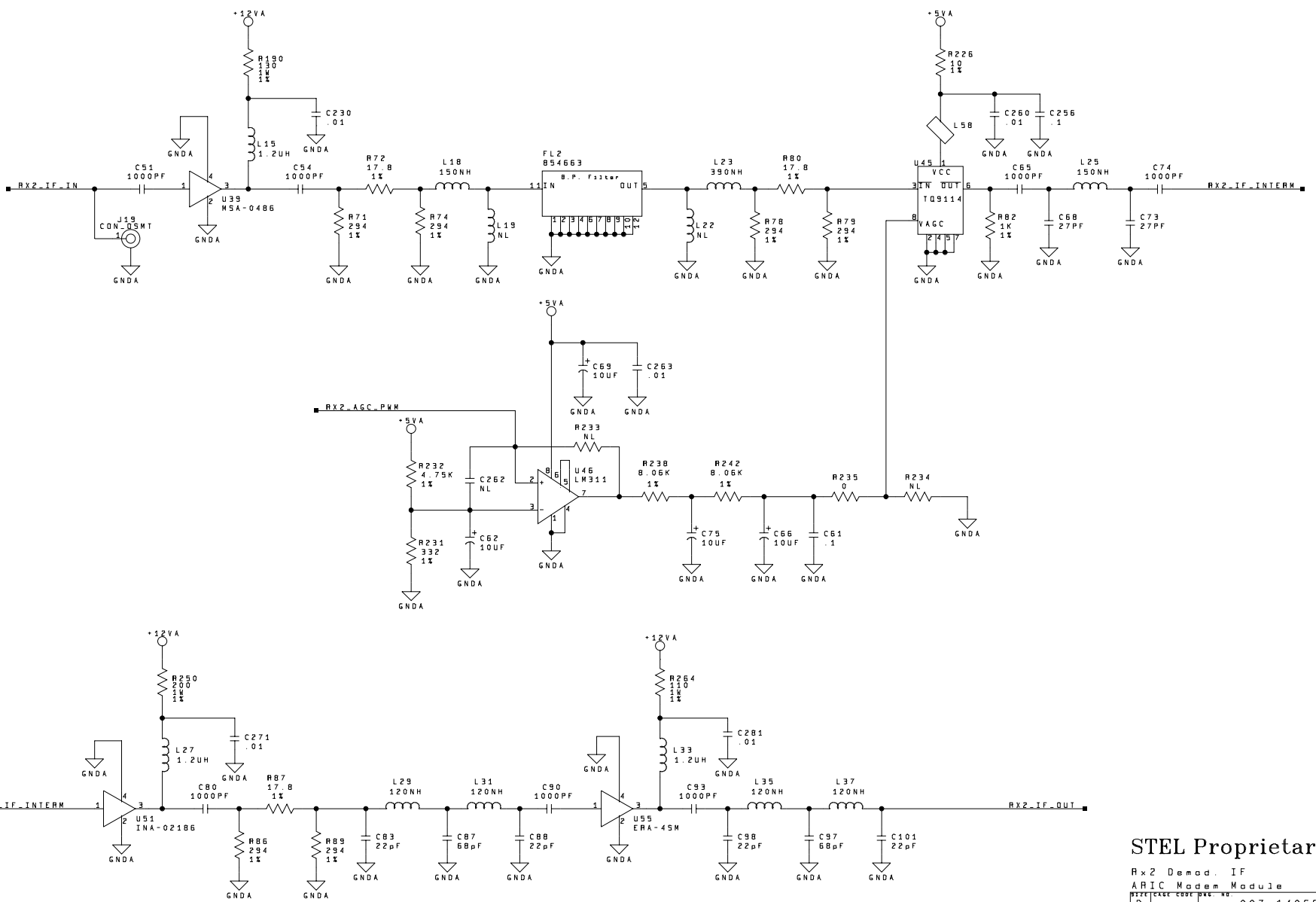


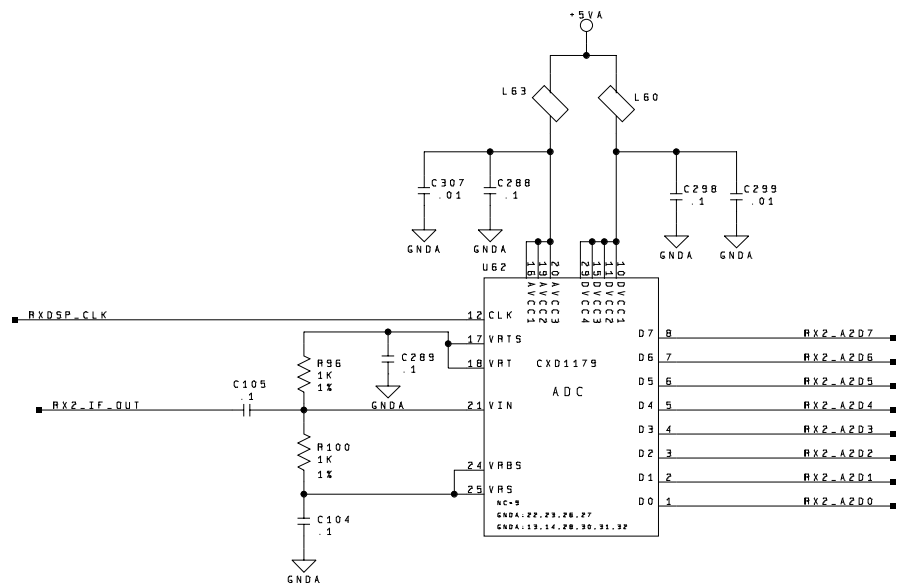
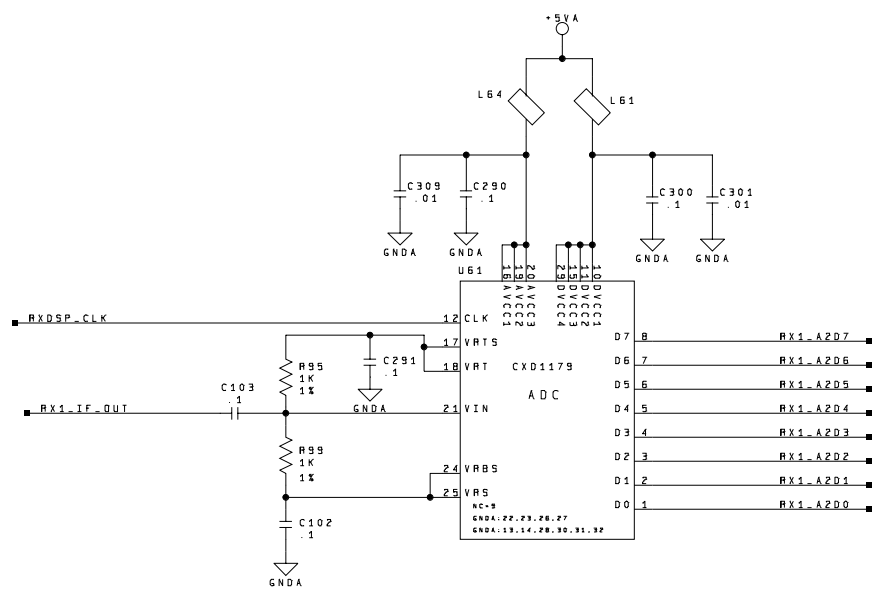
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Rx1 Demod. IF		REV
ARIC Modem Module		2.2
DATE	07-140691	11
REV	11-16-1998-15	21



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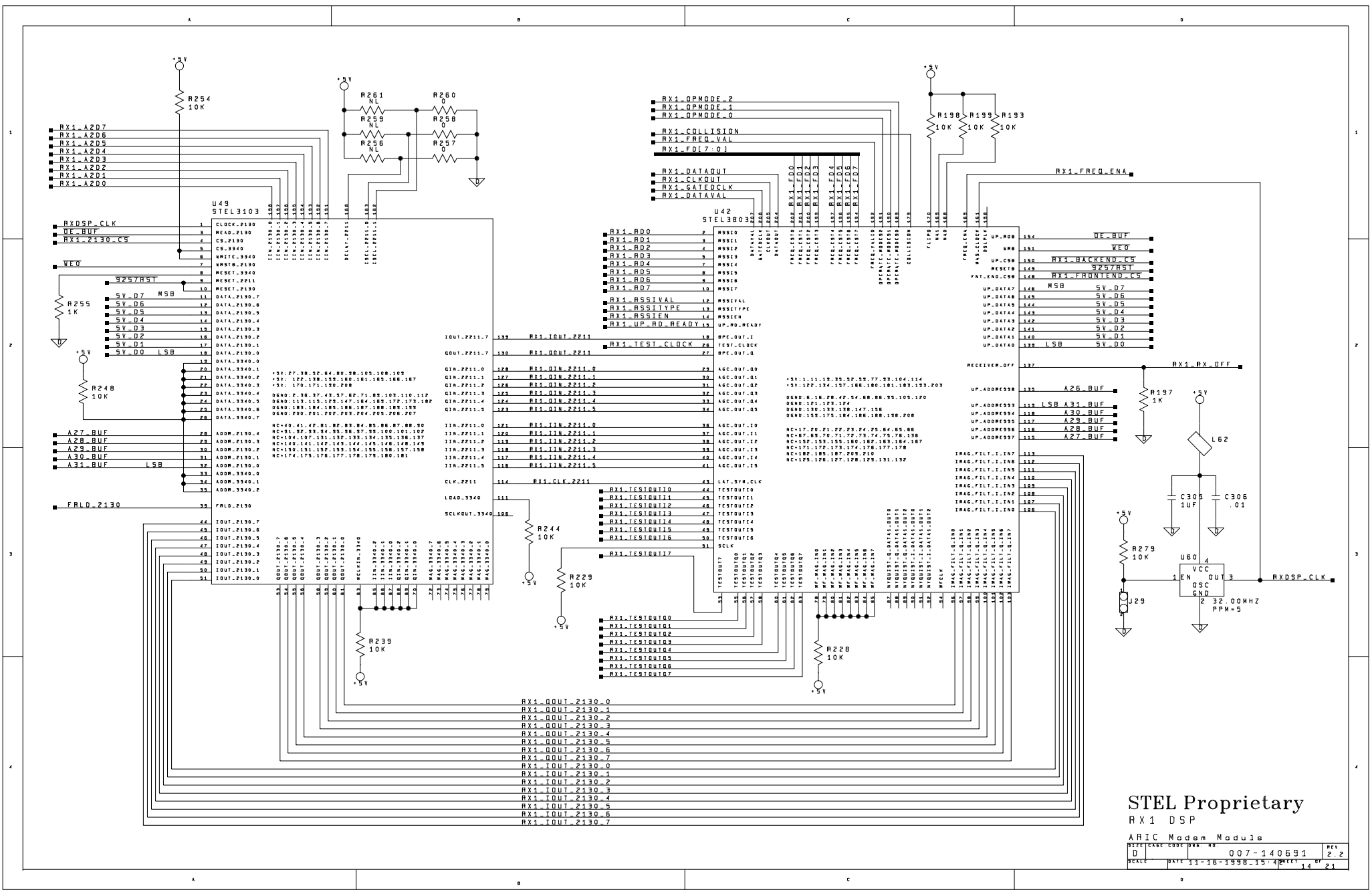
Rx2 Demod. IF		
ARIC Modem Module		
REV	DATE	REV
007-140691	11-16-1998 15:44	2.2
PAGE 12		OF 21



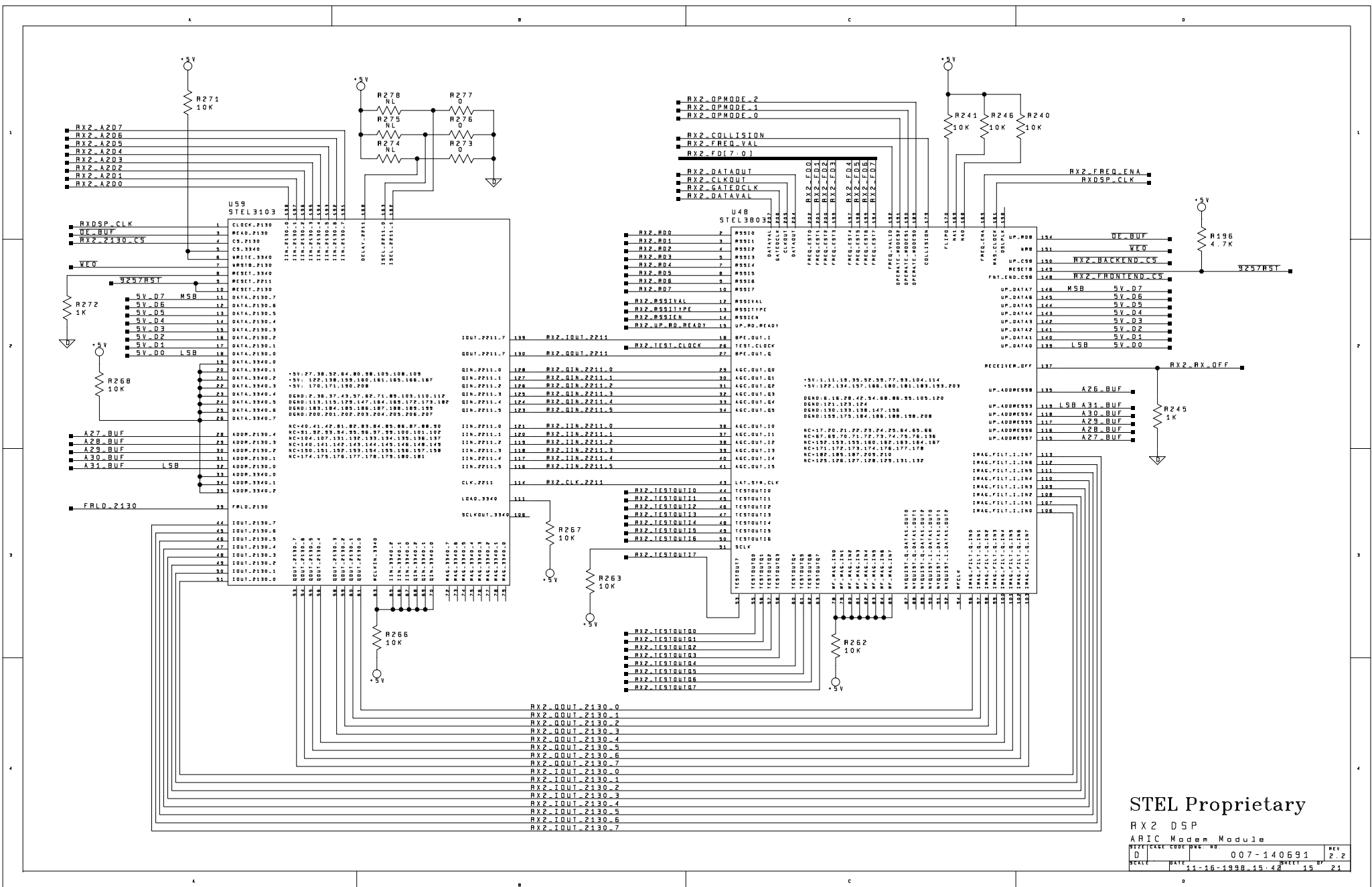
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RX ADCs

ARIC Modem Module			
REV	CODE	PKG	NO
D			07-140691
REV	DATE	11-16-1998-15	REV
			13 of 21



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 RX1 DSP
 ARIC Modem Module
 REVISION CODE PAK NO. 007-140691 REV 2.2
 DATE 11-16-1998 15:40:11 14 of 21



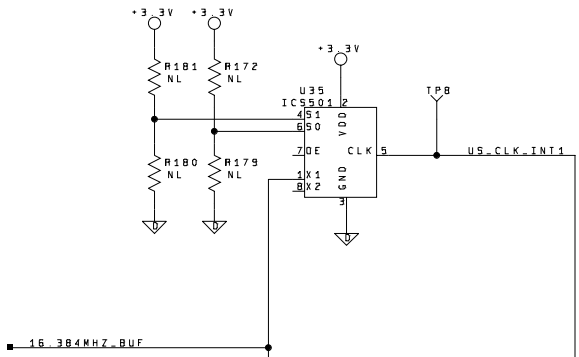
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RX2 DSP			
ARIC Modem Module			
REV	007-140691	REV	2.2
D		DATE	11-16-1998 15:42
FILE		SHEET	15 of 21

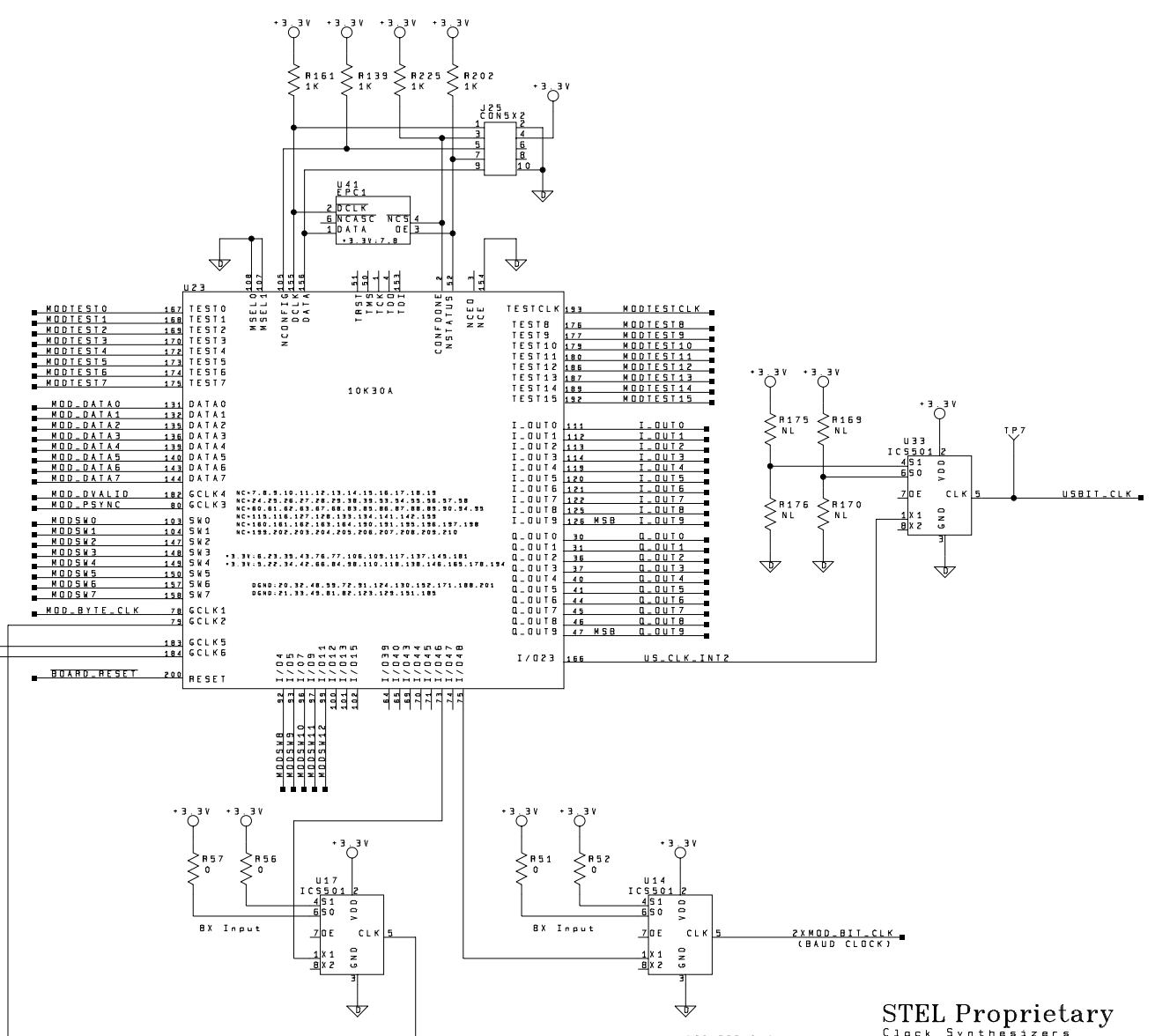
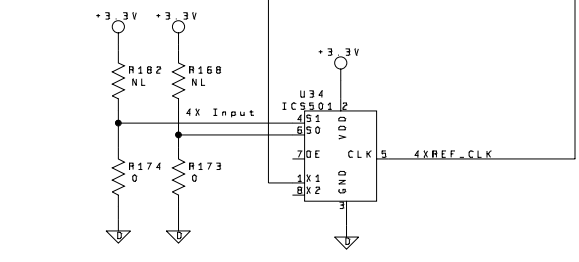
MOD SWITCH MAP

0:6 N
 7 SI
 8 19.44 or 16.384MHz
 9:11 Code Rate
 12 Load

Up Stream Clock Synthesizer



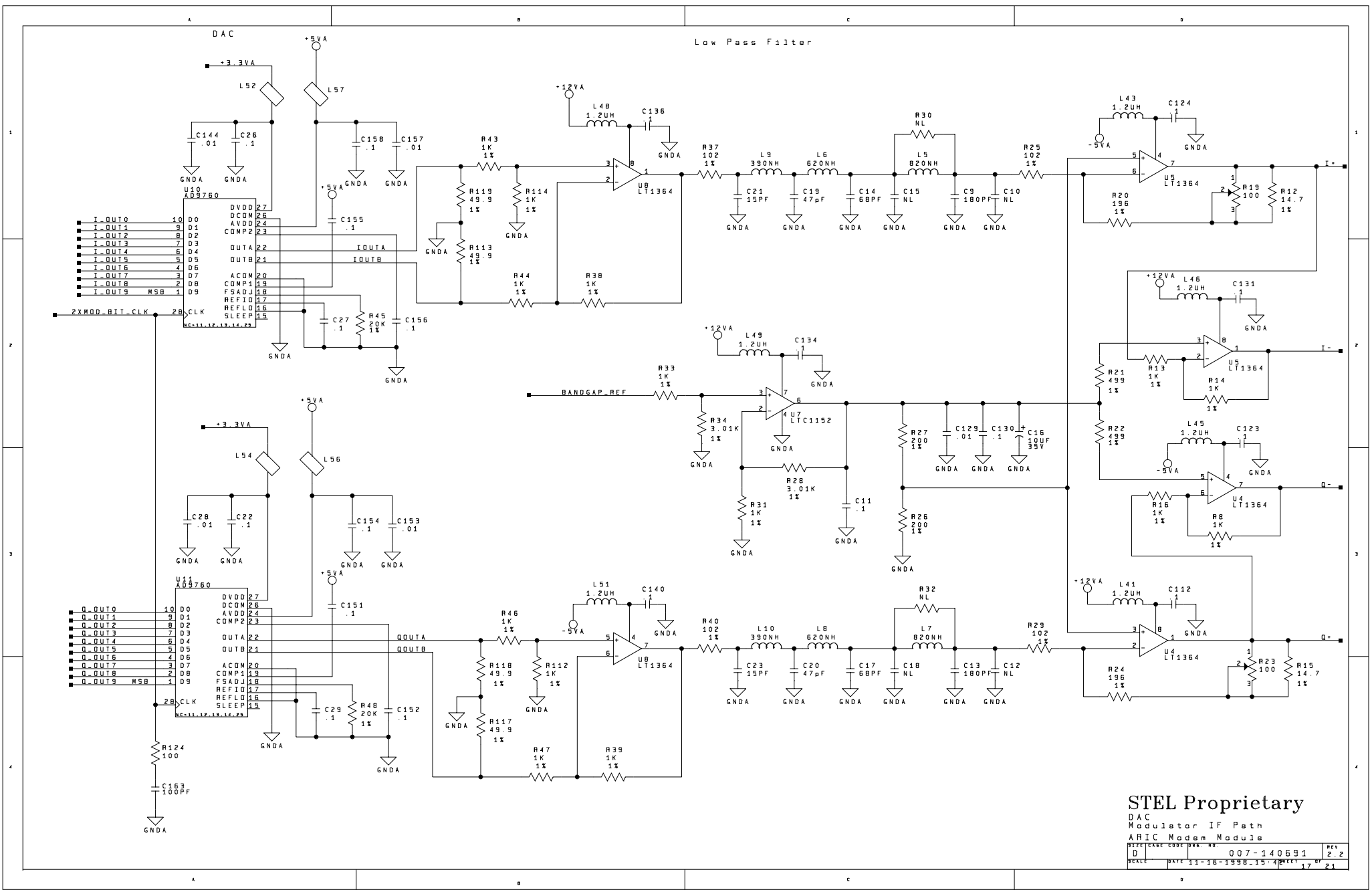
Modulator Clock Synthesizer



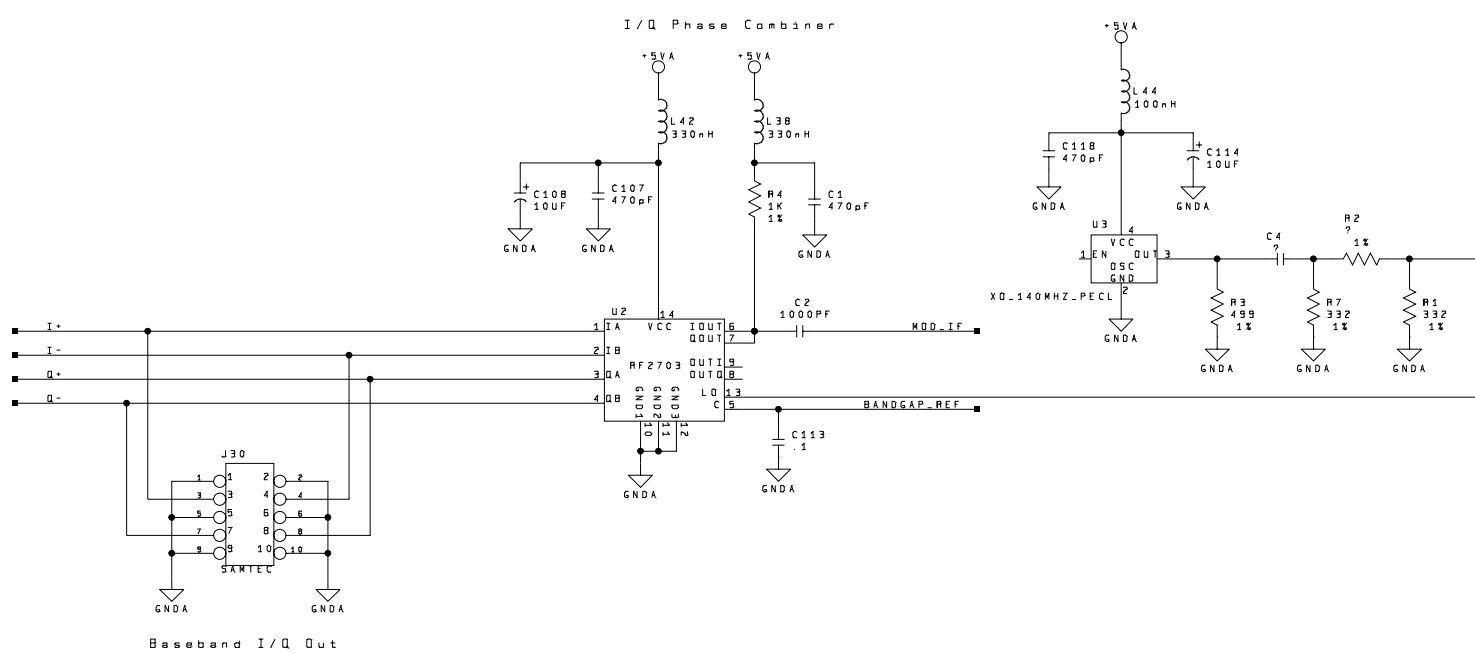
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Clock Synthesizers
 Concatenated Coder & FIR
 ARIC Modem Module

REV	007-140691	REV
ID		2.2
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 DAC
 Modulator IF Path
 ARIC Modem Module
 007-140691
 11-16-1998-15-4



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Modulator IF Path

ARIC Modem Module

REV	DATE	BY	CHKD	APPD	QTY	REV
07-140591	11-16-1998	15	42	18	21	2-2

HP Disassembler

J13

UP Data Bus	
CLKOUT	5 CLK.A
D0 MSB	7 A.15
D1	8 A.14
D2	9 A.13
D3	10 A.12
D4	11 A.11
D5	12 A.10
D6	13 A.9
D7	14 A.8
D8	15 A.7
D9	16 A.6
D10	17 A.5
D11	18 A.4
D12	19 A.3
D13	20 A.2
D14	21 A.1
D15	22 A.0
MDDCK1	
D16	8 CLK.B
D17	9 CLK.A
D18	10 CLK.B
D19	11 CLK.A
D20	12 CLK.B
D21	13 CLK.A
D22	14 CLK.B
D23	15 CLK.A
D24	16 CLK.B
D25	17 CLK.A
D26	18 CLK.B
D27	19 CLK.A
D28	20 CLK.B
D29	21 CLK.A
D30	22 CLK.B
D31 LSB	23 CLK.A

J15

UP Address Bus	
TSIZ0 MSB	7 A.15
A1	8 A.14
A2	9 A.13
A3	10 A.12
A4	11 A.11
A5	12 A.10
A6	13 A.9
A7	14 A.8
A8	15 A.7
A9	16 A.6
A10	17 A.5
A11	18 A.4
A12	19 A.3
A13	20 A.2
A14	21 A.1
A15	22 A.0
TSIZ1	
A16	8 CLK.A
A17	9 CLK.B
A18	10 CLK.A
A19	11 CLK.B
A20	12 CLK.A
A21	13 CLK.B
A22	14 CLK.A
A23	15 CLK.B
A24	16 CLK.A
A25	17 CLK.B
A26	18 CLK.A
A27	19 CLK.B
A28	20 CLK.A
A29	21 CLK.B
A30	22 CLK.A
A31 LSB	23 CLK.B

J1

UP Ctrl Signals	
TX	5 CLK.A
VFLS0	7 A.15
VFLS1	8 A.14
IP_B2	11 A.13
IP_B3	12 A.12
IP_B4	13 A.11
IP_B5	14 A.10
IP_B6	15 A.9
IP_B7	16 A.8
BG	19 A.5
BB	20 A.4
BB	21 A.3
BT	22 A.2
BDTP	23 A.1
BURST	24 A.0
RD/WR*	25 A.0
TS	26 A.0
TX	
CS0	8 CLK.B
CS1	9 CLK.A
CS2	10 CLK.B
CS3	11 CLK.A
CS4	12 CLK.B
CS5	13 CLK.A
CS6	14 CLK.B
CS7	15 CLK.A
BS_A0	16 CLK.B
BS_A1	17 CLK.A
BS_A2	18 CLK.B
BS_A3	19 CLK.A
VE0	20 CLK.B
VE1	21 CLK.A
VE2	22 CLK.B
VE3	23 CLK.A

J2

B60SAR UTOPIA and Controls	
TRM7	7 A.15
TRM5	8 A.14
TRM4	9 A.13
TRM3	10 A.12
TRM2	11 A.11
TRM1	12 A.10
TRM0	13 A.9
TRM0	14 A.8
TRM0	15 A.7
TRM0	16 A.6
TRM0	17 A.5
TRM0	18 A.4
TRM0	19 A.3
TRM0	20 A.2
TRM0	21 A.1
TRM0	22 A.0
MUTOPIA_CLK	
MUTOPIA_TXEN	8 CLK.B
MUTOPIA_RXEN	9 CLK.A
MUTOPIA_RXCAV	10 CLK.B
MUTOPIA_TXCAV	11 CLK.A
MUTOPIA_SDC	12 CLK.B
MUTOPIA_D7	13 CLK.A
MUTOPIA_D6	14 CLK.B
MUTOPIA_D5	15 CLK.A
MUTOPIA_D4	16 CLK.B
MUTOPIA_D3	17 CLK.A
MUTOPIA_D2	18 CLK.B
MUTOPIA_D1	19 CLK.A
MUTOPIA_D0	20 CLK.B
BUSYT	21 CLK.A
BUSYT	22 CLK.B
BUSYT	23 CLK.A

J11

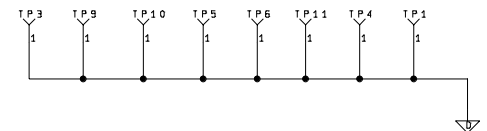
MOD Setup Modulator	
MDDTESTCLK	5 CLK.A
MDDTEST15	7 A.15
MDDTEST14	8 A.14
MDDTEST13	9 A.13
MDDTEST12	10 A.12
MDDTEST11	11 A.11
MDDTEST10	12 A.10
MDDTEST9	13 A.9
MDDTEST8	14 A.8
MDDTEST7	15 A.7
MDDTEST6	16 A.6
MDDTEST5	17 A.5
MDDTEST4	18 A.4
MDDTEST3	19 A.3
MDDTEST2	20 A.2
MDDTEST1	21 A.1
MDDTEST0	22 A.0
MOD_BIT_CLK	
MDD_DVALID	8 CLK.B
MDD_PSYNC	9 CLK.A
MDDSW12	10 CLK.B
MDDSW11	11 CLK.A
MDDSW10	12 CLK.B
MDDSW9	13 CLK.A
MDDSW8	14 CLK.B
MDDSW7	15 CLK.A
MDDSW6	16 CLK.B
MDDSW5	17 CLK.A
MDDSW4	18 CLK.B
MDDSW3	19 CLK.A
MDDSW2	20 CLK.B
MDDSW1	21 CLK.A
MDDSW0	22 CLK.B

J17

MOD Data	
MAC_TEST_CLK	5 CLK.A
MAC_TEST31	7 A.15
MAC_TEST30	8 A.14
MAC_TEST29	9 A.13
MAC_TEST28	10 A.12
MAC_TEST27	11 A.11
MAC_TEST26	12 A.10
MAC_TEST25	13 A.9
MAC_TEST24	14 A.8
MAC_TEST23	15 A.7
MAC_TEST22	16 A.6
MAC_TEST21	17 A.5
MAC_TEST20	18 A.4
MAC_TEST19	19 A.3
MAC_TEST18	20 A.2
MAC_TEST17	21 A.1
MAC_TEST16	22 A.0
MOD_BYTE_CLK	
MDD_DATA7	8 CLK.B
MDD_DATA6	9 CLK.A
MDD_DATA5	10 CLK.B
MDD_DATA4	11 CLK.A
MDD_DATA3	12 CLK.B
MDD_DATA2	13 CLK.A
MDD_DATA1	14 CLK.B
MDD_DATA0	15 CLK.A
5V Data	
5V_D6 MSB	7 A.15
5V_D5	8 A.14
5V_D4	9 A.13
5V_D3	10 A.12
5V_D2	11 A.11
5V_D1	12 A.10
5V_D0 LSB	13 A.9

J16

MAC SW Test	
MAC_TEST15	7 A.15
MAC_TEST14	8 A.14
MAC_TEST13	9 A.13
MAC_TEST12	10 A.12
MAC_TEST11	11 A.11
MAC_TEST10	12 A.10
MAC_TEST9	13 A.9
MAC_TEST8	14 A.8
MAC_TEST7	15 A.7
MAC_TEST6	16 A.6
MAC_TEST5	17 A.5
MAC_TEST4	18 A.4
MAC_TEST3	19 A.3
MAC_TEST2	20 A.2
MAC_TEST1	21 A.1
MAC_TEST0	22 A.0
RX1_RSSITYPE	
RX1_RSSIVAL	8 CLK.B
RX1_RSSICN	9 CLK.A
RX1_FREQ_VAL	10 CLK.B
RX1_FREQ_ENA	11 CLK.A
RX1_COLLISION	12 CLK.B
SYNC	13 CLK.A



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TEST CONNECTORS

ARIC Modem Module			
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TEST CONNECTORS

ARIC Modem Module			
REV	CODE	DATE	REV
D	007-140691	07/20	2.2
DATE	11-16-1998	REV	21

RX1 Reed Solomon

J21	
Signal	Pin
RX1_RS_CLK_IN	5
RX1_RSCODE_D7_IN	7
RX1_RSCODE_D6_IN	8
RX1_RSCODE_D5_IN	9
RX1_RSCODE_D4_IN	10
RX1_RSCODE_D3_IN	11
RX1_RSCODE_D2_IN	12
RX1_RSCODE_D1_IN	13
RX1_RSCODE_D0_IN	14
RX1_RS_CHE_IN	15
RX1_RSCEB_IN	16
RX1_RSSFRAME_IN	17
RX1_RSRESET	18
W257HST	19
FAULT3	20
RX1_RSCLK_OUT	21
RX1_RSCODE_D7_OUT	22
RX1_RSCODE_D6_OUT	23
RX1_RSCODE_D5_OUT	24
RX1_RSCODE_D4_OUT	25
RX1_RSCODE_D3_OUT	26
RX1_RSCODE_D2_OUT	27
RX1_RSCODE_D1_OUT	28
RX1_RSCODE_D0_OUT	29
RX1_RSCEB_OUT	30
RX1_RSVALID_OUT	31
RX1_RSERHRRFIX	32
RX1_RSERHRRHOUT	33
RX1_RSSFRAME_OUT	34
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RX1 3B03

J24	
Signal	Pin
RX1_TEST_CLOCK	5
RX1_TESTOUT17	7
RX1_TESTOUT16	8
RX1_TESTOUT15	9
RX1_TESTOUT14	10
RX1_TESTOUT13	11
RX1_TESTOUT12	12
RX1_TESTOUT11	13
RX1_TESTOUT10	14
RX1_TESTOUT9	15
RX1_TESTOUT8	16
RX1_TESTOUT7	17
RX1_TESTOUT6	18
RX1_TESTOUT5	19
RX1_TESTOUT4	20
RX1_TESTOUT3	21
RX1_TESTOUT2	22
RX1_TESTOUT1	23
RX1_TESTOUT0	24
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RX1 3103

J23	
Signal	Pin
RX1_QOUT_2130_7	7
RX1_QOUT_2130_6	8
RX1_QOUT_2130_5	9
RX1_QOUT_2130_4	10
RX1_QOUT_2130_3	11
RX1_QOUT_2130_2	12
RX1_QOUT_2130_1	13
RX1_QOUT_2130_0	14
RX1_IQOUT_2130_7	15
RX1_IQOUT_2130_6	16
RX1_IQOUT_2130_5	17
RX1_IQOUT_2130_4	18
RX1_IQOUT_2130_3	19
RX1_IQOUT_2130_2	20
RX1_IQOUT_2130_1	21
RX1_IQOUT_2130_0	22
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RX2 Reed Solomon

J22	
Signal	Pin
RX2_RS_CLK_IN	5
RX2_RSCODE_D7_IN	7
RX2_RSCODE_D6_IN	8
RX2_RSCODE_D5_IN	9
RX2_RSCODE_D4_IN	10
RX2_RSCODE_D3_IN	11
RX2_RSCODE_D2_IN	12
RX2_RSCODE_D1_IN	13
RX2_RSCODE_D0_IN	14
RX2_RS_CHE_IN	15
RX2_RSCEB_IN	16
RX2_RSSFRAME_IN	17
RX2_RSRESET	18
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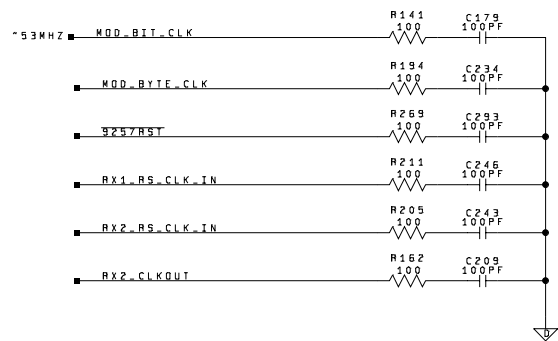
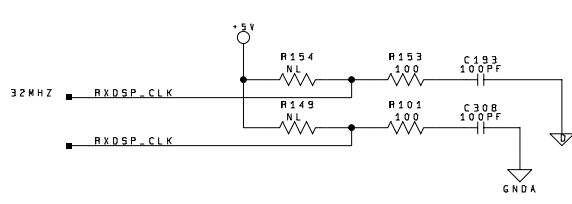
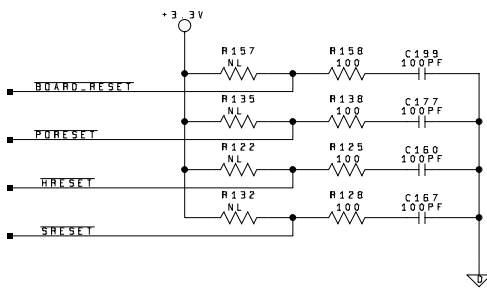
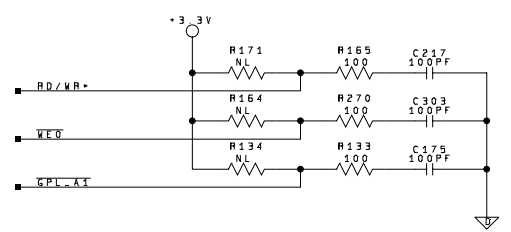
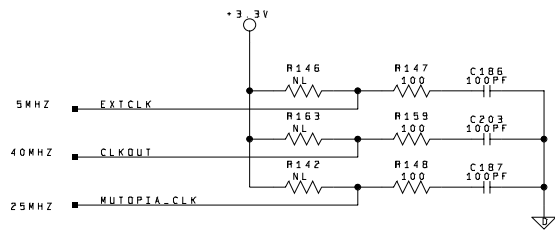
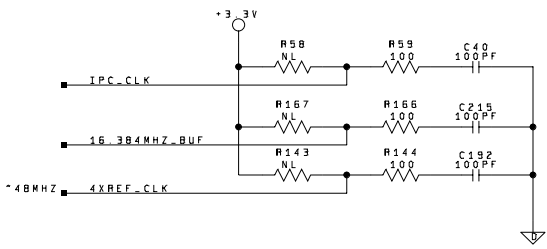
RX2 3B03

J26	
Signal	Pin
RX2_TEST_CLOCK	5
RX2_TESTOUT17	7
RX2_TESTOUT16	8
RX2_TESTOUT15	9
RX2_TESTOUT14	10
RX2_TESTOUT13	11
RX2_TESTOUT12	12
RX2_TESTOUT11	13
RX2_TESTOUT10	14
RX2_TESTOUT9	15
RX2_TESTOUT8	16
RX2_TESTOUT7	17
RX2_TESTOUT6	18
RX2_TESTOUT5	19
RX2_TESTOUT4	20
RX2_TESTOUT3	21
RX2_TESTOUT2	22
RX2_TESTOUT1	23
RX2_TESTOUT0	24
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RX2 3103

J27	
Signal	Pin
RX2SP_CLK	5
RX2_QOUT_2130_7	7
RX2_QOUT_2130_6	8
RX2_QOUT_2130_5	9
RX2_QOUT_2130_4	10
RX2_QOUT_2130_3	11
RX2_QOUT_2130_2	12
RX2_QOUT_2130_1	13
RX2_QOUT_2130_0	14
RX2_IQOUT_2130_7	15
RX2_IQOUT_2130_6	16
RX2_IQOUT_2130_5	17
RX2_IQOUT_2130_4	18
RX2_IQOUT_2130_3	19
RX2_IQOUT_2130_2	20
RX2_IQOUT_2130_1	21
RX2_IQOUT_2130_0	22
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Terminations



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Termination Resistors

ARIC Modem Module			
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07-140591	2-2		
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