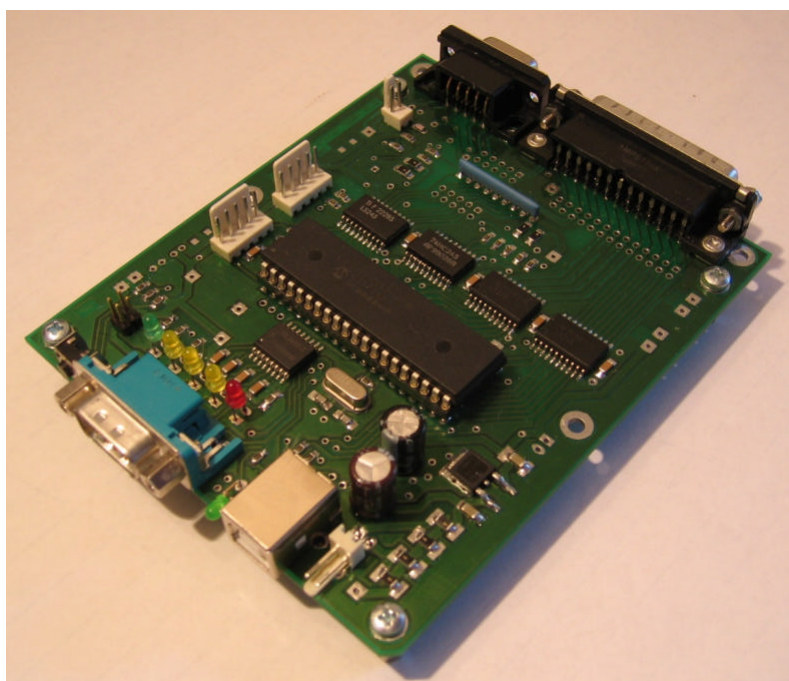


AKKON USB Controller Board

[Part list](#)



Authors: Gerhard Burger
 Version: 1.0b
 Last update: 13.01.2006
 File:
 Attachments: -Design file including part list

Table of versions

Version	Date	Remarks
1.0	31.10.2005	First version, based on German version
1.1	13.01.2006	Removing some spelling errors

Part list

No.	Part number	Part description	#	Ordering No.	Price	Supplier
1	Y1	Quartz for print mounting 20 MHz	1	168769-GL	1.15	Conrad
2	Y1_Isolierscheibe	Silicone isolation slice for quartz	1			Conrad
4	J8	D-Sub-socket 9-poles, angled, US-version (7.2mm)	1	239-5855	1.6	RS
5	J6	D-Sub-socket 25-poles, angled, US-version (7.2mm)	1	239-5906	1.6	RS
6	J2	D-Sub-plug 9-poles, angled, US-version (7.2mm)	1	239-5849	1.4	RS
7	IC1_Sockel	IC-socket 40-poles	1	189677-12	0.96	Conrad
9	D1, D2, D3	Low current LED 3mm, yellow	3	186945-12	0.6	Conrad
10	D4, D6	Low current LED 3mm, green	2	186953-12	0.4	Conrad
11	D5, D6	Low current LED 3mm, red	1	186937-12	0.2	Conrad
12	IC2	RS232 interface ST3232CW, BF SOIC(wide version), 0.1uF pump capacitors	1	415-2127	2	RS
13	C5, C6 or C20, C21	SMD-capacitor 33pF, BF0805	2	460095-12	0.09	Conrad
14	JJ10_socket	Plug for flat cable 2x5, 2.54mm grid	2	742309-12	1	Conrad
15	J6_socket	Plug for flat cable 2x13, 2.54mm grid	1	741825-12	1	Conrad
16	J1, J12, J13, J9) also alternatively to J1 (angled)	Plug 2-poles, straight version, 2,54mm grid	3			Conrad
17	J3, J4	Plug 5-poles, straight version, 2,54mm grid	2	741230-12	2	Conrad
20	C1	Elko, 220uF,35V 5mm-grid	1	468320-12	0.33	Conrad
21	C2	Elko, 470uf, 16V, 5mm-grid	1	468347-12	0.41	Conrad
22	R21	Resistor network 8 resistors, 9 Pins, 4K7	1	414271-12	0.28	Conrad
23	D7, D8, D9, D10, alternatively (D13, D14, D15, D16)	SMD-Diode 1A, BF 1206	4	160733-12	0.13	Conrad
24	D11, D12, D17, D18	SMD-Diode 500mA, BF 1206	2	140902-12	0.09	Conrad
25	IC4, IC5, IC6, IC7	Driver Low power-type, can also be a 74HCT245-type	4	857-569	0.84	RS
27	R14, R15, R16	SMD-Resistor 1K, BF0805	3	406252-12	0.1	Conrad
28	R18, R19, R20	SMD-Resistor 100, BF0805	3	406139-12	0.1	Conrad
28	R5	SMD-Resistor 10, BF1206	1	406139-12	0.1	Conrad
29	R8, R9	SMD-Resistor 1K8, BF0805	2	406295-12	0.1	Conrad
29	R7, R10, R11, R12, R13, R17, R24	SMD-Resistor 2K2, BF0805	7	406295-12	0.1	Conrad
30	R1, R25, R35, R36	SMD-Resistor 4K7, BF0805	4	406333-12	0.1	Conrad

31	R2, R6, R22	SMD-Resistor 470, BF0805	3	406210-12	0.1	Conrad
31	R3, R23	SMD-Resistor 10K, BF0805	2	406210-12	0.1	Conrad
31	R37, R38	SMD-Resistor 0, BF0805	2	406210-12	0.1	Conrad
32	R4	SMD-Resistor 1M, BF0805	1	406619-12	0.1	Conrad
33	C7 alternatively C22	SMD-Capacitor, 470nF, BF2220 or BF1206	1	500381-12 or 314-2309 (RS)	0.89	RS
34	C8	SMD-Capacitor, 100nF, BF0805	2	452505-12	0.17	Conrad
35	S2	Switch, angled for print mounting	1	452432-12	0.17	Conrad
37	J5	USB-socked, angled, type B	1	74 39 50-12	1.63	Conrad
38	J10, J11	Plug 2x5 pole, straight version, 2.54mm grid	2	742465-12	1.44	Conrad
39	J6	Plug 2x13 pole, straight 2.54mm grid, alternatively a print contact strip 2x13 can be used	1	741973-GL		Conrad
40	C2, C18, C15, C4, C16, C13, C14, C17, C19, C9, C10, C11, C22	SMD-Capacitor 100nF, BF1206	10		0.17	Conrad
41	JP1, JP2	print contact strip 2x10 pins, 2.54mm grid	1	744026-12	0.46	Conrad
42	JP1	Jumper, 2.54mm grid	1	734160-12	0.13	Conrad
43	JP2	Jumper, 2.54mm grid	1	731889-12		Conrad
44	IC1_uP	PIC18F4550 micro controller, with USB, /with pre programmed boot loader	1	9321357	10/12.5	Farnell
46	IC3	SMD-voltage regulator 5V, 500mA, BF DPAK	1	189-0977	0.8	RS
47	P1	AKKON USB Controller print	1		25	Gerhard Burger

Please note, S1 and S3 are optional and not included here

Totale cost ca. 90€