

**Atmosfire Development Kit
Design Overview
Version 1.0**

ATMOSFIRE



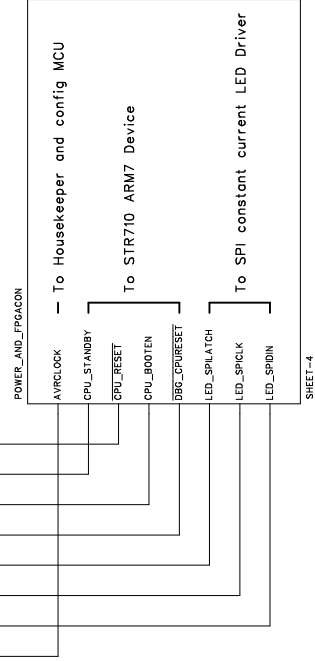
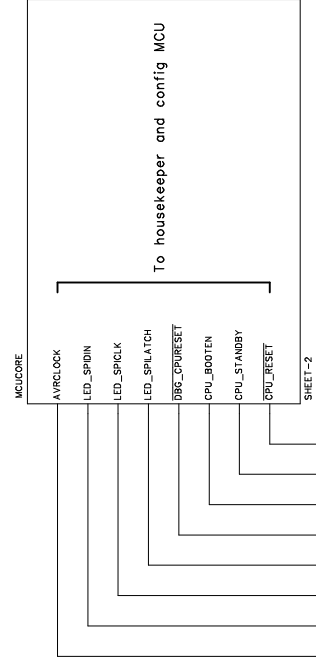
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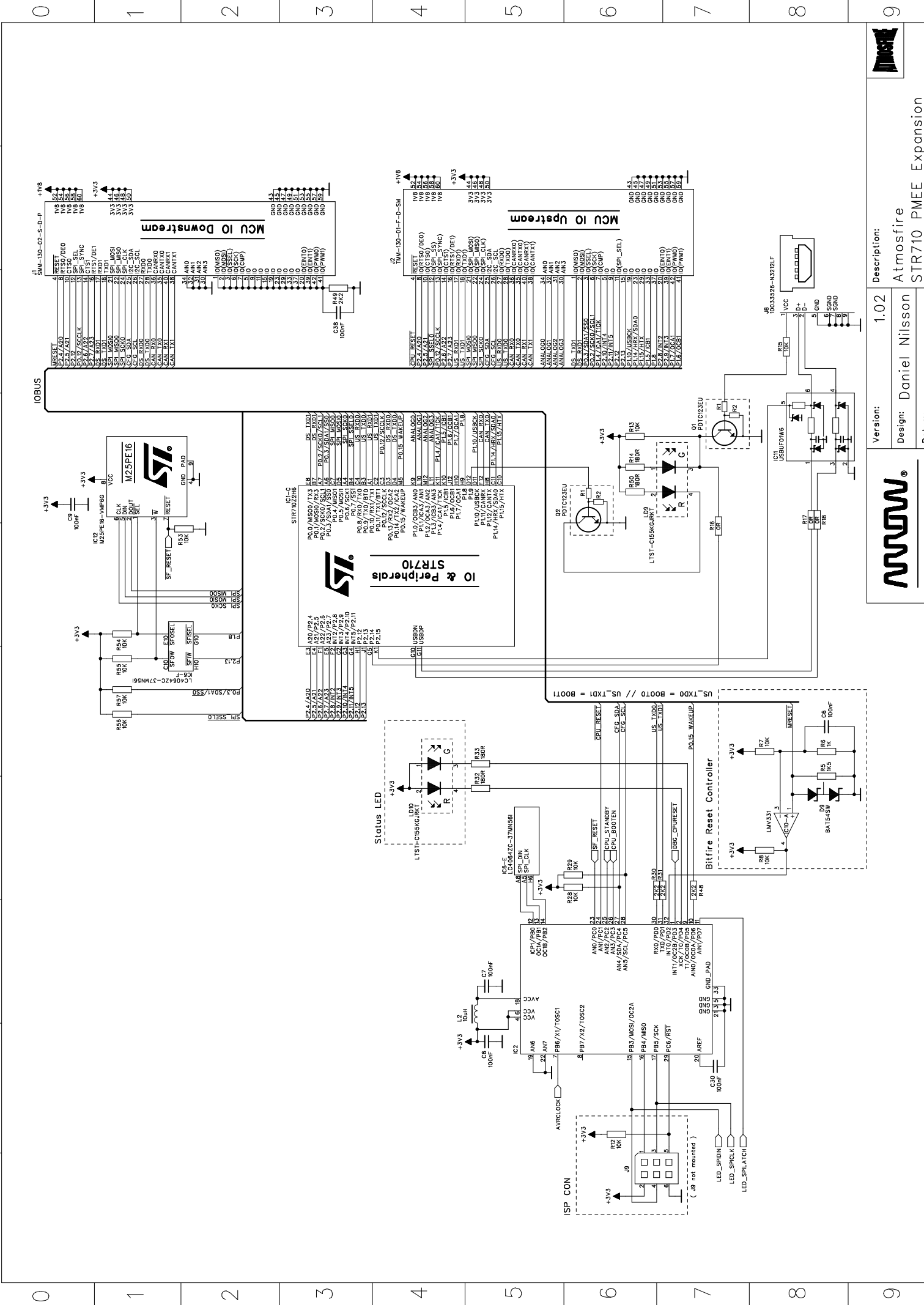
Revision History		
Version	Date	Updates
Rev.A	070516	First Atmosfire revision

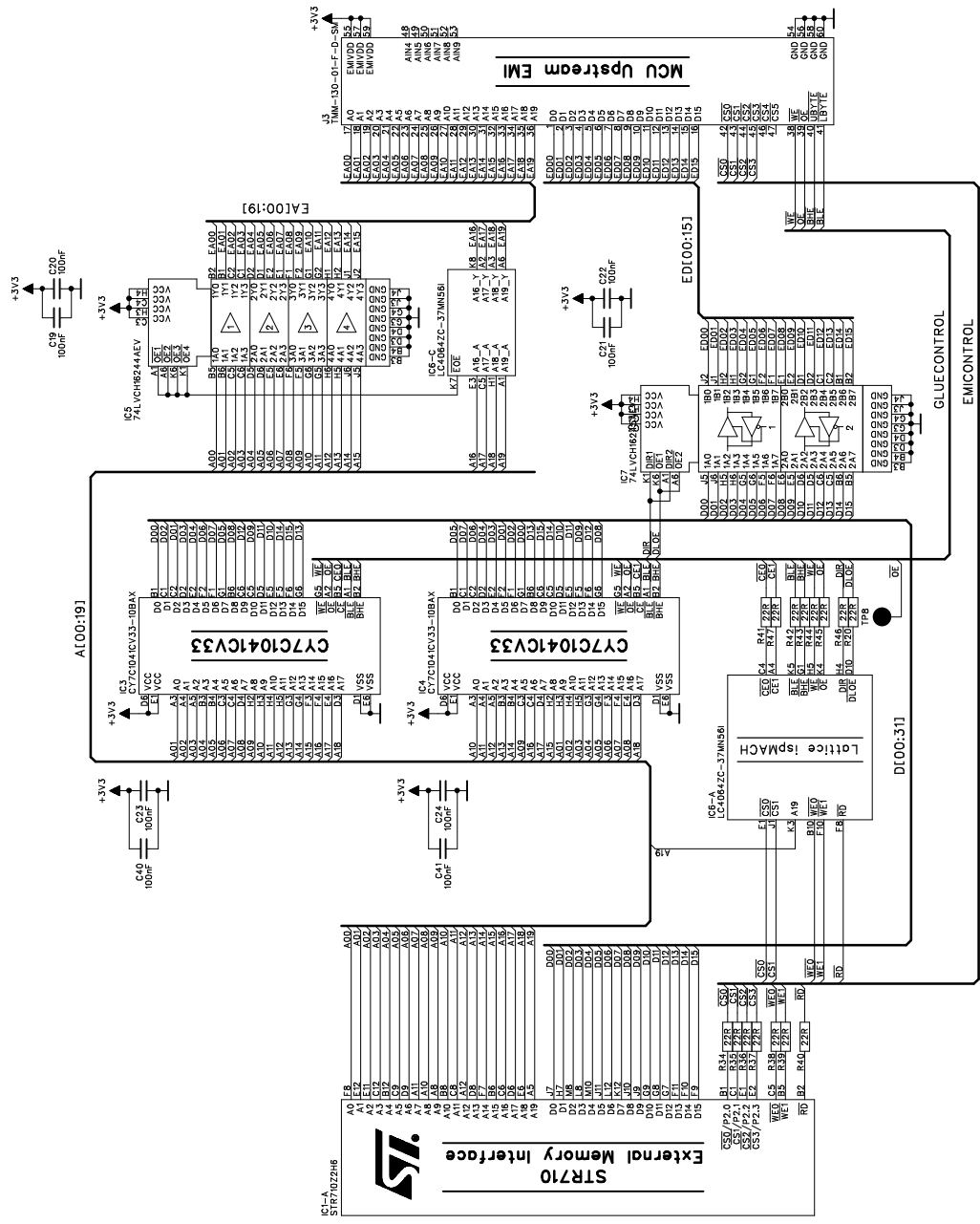
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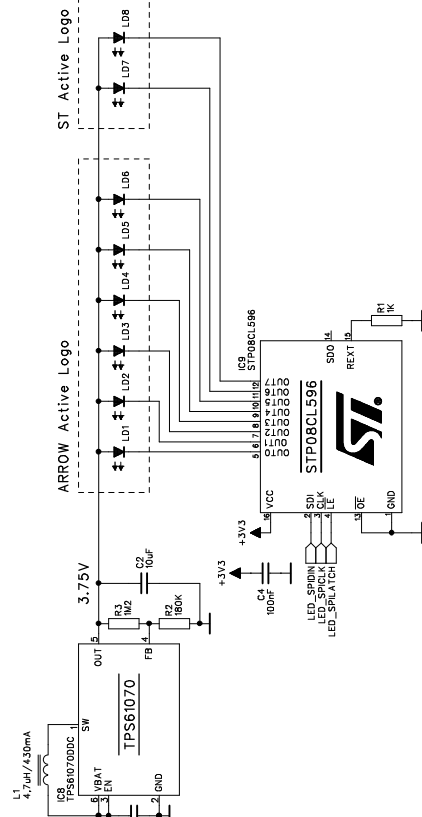
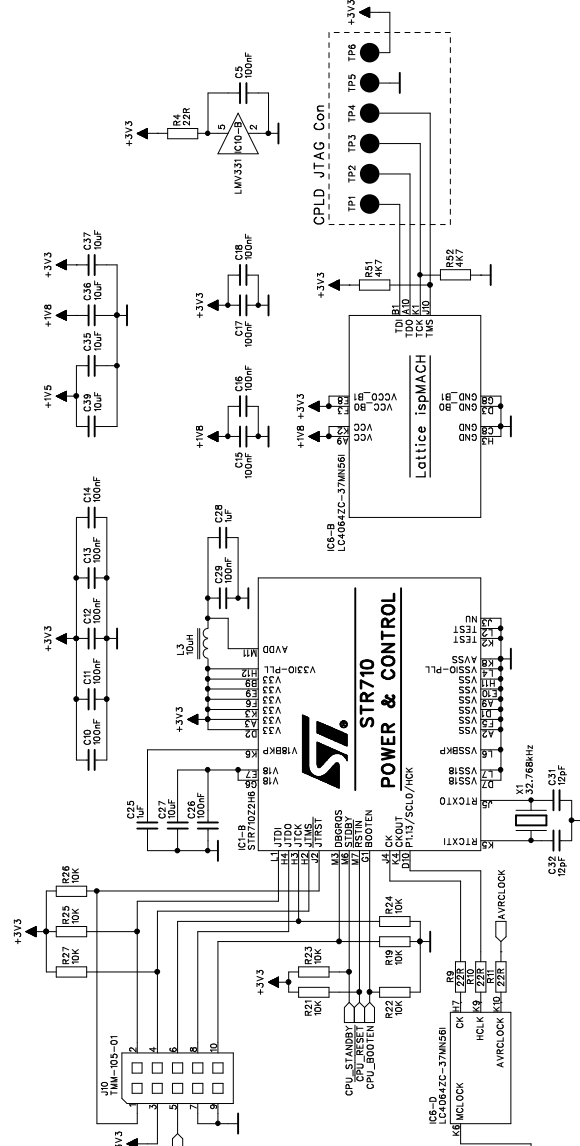
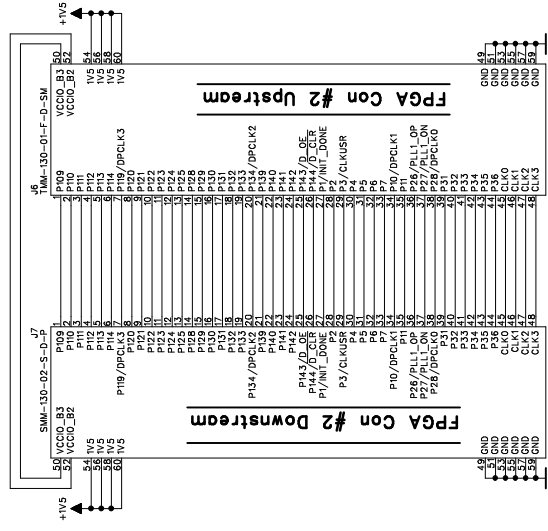
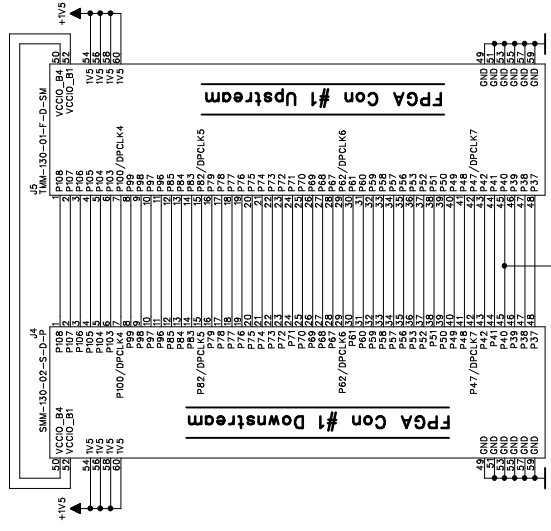
Arrow Engineering Sweden, Timmernabben, Sweden

EMI
SHEET -3









Bill Of Material STR7-Atmosfire

Date:	2007-02-11
Aut:	Daniel Nilsson
Schematic:	V1.02

POS	Ref Des	Qty	Partnumber	Value	Package	Manufacturer	Description
1	C3-24 C26 C29-30 C38 C40-41	28		100nF	0402	Any	X7R 10V 10% Ceramic Cap
2	C31-32	2		12pF	0402	Any	NP0 25V 5% Ceramic Cap
3	C25 C28	2		1uF	0805	Any	X7R 16V 10% Ceramic Cap
4	R16-18	3		0R	0402	Any	Metalfilm resistor 1%
5	R7-8 R12-13 R15 R19 R21-29 R53-57	20		10K	0402	Any	Metalfilm resistor 1%
6	R2	1		180K	0402	Any	Metalfilm resistor 1%
7	R14 R32-33 R50	4		180R	0402	Any	Metalfilm resistor 1%
8	R1 R6	2		1K	0402	Any	Metalfilm resistor 1%
9	R5	1		1K5	0402	Any	Metalfilm resistor 1%
10	R3	1		1M2	0402	Any	Metalfilm resistor 1%
11	R4 R9-11 R20 R34- 47	19		22R	0402	Any	Metalfilm resistor 1%
12	R30-31 R48-49	4		2K2	0402	Any	Metalfilm resistor 1%
13	R51-52	2		4K7	0402	Any	Metalfilm resistor 1%
14	J8	1	10033526-N3212LF	4 pole	USB Type B	FCI Connect	Type-B Mini USB connector
15	IC5	1	74LVCH16244AEV		VFPGA56	NXP	16-bit bus buffer with bus hold
16	IC7	1	74LVCH16245AEV		VFPGA56	NXP	16-bit Bus XCVR with bus hold
17	IC2	1	ATMEGA48-20MU		MLF-32	Atmel	8-bit 20Mhz RISC MCU with OCD and E2PROM
18	L1	1	B82422H1472K100	4.7uH/430mA	1210	Epcos	+/-10% 1210 SMD Choke
19	D9	1	BAT54SW		SC-70	NXP	Double schottky diode
20	C1-2 C27 C35-37 C39	7	C3216X5R0J106M	10uF	1206	TDK	X5R 6.3V 10% Ceramic Cap
21	L2-3	2	CS201212-100K	10uH	0805	Bourns	Chip inductor 0805
22	IC3-4	2	CY7C1041CV33-10BAX		48-FBGA	Cypress	256Kbx16 Fast Async SRAM, 10ns
23	IC6	1	LC4064ZC-37MN56I		csBGA56	Lattice	64MC 32 I/O ispJTAG 1.8V 5ns IND Pb-Free
24	X1	1	LF XTAL003000	32.768kHz	SMX 85 SMD	CMAC	32,768kHz SMD Crystal
25	IC10	1	LMV331IDBVT		SOT-23-5	TI	SOT-23 Comparator Open Drain Output
26	LD9-10	2	LTST-C155KGJRKT		3.2 x 2.7mm Chip	LiteOn	BiColor Red/Green LED
27	LD1-8	8	LTW-C191TL5		0603	LiteOn	White High intensity LED
28	IC12	1	M25PE16-VMP6G		MLP8	STMicroelectronics	16Mb Serial flash with SPI interface
29	Q1-2	2	PDTC123EU		SC-70	NXP	10k + 10k Digital NPN Transistor
30	J1, J4, J7	1	SMM-130-02-S-D-P	60 Pole	SMD 2 row socket	Samtec	SMD dual row 2mm socket
31	IC9	1	STP08CL596		TSSOP-16	STMicroelectronics	8-bit SPI driven LED Driver 15-90mA
32	IC1	1	STR710Z2H6		LFPGA144	STMicroelectronics	Integrated ARM7 MCU, USB, 4xUART and HDLC interface.
33	J10	1	TMM-105-01	10 Pole		Samtec	Dual row 1M Header
34	J2-3, J5-6	4	TMM-130-01-F-D-SM	60 Pole	SMD 2 row header	Samtec	SMD dual row 2mm pinheader
35	IC8	1	TPS61070DDC		SOT-23-6	TI	SOT-23 Boost DC-DC Converter
36	IC11	1	USBUF01W6		SC-70-6	STMicroelectronics	SC-70 USB ESD Protection
37	Plastic Spacer	1				Skylt & Gravyr	Plastic lasercut acrylspacer
38	Overlay	1				Screen Service	Plastic overlay with frosted logos
39	PCB	1	Atmosfire			NCAB	Atmosfire 6-layer PCB

