

Bill of Materials		Bill of Materials Full For Variant [Variant of AKKON_			BURGER
Source Data From:		AKKON_Controller_Board_V2_1a.PrjPcb			
Project:					
Variant:		Variant of AKKON_Controller_Board_V2_0 full			
Created: 08.11.2017		15:26:09			
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Pos	Designator	Comment	Description	ManufPartNo	Quantity
1	C1, C2, C8, C9, C11, C12	18p	Capacitor ceramic	C0603C180J5GACTU	6
2	C3, C4, C5, C7, C10, C14, C15, C16, C20, C21, C22	100n	Capacitor ceramic	08055C104KAT2A	11
3	C6, C13	10u/6.3V	Capacitor Tantal, low ESR 10u/6.3V, 10%, SMD, 2312, Type C	TAJC336K010RNJ, TAJC336K010	2
4	C17, C18, C19	470u/16V	Capacitor electrolytic	EEU-FM1C471L	3
5	C23	100uF/50V	Polarized Capacitor (Surface	EEU-FC1H101	1
6	D1, D2	1N4148	General purpose diode 1206	1N4148	2
7	D3	BAS70-05	Dual schottky diode SOT-23 200	BAS70-05	1
8	D4	USB	Light emitting diode If = 2 mA	TLLY4400	1
9	D5	ML	Light emitting diode If = 2 mA	TLLY4400	1
10	D6	Tx	Light emitting diode If = 2 mA	TLLR4400	1
11	D7	Rx	Light emitting diode If = 2 mA	TLLR4400	1
12	D8, D9	SS16	Schottky Diode DO214AC 1A 60 V	SS16	2
13	D10	PWR	Light emitting diode If = 2 mA	TLLG4400	1
14	IC1	MCP130T-300I	Supervisory circuit with open	MCP130T-300I	1
15	IC2	LPC2148	NXP 32 bit ARM micro controller	LPC2148FBD64	1
16	IC3	FT232RL	FTDI USB to UART converter	FT232RL	1
17	IC4	TEL 5-2411	TRACO DCDC converter single	TEL 5-2411	1
18	IC7	LM1117	Low drop voltage regulator 3,3V	LM1117	1
19	J2, J11	USB	USB Connector type B	2411 02	2
20	J5	Axes	Flat Cable Connector (IDC), Low-	T821120A1S100CEU	1
21	J6	Relays	Flat Cable Connector (IDC), Low-	T821110A1S100CEU	1
22	J7	Inputs	Flat Cable Connector (IDC), Low-	T821120A1S100CEU	1
23	J8	Spindle1	Flat Cable Connector (IDC), Low-	T821110A1S100CEU	1
24	J10	RS422	Flat Cable Connector (IDC), Low-	T821110A1S100CEU	1
25	J16, J17, J18	PowerExt	Connector 3 pole, 2.54 mm, angled	22-23-2031	3
26	J20	Pwr	Jumper	826936-2	1
27	PCB1	Akkon.Pcb	Printed Circuit Board	ACBV5_PCB	1
28	Q1, Q2	BC847	Bipolar transistor npn	BC847	2
29	Q3	BC856	Bipolar transistor pnp	BC856	1
30	R1, R2, R4	22K	Resistor	ERJP06	3
31	R3, R7, R8, R16, R36	10K	Resistor	ERJP06	5
32	R5	1K	Resistor	ERJP06	1
33	R6	0	Resistor	ERJP06	1
34	R9, R10	33	Resistor	ERJP06	2
35	R11	100K	Resistor	ERJP06	1
36	R17	3K3	Resistor	ERJP06	1
37	R18	1K5	Resistor	ERJP06	1
38	R19	390	Resistor	ERJP06	1
39	R22, R27, R28, R29, R30	0	Resistor	ERJP06	5
40	R31, R32, R33, R34, R35	4k7	Resistor	ERJP06	5
41	R37, R38, R40	2K2	Resistor	ERJP06	3
42	R39	100	Resistor	ERJP06	1
43	S1	Reset	Switch	1-1825027-4	1
44	S2	ICSP	Dual dip switch 90°	DTSM-2x	1
45	X1	12 MHz	Crystal	ABL-12.000MHZ-B2	1
46	X2	32768 Hz	Crystal, THT	R26-32.768- 12.5	1
Approved:			Notes:		