

Author: PA3AKE 9MHz SSB roofing filter

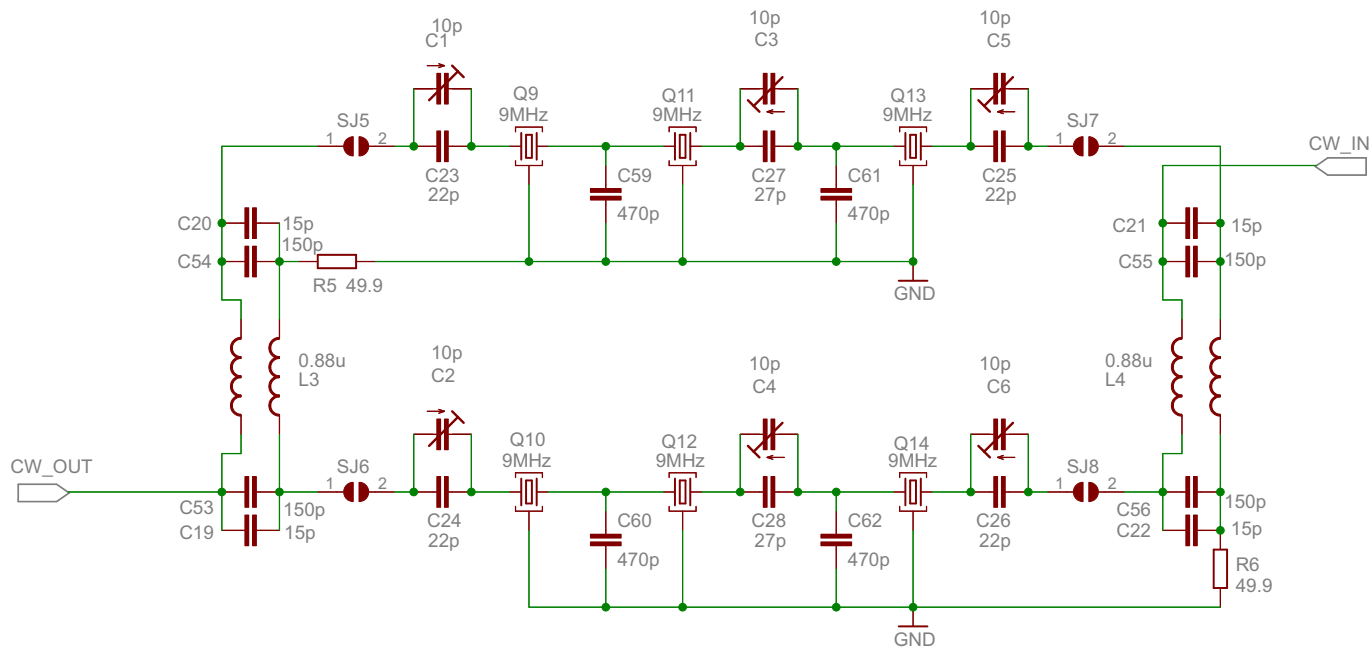
TITLE: FrontendBoard

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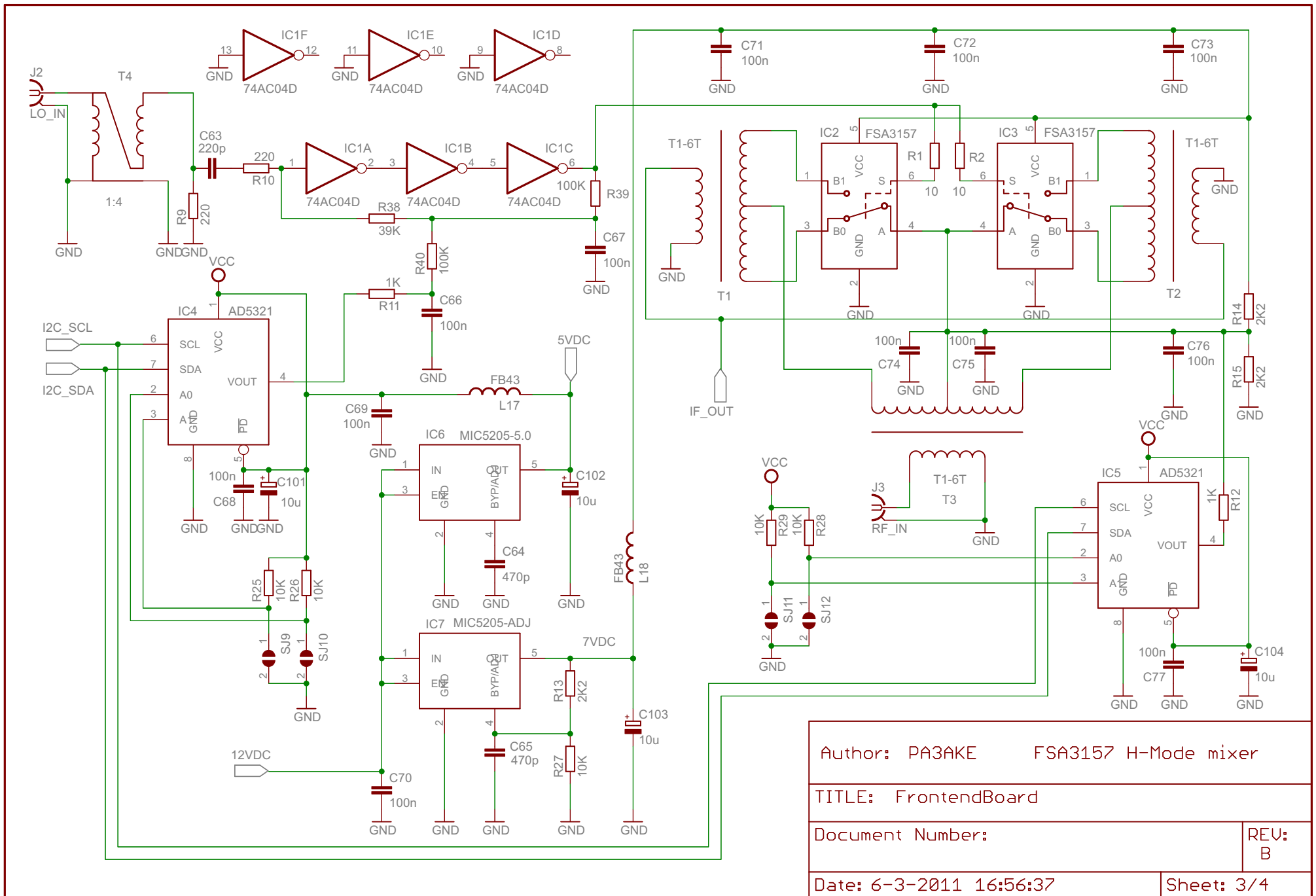
TITLE: FrontendBoard

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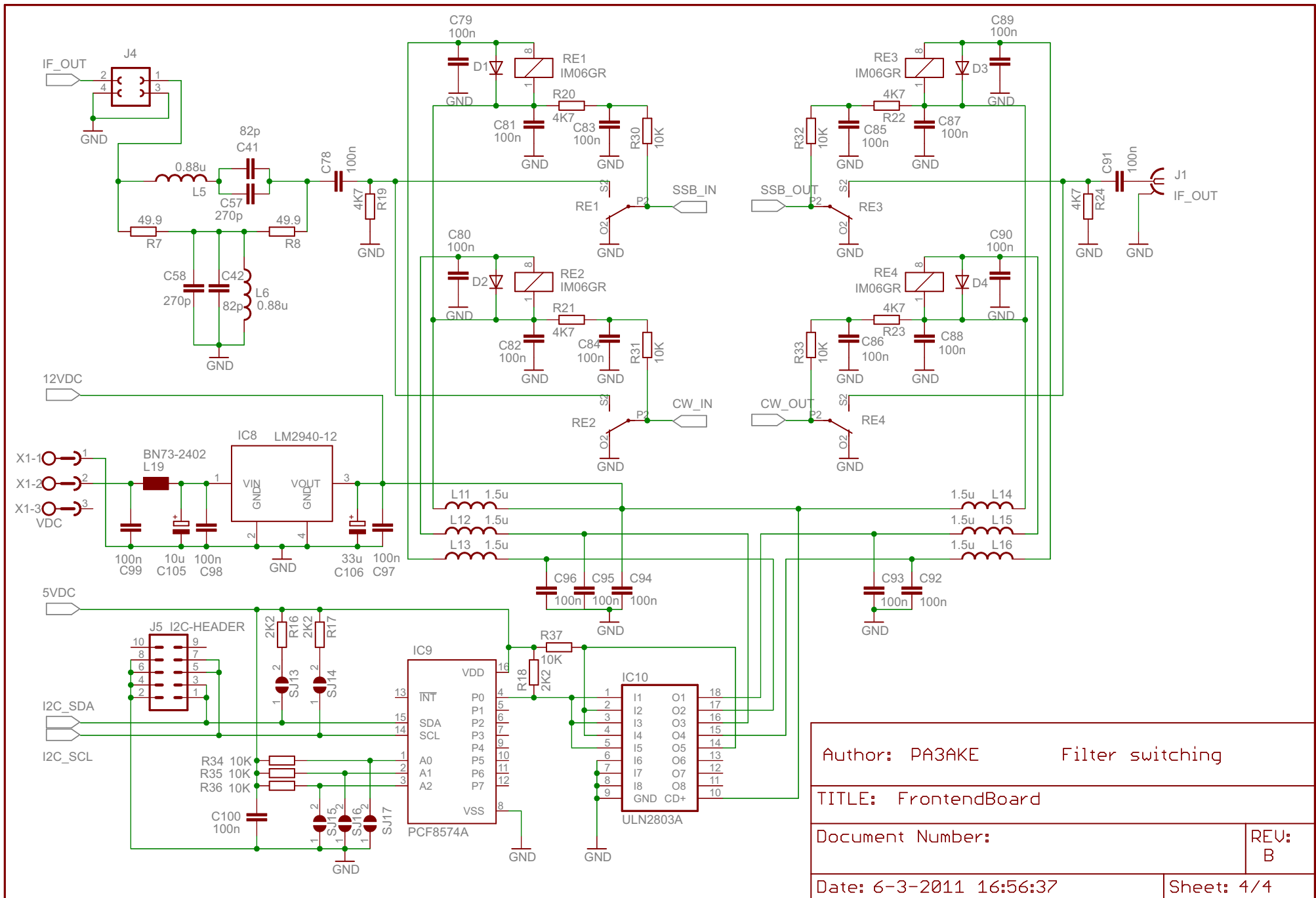
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Frontend Board Rev-B Partlist

Part	Value	Package	Description
-Resistors-----			
R1	10	1206	(Generic Thick Film resistor)
R2	10	1206	(Generic Thick Film resistor)
R3	49.9	1206	(Generic Thick Film resistor)
R4	49.9	1206	(Generic Thick Film resistor)
R5	49.9	1206	(Generic Thick Film resistor)
R6	49.9	1206	(Generic Thick Film resistor)
R7	49.9	1206	(Generic Thick Film resistor)
R8	49.9	1206	(Generic Thick Film resistor)
R9	220	1206	(Generic Thick Film resistor)
R10	220	1206	(Generic Thick Film resistor)
R11	1K	1206	(Generic Thick Film resistor)
R12	1K	1206	(Generic Thick Film resistor)
R13	2K2	1206	(Generic Thick Film resistor)
R14	2K2	1206	(Generic Thick Film resistor)
R15	2K2	1206	(Generic Thick Film resistor)
R16	2K2	1206	(Generic Thick Film resistor)
R17	2K2	1206	(Generic Thick Film resistor)
R18	2K2	1206	(Generic Thick Film resistor)
R19	4K7	1206	(Generic Thick Film resistor)
R20	4K7	1206	(Generic Thick Film resistor)
R21	4K7	1206	(Generic Thick Film resistor)
R22	4K7	1206	(Generic Thick Film resistor)
R23	4K7	1206	(Generic Thick Film resistor)
R24	4K7	1206	(Generic Thick Film resistor)
R25	10K	1206	(Generic Thick Film resistor)
R26	10K	1206	(Generic Thick Film resistor)
R27	10K	1206	(Generic Thick Film resistor)
R28	10K	1206	(Generic Thick Film resistor)
R29	10K	1206	(Generic Thick Film resistor)
R30	10K	1206	(Generic Thick Film resistor)
R31	10K	1206	(Generic Thick Film resistor)
R32	10K	1206	(Generic Thick Film resistor)
R33	10K	1206	(Generic Thick Film resistor)
R34	10K	1206	(Generic Thick Film resistor)
R35	10K	1206	(Generic Thick Film resistor)
R36	10K	1206	(Generic Thick Film resistor)
R37	10K	1206	(Generic Thick Film resistor)
R38	39K	1206	(Generic Thick Film resistor)
R39	100K	1206	(Generic Thick Film resistor)
R40	100K	1206	(Generic Thick Film resistor)

-Inductors-----

L1	0.88u	T50-10	(Micrometals T50-10, 16 bifilar turns, 0.5mm enameled)
L2	0.88u	T50-10	(Micrometals T50-10, 16 bifilar turns, 0.5mm enameled)
L3	0.88u	T50-10	(Micrometals T50-10, 16 bifilar turns, 0.5mm enameled)
L4	0.88u	T50-10	(Micrometals T50-10, 16 bifilar turns, 0.5mm enameled)
L5	0.88u	T50-10	(Micrometals T50-10, 16 turns, 0.5mm enameled)
L6	0.88u	T50-10	(Micrometals T50-10, 16 turns, 0.5mm enameled)
L7	2.81u	T50-10	(Micrometals T50-10, 30 turns, 0.5mm enameled)
L8	2.81u	T50-10	(Micrometals T50-10, 30 turns, 0.5mm enameled)
L9	2.81u	T50-10	(Micrometals T50-10, 30 turns, 0.5mm enameled)
L10	2.81u	T50-10	(Micrometals T50-10, 30 turns, 0.5mm enameled)
L11	1.5u	1210	(Generic SMD inductor)
L12	1.5u	1210	(Generic SMD inductor)
L13	1.5u	1210	(Generic SMD inductor)
L14	1.5u	1210	(Generic SMD inductor)
L15	1.5u	1210	(Generic SMD inductor)
L16	1.5u	1210	(Generic SMD inductor)
L17	FB43	2T	(FB43 bead, 6 turns 0.3mm enameled copper wire)
L18	FB43	2T	(FB43 bead, 6 turns 0.3mm enameled copper wire)
L19	BN73-2402	2T	(BN73-2402 binocular bead, 2 turns 0.8mm enameled copper)

-Capacitors-----

C1	10p	5.5x7.0mm, 2-pin	(Philips film trimmer, brown yellow)
C2	10p	5.5x7.0mm, 2-pin	(Philips film trimmer, brown yellow)
C3	10p	5.5x7.0mm, 2-pin	(Philips film trimmer, brown yellow)
C4	10p	5.5x7.0mm, 2-pin	(Philips film trimmer, brown yellow)
C5	10p	5.5x7.0mm, 2-pin	(Philips film trimmer, brown yellow)
C6	10p	5.5x7.0mm, 2-pin	(Philips film trimmer, brown yellow)
C7	5.6p	0805	(American Technical Ceramics ATC100-A)
C8	5.6p	0805	(American Technical Ceramics ATC100-A)
C9	5.6p	0805	(American Technical Ceramics ATC100-A)
C10	5.6p	0805	(American Technical Ceramics ATC100-A)
C11	15p	0805	(American Technical Ceramics ATC100-A)
C12	15p	0805	(American Technical Ceramics ATC100-A)
C13	15p	0805	(American Technical Ceramics ATC100-A)
C14	15p	0805	(American Technical Ceramics ATC100-A)
C15	15p	0805	(American Technical Ceramics ATC100-A)
C16	15p	0805	(American Technical Ceramics ATC100-A)
C17	15p	0805	(American Technical Ceramics ATC100-A)
C18	15p	0805	(American Technical Ceramics ATC100-A)
C19	15p	0805	(American Technical Ceramics ATC100-A)
C20	15p	0805	(American Technical Ceramics ATC100-A)
C21	15p	0805	(American Technical Ceramics ATC100-A)
C22	15p	0805	(American Technical Ceramics ATC100-A)
C23	22p	0805	(American Technical Ceramics ATC100-A)
C24	22p	0805	(American Technical Ceramics ATC100-A)
C25	22p	0805	(American Technical Ceramics ATC100-A)

C26	22p	0805	(American Technical Ceramics ATC100-A)
C27	27p	0805	(American Technical Ceramics ATC100-A)
C28	27p	0805	(American Technical Ceramics ATC100-A)
C29	68p	0805	(American Technical Ceramics ATC100-A)
C30	68p	0805	(American Technical Ceramics ATC100-A)
C31	68p	0805	(American Technical Ceramics ATC100-A)
C32	68p	0805	(American Technical Ceramics ATC100-A)
C33	82p	0805	(American Technical Ceramics ATC100-A)
C34	82p	0805	(American Technical Ceramics ATC100-A)
C35	82p	0805	(American Technical Ceramics ATC100-A)
C36	82p	0805	(American Technical Ceramics ATC100-A)
C37	82p	0805	(American Technical Ceramics ATC100-A)
C38	82p	0805	(American Technical Ceramics ATC100-A)
C39	82p	0805	(American Technical Ceramics ATC100-A)
C40	82p	0805	(American Technical Ceramics ATC100-A)
C41	82p	0805	(American Technical Ceramics ATC100-A)
C42	82p	0805	(American Technical Ceramics ATC100-A)
C43	100p	0805	(American Technical Ceramics ATC100-A)
C44	100p	0805	(American Technical Ceramics ATC100-A)
C45	120p	0805	(American Technical Ceramics ATC100-A)
C46	120p	0805	(American Technical Ceramics ATC100-A)
C47	120p	0805	(American Technical Ceramics ATC100-A)
C48	120p	0805	(American Technical Ceramics ATC100-A)
C49	150p	0805	(American Technical Ceramics ATC100-A)
C50	150p	0805	(American Technical Ceramics ATC100-A)
C51	150p	0805	(American Technical Ceramics ATC100-A)
C52	150p	0805	(American Technical Ceramics ATC100-A)
C53	150p	0805	(American Technical Ceramics ATC100-A)
C54	150p	0805	(American Technical Ceramics ATC100-A)
C55	150p	0805	(American Technical Ceramics ATC100-A)
C56	150p	0805	(American Technical Ceramics ATC100-A)
C57	270p	0805	(American Technical Ceramics ATC100-A)
C58	270p	0805	(American Technical Ceramics ATC100-A)
C59	470p	0805	(American Technical Ceramics ATC100-A)
C60	470p	0805	(American Technical Ceramics ATC100-A)
C61	470p	0805	(American Technical Ceramics ATC100-A)
C62	470p	0805	(American Technical Ceramics ATC100-A)
C63	220p	1206	(Generic C0G,NP0 MLCC)
C64	470p	1206	(Generic C0G,NP0 MLCC)
C65	470p	1206	(Generic C0G,NP0 MLCC)
C66	100n	1206	(Generic X7R MLCC)
C67	100n	1206	(Generic X7R MLCC)
C68	100n	1206	(Generic X7R MLCC)
C69	100n	1206	(Generic X7R MLCC)
C70	100n	1206	(Generic X7R MLCC)
C71	100n	1206	(Generic X7R MLCC)
C72	100n	1206	(Generic X7R MLCC)
C73	100n	1206	(Generic X7R MLCC)

C74	100n	1206	(Generic X7R MLCC)
C75	100n	1206	(Generic X7R MLCC)
C76	100n	1206	(Generic X7R MLCC)
C77	100n	1206	(Generic X7R MLCC)
C78	100n	1206	(Generic X7R MLCC)
C79	100n	1206	(Generic X7R MLCC)
C80	100n	1206	(Generic X7R MLCC)
C81	100n	1206	(Generic X7R MLCC)
C82	100n	1206	(Generic X7R MLCC)
C83	100n	1206	(Generic X7R MLCC)
C84	100n	1206	(Generic X7R MLCC)
C85	100n	1206	(Generic X7R MLCC)
C86	100n	1206	(Generic X7R MLCC)
C87	100n	1206	(Generic X7R MLCC)
C88	100n	1206	(Generic X7R MLCC)
C89	100n	1206	(Generic X7R MLCC)
C90	100n	1206	(Generic X7R MLCC)
C91	100n	1206	(Generic X7R MLCC)
C92	100n	1206	(Generic X7R MLCC)
C93	100n	1206	(Generic X7R MLCC)
C94	100n	1206	(Generic X7R MLCC)
C95	100n	1206	(Generic X7R MLCC)
C96	100n	1206	(Generic X7R MLCC)
C97	100n	1206	(Generic X7R MLCC)
C98	100n	1206	(Generic X7R MLCC)
C99	100n	1206	(Generic X7R MLCC)
C100	100n	1206	(Generic X7R MLCC)
C101	10u 16V	SMCB	(Generic Tantalium)
C102	10u 16V	SMCB	(Generic Tantalium)
C103	10u 16V	SMCB	(Generic Tantalium)
C104	10u 16V	SMCB	(Generic Tantalium)
C105	10u 16V	SMCB	(Generic Tantalium)
C106	33u 16V	SMCD	(Generic Tantalium)

-Integrated Circuits-----

IC1	SN74AC04D	SOIC-14	(Texas Instruments, Dual D-type Flip Flop)
IC2	FSA3157P6X	SC70-6	(Fairchild Semiconductor, SPDT bus-switch)
IC3	FSA3157P6X	SC70-6	(Fairchild Semiconductor, SPDT bus-switch)
IC4	AD5321BRMZ	MSOP-8	(Analog Devices, 12 bit I2C DAC)
IC5	AD5321BRMZ	MSOP-8	(Analog Devices, 12 bit I2C DAC)
IC6	MIC5205-5.0YM5	SOT23-5	(Micrel Inc., LDO regulator, 5V, 150mA)
IC7	MIC5205YM5	SOT23-5	(Micrel Inc., LDO regulator, adjustable, 150mA)
IC8	LM2940IMP-12	SOT223-4	(National Semiconductor, LDO regulator, 12V, 1A)
IC9	PCF8574AT	SOIC-16W	(NXP Semiconductors, I2C 8-bit IO-expander)
IC10	ULN2803ADWR	SOIC-18	(Texas Instruments, Darlington Array, 8 bit)

-Diodes-----

D1	MMSD4148T1G	SOD123	(ON Semiconductor, Diode Switch, 100V, 200mA)
D2	MMSD4148T1G	SOD123	(ON Semiconductor, Diode Switch, 100V, 200mA)
D3	MMSD4148T1G	SOD123	(ON Semiconductor, Diode Switch, 100V, 200mA)
D4	MMSD4148T1G	SOD123	(ON Semiconductor, Diode Switch, 100V, 200mA)

-Crystals-----

Q1	8.997M	HC-49	(QT Quarztechnik GmbH, specification 20100J1M1045)
Q2	8.997M	HC-49	(QT Quarztechnik GmbH, specification 20100J1M1045)
Q3	8.997M	HC-49	(QT Quarztechnik GmbH, specification 20100J1M1045)
Q4	8.997M	HC-49	(QT Quarztechnik GmbH, specification 20100J1M1045)
Q5	8.997M	HC-49	(QT Quarztechnik GmbH, specification 20100J1M1045)
Q6	8.997M	HC-49	(QT Quarztechnik GmbH, specification 20100J1M1045)
Q7	8.997M	HC-49	(QT Quarztechnik GmbH, specification 20100J1M1045)
Q8	8.997M	HC-49	(QT Quarztechnik GmbH, specification 20100J1M1045)
Q9	8.997M	HC-49	(QT Quarztechnik GmbH, specification 20100J1M1045)
Q10	8.997M	HC-49	(QT Quarztechnik GmbH, specification 20100J1M1045)
Q11	8.997M	HC-49	(QT Quarztechnik GmbH, specification 20100J1M1045)
Q12	8.997M	HC-49	(QT Quarztechnik GmbH, specification 20100J1M1045)
Q13	8.997M	HC-49	(QT Quarztechnik GmbH, specification 20100J1M1045)
Q14	8.997M	HC-49	(QT Quarztechnik GmbH, specification 20100J1M1045)

-Transformers-----

T1	T1-6T	X65	(Minicircuits, wideband 1:1 transformer with center tap)
T2	T1-6T	X65	(Minicircuits, wideband 1:1 transformer with center tap)
T3	T1-6T	X65	(Minicircuits, wideband 1:1 transformer with center tap)
T4	1:4	BN43-2402	(Binocular mix 43 bead, 7 bifilar turns, 0.5mm enameled) (or MCL ADTT4-1, T4-1 etc)

-Relays-----

RE1	IM06GR	IM06GR-2	(Tyco Electronics, Axicom, Signal Relay, DPDT, 12V)
RE2	IM06GR	IM06GR-2	(Tyco Electronics, Axicom, Signal Relay, DPDT, 12V)
RE3	IM06GR	IM06GR-2	(Tyco Electronics, Axicom, Signal Relay, DPDT, 12V)
RE4	IM06GR	IM06GR-2	(Tyco Electronics, Axicom, Signal Relay, DPDT, 12V)

-Connectors-----

J1	IF OUT	SMA	(Card edge SMA female connector)
J2	LO IN	SMA	(Card edge SMA female connector)
J3	RF IN	SMA	(Card edge SMA female connector)
J4	pin-header	2X02	(2x2 pin header)
J6	I2C-HEADER	ML10L	(10 pin male flatcable connector)
X1	MSTBA	MSTBA 2.5/3-G-5.08	(conn header rt ang 3pos 5.08mm, PhoenixContact 1757255)
X1	MSTBA	MSTB 2.5/3-ST-5.08	(conn term block plug 3pos 5.08mm, PhoenixContact 1757022)

PA3AKE 11/02/2011

FRONTEND Rev_B

