

Prepared (also subject responsible if other)		No.		
EAB/RTL/I Palle Zetterstrand		B5KAKRC161028-4 Uen		
Approved	Checked	Date	Rev	Reference
EAB/RTL/I (P. Zetterstrand)		2004-12-08	A	

EXHIBIT 10 Components - Tune Up

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1 2.1033 (c) (10) Function of Active Circuit Devices

1.1 Printed Board RAB 1900 ROA 117 5750/1

1.1.1 Function Block RX Frontend, ROZ 104 348/4

ROZ 104 348/4, Rev. L

Pos	Prod name/Func des	Product number
D5100	MICROCIRCUIT/74'04 HC1G SSOP5-P 1x INVERTER	RYT 326 6004/C
D5102	MICROCIRCUIT/74'595 HCT TSSOP16 8B S-IN S/P	RYT 310 6031/2C
D5103	MICROCIRCUIT/74'595 HCT TSSOP16 8B S-IN S/P	RYT 310 6031/2C
D5104	MICROCIRCUIT/74'595 HCT TSSOP16 8B S-IN S/P	RYT 310 6031/2C
L5100	INDUCTOR/22NH 5% 0.7A 0603	REG 704 1122/22
L5101	INDUCTOR/22NH 5% 0.7A 0603	REG 704 1122/22
L5102	INDUCTOR/3.3NH +/-0.2NH 0603	REG 704 0511/33
L5103	INDUCTOR/22NH 5% 0.7A 0603	REG 704 1122/22
L5104	INDUCTOR/3.3NH +/-0.2NH 0603	REG 704 0511/33
L5105	INDUCTOR/22NH 5% 0.7A 0603	REG 704 1122/22
L5106	INDUCTOR/3.3NH +/-0.2NH 0603	REG 704 0511/33
L5108	INDUCTOR/3.3NH +/-0.2NH 0603	REG 704 0511/33
L5109	INDUCTOR/22NH 5% 0.7A 0603	REG 704 1122/22
L5110	INDUCTOR/22NH 5% 0.7A 0603	REG 704 1122/22
L5111	INDUCTOR/3.3NH +/-0.2NH 0603	REG 704 0511/33
L5112	INDUCTOR/22NH 5% 0.7A 0603	REG 704 1122/22
L5113	INDUCTOR/22NH 5% 0.7A 0603	REG 704 1122/22
L5114	INDUCTOR/3.3NH +/-0.2NH 0603	REG 704 0511/33
L5118	INDUCTOR/3.3NH +/-0.2NH 0603	REG 704 0511/33
L5119	INDUCTOR/3.3NH +/-0.2NH 0603	REG 704 0511/33
N5100	MICROCIRCUIT/RF Amplifier LNA 0.1-3GHz 17.8	RYT 101 6539/1
N5101	DIRECTIONAL COUPLER/PD18-73 Y010	UND 106 039/1
N5103	DIRECTIONAL COUPLER/PD18-73 Y010	UND 106 039/1
N5104	DIRECTIONAL COUPLER/PD18-73 Y010	UND 106 039/1
N5105	DIRECTIONAL COUPLER/PD18-73 Y010	UND 106 039/1
N5106	MICROCIRCUIT/RF Amplifier LNA 0.1-3GHz 17.8	RYT 101 6539/1
N5107	MICROCIRCUIT/Switch. AS186-302 MSOP-8	RYT 101 6438/1
N5108	MICROCIRCUIT/REG LIN+ 5.0V 150mA 0.165V	RYT 113 6156/4
N5109	MICROCIRCUIT/REG LIN+ 5.0V 150mA 0.165V	RYT 113 6156/4
N5110	MICROCIRCUIT/COMP 2.7V R/R OPEN DRAIN	RYT 101 6326/1
N5111	MICROCIRCUIT/COMP 2.7V R/R OPEN DRAIN	RYT 101 6326/1
N5112	MICROCIRCUIT/COMP 2.7V R/R OPEN DRAIN	RYT 101 6326/1
N5113	MICROCIRCUIT/COMP 2.7V R/R OPEN DRAIN	RYT 101 6326/1
N5114	MICROCIRCUIT/RF Amplifier LNA 0.1-3GHz 17.8	RYT 101 6539/1
N5115	MICROCIRCUIT/RF Amplifier LNA 0.1-3GHz 17.8	RYT 101 6539/1
N5116	MICROCIRCUIT/COMP 2.7V R/R OPEN DRAIN	RYT 101 6326/1

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N5117	MICROCIRCUIT/COMP 2.7V R/R OPEN DRAIN	RYT 101 6326/1
N5118	MICROCIRCUIT/COMP 2.7V R/R OPEN DRAIN	RYT 101 6326/1
N5119	MICROCIRCUIT/COMP 2.7V R/R OPEN DRAIN	RYT 101 6326/1
N5120	MICROCIRCUIT/REG LIN+ 5.0V 150mA 0.165V	RYT 113 6156/4
N5121	MICROCIRCUIT/REG LIN+ 5.0V 150mA 0.165V	RYT 113 6156/4
N5122	MICROCIRCUIT/RF Amplifier LNA 0.1-3GHz 17.8	RYT 101 6539/1
N5123	MICROCIRCUIT/RF Amplifier LNA 0.1-3GHz 17.8	RYT 101 6539/1
N5124	MICROCIRCUIT/RF Amplifier LNA 0.1-3GHz 17.8	RYT 101 6539/1
N5125	MICROCIRCUIT/RF Amplifier LNA 0.1-3GHz 17.8	RYT 101 6539/1
N5126	MICROCIRCUIT/attenuator AA106-86	RYT 115 6032/1
N5127	MICROCIRCUIT/attenuator AA106-86	RYT 115 6032/1
N5128	MICROCIRCUIT/attenuator AA106-86	RYT 115 6032/1
N5129	MICROCIRCUIT/attenuator AA106-86	RYT 115 6032/1
N5130	MICROCIRCUIT/Switch. AS186-302 MSOP-8	RYT 101 6438/1
X3106	COAXIAL CONNECTOR/MCX;fm;50ohm;str.;SMD;	RNT 403 090/1
X3107	COAXIAL CONNECTOR/MCX;fm;50ohm;str.;SMD;	RNT 403 090/1
X3108	COAXIAL CONNECTOR/SMP;m;50ohm;str.;SMC;	RPT 408 1012/01
X3109	COAXIAL CONNECTOR/SMP;m;50ohm;str.;SMC;	RPT 408 1012/01

1.1.2**Function Block RX0, ROZ 104 382/4**

ROZ 104 382/4, Rev G

Pos	Prod name/Func des	Product number
L6200	INDUCTOR/560nH 10% 0603 multilayer	REG 704 493/56
L6201	INDUCTOR/560nH 10% 0603 multilayer	REG 704 493/56
L6203	INDUCTOR/470nH 5% 0805 0.25A	REG 724 5253/47
L6205	INDUCTOR/470nH 5% 0805 0.25A	REG 724 5253/47
L6207	INDUCTOR/470nH 5% 0805 0.25A	REG 724 5253/47
L6208	INDUCTOR/470nH 5% 0805 0.25A	REG 724 5253/47
L6211	INDUCTOR/15nH 5% 0603 multilayer	REG 704 9542/15
L6212	INDUCTOR/15nH 5% 0603 multilayer	REG 704 9542/15
L6213	INDUCTOR/15nH 5% 0603 multilayer	REG 704 9542/15
L6214	INDUCTOR/15nH 5% 0603 multilayer	REG 704 9542/15
L6215	INDUCTOR/10nH 5% 0603 multilayer	REG 704 9542/1
L6216	INDUCTOR/10nH 5% 0603 multilayer	REG 704 9542/1
L6217	INDUCTOR/5.6NH +/-0.2NH 0603	REG 704 0511/56
L6218	INDUCTOR/5.6NH +/-0.2NH 0603	REG 704 0511/56
L6300	INDUCTOR/15nH 2% 0805 0.6A	REG 724 5252/15G
L6301	INDUCTOR/15nH 2% 0805 0.6A	REG 724 5252/15G
L6302	INDUCTOR/27nH 5% 0603 multilayer	REG 704 9542/27
L6303	INDUCTOR/33nH 5% 0603 multilayer	REG 704 9542/33
L6306	INDUCTOR/33nH 5% 0603 multilayer	REG 704 9542/33
L6307	INDUCTOR/27nH 5% 0603 multilayer	REG 704 9542/27
L6309	INDUCTOR/33nH 5% 0603 multilayer	REG 704 9542/33
L6310	INDUCTOR/27nH 5% 0603 multilayer	REG 704 9542/27
L6313	INDUCTOR/27nH 5% 0603 multilayer	REG 704 9542/27
L6314	INDUCTOR/33nH 5% 0603 multilayer	REG 704 9542/33
L6315	INDUCTOR/820nH 5% 1008 0.4A	REG 724 5263/82

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N6200	MICROCIRCUIT/microsynth (RX 1900)	RYT 902 6046/1
N6201	MICROCIRCUIT/microsynth (RX 1900)	RYT 902 6046/1
N6202	MICROCIRCUIT/TEMP SENSOR, SOT-23, LM50C	RYT 124 6009/C
N6203	MICROCIRCUIT/Receiver front end mixer 1710-	RYT 102 6122/1
N6204	MICROCIRCUIT/REG LIN+ 5.0V 500mA +/-1%	RYT 113 6303/2
N6206	MICROCIRCUIT/REG LIN+ 3.3V 150mA 0.165V	RYT 113 6156/6
N6300	MICROCIRCUIT/REG LIN+ 3.3V 300mA 0.155V	RYT 113 6238/2
N6301	MICROCIRCUIT/REG LIN+ 5.0V 150mA 0.165V	RYT 113 6156/4
N6400	MICROCIRCUIT/REG LIN+ 5.0V 150mA 0.165V	RYT 113 6156/4
N6401	MICROCIRCUIT/REG LIN+ 5.0V 150mA 0.165V	RYT 113 6156/4
V6200	DIODE/SWI x2 70V 200mA SOT23 serial	RKZ 123 03/1
V6300	DIODE/VAR 15V 15-6pF 6pF@10V 1-1E1A	RKZ 323 610/1
V6301	DIODE/VAR 15V 15-6pF 6pF@10V 1-1E1A	RKZ 323 610/1
X6300	FILTER/201MHz 160kHz BP 15x6.5mm SAW	RTN 201 851/03
X6301	FILTER/201MHz 160kHz BP 15x6.5mm SAW	RTN 201 851/03
Z6200	FILTER/1880MHz 60MHz BP 7x8mm	RTN 202 709/02
Z6202	FILTER/1880MHz 60MHz BP 7x8mm	RTN 202 709/02
Z6300	PROD. ADAPT. CIRCUIT/ASIC VERDI	ROP 101 609
Z6301	PROD. ADAPT. CIRCUIT/ASIC QIM	ROP 101 1115/C
Z6400	MICROCIRCUIT/DELTA-SIGMA_MODULATOR QFP48	RYT 120 6061/2
Z6401	MICROCIRCUIT/DELTA-SIGMA_MODULATOR QFP48	RYT 120 6061/2
Z6402	MICROCIRCUIT/DELTA-SIGMA_MODULATOR QFP48	RYT 120 6061/2
Z6403	MICROCIRCUIT/DELTA-SIGMA_MODULATOR QFP48	RYT 120 6061/2

1.1.3**Function Block RX1, ROZ 104 383/4**

ROZ 104 383/4, Rev G

Pos	Prod name/Func des	Product number
L7200	INDUCTOR/560nH 10% 0603 multilayer	REG 704 493/56
L7201	INDUCTOR/560nH 10% 0603 multilayer	REG 704 493/56
L7203	INDUCTOR/15nH 5% 0603 multilayer	REG 704 9542/15
L7205	INDUCTOR/15nH 5% 0603 multilayer	REG 704 9542/15
L7207	INDUCTOR/15nH 5% 0603 multilayer	REG 704 9542/15
L7211	INDUCTOR/15nH 5% 0603 multilayer	REG 704 9542/15
L7212	INDUCTOR/470nH 5% 0805 0.25A	REG 724 5253/47
L7213	INDUCTOR/470nH 5% 0805 0.25A	REG 724 5253/47
L7214	INDUCTOR/470nH 5% 0805 0.25A	REG 724 5253/47
L7215	INDUCTOR/470nH 5% 0805 0.25A	REG 724 5253/47
L7216	INDUCTOR/10nH 5% 0603 multilayer	REG 704 9542/1
L7217	INDUCTOR/10nH 5% 0603 multilayer	REG 704 9542/1
L7218	INDUCTOR/5.6NH +/-0.2NH 0603	REG 704 0511/56
L7219	INDUCTOR/5.6NH +/-0.2NH 0603	REG 704 0511/56
L7300	INDUCTOR/15NH 2% 600MA SMD	REG 704 2152/15A
L7301	INDUCTOR/15NH 2% 600MA SMD	REG 704 2152/15A
L7302	INDUCTOR/27nH 5% 0603 multilayer	REG 704 9542/27
L7303	INDUCTOR/33nH 5% 0603 multilayer	REG 704 9542/33
L7306	INDUCTOR/33nH 5% 0603 multilayer	REG 704 9542/33

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L7307	INDUCTOR/27nH 5% 0603 multilayer	REG 704 9542/27
L7308	INDUCTOR/33nH 5% 0603 multilayer	REG 704 9542/33
L7309	INDUCTOR/27nH 5% 0603 multilayer	REG 704 9542/27
L7312	INDUCTOR/27nH 5% 0603 multilayer	REG 704 9542/27
L7313	INDUCTOR/33nH 5% 0603 multilayer	REG 704 9542/33
L7314	INDUCTOR/820nH 5% 1008 0.4A	REG 724 5263/82
N7200	MICROCIRCUIT/microsynth (RX 1900)	RYT 902 6046/1
N7201	MICROCIRCUIT/microsynth (RX 1900)	RYT 902 6046/1
N7202	MICROCIRCUIT/TEMP SENSOR, SOT-23, LM50C	RYT 124 6009/C
N7203	MICROCIRCUIT/Receiver front end mixer 1710-	RYT 102 6122/1
N7204	MICROCIRCUIT/REG LIN+ 5.0V 500mA +/-1%	RYT 113 6303/2
N7207	MICROCIRCUIT/REG LIN+ 3.3V 150mA 0.165V	RYT 113 6156/6
N7300	MICROCIRCUIT/REG LIN+ 3.3V 300mA 0.155V	RYT 113 6238/2
N7301	MICROCIRCUIT/REG LIN+ 5.0V 150mA 0.165V	RYT 113 6156/4
N7400	MICROCIRCUIT/REG LIN+ 5.0V 150mA 0.165V	RYT 113 6156/4
N7401	MICROCIRCUIT/REG LIN+ 5.0V 150mA 0.165V	RYT 113 6156/4
V7200	DIODE/SWI x2 70V 200mA SOT23 serial	RKZ 123 03/1
V7300	DIODE/VAR 15V 15-6pF 6pF@10V 1-1E1A	RKZ 323 610/1
V7301	DIODE/VAR 15V 15-6pF 6pF@10V 1-1E1A	RKZ 323 610/1
X7300	FILTER/201MHz 160kHz BP 15x6.5mm SAW	RTN 201 851/03
X7301	FILTER/201MHz 160kHz BP 15x6.5mm SAW	RTN 201 851/03
Z7200	FILTER/1880MHz 60MHz BP 7x8mm	RTN 202 709/02
Z7202	FILTER/1880MHz 60MHz BP 7x8mm	RTN 202 709/02
Z7300	PROD. ADAPT. CIRCUIT/ASIC QIM	ROP 101 1115/C
Z7301	PROD. ADAPT. CIRCUIT/ASIC VERDI	ROP 101 609
Z7400	MICROCIRCUIT/DELTA-SIGMA_MODULATOR QFP48	RYT 120 6061/2
Z7401	MICROCIRCUIT/DELTA-SIGMA_MODULATOR QFP48	RYT 120 6061/2
Z7402	MICROCIRCUIT/DELTA-SIGMA_MODULATOR QFP48	RYT 120 6061/2
Z7403	MICROCIRCUIT/DELTA-SIGMA_MODULATOR QFP48	RYT 120 6061/2

1.1.4 Function Block Digital, ROZ 104 361/1

ROZ 104 361/1, Rev C

Pos	Prod name/Func des	Product number
D2203	MICROCIRCUIT/74'08 LVC,Z1G SSOP5-P-A 1x 2-I	RYT 326 6008/42C
D3200	MICROCIRCUIT/74'244 LVC TSSOP 8x BUFFER NON	RYT 331 0244/3C
D3203	MICROCIRCUIT/82B715 I2C-BUS EXPANDER	RYT 125 6011/C
D3300	MICROCIRCUIT/74'244 LVC TSSOP 8x BUFFER NON	RYT 331 0244/3C
D3302	MICROCIRCUIT/RS485/422 TRANSCEIVER SO8/MAX3	RYT 109 165/C
D4202	MICROCIRCUIT/74'244 LVC TSSOP 8x BUFFER NON	RYT 331 0244/3C
N1100	MICROCIRCUIT/REG LIN+ 5.0V 150mA 0.165V	RYT 113 6156/4
N1101	MICROCIRCUIT/REG LIN+ 3.3V 150mA 0.575V	RYT 113 6110/12
N2200	MICROCIRCUIT/Volt Reg LDO 1.5A W/Dual Inp V	RYT 113 161/C
N3200	MICROCIRCUIT/IC, DIGITAL THERMOMETER AND TH	RYT 124 6006/C
N4200	MICROCIRCUIT/Volt Reg LDO 1.5A W/Dual Inp V	RYT 113 161/C

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X3100	CONNECTOR/24 pos Right angle SMC without	RPV 403 199/024
X3101	CONNECTOR/DAUGHTERBOARD 24pos 2.0 angled	RNV 403 257/001
X3102	CONNECTOR/DAUGHTERBOARD 24pos 2.0 angled	RNV 403 257/001
X3103	CONNECTOR/DAUGHTERBOARD 24pos 2.0 angled	RNV 403 257/001
X3104	CONNECTOR/DAUGHTERBOARD 24pos 2.0 angled	RNV 403 257/001
X3105	CONNECTOR/DAUGHTERBOARD 24pos 2.0 angled	RNV 403 257/001
Z1100	MICROCIRCUIT/74'04 ACT TSSOP14 6x INVERTER	RYT 317 6004/22C
Z1102	MICROCIRCUIT/74'04 LVC SSOP14 6x INVERTER	RYT 331 0004/C
Z1103	MICROCIRCUIT/74'04 ACT TSSOP14 6x INVERTER	RYT 317 6004/22C
Z1104	MICROCIRCUIT/74'04 ACT TSSOP14 6x INVERTER	RYT 317 6004/22C
Z1109	MICROCIRCUIT/PLL SSOP16 MB15E07 PFV-ER	RYT 102 6057/1
Z1111	MICROCIRCUIT/74'74 AC SOP14 2xD FLIP-FLOP	RYT 318 0074/C
Z1112	OSCILLATOR/VCXO 26.000MHZ	RTL 202 610/02
Z2200	MICROCIRCUIT/FLASH SPI 128K8 20MHz 2.7V I	RYT 118 6154/2
Z2300	PROD. ADAPT. CIRCUIT/TARAC_U+	ROP 101 1128/2
Z4200	MICROCIRCUIT/FLASH SPI 128K8 20MHz 2.7V I	RYT 118 6154/2
Z4300	PROD. ADAPT. CIRCUIT/TARAC_U+	ROP 101 1128/2

1.1.5**Function Block TXPA0, ROZ 104 349/4**

ROZ 104 349/4, Rev AC

Pos	Prod name/Func des	Product number
D8300	MICROCIRCUIT/74'04 HC1G SSOP5-P 1x INVERTER	RYT 326 6004/C
D8301	MICROCIRCUIT/74'04 HC1G SSOP5-P 1x INVERTER	RYT 326 6004/C
D8700	MICROCIRCUIT/OPAMP x2 +/-15V 4.5MHz	RYT 101 6076/1C
D8802	MICROCIRCUIT/74'4051 HCT SSOP16 8-CH ANALOG	RYT 310 6017/C
D8803	MICROCIRCUIT/74'595 HCT TSSOP16 8B S-IN S/P	RYT 310 6031/2C
D8804	MICROCIRCUIT/74'541 HCT TSSOP20 8x BUS BUFF	RYT 310 6023/2C
L8300	INDUCTOR/100NH 5% 0.4A 0603	REG 704 1123/1
L8302	INDUCTOR/22NH 5% 0.7A 0603	REG 704 1122/22
L8303	INDUCTOR/560nH 10% 0603 multilayer	REG 704 493/56
L8305	INDUCTOR/820nH 5% 1008 0.4A	REG 724 5263/82
L8306	INDUCTOR/22nH 2% 0805 0.5A	REG 724 5252/22G
L8309	INDUCTOR/100NH 5% 0.4A 0603	REG 704 1123/1
L8311	INDUCTOR/560nH 10% 0603 multilayer	REG 704 493/56
L8313	INDUCTOR/22nH 2% 0805 0.5A	REG 724 5252/22G
L8317	INDUCTOR/47nH 5% 0603 multilayer	REG 704 9542/47
L8318	INDUCTOR/47nH 5% 0603 multilayer	REG 704 9542/47
L8319	INDUCTOR/15nH 5% 0603 multilayer	REG 704 9542/15
L8320	INDUCTOR/15nH 5% 0603 multilayer	REG 704 9542/15
L8321	INDUCTOR/15nH 5% 0603 multilayer	REG 704 9542/15
L8322	INDUCTOR/15nH 5% 0603 multilayer	REG 704 9542/15
L8400	INDUCTOR/180nH 5% 0805 0.4A	REG 724 5253/18
L8401	INDUCTOR/22NH 5% 0.7A 0603	REG 704 1122/22
L8600	INDUCTOR/180nH 5% 0805 0.4A	REG 724 5253/18
L8601	INDUCTOR/18NH 5% 0.7A 0603	REG 704 1122/18
L8602	INDUCTOR/22NH 5% 0.7A 0603	REG 704 1122/22

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L8603	INDUCTOR/180nH 5% 0805 0.4A	REG 724 5253/18
N8300	MICROCIRCUIT/RF Amplifier. DC-2.8 GHz amp	RYT 101 6476/1
N8301	PROD. ADAPT. CIRCUIT/ASIC FINJA	ROP 101 5005
N8302	PROD. ADAPT. CIRCUIT/ASIC PENNY	ROP 101 612/2
N8304	MICROCIRCUIT/REG LIN+ 3.3V 150mA 0.165V	RYT 113 6156/6
N8305	MICROCIRCUIT/REG LIN+ 3.3V 300mA 0.155V	RYT 113 6238/2
N8306	MICROCIRCUIT/REG LIN+ 3.3V 300mA 0.155V	RYT 113 6238/2
N8307	MICROCIRCUIT/Switch. AS186-302 MSOP-8	RYT 101 6438/1
N8308	MICROCIRCUIT/Switch. AS186-302 MSOP-8	RYT 101 6438/1
N8403	FILTER/1960MHz 60MHz BP 6.6x4.4mm	RTN 202 1021/01
N8600	MICROCIRCUIT/5 bit attenuator 0.5-2.5GHz	RYT 115 6033/1
N8601	MICROCIRCUIT/5 bit attenuator 0.5-2.5GHz	RYT 115 6033/1
N8602	MICROCIRCUIT/RF Amplifier 400-2500MHz 0.5W	RYT 101 6537/2
N8603	FILTER/1960MHz 60 MHz BP 8x4.3mm (Plu	RTN 202 841/02
N8604	MICROCIRCUIT/74'595 HCT TSSOP16 8B S-IN S/P	RYT 310 6031/2C
N8605	MICROCIRCUIT/74'595 HCT TSSOP16 8B S-IN S/P	RYT 310 6031/2C
N8701	DIRECTIONAL COUPLER/1500-2200MHz 20dB 100W 14x9mm	UND 106 049/1
N8703	MICROCIRCUIT/OPAMP x2 2.7V R/R 5.5MHz	RYT 101 6331/2
N8705	MICROCIRCUIT/TEMP. SENSOR FAHERNHEIT	RYT 124 6015/1
N8900	MICROCIRCUIT/IC, H-Volt Hot-Swap Cont Auto-	RYT 126 6016/02
N8901	MICROCIRCUIT/REG LIN+ 3.3V 300mA 0.155V	RYT 113 6238/2
T8300	BALUN/1900MHz 3216 200ohm 1W	REG 735 58/16
T8301	BALUN/1800MHz 3216 200ohm 1W	REG 735 58/9
T8303	BALUN/1900MHz 3216 200ohm 1W	REG 735 58/16
T8304	BALUN/1800MHz 3216 200ohm 1W	REG 735 58/9
V8300	DIODE/VAR 15V 15-6pF 6pF@10V 1-1E1A	RKZ 323 610/1
V8301	DIODE/VAR 15V 15-6pF 6pF@10V 1-1E1A	RKZ 323 610/1
V8701	DIODE/RF SCH x2 20V 5mA SOT363 uncon	RKZ 323 6059/1
V8900	TRANSISTOR/POWER MOSFET N-CHANNEL	RYN 123 270
V8901	ZENERDIODE/ZEN 15.0V 5% 0.2W SOT23	RKZ 223 01/20
X3110	COAXIAL CONNECTOR/SMP;m;50ohm;str.;SMD;	RPT 408 1011/01
Z8201	MICROCIRCUIT/REG LIN+ 5.0V 150mA 0.165V	RYT 113 6156/4
Z8202	PROD. ADAPT. CIRCUIT/ASIC SPIRA	ROP 101 616/C
Z8300	FILTER/1880MHz 60MHz BP 3x3mm SAW	RTN 201 404/01
Z8301	MICROCIRCUIT/microsynth (TX 1900)	RYT 902 6047/1
Z8302	MICROCIRCUIT/microsynth (TX 1900)	RYT 902 6047/1
Z8400	AMPLIFIER/RF Amplifier. SGA-6389 SOT	RYT 101 6414/1
Z8402	MICROCIRCUIT/74'541 HCT TSSOP20 8x BUS BUFF	RYT 310 6023/2C
Z8600	MICROCIRCUIT/RF Amplifier. SGA-6589, SiGe	RYT 101 6470/1

1.1.6**Function Block TXPA1, ROZ 104 350/4**

ROZ 104 350/4, Rev AE

Pos	Prod name/Func des	Product number
D9300	MICROCIRCUIT/74'04 HC1G SSOP5-P 1x INVERTER	RYT 326 6004/C
D9301	MICROCIRCUIT/74'04 HC1G SSOP5-P 1x INVERTER	RYT 326 6004/C
D9700	MICROCIRCUIT/OPAMP x2 +/-15V 4.5MHz	RYT 101 6076/1C

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D9802	MICROCIRCUIT/74'4051 HCT SSOP16 8-CH ANALOG	RYT 310 6017/C
D9803	MICROCIRCUIT/74'595 HCT TSSOP16 8B S-IN S/P	RYT 310 6031/2C
D9804	MICROCIRCUIT/74'541 HCT TSSOP20 8x BUS BUFF	RYT 310 6023/2C
L9300	INDUCTOR/100NH 5% 0.4A 0603	REG 704 1123/1
L9302	INDUCTOR/22NH 5% 0.7A 0603	REG 704 1122/22
L9303	INDUCTOR/560nH 10% 0603 multilayer	REG 704 493/56
L9304	INDUCTOR/820nH 5% 1008 0.4A	REG 724 5263/82
L9306	INDUCTOR/22nH 2% 0805 0.5A	REG 724 5252/22G
L9307	INDUCTOR/22nH 2% 0805 0.5A	REG 724 5252/22G
L9309	INDUCTOR/47nH 5% 0603 multilayer	REG 704 9542/47
L9310	INDUCTOR/100NH 5% 0.4A 0603	REG 704 1123/1
L9313	INDUCTOR/560nH 10% 0603 multilayer	REG 704 493/56
L9316	INDUCTOR/47nH 5% 0603 multilayer	REG 704 9542/47
L9317	INDUCTOR/15nH 5% 0603 multilayer	REG 704 9542/15
L9318	INDUCTOR/15nH 5% 0603 multilayer	REG 704 9542/15
L9319	INDUCTOR/15nH 5% 0603 multilayer	REG 704 9542/15
L9320	INDUCTOR/15nH 5% 0603 multilayer	REG 704 9542/15
L9400	INDUCTOR/180nH 5% 0805 0.4A	REG 724 5253/18
L9401	INDUCTOR/22NH 5% 0.7A 0603	REG 704 1122/22
L9600	INDUCTOR/180nH 5% 0805 0.4A	REG 724 5253/18
L9601	INDUCTOR/18NH 5% 0.7A 0603	REG 704 1122/18
L9602	INDUCTOR/180nH 5% 0805 0.4A	REG 724 5253/18
L9603	INDUCTOR/22NH 5% 0.7A 0603	REG 704 1122/22
N9300	MICROCIRCUIT/RF Amplifier. DC-2.8 GHz amp	RYT 101 6476/1
N9301	PROD. ADAPT. CIRCUIT/ASIC FINJA	ROP 101 5005
N9302	PROD. ADAPT. CIRCUIT/ASIC PENNY	ROP 101 612/2
N9304	MICROCIRCUIT/REG LIN+ 3.3V 150mA 0.165V	RYT 113 6156/6
N9305	MICROCIRCUIT/REG LIN+ 3.3V 300mA 0.155V	RYT 113 6238/2
N9306	MICROCIRCUIT/REG LIN+ 3.3V 300mA 0.155V	RYT 113 6238/2
N9307	MICROCIRCUIT/Switch. AS186-302 MSOP-8	RYT 101 6438/1
N9308	MICROCIRCUIT/Switch. AS186-302 MSOP-8	RYT 101 6438/1
N9403	FILTER/1960MHz 60MHz BP 6.6x4.4mm	RTN 202 1021/01
N9600	MICROCIRCUIT/5 bit attenuator 0.5-2.5GHz	RYT 115 6033/1
N9601	MICROCIRCUIT/5 bit attenuator 0.5-2.5GHz	RYT 115 6033/1
N9602	MICROCIRCUIT/RF Amplifier 400-2500MHz 0.5W	RYT 101 6537/2
N9603	FILTER/1960MHz 60 MHz BP 8x4.3mm (Plu	RTN 202 841/02
N9604	MICROCIRCUIT/74'595 HCT TSSOP16 8B S-IN S/P	RYT 310 6031/2C
N9605	MICROCIRCUIT/74'595 HCT TSSOP16 8B S-IN S/P	RYT 310 6031/2C
N9701	DIRECTIONAL COUPLER/1500-2200MHz 20dB 100W 14x9mm	UND 106 049/1
N9703	MICROCIRCUIT/TEMP. SENSOR FAHERNHEIT	RYT 124 6015/1
N9704	MICROCIRCUIT/OPAMP x2 2.7V R/R 5.5MHz	RYT 101 6331/2
N9900	MICROCIRCUIT/IC, H-Volt Hot-Swap Cont Auto-	RYT 126 6016/02
N9901	MICROCIRCUIT/REG LIN+ 3.3V 300mA 0.155V	RYT 113 6238/2
T9300	BALUN/1900MHz 3216 200ohm 1W	REG 735 58/16
T9301	BALUN/1800MHz 3216 200ohm 1W	REG 735 58/9
T9303	BALUN/1900MHz 3216 200ohm 1W	REG 735 58/16
T9304	BALUN/1800MHz 3216 200ohm 1W	REG 735 58/9
V9300	DIODE/VAR 15V 15-6pF 6pF@10V 1-1E1A	RKZ 323 610/1
V9301	DIODE/VAR 15V 15-6pF 6pF@10V 1-1E1A	RKZ 323 610/1

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V9701	DIODE/RF SCH x2 20V 5mA SOT363 uncon	RKZ 323 6059/1
V9900	TRANSISTOR/POWER MOSFET N-CHANNEL	RYN 123 270
V9901	ZENERDIODE/ZEN 15.0V 5% 0.2W SOT23	RKZ 223 01/20
X3111	COAXIAL CONNECTOR/SMP;m;50ohm;str.;SMC;	RPT 408 1012/01
Z9200	PROD. ADAPT. CIRCUIT/ASIC SPIRA	ROP 101 616/C
Z9202	MICROCIRCUIT/REG LIN+ 5.0V 150mA 0.165V	RYT 113 6156/4
Z9300	FILTER/1880MHz 60MHz BP 3x3mm SAW	RTN 201 404/01
Z9301	MICROCIRCUIT/microsynth (TX 1900)	RYT 902 6047/1
Z9302	MICROCIRCUIT/microsynth (TX 1900)	RYT 902 6047/1
Z9400	AMPLIFIER/RF Amplifier. SGA-6389 SOT	RYT 101 6414/1
Z9402	MICROCIRCUIT/74'541 HCT TSSOP20 8x BUS BUFF	RYT 310 6023/2C
Z9600	MICROCIRCUIT/RF Amplifier. SGA-6589, SiGe	RYT 101 6470/1

1.2 Printed Board, DRB, ROA 117 4767/3

1.2.1 Function Block LEC, ROZ 104 120/2

ROZ 104 120/2, Rev E

Pos	Prod name/Func des	Product number
L4201	INDUCTOR/1.3uH 15.8A 3.30mOhm	REG 724 5084/13
L4202	INDUCTOR/2.2uH 5.3A 10.2mOhm	REG 735 9411/22
L4203	INDUCTOR/4.7uH 3.5A 22.2mOhm	REG 735 9411/47
L4204	INDUCTOR/2.2uH 5.3A 10.2mOhm	REG 735 9411/22
L4205	INDUCTOR/4.7uH 3.5A 22.2mOhm	REG 735 9411/47
L4206	INDUCTOR/DUAL WIND. INDUCTOR 10uH	REG 735 9409/101
L4207	INDUCTOR/1.5uH 20% 6.4A SMD13.0x9.4x5.5	REG 603 201/15
L4208	INDUCTOR/DUAL WIND. INDUCTOR 10uH	REG 735 9409/104A
V4201	DIODE/SWI SCH x2 30V 100mA SOT23 com	RKZ 123 601/3
V4202	DIODE/SWI SCH x2 30V 100mA SOT23 com	RKZ 123 601/3
V4203	DIODE/REC SCH 40V 1A SMA 0.55V(1A)	RKZ 323 488/04
V4204	RECTIFIER/REC SCH 30V 5.5A DPAK 0.46V	RKZ 323 6083/1
V4205	TRANSISTOR/NFET 28V 11A SO8 12mohm	RYN 123 490/2
V4206	TRANSISTOR/NFET 28V 11A SO8 12mohm	RYN 123 490/2
V4207	TRANSISTOR/NFETx2+SCH 30V 5A/7A/2A SO8 0	RYN 123 6029/1
V4208	TRANSISTOR/NFETx2+SCH 30V 5A/7A/2A SO8 0	RYN 123 6029/1
V4209	TRANSISTOR/NFETx2+SCH 30V 5A/7A/2A SO8 0	RYN 123 6029/1
V4210	DIODE/SWI SCH x2 30V 100mA SOT23 com	RKZ 123 601/4
V4211	TRANSISTOR/NFET/SCH 30V 8A/4A SO8 18mohm	RYN 123 6028/1
V4301	DIODE/SWI SCH x2 30V 100mA SOT23 com	RKZ 123 601/4
V4302	TRANSISTOR/NPN SS 45V 100mA SOT23 hFE>250	RYN 121 629/1
V4304	DIODE/SWI SCH x2 30V 100mA SOT23 com	RKZ 123 601/4
V4305	DIODE/SWI SCH x2 30V 100mA SOT23 com	RKZ 123 601/4
Z4201	MICROCIRCUIT/REG SW DUAL.CONTR 3V-7V +/-1%	RYT 113 6225/3
Z4202	MICROCIRCUIT/REG SW DUAL.CONTR 3V-7V +/-1%	RYT 113 6225/3
Z4203	MICROCIRCUIT/REG SW ADJ -VO 1.2MHz	RYT 113 6333/1
Z4204	MICROCIRCUIT/SUP.V x4 5V/3.3V/ADJ/-5V	RYT 113 6341/1
Z4205	MICROCIRCUIT/REF SHUNT 5.0V 0.2% 100ppm/C 1	RYT 113 481/10

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Z4206	MICROCIRCUIT/SUP.V x4 5V/3.3V/ADJ/-5V	RYT 113 6341/1
Z4207	MICROCIRCUIT/CURRENT MODE BOOST CONTR.	RYT 113 6365/1
Z4301	MICROCIRCUIT/COMP 2.7V R/R OPEN DRAIN	RYT 101 6326/1
Z4302	MICROCIRCUIT/Controller 8-BIT FLASH	RYT 123 6102/1
Z4303	MICROCIRCUIT/COMP 2.7V R/R OPEN DRAIN	RYT 101 6326/1
Z4304	MICROCIRCUIT/COMP 2.7V R/R OPEN DRAIN	RYT 101 6326/1
Z4305	MICROCIRCUIT/COMP 2.7V R/R OPEN DRAIN	RYT 101 6326/1
Z4306	MICROCIRCUIT/COMP 2.7V R/R OPEN DRAIN	RYT 101 6326/1
Z4307	MICROCIRCUIT/COMP 2.7V R/R OPEN DRAIN	RYT 101 6326/1
Z4308	MICROCIRCUIT/COMP 2.7V R/R OPEN DRAIN	RYT 101 6326/1

1.2.2**Function Block Digital, ROZ 104 232/2**

ROZ 104 232/2, Rev D

Pos	Prod name/Func des	Product number
L11001	FILTER/50ohm 1206 3A 0.025ohm Bead	REG 706 21/1
L13001	FILTER/50ohm 1206 3A 0.025ohm Bead	REG 706 21/1
L13002	FILTER/50ohm 1206 3A 0.025ohm Bead	REG 706 21/1
L14001	FILTER/50ohm 1206 3A 0.025ohm Bead	REG 706 21/1
L14002	FILTER/50ohm 1206 3A 0.025ohm Bead	REG 706 21/1
V11001	LIGHT EMITTING DIODE/LED red 0.5-1.3mcd(20mA) chip	RKZ 433 606/3
V11002	TRANSISTOR/NFET SS 50V 170mA SOT23 20ohm(RYN 123 661/1
V11003	TRANSISTOR/NFET SS 50V 170mA SOT23 20ohm(RYN 123 661/1
X3201	CONNECTOR/DAUGHTERBOARD 24pos 2 mm angle	RPV 403 251/001
X3202	CONNECTOR/DAUGHTERBOARD 24pos 2 mm angle	RPV 403 251/001
X3203	CONNECTOR/DAUGHTERBOARD 24pos 2 mm angle	RPV 403 251/001
X3204	CONNECTOR/DAUGHTERBOARD 24pos 2 mm angle	RPV 403 251/001
X3205	CONNECTOR/DAUGHTERBOARD 24pos 2 mm angle	RPV 403 251/001
X3206	CONNECTOR/30 pol.	RPV 403 262/001
X3207	CONNECTOR/30 pol.	RPV 403 262/001
X3208	CONNECTOR/PINSTRIP 2x25pos 1,27 SMD.SHRO	RPV 380 253/550
Z01001	MICROCIRCUIT/IC, DIGITAL THERMOMETER AND TH	RYT 124 6006/C
Z02001	MICROCIRCUIT/74'244 LVC SSOP20 8x BUFFER NO	RYT 331 0244/C
Z02002	MICROCIRCUIT/74'244 AHC/VHC TSSOP20 8x BUFF	RYT 335 6008/2C
Z05001	MICROCIRCUIT/74'244 LVC SSOP20 8x BUFFER NO	RYT 331 0244/C
Z05002	MICROCIRCUIT/74'244 AHC/VHC TSSOP20 8x BUFF	RYT 335 6008/2C
Z07001	MICROCIRCUIT/74'244 AHC/VHC TSSOP20 8x BUFF	RYT 335 6008/2C
Z07002	MICROCIRCUIT/74'244 AHC/VHC TSSOP20 8x BUFF	RYT 335 6008/2C
Z08001	MICROCIRCUIT/74'08 LVC,Z1G SSOP5-P-A 1x 2-I	RYT 326 6008/42C
Z09001	MICROCIRCUIT/74'244 AHC/VHC TSSOP20 8x BUFF	RYT 335 6008/2C
Z09002	MICROCIRCUIT/74'244 AHC/VHC TSSOP20 8x BUFF	RYT 335 6008/2C
Z09003	MICROCIRCUIT/74'08 LVC,Z1G SSOP5-P-A 1x 2-I	RYT 326 6008/42C
Z09004	MICROCIRCUIT/74'32 LVC,Z1G SSOP5-P-A 1x 2-I	RYT 326 6032/42C
Z11001	PROD. ADAPT. CIRCUIT/ASIC POWER GARP	ROP 101 1192/1
Z11002	MICROCIRCUIT/74'14 LVC TSSOP14 6x INVERT SC	RYT 331 0014/3C
Z11003	MICROCIRCUIT/74'244 AHC/VHC TSSOP20 8x BUFF	RYT 335 6008/2C
Z12001	MICROCIRCUIT/SDRAM 16M16 133MHz CL=3 100MHz	RYT 119 6142/5

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Z12002	MICROCIRCUIT/SDRAM 16M16 133MHz CL=3 100MHz	RYT 119 6142/5
Z12003	MICROCIRCUIT/FLASH TB 2M16 90NS 3.3V I	RYT 118 6152/6
Z12004	MICROCIRCUIT/FLASH 8M16 150NS 3.3V E	RYT 118 6153/1
Z13001	PROD. ADAPT. CIRCUIT/EDGE BASE BAND ASIC, EBBA	ROP 101 1189/1
Z13002	MICROCIRCUIT/SDRAM 16M16 133MHz CL=3 100MHz	RYT 119 6142/5
Z14001	PROD. ADAPT. CIRCUIT/EDGE BASE BAND ASIC, EBBA	ROP 101 1189/1
Z14002	MICROCIRCUIT/SDRAM 16M16 133MHz CL=3 100MHz	RYT 119 6142/5

2 2.1033(c)(9) Tune-Up Procedure

All the necessary adjustments will be set in the factory, and no adjustments are needed. The output power level is remotely controlled by the Base Station Controller (BSC). If the TRX (an RRU contains of two identical TRXes) is not able to maintain the requirements for power output, frequency stability, etc an alarm is sent to the BSC. On severe faults, the TRX will disable transmission.

3 2.1033(c)(9,10) Power Tune-Up – Power Limiting

The transmitter in each TRX contains three synthesized oscillators. One PLL gives a 160 MHz signal to the I/Q modulator. The two other generate a 1770 to 1830 MHz signal to the mixer where the modulated signal is converted to the transmit frequency. Two oscillators are needed in frequency hopping mode, one is retuning while the other is active. All three synthesized oscillators have a reference of 13 MHz generated in a central synthesized oscillator (PLL) of 26 MHz, which is downmixed by 2, in the LTU part of the RRU. This PLL frequency reference is locked to a 3.25 MHz clock which is extracted from the multiplexed Y-interface MY. MY is generated and distributed by the IXU (Interface & Switching Unit) to all RRU:s in the base station.

The frequency reference 13 MHz in the IXU is generated in a voltage controlled oscillator phase-locked to the incoming PCM-link frequency or as an option an incoming GPS-link frequency.