1	470n 50V X7R	0805, 50V	C7	Power board	2										
	2	470n 50V X7R	0805, 50V	C87, C92	Arduino Shield	2										

#	Qty	Part name	RS Components Code	Part Number	Unit price €	MOQ	TME Code / Part Number	Unit price €	MOQ	THT	SMD	Best Supplier	Lowest unit 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	17	100n 16V X7R													
	5	100n 16V X7R													
	27	100n 16V X7R													
			391-246	0603YC104JAT2A	0,004	50	CL10B104KO8NNNC	0,004	100		66	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	5	10n 50V X7R													
	7	10n 50V X7R													
			461-4013	CC0805KRX7R9BB103	0,007	50	CL21B103JBANNNC	0,006	100		19	TME	0,006 €	20	0,120
5	2	10u 50V X7R													
	7	10u 50V X7R													
			766-1214	CL32B106KBJNNNE	0,601	10	CL32B106KBJNNNE	0,201	10		16	TME	0,201 €	16	3,216
6	2	10u 10V													
	3	10u 10V													
			538-2278	T491A106K010AT	0,196	10	T491A106K010AT	0,085	10		8	TME	0,085 €	10	0,845
7	2	120p 50V NP0	723-6209	GRM2165C1H121JA01D	0,035	100	CL21C121JBANNNP	0,007	100		4	TME	0,007 €	10	0,069
8	2	18p 50V NP0	648-0935	C0805C180J5GACTU	0,157	10	CL21C180JBANNNC	0,071	100		2	Farnell	0,026 €	2	0,053
9	2	1n 50V NP0	378-710	0805CG102J9BB	0,021	25	CL21C102JBCNNNC	0,010	100		4	TME	0,010 €	10	0,097
10	2	1u 100V X7R	740-7590	C3216X7R2A105K160AA	0,174	10	GRM31CR72A105KA01L	0,128	10		4	TME	0,128 €	10	1,279
11	7	1u 50V X7R	766-1062	CL21B105KBFNNNF	0,041	100	CL21B105KBFNNNG	0,014	100		14	TME	0,014 €	15	0,214
12	1	22n 50V X7R	464-6701	08055C223KAT2A	0,015	50	CL21B223KBANNNC	0,008	100		1	TME	0,008 €	10	0,084
13	5	2n2 50V NP0	802-9905	C0805C222J5GACTU	0,043	100	GRM2165C1H222JA01D	0,015	100		10	TME	0,015 €	10	0,145
14	4	3n3 50V X7R or NP0	237-7009	GRM216R71H332KA01D	0,038	50	CL21B332KBANNNC	0,007	100		8	TME	0,007 €	10	0,069
15	1	470n 50V X7R													
	2	470n 50V X7R													

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							Code	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ
						4	2470492	GRM21BR71H474KA88L	0,163	5	CL21B474KBFNFNE	0,139		C0805C474K5RACTU	0,103	
16	2	470p 50V NP0	0805 / 0603	C14, C19	Power board	4	1759217	MC0805N471J500CT	0,023	10	CL21C471JBANNNC	0,090		08055A471JAT2A	0,091	
17	2	47n 50V X7R	0805	C133, C140	Arduino Shield	2										
	1	47n 50V X7R	0805	C79	AUX PS	1										
						3	2496983	0805B473K500CT	0,023	10	CL21B473KBCNNNC	0,090		08055C473KAT2A	0,091	
18	1	47n 400V Polyester Film	THT R=7,5mm	C76	AUX PS	1	2468839	B32520E6473K000	0,358	1	-			-		
19	2	47p 50V NP0	0805 / 0603	C34, C41	Power board	4	1414692	C0805C470J5GACTU	0,028	10	CL21C470JBANNNC	0,043		C0805C470J5GACTU	0,029	
20	1	47u 35V	SMD ELCO, Ø6.3 x 5.8mm	C103	Arduino Shield	1										
	2	47u 35V	SMD ELCO, Ø6.3 x 5.8mm	C77, C80	AUX PS	2										
						3	9695850	EEEFK1V470P	0,493	1	EEEFK1V470P	0,440		EEEFK1V470P	0,443	
21	1	47u 50V	SMD ELCO; Ø8x10.2mm	C13	Power board	2										
	2	47u 50V	SMD ELCO; Ø8x10.2mm	C89, C94	Arduino board	2										
						4	9695931	EEEFK1H470P	0,622	1	PCE3815CT-ND	0,600	1	667-EEE-FK1H470P	0,754	1
22	4	4n7 100V X7R	0805	C1, C2, C4, C18	Power board	8										
	4	4n7 100V X7R	0805	C88, C91, C93, C95	Arduino board	4										
						12	1759293	MC0805B472K101CT	0,019	10	CL21B472KCANNNC	0,065		GRM21AR72D472KW01D	0,050	
23	1	4u7 10V	1206, Tantalum	C130	Arduino Shield	1										
	1	4u7 10V	1206, Tantalum	C21	Power board	2										
						3	1457428	T491A475K016AT	0,238	5	T491A475K010AT	0,310		T491A475K010AT	0,299	
24	2	4u7 100V X7R	1210, 100V, X7R	C5, C6	Power board	4	2211140	CGA6M3X7S2A475K200AB	1,560	1	GRJ32DC72A475KE11L	1,240		GRJ32DC72A475KE11L	1,250	
25	2	6n8 50V X7R or NP0	0603	C117, C119	Arduino Shield	2	1759100	MC0603B682K500CT	0,007	10	CL10B682KB8NNNC	0,090		GRM188R71H682KA01J	0,091	
26	1	6n8 (X1 / Y2) PP Film 300Vac 1000Vdc	THT R=10mm	C75	AUX PS	1	2478385	R413F16804000M	0,528	1	R413F16804000M	0,520		R413F16804000M	0,525	
27	1	1F 5,5V Backup Cap	THT	C112	Arduino Shield	1	9697497	EEC-S5R5H105	4,660	1	EEC-S5R5H105	3,480		EEC-S5R5H105	3,510	
28	1	100u 63V	SMD ELCO; Ø10 x 10.2mm	C15	Power board	2	9696040	EEEFK1J101P	0,846	1	EEE-FK1J101P	0,930		EEE-FK1J101P	0,932	
29	2	18u 50V	SMD ELCO **Polymer**; Ø8x6.3mm	C3	Power bord	2										
	2	18u 50V	SMD ELCO **Polymer**; Ø8x6.3mm	C86, C96	Arduino Shield	2										
						4	2354813	50SVPF18M	1,830	1	P18942CT-ND	1,430	1	667-50SVPF18M	1,720	1
30	1	BAS316	SOD-323	D12	AUX PS	1										
	6	BAS316	SOD-323	D13, D14, D15, D16, D18, D21	Arduino Shield	6										
	9	BAS316	SOD-323	D2, D3, D4, D5, D6, D7, D8, D9, D10	Power board	18										

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			766-1053	CL21B474KBF4PNG	0,085	50	CL21B474KBFNNNG	0,015	100		4	TME	0,015 €	10	0,153
16	2	470p 50V NP0	378-700	0805CG471J9BB	0,021	25	CL21C471JBANNNC	0,009	100		4	TME	0,009 €	2	0,018
17	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
18	1	47n 400V Polyester Film	668-9993	B32520C6473K189	0,241	10	-			1		RS	0,241 €	1	0,241
19	2	47p 50V NP0	264-4270	C0805C470J5GACTU	0,014	25	CC0805JRNPO9470	0,007	100		4	TME	0,007 €	10	0,074
20	1	47u 35V													
	2	47u 35V													
			565-623	EEEFK1V470AP	0,165	5	EEEFK1V470P	0,157	5		3	TME	0,157 €	10	1,572
21	1	47u 50V													
	2	47u 50V													
			537-0590	EEEFK1H470P	0,170	5	EEEFK1H470P	0,197	5		4	RS	0,170 €	5	0,850
22	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
23	1	4u7 10V													
	1	4u7 10V													
			538-2341	T491A475K016AT	0,179	10	T491A475M010AT	0,128	5		3	TME	0,128 €	5	0,640
24	2	4u7 100V X7R	915-5415	CGA6M3X7S2A475K200AB	0,686	5	-				4	RS	0,686 €	4	2,744
25	2	6n8 50V X7R or NP0	147-825	C0603C682K5RACTU	0,007	50	CL10B682JB8NNNC	0,004	100		2	TME	0,004 €	10	0,042
26	1	6n8 (X1 / Y2) PP Film 300Vac 1000Vdc	871-2489	890334023003CS	0,420	10	MKP-Y2-6N8	0,158	5	1		TME	0,158 €	1	0,158
27	1	1F 5,5V Backup Cap	339-6843	EECS5R5H105	3,556	1	EECS5R5H105	2,190	1	1		TME	2,190 €	1	2,190
28	1	100u 63V	708-3623	EEEFK1J101P	0,641	5	EEEFK1J101P	0,380	5		2	TME	0,380 €	2	0,760
29	2	18u 50V													
	2	18u 50V													
			-				-				4	Digikey	1,430 €	5	7,150
30	1	BAS316													
	6	BAS316													
	9	BAS316													

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							Code	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ
						25	8734275	BAS316,115	0,192	5	BAS316,115	0,175		BAS316,115	0,174	
31	1	BAT54S	SOT-23	D19	Arduino Shield	1	1621835	BAT54S	0,125	10	BAT54SLT1G	0,150		BAT54SLT1G	0,145	
32	1	SKL16	SOD-323	D11	AUX PS	1										
	1	SKL16	SOD-323	D20	Arduino Shield	1										
						2	8738025	PMEG4005AEA	0,104	5	PMEG4005AEA	0,325		PMEG4005AEA	0,286	
33	1	STPS15H100	TO-252	D1	Power board	2	2344052	STPS15H100CB-TR	1,070	1	STPS15H100CB	0,900		STPS15H100CB	0,896	
34	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
35	3	60R@100MHz	0603 Ferrite Bead	FB1, FB2, FB3	Power board	6										
	3	60R@100MHz	0603 Ferrite Bead	FB4, FB5, FB6	AUX PS	3										
	1	60R@100MHz	0603 Ferrite Bead	FB7	Arduino Shield	1										
						10	1635704	742792602	0,210	1	742792602	0,210		742792602	0,160	
36	1	LTC3864EMSE#PBF	MSOP-12	IC1	Power board	2	2293128	LTC3864EMSE#PBF	4,520	1	LTC3864EMSE#PBF	3,960		-		
37	1	DAC8552IDGKTG4	MSOP-8 (VSSOP-8)	IC10	Power board	2	1329584	DAC8552IDGKTG4	6,420	1	DAC8552IDGKT	7,660		DAC8552IDGKR	6,510	
38	1	ADG465BRTZ	SOT-23	IC11	Power board	2	2376952	ADG465BRTZ-REEL7	1,690	1	Discontinued			Discontinued		
39	1	TS5A9411DCKT	SC-70	IC12	Power board	2	1755582	TS5A9411DCKT	1,050	1	TS5A9411DCKR	0,560		TS5A9411DCKR	0,534	
40	1	ADS1120IPWR	TSSOP-16	IC13	Power board	2	2402249	ADS1120IPWR	6,760	1	ADS1120IPWR	6,250		ADS1120IPWR	6,100	
41	1	LP339D	SOIC-14	IC14	Power board	2	9589686	LP339D	0,573	1	LP339DR	0,520		LP339DR	0,498	
42	1	TPD4E002DRLR		IC15	AUX PS	1	1755329	TPD4E002DRLR	0,275	1	296-21694-1-ND	0,660	1	595-TPD4E002DRLR	0,594	1
43	1	TPD2E001DZDR		IC16	AUX PS	1	2335446	TPD2E001DZDR	0,506	1	296-24770-1-ND	0,580	1	595-TPD2E001DZDR	0,519	1
44	1	ADUM3160BRWZ		IC17	AUX PS	1	1843660	ADUM3160BRWZ	7,070	1	ADUM3160BRWZ-ND	7,290	1	584-ADUM3160BRWZ	6,660	1
45	1	TLC5925IDBQR	SSOP-24	IC18	Arduino Shield	1	1694438	TLC5925IDBQR	1,520	1	TLC5925IDBQR	1,370		TLC5925IDBQR	1,330	
46	2	Si8641EC-B-IS1	SOIC-16	IC19, IC23	Arduino Shield	2	2423294	Si8641EC-B-IS1	3,210	1	Si8641EC-B-IS1	2,780		Si8641EC-B-IS1	2,720	
47	1	LP2951D	SOIC-8	IC2	Power board	2	1755066	LP2951D	0,573	1	LP2951DR	0,520		LP2951DR	0,498	
48	2	SI8651EC-B-IS1	SOIC-16	IC20, IC21	Arduino Shield	2	2423323	SI8651EC-B-IS1	3,150	1	SI8651EC-B-IS1	3,190		SI8651EC-B-IS1	3,060	
49	1	LD1117ADT33TR	TO-252	IC22	Arduino Shield	1	1087169	LD1117DT33	0,358	5	LD1117ADT33TR	0,590		LD1117ADT33TR	0,570	
50	1	PCA21125T/Q900/1,1	TSSOP-14	IC24	Arduino Shield	1	2400445	PCA21125T/Q900/1,1	1,870	1	PCA21125T/Q900/1,1	1,610		PCA21125T/Q900/1,1	1,660	
51	1	AT25256B	SOIC-8	IC25	Arduino Shield	1	1841577	AT25256B-SSHL-B	1,190	1	AT25256B-SSHL-B	1,300		AT25256B-SSHL-B	1,290	
52	1	W5500	LQFP-48	IC26	Arduino Shield	1	-				W5500	3,750		W5500	2,390	
53	1	BC857BS	SOT-363	IC27	Arduino Shield	1	1653608	BC857BDW1T1G	0,141	1	BC857BDW1T1G	0,210		BC857BDW1T1G	0,199	
54	1	TLC555	SOIC-8	IC28	Arduino Shield	1	9589880	NE555DR	0,300	1	NE555D	0,350		NE555D	0,353	

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			397-2914	BAS316,115	0,195	50	BAS316,115	0,019	25		25	TME	0,019 €	25	0,463
31	1	BAT54S	670-8797	BAT54S	0,202	10	BAT54S.215	0,017	50		1	TME	0,017 €	1	0,017
32	1	SKL16													
	1	SKL16													
			485-729	PMEG4005AEA, 115	0,325	20	SKL16	0,095	5		2	TME	0,095 €	10	0,952
33	1	STPS15H100	795-9075	STPS15H100CB-TR	0,924	5	-				2	Mouser	0,896 €	2	1,792
34	1	50mA, polyfuse	-				SM005-60	0,092	10		1	TME	0,092 €	1	0,092
35	3	60R@100MHz													
	3	60R@100MHz													
	1	60R@100MHz													
			669-4049	742792602	0,172	10	LCBA-600	0,027	25		100	TME	0,027 €	10	0,269
36	1	LTC3864EMSE#PBF	-				-				2	Digikey	3,960 €	2	7,920
37	1	DAC8552IDGKTG4	662-1498	DAC8552IDGKT	6,524	1	-				2	Farnell	6,420 €	2	12,840
38	1	ADG465BRTZ	-				-				2	Farnell	1,690 €	2	3,380
39	1	TS5A9411DCKT	459-459	TS5A9411DCKT	0,570	10	-				2	Mouser	0,534 €	2	1,068
40	1	ADS1120IPWR	-				-				2	Mouser	6,100 €	2	12,200
41	1	LP339D	661-2659	LP339DR	0,175	10	LP339D	0,244	3		2	RS	0,175 €	2	0,350
42	1	TPD4E002DRLR	709-9060	TPD4E002DRLR	0,199	10	-				1	RS	0,199 €	1	0,199
43	1	TPD2E001DZDR	812-0171	TPD2E001DZDR	0,193	25	-				1	RS	0,193 €	3	0,579
44	1	ADUM3160BRWZ	796-9041	ADUM3160BRWZ	5,880	1	ADUM3160BRWZ-RL	4,040	1		1	TME	4,040 €	1	4,040
45	1	TLC5925IDBQR	812-3984	TLC5925IDBQR	1,109	10	-				1	RS	1,109 €	1	1,109
46	2	Si8641EC-B-IS1	753-2438	Out of stock			-				2	Mouser	2,720 €	2	5,440
47	1	LP2951D	796-8095	LP2951D	0,613	5	LP2951CM/NOPB	0,495	1		2	TME	0,495 €	2	0,990
48	2	SI8651EC-B-IS1	753-2497	Si8651EC-B-IS1	3,038	1	-				2	RS	3,038 €	2	6,076
49	1	LD1117ADT33TR	686-9123	LD1117ADT33TR	0,294	10	LD1117ADT33	0,315	3		1	RS	0,294 €	1	0,294
50	1	PCA21125T/Q900/1,1	-				-				1	Digikey	1,610 €	1	1,610
51	1	AT25256B	738-0079	AT25256B-SSHL-B	1,267	2	25AA256-I/SN	1,290	1		1	Farnell	1,190 €	1	1,190
52	1	W5500	-				W5500	2,190	1		1	TME	2,190 €	1	2,190
53	1	BC857BS	690-0101	BC857BDW1T1G	0,022	25	BC857BS	0,027	25		1	RS	0,022 €	1	0,022
54	1	TLC555	662-4006	TLC555CDR	0,218	10	TLC555CDR	0,384	3		1	RS	0,218 €	1	0,218

#	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
55	1	SN74LVC08APWR	SSOP-8	IC29	Arduino Shield	1	1102978	SN74LVC08APWR	0,236	1	296-1221-1-ND	0,350	1	595-SN74LVC08APWR	0,335	1
56	1	TL783CKTTR	TO-263-3	IC3	Power board	2	2075436	TL783CKTTR	2,070	1	296-20778-1-ND	2,270	1	595-TL783CKTTR	2,220	1
57	1	SN74LV1T34DBVR	SOT-23	IC30	Arduino Shield	1	2499914	SN74LV1T34DBVR	0,457	1	SN74LV1T34DBVR	0,410		SN74LV1T34DBVR	0,398	
58	1	TPS3705-33D	SOIC-8	IC31	Arduino Shield	1	2296066	TPS3705-33D	1,330	1	TPS3705-33DR	1,580		TPS3705-33D	1,840	
59	1	SN74LVC2G02DCTR	SSOP-8	IC32	Arduino Shield	1	1236358	SN74LVC2G02DCTR	0,452	1	SN74LVC2G02DCTR	0,590		SN74LVC2G02DCTR	0,570	
60	1	LTC3260EMSE#PBF	MSOP-16	IC4	Power board	2	2115838	LTC3260EMSE#PBF	7,660	1	LTC3260EMSE#PBF-ND	6,780	1	-		
61	2	TL072CD	SOIC-8	IC5, IC6	Power board	4	1467663	TL072CDT	0,252	5	TL072CDT	0,430		TL072CDT	0,416	
62	1	OP27GSZ	SOIC-8	IC7	Power board	2	9426124	OP27GSZ	2,810	1	OP27GSZ	3,140		OP27GSZ	3,080	
63	1	MCP23S17-E/SS	SSOP-28	IC8	Power board	2	1467675	MCP23S17-E/SS	1,280	1	MCP23S17-E/SS-ND	1,270	1	579-MCP23S17-E/SS	1,320	1
64	1	REF5025AIDG4	SOIC-8	IC9	Power board	2	1439622	REF5025AIDG4	3,720	1	REF5025AIDR	2,990		REF5025AIDR	2,910	
65	1	1-726388-2	THT	J2	Arduino board	1	2308760	1-726388-2	0,085	10	A121493-ND	0,210	1	571-1-726388-2	0,235	1
66	2	RT424005	THT	K_PAR, K_SER	Arduino Shield	2										
	1	RT424005	THT	K_DOUT2	AUX PS	1										
						3	9950168	G2RL-2 5DC	3,940	1	RTE24005	2,920		RTE24005	2,850	
67	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	
68	1	SK 145/37,5	THT Heatsink for installation of Q21 and Q22 like on the picture here.	KK1	AUX PS	1	4621414	SK 145/37,5 STS-220	3,530	1	-			-		
	1	M3 nut	For mounting Q21, Q22 to KK1		AUX PS	1	-									
	1	Washer externally serrated M3, D=6mm	For mounting Q21, Q22 to KK1		AUX PS	1	7096471	6797/3.0	1,870	100						
	1	M3x8, black finish	For mouniting Q21, Q22 to KK1		AUX PS	1	-									
69	1	RN112-4-02	THT, **solder on the bottom layer!**	L1	Power board	2	1191474	RN112-4-02	3,240	1	817-1535-ND	2,510	1	631-RN112-4/02	2,290	1
70	1	470uH	SMD; 7.3mm x 7.3mm	L5	AUX PS	1	2455059	SRR0745A-471M	0,918	1	SRR0745A-471M	0,770		SRR0745A-471M	0,814	
71	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	
72	2	IHLP2020CZER3R3M11	SMD; 5.49mm x 5.18mm	L3, L4	Power board	4	1741325	IHLP2020CZER3R3M11	1,410	5	IHLP2020CZER3R3M11	2,160		IHLP2020CZER3R3M11	1,030	
73	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	
74	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	
75	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	
76	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	
77	4	HSMY-C170	0805 Yellow	LED_CV1, LED_CV2, LED_S1, LED_S2	Arduino Shield	4	5790876	HSMY-C170	0,330	5	HSMY-C170	0,440		630-HSMY-C170	0,060	

#	Qty	Part name	Code	Part Number	Unit price €	MOQ	Code / Part Number	Unit price €	MOQ	THT	SMD	Best Supplier	Lowest unit price €	Order Qty	Line Cost €
			RS Components				**TME**					**Price calculation for 1 set**			
55	1	SN74LVC08APWR	662-8588	SN74LVC08APWR	0,240	10	-				1	Farnell	0,236 €	1	0,236
56	1	TL783CKTTR	660-7455	TL783CKTTR	1,904	5	-				2	RS	1,904 €	2	3,808
57	1	SN74LV1T34DBVR	-				-				1	Mouser	0,398 €	1	0,398
58	1	TPS3705-33D	662-3331	TPS3705-33D	0,528	5	-				1	RS	0,528 €	1	0,528
59	1	SN74LVC2G02DCTR	-				SN74LVC2G02DCTR	0,252	5		1	TME	0,252 €	1	0,252
60	1	LTC3260EMSE#PBF	851-6768	LTC3260EMSE#PBF	5,800	1	-				2	RS	5,800 €	2	11,600
61	2	TL072CD	857-907P	TL072CD	0,252	1	TL072CD	0,164	3		4	TME	0,164 €	4	0,654
62	1	OP27GSZ	522-8304	OP27GSZ	3,024	1	OP27GSZ	1,550	1		2	TME	1,550 €	2	3,100
63	1	MCP23S17-E/SS	669-6452	MCP23S17-E/SS	1,168	5	MCP23S17-E/SS	1,290	1		2	RS	1,168 €	2	2,336
64	1	REF5025AIDG4	404-304	REF5025AID	3,500	1	-				2	Mouser	2,910 €	2	5,820
65	1	1-726388-2	680-5772	1-726388-2	0,060	100	1-726388-2	0,082	10	1		RS	0,060 €	1	0,060
66	2	RT424005													
	1	RT424005													
			198-6898	RTE24005	4,676	1	RT424005	1,260	1	3		TME	1,260 €	3	3,780
67	2	G6K-2F-5DC	683-9633	G6K2F5DC	4,928	1	G6K-2F-5DC	2,490	1		2	TME	2,490 €	2	4,980
68	1	SK 145/37,5	-				-			1		Farnell	3,530 €	1	3,530
	1	M3 nut					B3/BN117	0,005	100			TME	0,005 €	1	0,005
	1	Washer externally serrated M3, D=6mm					B3/BN789	0,008	100			TME	0,008 €	1	0,008
	1	M3x8, black finish					M3X8/D7985B	0,019	100			TME	0,019 €	1	0,019
69	1	RN112-4-02	219-3261	RN112-4-02	3,160	1	-			2		Mouser	2,290 €	2	4,580
70	1	470uH	770-1182	DR74-471-R	0,977	5	DE0704-470	0,254	5		1	TME	0,254 €	1	0,254
71	1	33uH - 7443551331	-				-				2	Mouser	2,970 €	2	5,940
72	2	IHLP2020CZER3R3M11	748-6912	IHLP2020CZER3R3M01	1,518	5	-				4	Mouser	1,030 €	4	4,120
73	1	TFT_320QVT	681-6851	M20-7832046	3,027	5	ZL262-40DG	0,329	2	1		TME	0,329 €	2	0,658
74	2	HSMG-C170	435-6767	HSMG-C170	0,206	50	HSMG-C170	0,095	5		2	Mouser	0,060 €	2	0,120
75	5	HSMH-C170	486-0468	HSMH-C170	0,188	25	HSMH-C170	0,057	10		5	TME	0,057 €	5	0,287
76	1	HSMD-C170	486-0525	HSMD-C170	0,231	25	HSMD-C170	0,059	10		1	TME	0,059 €	1	0,059
77	4	HSMY-C170	486-0519	HSMY-C170	0,248	25	HSMY-C170	0,060	10		4	Mouser	0,060 €	4	0,240

#	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	10K/Beta:3570K	0805	NTC1	Power board	2	1612623	NTCS0805E3103JMT	0,413	1	NTCS0805E3103JMT	0,250		NTCS0805E3103JMT	0,145	
79	1	MOC3052	SMD; SDIP-6	OK1	AUX PS	1	2453236	MOC3052SM	0,884	1	MOC3052SM	0,910		MOC3052SM	0,750	
80	1	MOC3062	SMD; SDIP-6	OK2	AUX PS	1	2322554	MOC3062SR2VM	0,977	1	MOC3062SM	1,110		MOC3062SM	0,924	
81	2	HCPL-181	SOIC-4	OK3, OK4	AUX PS	2										
	2	HCPL-181	SOIC-4	OK5, OK6	Arduino Shield	2										
						4	1244525	HCPL-181-000E	0,342	1	HCPL-181-000E	0,560		HCPL-181-000E	0,150	
82	2	IRFR5305	TO-252	Q1, Q7	Power board	4	8649820	IRFR5305PBF	0,994	1	IRFR5305PBF-ND	0,810		942-IRFR5305PBF	0,805	
		Option #1: SPD30P06P	TO-252	Q1, Q7	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, Q7	Power board	0	2101465	SUD19P06-60-GE3	1,590	5	SUD19P06-60-GE3	0,950		SUD19P06-60-GE3	1,070	
83	5	MMBT5551	SOT-23	Q11, Q12, Q17, Q19, Q20	Power board	10										
	1	MMBT5551	SOT-23	Q24	AUX PS	1										
						11	1459109	MMBT5551LT1G	0,167	5	MMBT5551LT1G	0,180		MMBT5551LT1G	0,163	
84	4	MMBT5401	SOT-23	Q2, Q9, Q10, Q18	Power board	8	1459108	MMBT5401LT1G	0,167	10	MMBT5401LT1G	0,180		MMBT5401LT1G	0,163	
85	2	BTA26-600	THT	Q21, Q22	AUX PS	2	1057286	BTA26-600BRG	2,840	1	BTA26-600BRG	2,930		BTA26-600BRG	3,110	
86	1	IRLL2705PBF	SOT-223	Q13	Power board	2										
	1	IRLL2705PBF	SOT-223	Q23	AUX PS	1										
						3	8651230	IRLL2705PBF	0,578	1	IRLL2705PBF-ND	0,630	1	942-IRLL2705PBF	0,622	1
87	1	IRFR48ZPB	TO-252	Q14	Power board	2	1013388	IRFR48ZPBF	1,310	1	IRFR48ZTRLPBFCT-ND	1,090	1	942-IRFR48ZPBF	1,110	1
88	5	IRLML2246TRPBF	SOT-23	Q26, Q27, Q28, Q29, Q31	Arduino Shield	5										
	1	IRLML2246TRPBF	SOT-23	Q15	Power board	2										
						7	1888166	IRLML2246TRPBF	0,287	1	IRLML2246TRPBF	0,400		IRLML2246TRPBF	0,389	
89	1	2N7002	SOT-23	Q25	AUX PS	1										
	2	2N7002	SOT-23	Q3, Q16	Power board	4										
	3	2N7002	SOT-23	Q30, Q32, Q33	Arduino Shield	3										
						8	1713823	2N7002-7-F	0,135	5	2N7002LT1G	0,130		2N7002LT1G	0,118	
90	1	IRFP250N	THT, **solder on the bottom layer!** See pic here and here	Q4	Power board	2	8649260	IRFP250NPBF	2,080	1	IRFP250NPBF	1,870		IRFP250NPBF	1,870	
91	1	BC857C	SOT-23	Q5	Power board	2	8734771	BC857C,215	0,022	10	BC857CLT1G	0,120		BC857CLT1G	0,109	
92	2	BCP56-16.115	SOT-223	Q6, Q8	Power board	4	1081258	BCP56-16,115	0,256	5	BCP56-16T1G	0,360		BCP56-16,115	0,340	
93	5	0R	0805	JP1, JP2, JP3, R6, R56	Power board	10										

#	Qty	Part name	Code	Part Number	Unit price €	MOQ	Code / Part Number	Unit price €	MOQ	THT	SMD	Best Supplier	Lowest unit price €	Order Qty	Line Cost €
			RS Components				TME					Price calculation for 1 set			
78	1	10K/Beta:3570K	697-4601	NB12K00103JBB	0,392	5	NTCS0805E3103JMT	0,190	5		2	Mouser	0,145 €	2	0,290
79	1	MOC3052	761-3690	MOC3052SM	0,739	5	MOC3052SR2VM	0,380	2		1	TME	0,380 €	1	0,380
80	1	MOC3062	806-6064	MOC3062SM	0,718	10	MOC3062XSM	0,410	1		1	TME	0,410 €	1	0,410
81	2	HCPL-181													
	2	HCPL-181													
			693-5277	HCPL-181-000E	0,343	10	HCPL-181-000E	0,250	2		4	Mouser	0,150 €	4	0,600
82	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	-				-								
83	5	MMBT5551													
	1	MMBT5551													
			545-0400	MMBT5551LT1G	0,129	10	MMBT5551	0,020	25		11	TME	0,020 €	25	0,510
84	4	MMBT5401	545-0393	MMBT5401LT1G	0,151	10	MMBT5401	0,021	25		8	TME	0,021 €	25	0,513
85	2	BTA26-600	714-0515	BTA26-600BRG	3,038	1	BTA26-600BRG	2,540	1	2		TME	2,540 €	2	5,080
86	1	IRLL2705PBF													
	1	IRLL2705PBF													
			540-9907	IRLL2705PBF	0,260	1	IRLL2705PBF	0,307	1		3	RS	0,260 €	3	0,780
87	1	IRFR48ZPB	688-7055	IRFR48ZPBF	1,234	1	IRFR48ZPBF	0,540	1		2	TME	0,540 €	2	1,080
88	5	IRLML2246TRPBF													
	1	IRLML2246TRPBF													
			760-4432	IRLML2246TRPBF	0,322	5	IRLML2246TRPBF	0,100	5		7	TME	0,100 €	7	0,700
89	1	2N7002													
	2	2N7002													
	3	2N7002													
			545-0012	2N7002LT1G	0,108	50	2N7002LT1G	0,019	25		8	TME	0,019 €	25	0,475
90	1	IRFP250N	541-0042	IRFP250NPBF	2,100	1	IRFP250NPBF	1,060	1	2		TME	1,060 €	2	2,120
91	1	BC857C	690-0105	BC857CLT1G	0,102	25	BC857C-DIO	0,020	25		2	TME	0,020 €	2	0,040
92	2	BCP56-16.115	773-7633	BCP56-16T3G	0,242	10	BCP56-16.115	0,106	5		4	TME	0,106 €	4	0,424
93	5	0R													

#	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
	5	0R	0805	JP4, JP5, JP6, JP7, JP8	Arduino Shield	5										
						15	9233750	RC0805JR-070RL	0,010	10	RC2012J000CS	0,014		RC0805JR-070RL	0,012	
94	6	100K 1%	0805	R12, R15, R22, R23, R73, R75	Power board	12										
	1	100K 1%	0805	R123	AUX PS	1										
	2	100K 1%	0805	R135, R146	Arduino Shield	2										
						15	2352619	RCV0805100KFKEA	0,080	10	RC0805FR-07100KL	0,019		RC0805FR-07100KL	0,015	
95	2	100K 0.1%	0805	R43, R53	Power board	4	1577686	ERA6AEB104V	0,205	5	RT0805BRD07100KL	0,350		CPF0805B100KE	0,095	
96	1	100R 1%	0805	R116	AUX PS	1										
	1	100R 1%	0805	R155	Arduino Shield	1										
	3	100R 1%	0805	R7, R8, R42	Power board	6										
						8	9332375	MC01W08051100R	0,002	10	RC0805FR-07100RL	0,019		RC0805FR-07100RL	0,015	
97	2	10K 1%	0805	R121, R122	AUX PS	2										
	5	10K 1%	0805	R139, R145, R149, R157, R165	Arduino Shield	5										
	18	10K 1%	0805	R3, R10, R11, R19, R27, R40, R49, R51, R58, R69, R72, R74, R82, R91, R94, R95, R98, R102	Power board	36										
						43	9237755	RC0805FR-0710KL	0,011	10	RC0805FR-0710KL	0,019		RC0805FR-0710KL	0,015	
98	1	10R 1%	1206	R143	Arduino Shield	1										
	3	10R 1%	1206	R9, R33, R81	Power board	6										
						7	9236643	RC1206FR-0710RL	0,017	10	RC1206FR-0710RL	0,029		RC1206FR-0710RL	0,022	
99	1	12K4 1%	0805	R144	Arduino Shield	1	2141850	MC01W0805112K4	0,002	10	RC0805FR-0712K4L	0,090		RC0805FR-0712K4L	0,091	
100	1	18-22R / 7W	THT, RM 5mm, radial, max. Height 40 mm	R103	AUX PS	1	1687978	SQM7-22RJI	0,474	1	SQMW722RJ	0,590		280-PRM7-20-RC	0,378	
101	3	16K 1%	0805	R17, R21, R34	Power board	6	9332677	MC01W0805116K	0,002	10	RC0805FR-0716KL	0,019		RC0805FR-0716KL	0,015	
102	4	180R 1%	0805	R134, R147, R148, R150	Arduino Shield	4	2447583	MCWR08X1800FTL	0,006	10	RC0805FR-07180RL	0,019		RC0805FR-07180RL	0,015	
103	2	1K 1%	0805	R114, R120	AUX PS	2										
	2	1K 1%	0805	R163, R164	Arduino Shield	2										
	5	1K 1%	0805	R28, R38, R68, R78, R92	Power board	10										
						14	1099800	WCR0805-1K0FI	0,018	10	RC0805FR-071KL	0,019		RC0805FR-071KL	0,015	
104	2	1K8 1%	0805	R24, R55	Power board	4										
	2	1K8 1%	0805	R130, R151	Arduino Shield	2										
						6	2447595	MCWR08X1801FTL	0,006	10	RC0805FR-071K8L	0,019		RC0805FR-071K8L	0,015	

#	Qty	Part name	Code	Part Number	Unit price €	MOQ	Code / Part Number	Unit price €	MOQ	THT	SMD	Best Supplier	Lowest unit price €	Order Qty	Line Cost €
	5	0R													
			679-0800	CRCW08050000Z0EA	0,020	50	SMD0805-0R	0,006	100		15	TME	0,006 €	15	0,090
94	6	100K 1%													
	1	100K 1%													
	2	100K 1%													
			223-0691	CRG0805F100K	0,007	50	SMD0805-100K-1%	0,008	100		15	RS	0,007 €	15	0,105
95	2	100K 0.1%	666-2673	CPF0805B100KE	0,112	5	RN73C2A100KBTDF	0,513	2		4	Mouser	0,095 €	4	0,380
96	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
97	2	10K 1%													
	5	10K 1%													
	18	10K 1%													
			223-0562	CRG0805F10K	0,021	50	RC0805FR-0710K	0,008	100		43	TME	0,008 €	50	0,385
98	1	10R 1%													
	3	10R 1%													
			740-9085	CR1206-FX-10R0ELF	0,028	50	CRCW120610R0FKTABC	0,014	100		7	TME	0,014 €	10	0,137
99	1	12K4 1%	679-0863	CRCW080512K4FKEA	0,008	50	-				1	Farnell	0,002 €	10	0,023
100	1	18-22R / 7W	199-8087	SQMW722RJ	0,725	5	-			1		Mouser	0,378 €	1	0,378
101	3	16K 1%	679-0920	CRCW080516K0FKEA	0,014	50	SMD0805-16K-1%	0,008	100		6	Farnell	0,002 €	10	0,020
102	4	180R 1%	223-0326	CRG0805F180R	0,006	50	SMD0805-180R-1%	0,008	100		4	Farnell	0,024 €	10	0,240
103	2	1K 1%													
	2	1K 1%													
	5	1K 1%													
			223-0427	CRG0805F1K0	0,013	50	RC0805FR-071K	0,008	100		14	TME	0,008 €	15	0,116
104	2	1K8 1%													
	2	1K8 1%													
			679-1033	CRCW08051K80FKEA	0,011	50	SMD0805-1K8-1%	0,008	100		6	Farnell	0,006 €	10	0,063

#	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
105	2	1R 1%	0805	R129, R132	Arduino Shield	2	2141629	MC01W080511R0	0,002	10	RC0805FR-071RL	0,090		RC0805FR-071RL	0,091	
106	2	24K 0.1%	0805	R44, R54	Power board	4	1670195	ERA3AEB243V	0,184	10	YAG1843CT-ND	0,330	1	660-RN732ATTD2402B25	0,292	1
107	2	22R 1%	0805	R124, R125	AUX PS	2	2447609	MCWR08X22R0FTL	0,007	10	0603YC104KAT2A	0,090	1	603-RC0805FR-0722RL	0,094	1
108	10	220R 1%	0805	R31, R35, R36, R41, R47, R57, R76, R77, R79, R80	Power board	20											
	3	220R 1%	0805	R110, R113, R118	AUX PS	3											
	1	220R 1%	0805	R166	Arduino Shield	1											
						24	1099795	WCR0805-220RFI	0,024	10	RC0805FR-07220RL	0,019		RC0805FR-07220RL	0,015	
109	2	2K 0.1%	0805	R60, R70	Power board	4	1670231	ERA6AEB202V	0,259	10	P2.0KDACT-ND	0,370	1	667-ERA-	0,547	1
110	3	2K2 1%	0805	R106, R107, R119	AUX PS	3											
	9	2K2 1%	0805	R29, R30, R32, R45, R59, R61, R64, R90, R93	Power board	18											
						21	9237534	RC0805FR-072K2L	0,011	10	RC0805FR-072K2L	0,019		RC0805FR-072K2L	0,015	
111	1	2R2 5% / 2W	2512	R26	Power board	2	1376975	RC2512JK-7W2R2L	0,557	10	CRM2512-JW-2R2ELF	0,320		CRM2512-JW-2R2ELF	0,341	
112	3	330K 1%	0805	R13, R20, R25	Power board	6	9333070	MC01W08051330K	0,002	10	RC0805FR-07330KL	0,090	1	RC0805FR-07330KL	0,091	1
113	2	330R 1%	0805	R83, R101	Power board	4	9333037	MC01W08051330R	0,002	10	RC0805FR-07330RL	0,090		RC0805FR-07330RL	0,091	
114	4	330R 5% / 2W	2512	R104, R105, R108, R111	AUX PS	4	1265196	3520330RJT	0,122	10	RHC2512FT330R	0,760		3521330RFT	0,580	
115	2	470R 1%	0805	R37, R50	Power board	4	1099798	WCR0805-470RFI	0,024	10	RC0805FR-07470RL	0,019		RC0805FR-07470RL	0,015	
116	2	47K 1%	0805	R154, R158	Arduino Shield	2											
	7	47K 1%	0805	R5, R66, R67, R85, R86, R87, R100	Power board	14											
						16	2447664	MCWR08X4702FTL	0,006	10	RC0805FR-0747KL	0,019		RC0805FR-0747KL	0,015	
117	11	4K7 1%	0805	R126, R127, R128, R131, R133, R136, R137, R156, R159, R161, R162	Arduino Shield	11											
	1	4K7 1%	0805	R16	Power board	2											
						13	9333266	MC01W080514K7	0,002	10	RC0805FR-074K7L	0,019		RC0805FR-074K7L	0,015	
118	4	49R9 1%	0805	R138, R140, R141, R142	Arduino Shield	4											
	2	49R9 1%	0805	R109, R112	AUX PS	2											
						6	2141727	MC01W0805149R9	0,002	10	RC0805FR-0749R9L	0,019		RC0805FR-0749R9L	0,015	
119	1	51K 1%	0805	R48	Power board	2	9334653	MC01W0805551K	0,015	10	RC0805FR-0751KL	0,019		RC0805FR-0751KL	0,015	

#	Qty	Part name	RS Components Code	Part Number	Unit price €	MOQ	TME Code / Part Number	Unit price €	MOQ	THT	SMD	Best Supplier	Lowest unit price €	Order Qty	Line Cost €
105	2	1R 1%	721-5631	ERJ6BQF1R0V	0,246	5	RC0805FR-071R	0,009	100		2	Farnell	0,002 €	10	0,022
106	2	24K 0.1%					AR0805-24K-0.1%	0,111	10		4	TME	0,111 €	4	0,442
107	2	22R 1%	223-0203	CRG0805F22R	0,006	50	SMD0805-22R-1%	0,008	100		2	RS	0,006 €	2	0,012
108	10	220R 1%													0,000
	3	220R 1%													
	1	220R 1%													
			223-0332	CRG0805F220R	0,024	50	RC0805FR-07220R	0,007	100		24	TME	0,007 €	50	0,357
109	2	2K 0.1%	828-0554	ERA6AEB202V	0,230	5	AR0805-2K-0.1%	0,113	10		4	TME	0,113 €	4	0,452
110	3	2K2 1%													
	9	2K2 1%													
			679-1207	CRCW08052K20FKEA	0,027	50	SMD0805-2K2-1%	0,008	100		21	TME	0,008 €	30	0,242
111	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
112	3	330K 1%	679-1272	CRCW0805330KFKEA	0,024	50	RC0805FR-07330K	0,007	100		6	Farnell	0,002 €	10	0,020
113	2	330R 1%	740-9022	CR0805-FX-3300GLF	0,025	50	RC0805FR-07330R	0,007	100		4	Farnell	0,002 €	10	0,020
114	4	330R 5% / 2W	755-1224	3521330RFT	0,182	10	WF25P-330R-5%	0,042	50		4	TME	0,042 €	10	0,419
115	2	470R 1%	223-0376	CRG0805F470R	0,024	50	RC0805FR-07470R	0,007	100		4	TME	0,007 €	10	0,073
116	2	47K 1%													
	7	47K 1%													
			679-1434	CRCW080547K0FKEA	0,010	50	RC0805FR-0747K	0,007	100		16	Farnell	0,006 €	20	0,126
117	11	4K7 1%													
	1	4K7 1%													
			223-0528	CRG0805F4K7	0,011	50	RC0805FR-074K7	0,008	100		13	Farnell	0,002 €	20	0,040
118	4	49R9 1%													
	2	49R9 1%													
			679-1462	CRCW080549R9FKEA	0,011	50	RC0805FR-0749R9	0,007	100		6	Farnell	0,002 €	10	0,020
119	1	51K 1%	679-1525	CRCW080551K0FKEA	0,020	50	RC0805FR-0751K	0,006	100		2	TME	0,006 €	10	0,061

#	Qty	Part name	Package	Reference designator	Board name	Qty	Farnell / Element14 Code	Farnell Part Number	Farnell Unit price €	MOQ	Digi-Key Part Number	Digi-Key Unit price €	MOQ	Mouser Part Number	Mouser Unit price €	MOQ
120	2	5K1 1%	0805	R84, R97	Power board	4	9333320	MC01W080515K1	0,002	10	RC0805FR-075K1L	0,019		RC0805FR-075K1L	0,015	
121	2	5K6 1%	0805	R115, R117	AUX PS	2										
	2	5K6 1%	0805	R88, R99	Power board	4										
						6	2447693	MCWR08X5601FTL	0,006	10	RC0805FR-075K6L	0,019		RC0805FR-075K6L	0,015	
122	3	750R 1%	0805	R46, R89, R96	Power board	6										
	2	750R 1%	0805	R152, R153	Arduino Shield	2										
						8	9333525	MC01W08051750R	0,002	10	RC0805FR-07750RL	0,019		RC0805FR-07750RL	0,015	
123	2	7K5 0.1%	0805	R39, R52	Power board	4	1670239	ERA6AEB752V	0,312	10	RT0805BRD077K5L	0,350		RT0805BRD077K5L	0,357	
124	2	82R 0.1%	0805 / 0603	R62, R71	Power board	4	1577592	ERA3AEB820V	0,185	10	P82DBCT-ND	0,370	1	667-ERA-6AEB820V	0,547	1
125	1	0R010 1% / 2W	2512 or 1206 / min 1W	R4	Power board	2	1435947	CRA2512-FZ-R010ELF	0,484	10	CRA2512-FZ-R010ELF	0,540		CRA2512-FZ-R010ELF	0,568	
126	1	0R020 1% / 2W	2512, 2W	R65	Power board	2	2079436	LRMAM2512-R02FT4	0,250	10	CRA2512-FZ-R020ELF	0,540		CRA2512-FZ-R020ELF	0,568	
127	1	0R2 1%	1210	R63	Power board	2	1892932	ERJ3BSFR20V	0,263	10	311-0.2NACT-ND	0,530	1	756-LCS1206-R20FT3	0,179	1
128	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	
129	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	
130	1	LD-BZEN-0903	THT	SP1 Buzzer	Arduino Shield	1	-				-			TE092703-6	2,200	
131	1	A101SYCQ04	THT, **solder on the bottom layer**. See pic here.	SW1	Arduino Shield	1	2292959	A101SYCQ04	2,760	1	A101SYCQ04	3,000		A101SYCQ04	2,640	
132	1	EC12E20-24P24C-SW or PEC11R-4220F-S0024	THT	SW2 incremental encoder	Arduino Shield	1	2663527	PEC11R-4220F-S0024	2,100	1	EN12-HS22AF20	1,000	1	858-EN12-HS22AF20	1,050	1
133	1	1301.9316	SMD; tactile switch	SW3	Arduino Shield	1	1217765	1301.9316	0,302	1	FSM6JSMA	0,210		1301.9316	0,270	
134	1	VTX-214-005-0512	THT	TR1	AUX PS	1	2627176	VTX-214-005-0512	5,980	1	-			-		
135	2	ERZE14A431	THT	VAR1, VAR2	AUX PS	2	2291852	ERZE14A431	0,546	1	P15589-ND	0,990	1	667-ERZ-E14A431	0,905	1
136	2	ERZE11A431	THT	VAR3, VAR4	AUX PS	2	2291831	ERZE11A431	0,418	1	P16688-ND	0,470	1	667-ERZ-E11A431	0,472	1
137	1	39-30-1039	THT 4,2mm 3-pin	X1	Power board	2	2425045	39-30-1039	0,550	1	WM18442-ND	0,630	1	538-39-30-1039	0,585	1
138	1	2411-01	THT, solder on the bottom layer!	X11 USB Connector	AUX PS	1	1177884	2411-01	1,050	1	952-1767-ND	0,730		710-61400413321	1,200	
139	4	ZL305-08 (or similar with 0.1" raster and **5mm** height)	THT, **solder on the bottom layer**! Two headers per one connector.	X12, X14 Front Treminal	Arduino Shield	4	-				-			-		
140	2	TSW-113-07-F-D	THT; 2x13-pin header	X13, X15 Power board main connectors	Arduino Shield	2	2025182	TSW-113-07-F-D	2,240	5	TSW-113-07-L-D	2,470		710-61302621121	1,410	
141	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	
142	1	MC34753	THT	X18, 8-pin header, angled	Arduino Shield	1	1593431	MC34753	0,422	10	M20-9750846	0,230		710-61300811021	0,670	
143	1	SSW-113-02-T-D-RA	THT; 2x13-pin socket	X2	Power board	2	1805583	SSW-113-02-G-D-RA	5,700	2	SSW-113-02-G-D-RA	5,340		-		
144	1	39-30-3055	THT 4,2mm 5pin	X3 AC In	AUX PS	1	9963561	39303055	0,530	1	39-30-3055	1,180		39-30-3055	0,923	
	1	09185107324	THT; 2x5-pin header	X5	AUX PS	1										
	1	09185107324	THT; 2x5-pin header	X16	Arduino Shield	1										

#	Qty	Part name	Code	Part Number	Unit price €	MOQ	Code / Part Number	Unit price €	MOQ	THT	SMD	Best Supplier	Lowest unit price €	Order Qty	Line Cost €
							TME					**Price calculation for 1 set**			
120	2	5K1 1%	679-1569	CRCW08055K10FKEA	0,027	50	RC0805FR-075K1	0,007	100		4	Farnell	0,002 €	10	0,021
121	2	5K6 1%													
	2	5K6 1%													
			679-1572	CRCW08055K60FKEA	0,021	50	SMD0805-5K6-1%	0,008	100		6	Farnell	0,006 €	10	0,063
122	3	750R 1%													
	2	750R 1%													
			679-1660	CRCW0805750RFKEA	0,010	50	CRCW0805750RFKTABC	0,012	100		8	Farnell	0,002 €	20	0,040
123	2	7K5 0.1%	666-2588	CPF0805B7K5E	0,280	5	RN73C2A7K5BTDF	0,520	2		4	RS	0,280 €	5	1,400
124	2	82R 0.1%	565-863	ERA6AEB820V	0,046	5	AR0805-82R-0.1%	0,113	10		4	RS	0,046 €	10	0,460
125	1	0R010 1% / 2W	693-4381	CRA2512-FZ-R010ELF	0,515	5	LRP2512-R010-1%	0,151	5		2	TME	0,151 €	5	0,754
126	1	0R020 1% / 2W	693-4384	CRA2512-FZ-R020ELF	0,507	5	WW25NR020FTL	0,189	5		2	TME	0,189 €	5	0,945
127	1	0R2 1%	721-5892	ERJ8BSFR20V	0,272	5	CS1210S2-0R2-1%	0,118	10		2	TME	0,118 €	5	0,589
128	2	4x10K 5%	522-5585	CAY16-103J4LF	0,020	50	DR1206-10K-4/8	0,007	100		2	TME	0,007 €	2	0,013
129	1	CG2-470L	878-3652	CG2-470L	2,279	10	CG2-470L	1,450	1	1		Digikey	1,270 €	1	1,270
130	1	LD-BZEN-0903	-				LD-BZEN-0903	0,504	3	1		TME	0,504 €	3	1,512
131	1	A101SYCQ04	710-9788	A101SYCQ04	2,576	1	-			1		RS	2,576 €	1	2,576
132	1	EC12E20-24P24C-SW or PEC11R-4220F-S0024	737-7767	PEC11R-4220F-S0024	1,160	1	EC12E20-24P24C-SW	1,024	1	1		Digikey	1,000 €	1	1,000
133	1	1301.9316	718-2443	FSM6JSMATR	0,818	5	1301.9316	0,220	5		1	Digikey	0,210 €	1	0,210
134	1	VTX-214-005-0512	-							1		Farnell	5,980 €	1	5,980
135	2	ERZE14A431	785-8960	ERZE14A431	0,928	5	-			2		Farnell	0,546 €	2	1,092
136	2	ERZE11A431	785-8904	ERZE11A431	0,249	25	-			2		RS	0,249 €	2	0,498
137	1	39-30-1039	670-5751	39-30-1039	0,550	5	MX-5566-03A3	0,498	1	2		TME	0,498 €	2	0,996
138	1	2411-01	-				2411-01	0,660	1	1		TME	0,660 €	1	0,660
139	4	ZL305-08 (or similar with 0.1" raster and **5mm** height)	-				ZL305-08	0,560	1	4		TME	0,560 €	4	2,240
140	2	TSW-113-07-F-D	-				-			2		Mouser	1,410 €	2	2,820
141	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
142	1	MC34753	828-1673	61300811021	0,759	5				1		Digikey	0,230 €	1	0,230
143	1	SSW-113-02-T-D-RA	-				ZL263-26DG	0,399	2	2		TME	0,399 €	2	0,798
144	1	39-30-3055	670-5861	39-30-3055	0,563	5	-			1		Farnell	0,530 €	1	0,530
	1	09185107324													
	1	09185107324													

#	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	1096985	09 18 510 7324	1,220	1	09185107324	1,460		09185107324	1,460	
145	1	22-23-2031	THT	X4 FAN Connector	AUX PS	1	1462950	22-23-2031	0,081	1	22-23-2031	0,210		22-23-2031	0,198	
146	1	CTB9300/3A	THT	X6 DOUT2 Connector	AUX PS	1	3882044	CTB9300/3A	0,176	1	ED2800-ND	0,350	1	710-691311700103	0,620	1
147	1	LMJ2138814S0L1T1C	THT, **solder on the bottom layer!**	X7 RJ45 Connector	AUX PS	1	-				-			-		
148	1	826629-8	THT 8-Pin Header	X8	AUX PS	1										
	5	826629-8	THT 8-Pin Header	MCU-ADCL, MCU-ADCH, MCU-COMM, MCU-PWML, MCU-PWMH	Arduino Shield	5										
						6	1022256	M20-9990845	0,117	10	M20-9990845	0,240		M20-9990845	0,317	
149	1	826629-6	THT 6-Pin Header	MCU-POWER	Arduino Shield	1	1022255	M20-9990646	0,161	10	952-2270-ND	0,220	1	855-M20-9990646	0,226	1
150	1	10-89-7361	THT 2x18-Pin Header	MCU-DIGITAL	Arduino Shield	1	2356147	61303621121	1,580	1	WM50022-36-ND	3,020	1	538-10-89-7361	1,680	1
151	1	826629-5	THT 5-Pin Header	X10	AUX PS	1	2452473	826629-5	0,631	50	826629-5	0,660		M20-9990545	0,217	
152	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	
153	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	
154	1	SMAJ51A	DO-214AC	ZD1	Power board	2	1578999	SMAJ51A	0,163	5	SMAJ51ALFCT-ND	0,370	1	576-SMAJ51A	0,405	1
155	5	SMAJ18A	DO-214AC	ZD8, ZD9, ZD11, ZD12, ZD14	Arduino Shield	5										
	1	SMAJ18A	DO-214AC	ZD6	AUX PS	1										
						6	1749305	SMAJ18A-TR	0,070	10	SMA6J18A-TR	0,340		SMA6J18A-TR	0,407	
156	1	BZX384-C4V3	SOD-323	ZD13	Arduino Shield	1	8735697	BZX384-C4V3	0,182	5	MM3Z4V3T1G	0,130		BZX384-C4V3,115	0,110	
157	1	BZX384-C15.115	SOD-323	ZD2	Power board	2	8735506	BZX384-C15	0,182	5	MM3Z15VT1G	0,130		MM3Z15VT1G	0,118	
158	1	PDZ6.2B	SOD-323	ZD3	Power board	2	1757863	PDZ6.2B,115	0,266	5	MM3Z6V2T1G	0,130		MM3Z6V2T1G	0,118	
159	2	P4SMAJ48A	DO-214AC	ZD7, ZD10	Arduino Shield	2	1749310	SMAJ48A-TR	0,264	1	SMAJ48A-TR	0,340		SMAJ48A-TR	0,340	
160	2	1.5KE400CA	THT	ZD4, ZD5	AUX PS	2	2341650	1.5KE400CARL	0,777	1	1.5KE400CA-TP	0,560		1.5KE400CA-TP	0,549	

	Not installed															
2	1u 50V X7R	0805, 50V	C104A, C109A	Arduino Shield	2											
1	n.c.	0805	C12	Power board	2	-										
1	1u	0805	C149	Arduino Shield	1	-										
4	1n	0805	C142, C143, C147, C148	Power board	8	-										
1	n.c.	1206	C144	Power board	2	-										
2	2m2	THT, Ø18mm, **solder on bottom layer!**	C145, C146	Power board	4	-										
2	470n 50V X7R	0805, 50V	C150, C153	Arduino Shield	2											
2	4n7 100V X7R	0805	C151, C152	Arduino Shield	2											
1	100n	0805	C154	Arduino Shield	1	-										
1	220n X7R	0805	C155	Arduino Shield	1	-										
1	1uF/50V Tant.	6032	C27	power bord	1	-										
1	n.c.	0805	C62	Power board	2	-										

#	Qty	Part name	Code	Part Number	Unit price €	MOQ	Code / Part Number	Unit price €	MOQ	THT	SMD	Best Supplier	Lowest unit price €	Order Qty	Line Cost €
			740-7108	09185107324	1,442	1	T821-1-10-S1	0,290	2	2		TME	0,290 €	2	0,580
145	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
146	1	CTB9300/3A					TBG-5.0-PW-3P	0,114		1		TME	0,114 €	1	0,114
147	1	LMJ2138814S0L1T1C	-				RJ45-TRAFO-LP	2,820	1	1		TME	2,820 €	1	2,820
148	1	826629-8													
	5	826629-8													
			681-2997	M20-9990845	0,125	10	ZL201-08G	0,065	10	6		TME	0,065 €	10	0,649
149	1	826629-6	745-7062	M20-9990646	0,244	10	ZL201-06G	0,037	10	1		TME	0,037 €	1	0,037
150	1	10-89-7361	828-1569	61303621121	1,626	1	-			1		Farnell	1,580 €	1	1,580
151	1	826629-5	681-2981	M20-9990545	0,160	10	ZL201-05G	0,032	25	1		TME	0,032 €	1	0,032
152	1	32.768kHz	226-1443	LFXTAL002995	0,532	1	32.768K-TC38	0,144	5	1		TME	0,144 €	1	0,144
153	1	25MHz	814-9550	QCS25.0000F18B23R	0,217	10	25.00M-SMDHC49S	0,373	2		1	RS	0,217 €	1	0,217
154	1	SMAJ51A	687-3309	SMAJ51A R3	0,073	25	SMAJ51A-LF	0,175	3		2	RS	0,073 €	2	0,146
155	5	SMAJ18A													
	1	SMAJ18A													
			795-9268	SMA6J18A-TR	0,112	25	P4SMAJ18A-DIO	0,105	5		6	Farnell	0,070 €	6	0,420
156	1	BZX384-C4V3	508-696	BZX384-C4V3	0,013	100	BZT52C4V3-DIO	0,019	25		1	RS	0,013 €	1	0,013
157	1	BZX384-C15.115	802-4568	MM3Z15VST1G	0,013	200	BZX384-C15.115	0,019	25		2	RS	0,013 €	2	0,026
158	1	PDZ6.2B	725-8247	PDZ6.2B,115	0,014	100	PDZ6.2B	0,019	25		2	RS	0,014 €	2	0,028
159	2	P4SMAJ48A	687-3286	SMAJ48A	0,098	25	P4SMAJ48A-DIO	0,102	5		2	RS	0,098 €	2	0,196
160	2	1.5KE400CA	486-4381	1.5KE400CA	0,781	5	1.5KE400CA	0,256	3	2		TME	0,256 €	2	0,512
										57	659		3		199,32 €

	Not installed								THT	SMD			
2	1u 50V X7R									2			
1	n.c.									2			
1	1u						-			1			
4	1n									8			
1	n.c.									2			
2	2m2						-		4				
2	470n 50V X7R									2			
2	4n7 100V X7R									2			
1	100n						-			1			
1	220n X7R									1			
1	1uF/50V Tant.									1			
1	n.c.						-			2			

# 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	SMBJ5.0A-TR	DO-214AA	D17	Arduino Shield	1	-									
4	STPS15H100	TO-252	D22, D23, D24, D25	Power board	8	-									
1	74LVC1G125GW.125	TSSOP-5	IC33	Arduino board	1	-									
1	TPA6205A1DGN	MSOP-8	IC34	Arduino board	1	-									
1	HSMY-C170	0805 Yellow	LED	Power board	2	-									
1	n.c.	0805	R1	Power board	2	-									
2	1R 1%	0805	R136A, R140A	Arduino Shield	2										
2	47K 1%	0805	R160, R174	Arduino Shield	2										
1	n.c.	1206	R167	Power board	2	-									
1	12K	1208	R168	Power board	2	-									
2	20K 1%	0805	R169, R175	Arduino board	2										
2	1K 1%	0805	R170, R171	Arduino Shield	2										
2	10K 1%	0805	R172, R173	Arduino Shield	2										
2	n.c.	0805	R2, R14	Power board	4	-									
1	LD-BZEN-0903	THT	SP2, if used mount SP1 on this position	Arduino Shield	1	-									
1	826629-5	THT	X9	AUX PS	1	-									
1	282836-2	THT	X19	Power board	2	-									
1	PCA-6B-20-HL-3 or 52746-2071	SMT	X20 3.5" Riverdi TFT LCD	Arduino board	1	-									
1	n.c.		ZD15	Power board	2	-									

Power module AC input option

# Qty	Part name	Package	Reference designator	Board name	Qty	Farnell Code	Part Number	Unit price €	MOQ	Digi-Key Part Number	Unit price €	MOQ	Mouser Part Number	Unit price €	MOQ
2	2200uF 63V	THT, **solder on bottom layer!**	C145, C146	Power board	4	1822562	UVR1J222MHD	2,540	1	UVR1H222MHD	1,680		UVR1H222MHD	1,710	
	Option #1: UVZ1H222MHD	THT, **solder on bottom layer!**	C145, C146	Power board	0	1822570	UVZ1H222MHD	2,420	1	UVZ1H222MHD	1,500		UVZ1H222MHD	1,690	
	Option #2: UVZ1J222MHD	THT, **solder on bottom layer!**	C145, C146	Power board	0	1822575	UVZ1J222MHD	2,420	1	UVZ1J222MHD	2,210		UVZ1J222MHD	2,780	
4	STPS15H100	TO-252	D22, D23, D24, D25	Power board	8	2344052	STPS15H100CB-TR	1,070	1	STPS15H100CB	0,900		STPS15H100CB	0,896	
1	12K 1%	1206	R168	Power board	2	1100220	WCR1206-12KFI	0,026	10	RC1206FR-0712KL	0,090		RC1206FR-0712KL	0,091	
1	282836-2	THT, Terminal Block	X19	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

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

#	Qty	Part name	RS Components Code	RS Components Part Number	Unit price €	MOQ	TME Code / Part Number	Unit price €	MOQ	THT	SMD	Best Supplier	Lowest unit price €	Order Qty	Line Cost €
	1	SMBJ5.0A-TR									1				
	4	STPS15H100					-				8				
	1	74LVC1G125GW.125									1				
	1	TPA6205A1DGN									1				
	1	HSMY-C170									2				
	1	n.c.									2				
	2	1R 1%									2				
	2	47K 1%									2				
	1	n.c.					-				2				
	1	12K					-				2				
	2	20K 1%									2				
	2	1K 1%									2				
	2	10K 1%									2				
	2	n.c.					-				4				
	1	LD-BZEN-0903								1					
	1	826629-5					-			1					
	1	282836-2					-			2					
	1	PCA-6B-20-HL-3 or 52746-2071										1				
	1	n.c.					-				2				
		Power module AC input														
	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								-					

#						Qty	Farnell / Element14				Digi-Key			Mouser		
	Qty	Part name	Package	Reference designator	Board name		Code	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ	Part Number	Unit price €	MOQ
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	-			-		
2	MC000006	Insert into 2 x headers 5mm height	X12, X14 Front Treminal		Arduino Shield	2	2007972	MC000006	1,900	1	-			-		
2	0.4 mm thermal silicone pad	Power module's Q4 mounting on heatsink			Enclosure	2										
2	5 mm thick thermal silicone pad (20 x 75 mm)	Mounted below power pre-regulator	Search AliExpress, eBay, etc.		Enclosure	2										
2	BS-244DSM-R	Binding post 4mm, red	J1, J5		Arduino Shield	2	-									
1	BS-244DSM-G	Binding post 4mm, green	J3		Arduino Shield	1	-									
2	BS-244DSM-B	Binding post 4mm, black	J4, J6		Arduino Shield	2	-									
5	Washer, spring M5	Binding posts			Arduino Shield	5	-									
2	M3x5 countersunk, black finish	Rear and front panel			Enclosure	2										
2	M3x5 countersunk, black finish	AC/DC mounting rail			Enclosure	2										
4	M3x5 countersunk, black finish	TFT display mounting rail			Enclosure	4										
2	M3x5 countersunk, black finish	AC inlet			Enclosure	2										
8	M3x5 countersunk, black finish	Top and bottom plates			Enclosure	8										
8	M3x5 countersunk, black finish	Power board top and bottom plate mounting			Enclosure	8										
						26	-									
4	M4x6	Front panel handles			Enclosure	4	-									
1	Washer externally serrated M3, D=6mm	Earth connection			Enclosure	1										
2	Washer externally serrated M3, D=6mm	Power module's Q4 mounting on heatsink			Enclosure	2										
						3	7096471	6797/3.0	1,870	100						
2	M3x12, cheese head	Power module's Q4 mounting on heatsink			Enclosure	2	-									
4	Washer M3, 8mm	Enclosure feet			Enclosure	4	-									
5	M3x8, black finish	AUX PS mounting, ext			AUX PS	5										
2	M3x8, black finish	Three part heatsink joints			Power board	4										
4	M3x8, black finish	Enclosure feet			Enclosure	4										
4	M3x8, black finish	Power module mounting on heatsink			Power board	8										
						21	-									
5	M3x5	AUX PS mounting, int			AUX PS	5										
4	M3x5	AC/DC mounting rail			Enclosure	4										
						9	-									

#	Qty	Part name	RS Components					TME					Price calculation for 1 set			
			Code	Part Number	Unit price €	MOQ		Code / Part Number	Unit price €	MOQ	THT	SMD	Best Supplier	Lowest unit price €	Order Qty	Line Cost €
																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
2		MC000006	-					-					Farnell	1,900 €	2	3,800
2		0.4 mm thermal silicone pad						SMICA-SOT93	0,214	10			TME	0,214 €	20	4,270
2		5 mm thick thermal silicone pad (20 x 75 mm)														
2		BS-244DSM-R						BS-244DSM-R	1,120	1			TME	1,120 €	2	2,240
1		BS-244DSM-G						BS-244DSM-G	1,120	1			TME	1,120 €	1	1,120
2		BS-244DSM-B						BS-244DSM-B	1,140	1			TME	1,140 €	2	2,280
5		Washer, spring M5						B5/BN672	0,010	100			TME	0,010 €	5	0,049
2		M3x5 countersunk, black finish														
2		M3x5 countersunk, black finish														
4		M3x5 countersunk, black finish														
2		M3x5 countersunk, black finish														
8		M3x5 countersunk, black finish														
8		M3x5 countersunk, black finish														
								M3X5/D965B	0,013	100			TME	0,013 €	26	0,344
4		M4x6						B4X6/BN3334	0,014	100			TME	0,014 €		0,000
1		Washer externally serrated M3, D=6mm														
2		Washer externally serrated M3, D=6mm														
								B3/BN789	0,008	100			TME	0,008 €	3	0,025
2		M3x12, cheese head						B3X12/BN272	0,026	200			TME	0,026 €	2	0,051
4		Washer M3, 8mm						B8X0.4/BN806	0,026	100			TME	0,026 €	4	0,103
5		M3x8, black finish														
2		M3x8, black finish														
4		M3x8, black finish														
4		M3x8, black finish														
								M3X8/D7985B	0,019	100			TME	0,019 €	21	0,389
5		M3x5														
4		M3x5														
								M3X5/D7985	0,013	100			TME	0,013 €	9	0,114

# 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	TFF-M3X40/DR124	40 mm metal spacer, M3 (a pair is required for dual channel)		Enclosure	2	-									
5	Screwed spacer sleeve; hexagonal	14 mm, M3		AUX PS	5	1466812	05.03.143	0,397	4						
5	Screwed spacer sleeve; M5; 8mm; brass	Extend binding post for PCB mounting		Arduino Shield	5	-									
8	Spacer sleeve; 5mm; cylindrical; brass	Power module mounting on heatsink		Enclosure	8	1733405	D01475	0,106	10						
4	???	Spacer between display and Arduino shield		Arduino Shield	4										
12	Light pipe for LED	Round; Ø3mm; Front: convex; straight		Arduino Shield	12	2293496	PLP2-500	0,627	10						
1	Schurter 4304.6090	C14 IEC inlet, switch, 2 fuse drawer is included		Enclosure	1	2080294	4304.6090	9,200	1						
2	4A Fuse	230 VAC		AUX PS	2	-									
	8A Fuse	115 VAC option			0	-									
0,06	CB-HFT50.8/1M-BL	Heat shrink sleeve; 2:1, 50.8mm		AUX PS	0,06	-									
1	A3116068	Encoder knob head		Arduino Shield	1	-				-			-		
1	A3216007	Encoder knob cap; grey		Arduino Shield	1	-				-			-		
1	SD card 8Gb, min. 4Mb/s			Arduino Shield	1	-				-			908-AP8GSDHC4-B	8,710	1
1	CTB92VG/3S	Pluggable terminal block; female; 5mm; angled 90° for DOUT2		AUX PS	1	3881921	CTB92VG/3S	1,070	1						
	Wire harness														
1	10K NTC	AUX temperature sensor		Arduino Shield	1	1187031	NTCLE100E3103JB0	0,489	1	BC2301-ND	0,640	1	594-2381-640-63103	0,245	1
0,03	HIS-1.2/0.6-RD	Heat shrink sleeve; red	AUX temp sensor	Arduino Shield	0,03	-				-			-		
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 X3	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	3-pin receptacle for X4	Cooling fan	AUX PS	1	143127	22-01-2035	0,192	10	22-01-2035	0,310		22-01-2035	0,290	
1	22-01-2025	2-pin receptacle for X17	AUX temp sensor	Arduino Shield	1	143126	22-01-2025	0,179	10	WM2613-ND	0,270	10			
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 X3	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 X4	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	BM 91103	Ring terminal; M3; 0.5÷1 mm2	Chassis Earth	Enclosure	1	7356528	LRB-1.0T-M3	0,102	100						

#			RS Components				TME					Price calculation for 1 set			
	Qty	Part name	Code	Part Number	Unit price €	MOQ	Code / Part Number	Unit price €	MOQ	THT	SMD	Best Supplier	Lowest unit price €	Order Qty	Line Cost €
	2	TFF-M3X40/DR124					TFF-M3X40/DR124	0,156	10			TME	0,156 €	2	0,312
	5	Screwed spacer sleeve; hexagonal					B3X14/BN3320	0,309	10			TME	0,309 €	5	1,547
	5	Screwed spacer sleeve; M5; 8mm; brass					TFM-M5X8/DR218	0,187	10			TME	0,187 €	5	0,934
	8	Spacer sleeve; 5mm; cylindrical; brass					DR316/3.2X5	0,057	10			TME	0,057 €	8	0,456
	4	???										Farnell	0,000 €	4	0,000
	12	Light pipe for LED					PLP2-625	0,331	5			TME	0,331 €	12	3,972
	1	Schurter 4304.6090					4304.6090	3,594	1			TME	3,594 €	1	3,594
	2	4A Fuse					ZKT-4A	0,095	10			TME	0,095 €	2	0,189
		8A Fuse					ZKT-8A/125V	0,094	10			TME	0,094 €	0	0,000
	0,06	CB-HFT50.8/1M-BL					CB-HFT50.8/1M-BL	1,241	1			TME	1,241 €	1	1,241
	1	A3116068	-				A3116068	1,495	1			TME	1,495 €	1	1,495
	1	A3216007	-				A3216007	0,563	1			TME	0,563 €	1	0,563
	1	SD card 8Gb, min. 4Mb/s					S400-0080R11	3,840	1			TME	3,840 €	1	3,840
	1	CTB92VG/3S					TBW-5.0-3P	0,420	1			TME	0,420 €	1	0,420
															18,96 €
	Wire harness														
	1	10K NTC	754-6645	NTCLE100E3103JB0	0,334	5	NTCLE100E3103JB0	0,269				Mouser	0,245 €	1	0,245
	0,03	HIS-1.2/0.6-RD	-				HIS-1.2/0.6-RD	1,295	10			TME	1,295 €	1	
	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
	1	22-01-2025					MX-6471-021	0,048	10			TME	0,048 €	1	
	2	NSR-08					NSR-08	0,087	10			TME	0,087 €	2	
	3	39-00-0078													
	5	39-00-0078													0,000
			215-5887	39-00-0078 100pc	14,100	1	MX-5556-T3L	0,074	10			TME	0,074 €	11	
	3	08-50-0114													
	2	08-50-0114													0,000
			172-9178	08-50-0114	0,085	100	MX-0850-0114	0,047	10			Farnell	0,030 €	5	
	21	NDR-T	681-2887	122-4777	0,041	100	NDR-T	0,027	25			TME	0,027 €	21	
	1	BM 91103					BM 91103	0,048	10			TME	0,048 €	1	0,048

# 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
4	BM01148	Female quick disconnect	AC switch patch cables	Enclosure	2										
1	BM01148	Female quick disconnect	AC inlet Earth (Side B)	Enclosure	1										
2	BM01148	Female quick disconnect	Lower AC/DC module power input (Side B)	Enclosure	2										
1	BM01148	Female quick disconnect	Cable set #1	Arduino board	1										
					6	3625424	STO-1.0T-187N-8	0,057	100						
2	H0.75/14D/GY	Bootlace ferrule; insulated, 0.75mm2	Cable set #1	Enclosure	2										
4	H0.75/14D/GY	Bootlace ferrule; insulated, 0.75mm2	Cable set #2	Enclosure	4										
					6	841195	H0,75/14.	0,135	100						
2	H0.75/15D2/GY	Bootlace ferrule, twin entry; insulated, 0.75mm2	Cable set #1	Enclosure	2										
3	H0.75/15D2/GY	Bootlace ferrule, twin entry; insulated, 0.75mm2	Cable set #2	Enclosure	3										
					5	1121751	9037410000	0,120	100						
1	Cat5E cable, stranded wire		Ethernet cable	Arduino Shield	1	1734894	PS11029	1,120	1						
0,09	LGY0.75/25-BR	Insulated wire, stranded, **brown**, 0.75 mm2	AC switch patch cables	Enclosure	0,09										
0,2	LGY0.75/25-BR	Insulated wire, stranded, **brown**, 0.75 mm2	Lower AC/DC module power input	Enclosure	0,2										
0,07	LGY0.75/25-BR	Insulated wire, stranded, **brown**, 0.75 mm2	Upper AC/DC module power input	Enclosure	0,07										
0,11	LGY0.75/25-BR	Insulated wire, stranded, **brown**, 0.75 mm2	AUX PS module power input	Enclosure	0,11										
					0,47	2528103	PP001205	0,239	1						
0,09	LGY0.75/25-BL	Insulated wire, stranded, **blue**, 0.75 mm2	AC switch patch cables	Enclosure	0,09										
0,2	LGY0.75/25-BL	Insulated wire, stranded, **blue**, 0.75 mm2	Lower AC/DC module power input	Enclosure	0,2										
0,07	LGY0.75/25-BL	Insulated wire, stranded, **blue**, 0.75 mm2	Upper AC/DC module power input	Enclosure	0,07										
0,11	LGY0.75/25-BL	Insulated wire, stranded, **blue**, 0.75 mm2	AUX PS module power input	Enclosure	0,11										
					0,47	2528092	PP001196	0,239	1						
0,4	LGY0.75/25-RD	Insulated wire, stranded, **red**, 0.75 mm2	Cable set #1, Power board X1 cable	Enclosure	0,4										
0,33	LGY0.75/25-RD	Insulated wire, stranded, **red**, 0.75 mm2	Cable set #2, Power board X1 cable	Enclosure	0,33										
					0,73	2528175	PP001270	0,481	1						
0,4	LGY0.75/25-BK	Insulated wire, stranded, **black**, 0.75 mm2	Cable set #1, Power board X1 cable	Enclosure	0,4										
0,33	LGY0.75/25-BK	Insulated wire, stranded, **black**, 0.75 mm2	Cable set #2, Power board X1 cable	Enclosure	0,33										

# Qty	Part name	RS Components					TME			THT	SMD	Price calculation for 1 set			Line Cost €
		Code	Part Number	Unit price €	MOQ		Code / Part Number	Unit price €	MOQ			Best Supplier	Lowest unit price €	Order Qty	
4	BM01148														0,000
1	BM01148														0,000
2	BM01148														0,000
1	BM01148														
							BM01148	0,047	10			TME	0,047 €	6	0,281
2	H0.75/14D/GY														
4	H0.75/14D/GY														
							H0.75/14D/GY	0,023	20			TME	0,023 €	6	0,140
2	H0.75/15D2/GY														
3	H0.75/15D2/GY														
							H0.75/15D2/GY	0,036	10			TME	0,036 €	5	
1	Cat5E cable, stranded wire						CA00600.00C01	6,800	1			Farnell	1,120 €	1	1,120
0,09	LGY0.75/25-BR														
0,2	LGY0.75/25-BR														
0,07	LGY0.75/25-BR														
0,11	LGY0.75/25-BR														
							LGY0.75/25-BR	0,340	25			Farnell	0,239 €	1	0,239
0,09	LGY0.75/25-BL														
0,2	LGY0.75/25-BL														
0,07	LGY0.75/25-BL														
0,11	LGY0.75/25-BL														
							LGY0.75/25-BL	0,340	25			Farnell	0,239 €	1	0,239
0,4	LGY0.75/25-RD														
0,33	LGY0.75/25-RD														
							LGY0.75/25-RD	0,340	25			TME	0,340 €	1	0,248
0,4	LGY0.75/25-BK														
0,33	LGY0.75/25-BK														

#	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
						0,73	2528082	PP001186	0,481	1						
	0,4	LGY0.75/25-YL/GR	Insulated wire, stranded, **green-yellow**, 0.75 mm2	Cable set #1, Power board X1 cable	Enclosure	0,4										
	0,07	LGY0.75/25-YL/GR	Insulated wire, stranded, **green-yellow**, 0.75 mm2	Cable set #1, AC/DC module Earth	Enclosure	0,07										
	0,17	LGY0.75/25-YL/GR	Insulated wire, stranded, **green-yellow**, 0.75 mm2	Chassis Earth	Enclosure	0,17										
	0,5	LGY0.75/25-YL/GR	Insulated wire, stranded, **green-yellow**, 0.75 mm2	Arduino Shield Earth	Enclosure	0,5										
	0,33	LGY0.75/25-YL/GR	Insulated wire, stranded, **green-yellow**, 0.75 mm2	Cable set #2, Power board X1 cable	Enclosure	0,33										
	0,15	LGY0.75/25-YL/GR	Insulated wire, stranded, **green-yellow**, 0.75 mm2	Cable set #2, AC/DC module Earth	Enclosure	0,15										
	0,15	LGY0.75/25-YL/GR	Insulated wire, stranded, **green-yellow**, 0.75 mm2	AUX PS module Earth	Enclosure	0,15										
						1,77	2528140	PP001239	0,481	1						
	0,24	LGY0.35/25-BR	Insulated wire, stranded, **any color**, max. 0.35 mm2	AUX temp sensor	Arduino Shield	0,24	2425402	MC6A-7/0.2T2-BN-100	0,095	1						
	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					Price calculation for 1 set			
	Qty	Part name	Code	Part Number	Unit price €	MOQ	Code / Part Number	Unit price €	MOQ	THT	SMD	Best Supplier	Lowest unit price €	Order Qty	Line Cost €
							LGY0.75/25-BK	0,340	25			TME	0,340 €	1	0,248
	0,4	LGY0.75/25-YL/GR													
	0,07	LGY0.75/25-YL/GR													
	0,17	LGY0.75/25-YL/GR													
	0,5	LGY0.75/25-YL/GR													
	0,33	LGY0.75/25-YL/GR													
	0,15	LGY0.75/25-YL/GR													
	0,15	LGY0.75/25-YL/GR													
							LGY0.75/25-YL/GR	0,340	25			TME	0,340 €	2	0,602
	0,24	LGY0.35/25-BR					LGY0.35/25-BR	0,210	25			Farnell	0,095 €	1	0,095
	1	Arduino USB cable					-					Farnell	0,000 €	1	0,000
	1	FC10300-0					FC10300-0	1,040	1			TME	1,040 €	1	1,040
															5,05 €

Total		**285,15 €**

PCBA (min. 50 pcs)	Estimated	40,00
PCBs (min. 20 pcs)	Estimated	30,00
Enclosure (min. 20 pcs)	Estimated	51,00
		121,00
Estimated total (no shipping costs included):		**406,15 €**