

This manual is made as documentation for Danphone's R4 Transceiver used for Saab Transponder Tech's R4 UAIS transponder.

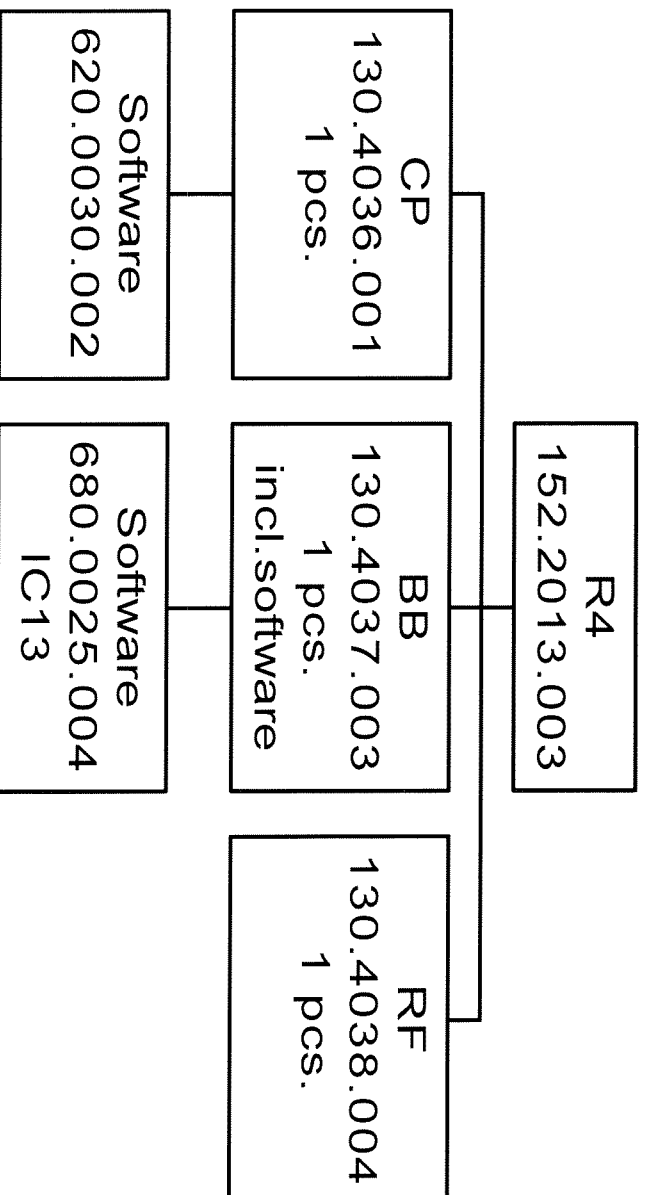
The manual contains the following:

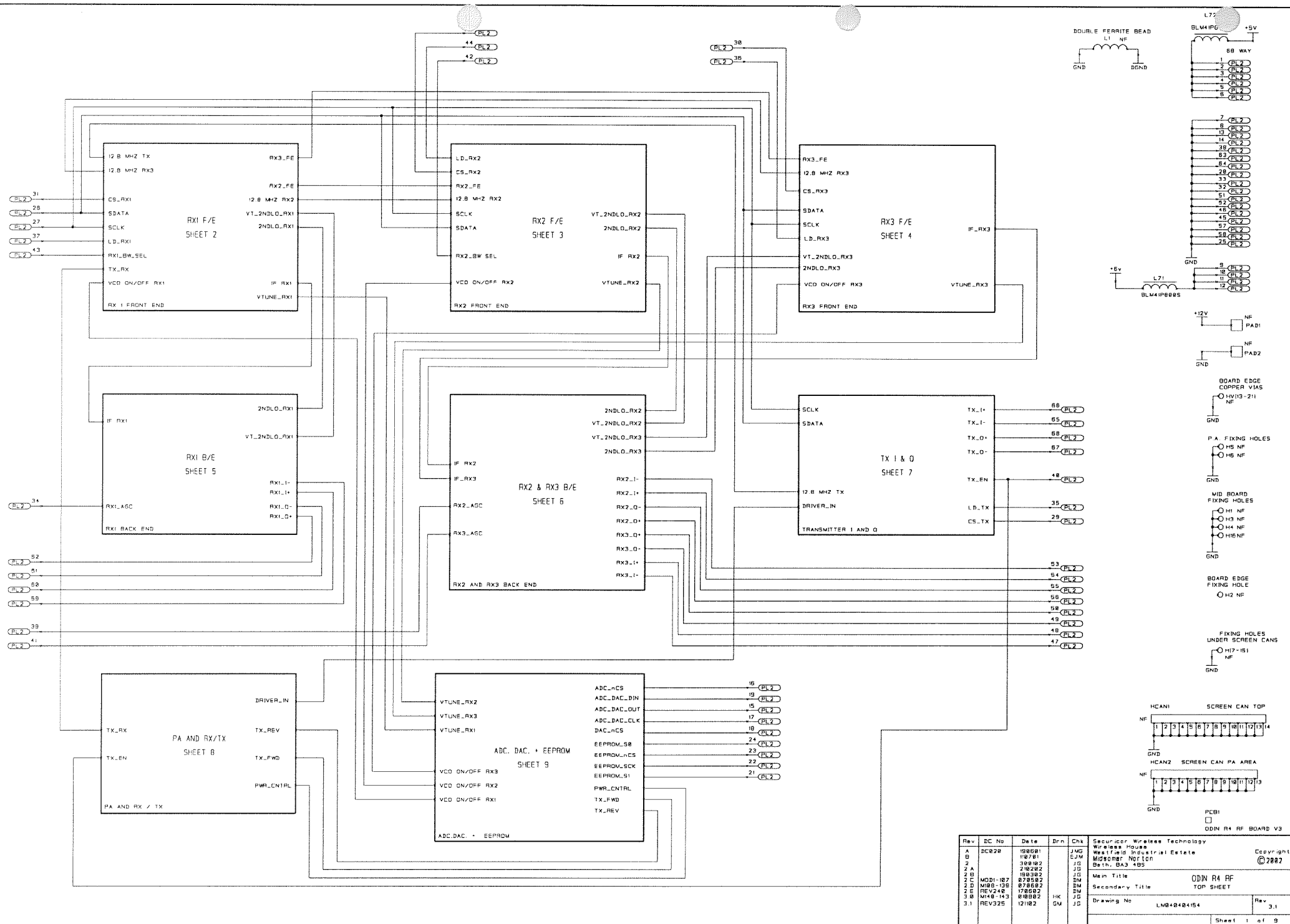
- Modifications on R4 RF version 3
- Overview of the complete transponder (Structure Diagram)
- Diagram for each transceiver module.
- Component placement for each transceiver module.
- Partslist for each transceiver module

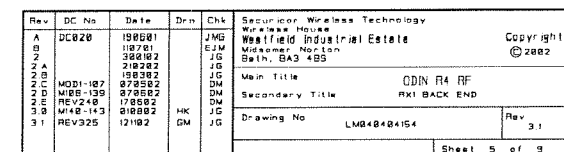
Modification to Documentation.

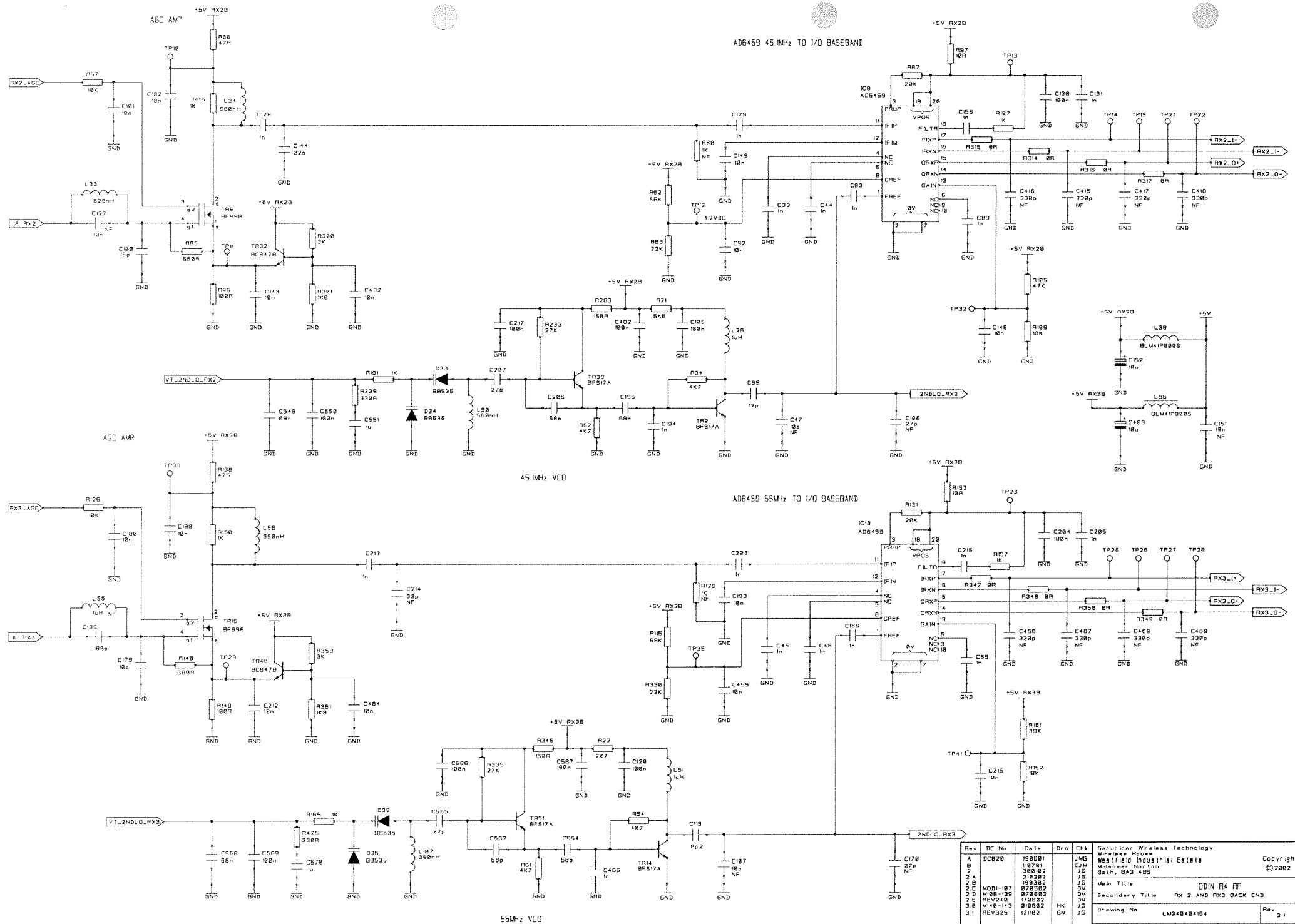
Since approval measurements at Telefication (Telefication Report number 99368530) there is added a gate in the power ramping cicuity. The gate is inserted to turn off the Tx-modulator when the Tx switch is in receiver mode. The gate ensures that the Tx modulator is turned on before power ramp up, and turned off after power ramp down. It is checked that the ramping behavior is un-altered compared to the measurement at Telefication. For this modification a Quad NOR gate is used. In future a single NOR gate shall be implemented in the layout. Also the daughterboard that contains the ramping shall be implemented in the layout.

R4 Structure Diagram

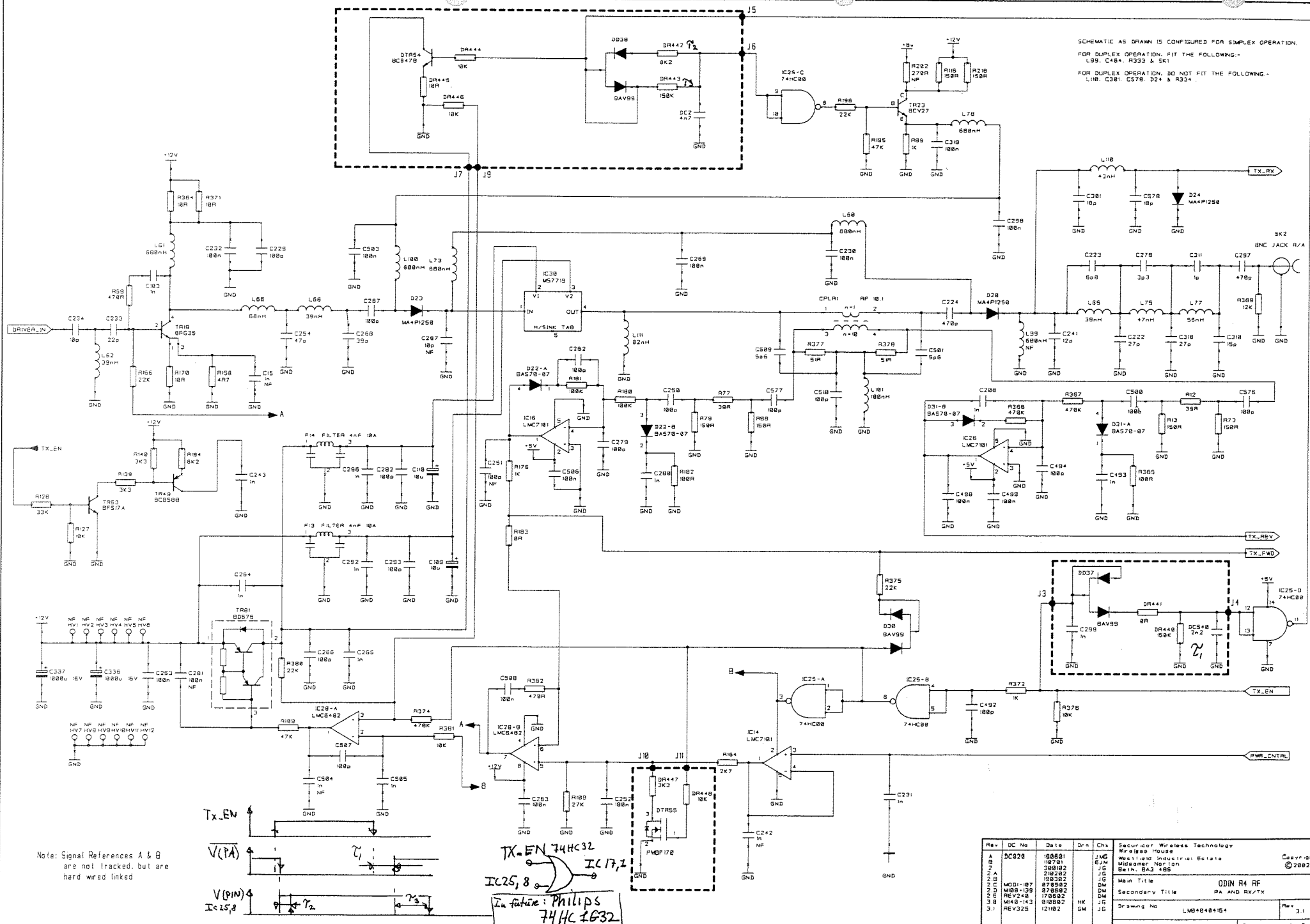






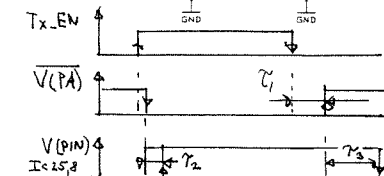


Rev	DC No	Dw	Dr	Chg	Secondary Workless Technology Workless House	Copyright © 2002
1	DCB28	198501	JMS	Wetland Industrial Estate		
2		10781	JMS	London, England		
3		10782	JMS	Bath, BA2 4BS		
4		21028	JG			
5		21029	JG			
6		21030	JG	Map Title	ODIN RA RF	
7		21031	JG	Secondary Title	RA 2 AND RA3 BACK END	
8		21032	JG			
9		21033	JG	Drawing No	LM04040415	
10		21034	JG			
11		21035	JG			
12		21036	JG			
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98						



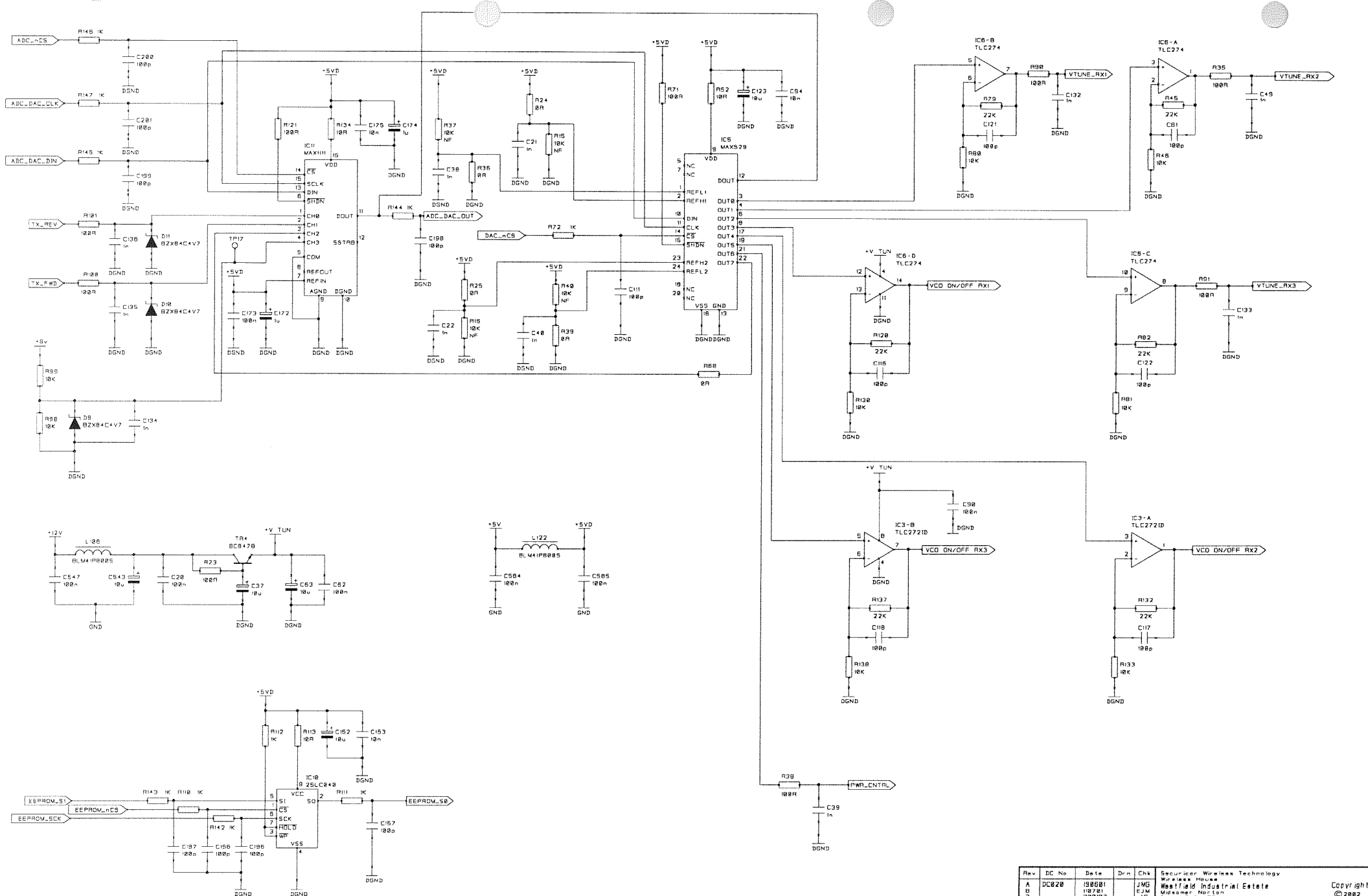
SCHEMATIC AS DRAWN IS CONFIGURED FOR SIMPLEX OPERATION.
 FOR DUPLEX OPERATION, FIT THE FOLLOWING:-
 L39, C48, R333 & SK1
 FOR DUPLEX OPERATION, DO NOT FIT THE FOLLOWING:-
 L110, C381, C578, D24 & R324

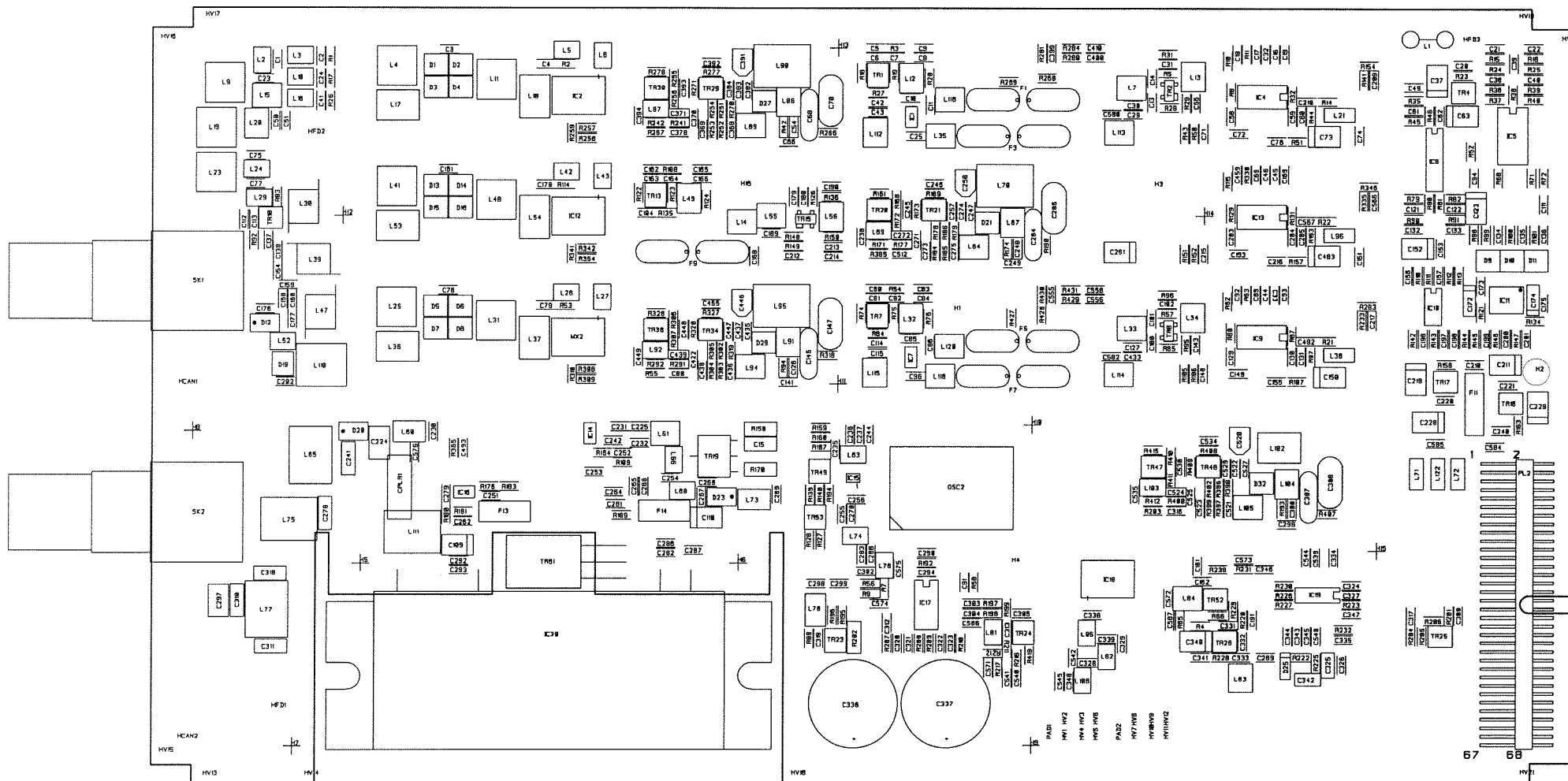
Note: Signal References A & B are not tracked, but are hard wired linked



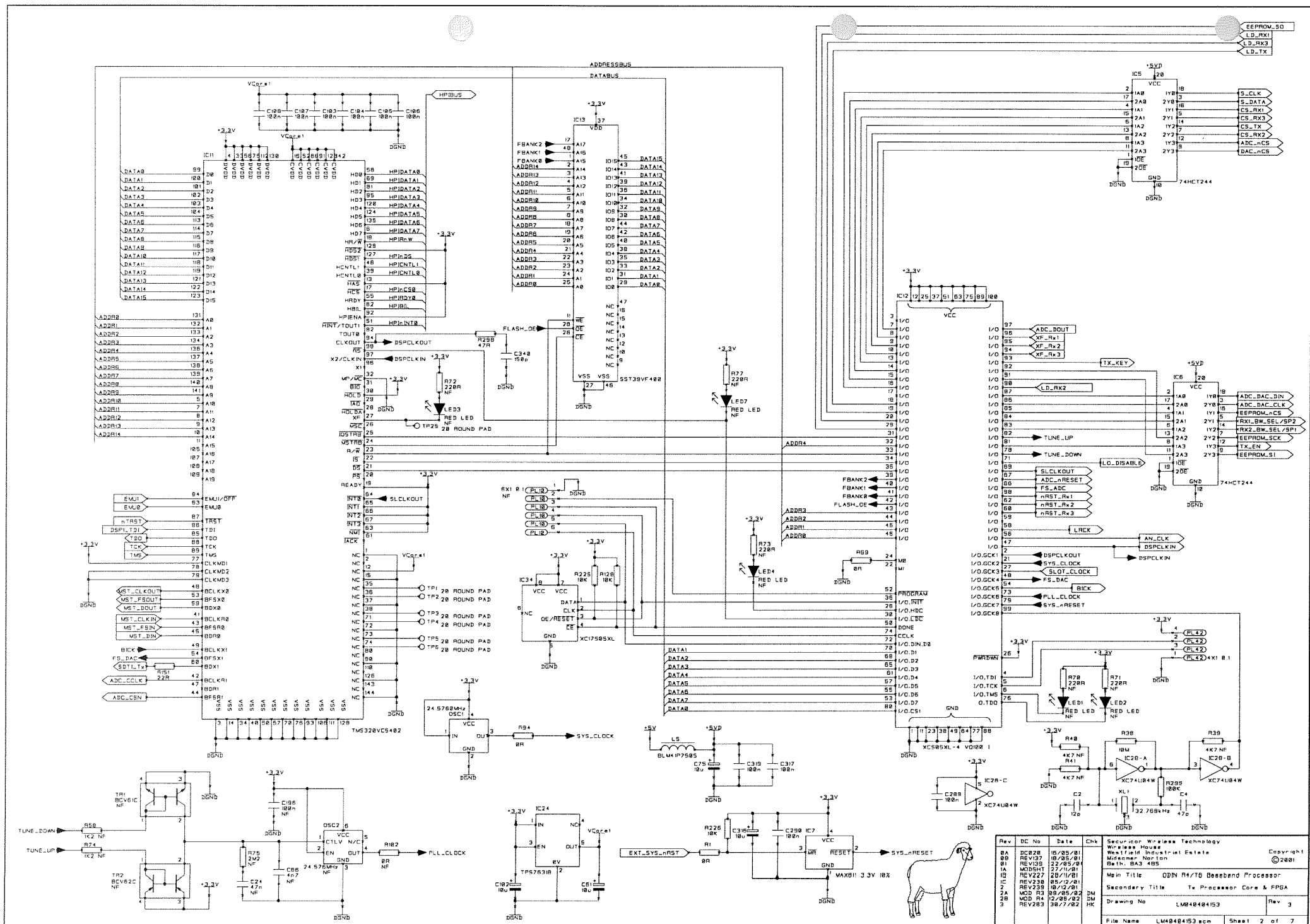
TX-EN 74HC32
 IC25, 8
 In future: PHILIPS 74HC1632

Rev	DC No	Date	Drn	Chs	Securcor Wireless Technology	Copyright
1	2002	199801	JMC	1	Wireless House	© 2002
2		199701	JMC	2	Wellfield Industrial Estate	
3		199802	JMC	3	Midsummer, Norton	
4		199802	JMC	4	Stn, BA3 4BS	
5		199802	JMC	5	Man Title	
6		199802	JMC	6	ODIN R4 RF	
7		199802	JMC	7	Secondary Title	
8		199802	JMC	8	PA AND RX/TX	
9		199802	JMC	9	Drawing No	
10		121002	JMC	10	LMB0404154	
11			JMC	11	Rev	
12			JMC	12	Sheet 8 of 9	



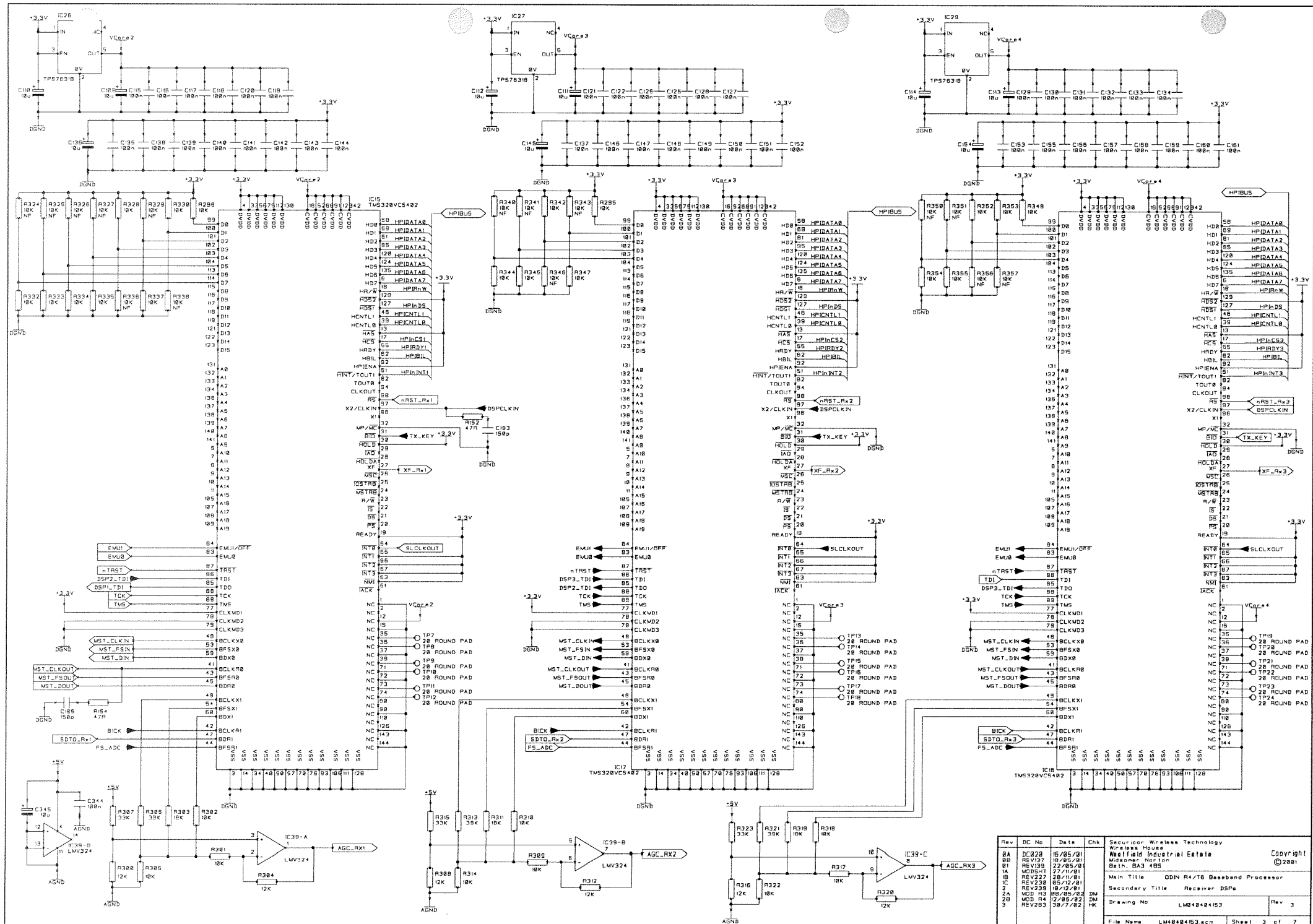


SECURICOR WIRELESS TECHNOLOGY LTD
 ODIN R4 RF PCB - V3
 L0010DINR4RC0
 LAYER 1 ASSEMBLY



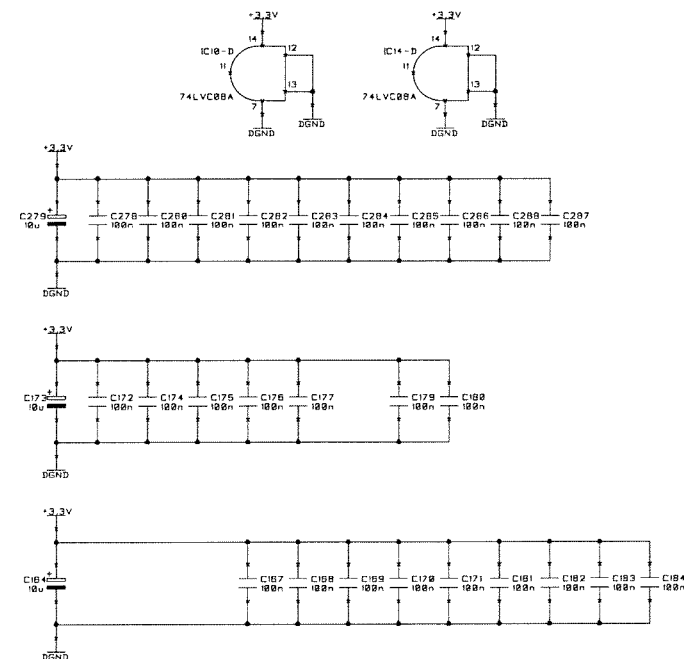
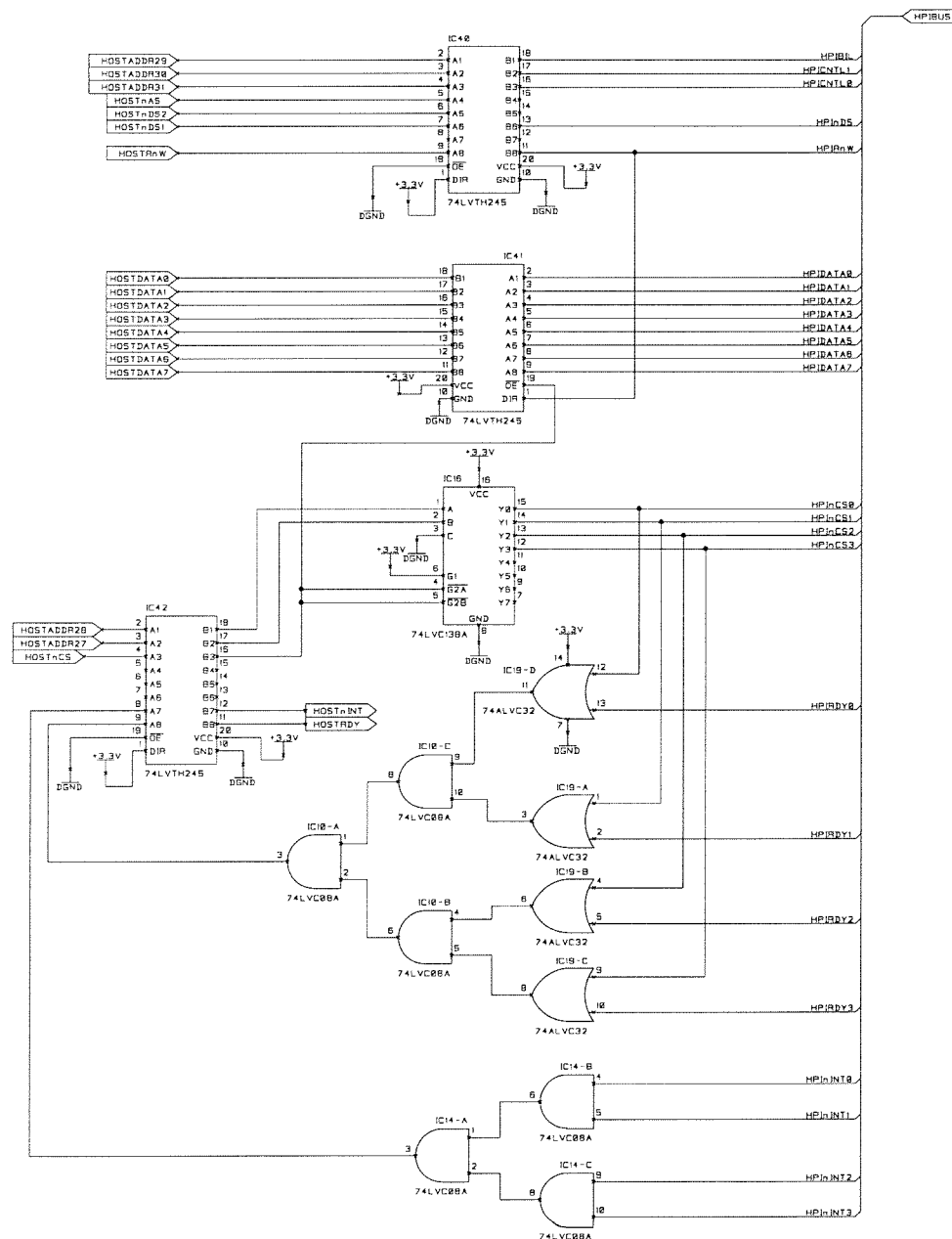
Rev	DC No	Date	Chk	Securicon Wireless Technology	Copyright
0A	DC028	15/05/01		Wireless House	© 2001
0B	REV137	18/05/01		Westfield Industrial Estate	
0C	REV228	22/05/01		Midsummer Norton	
1A	MOD501	27/11/01		Devon, BA3 4BS	
1B	REV227	28/11/01			
1C	REV230	05/12/01			
1D	REV238	18/12/01			
2A	MOD R3	08/05/02	DM		
2B	REV239	12/05/02	DM		
3	REV263	30/7/02	HK		

Main Title		QDN R4/T6 Baseband Processor	
Secondary Title		Tx Processor Core & FPGA	
Drawing No		LMB484153	
Rev		3	
File Name		LMB484153.scm	
Sheet		2 of 7	



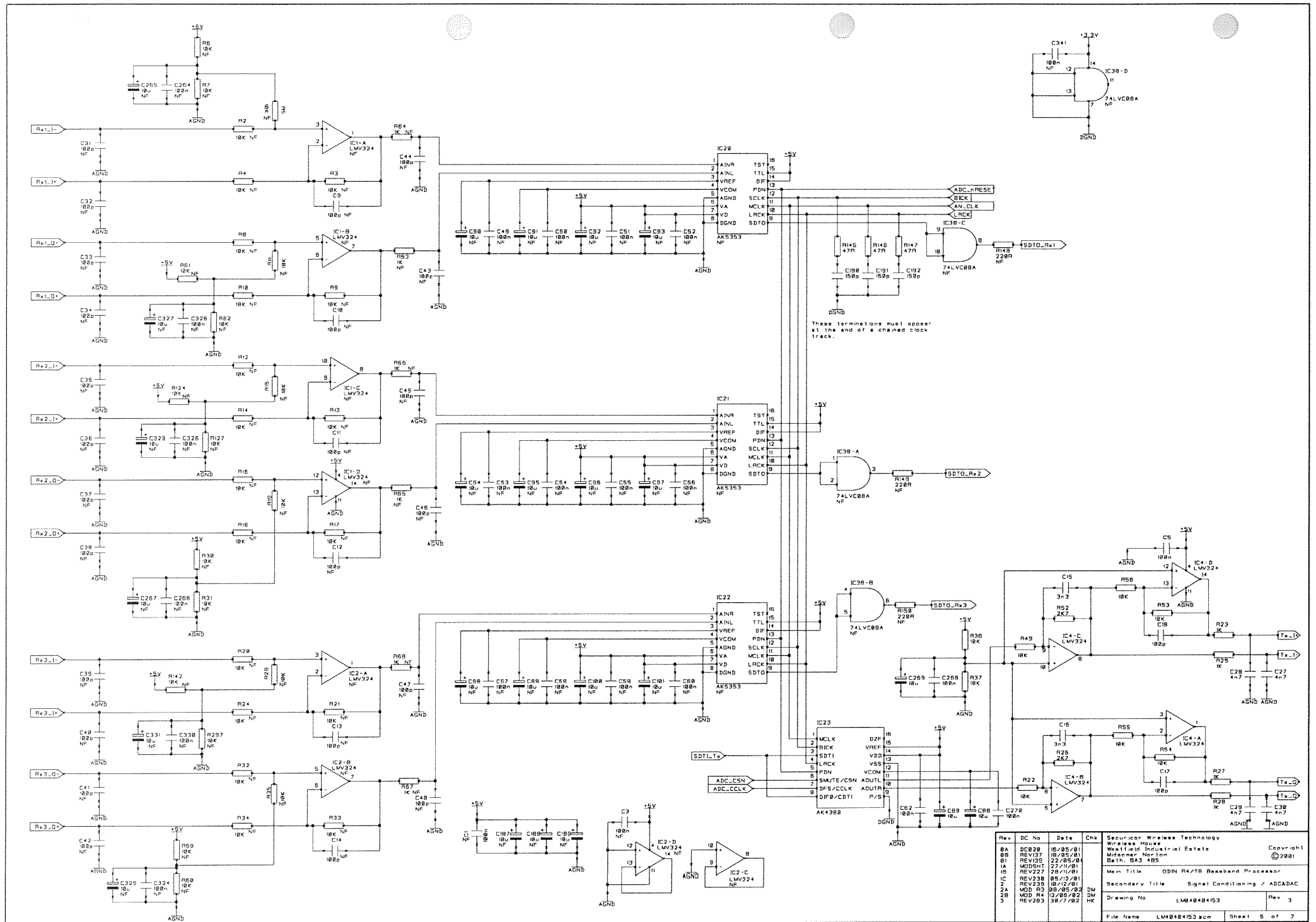
Rev	DC No	Date	Chk	Securicon Wireless Technology Wireless House Wellfield Industrial Estate Mokkum, Bath, BA3 4BS	Copyright © 2001
0A	DC020	15/05/01			
0B	REV137	15/05/01			
01	REV138	22/05/01			
1A	MOD137	27/11/01			
1B	REV222	28/11/01			
1C	REV238	05/12/01			
2	REV238	19/12/01			
2A	MOD R3	09/05/02	DW		
3	MOD R4	12/05/02	DM		
	REV203	30/7/02	HK		

Main Title	ODN R4/T6 Baseband Processor
Secondary Title	Receiver DSPs
Drawing No	LM04040153
File Name	LM04040153.acm
Sheet	3 of 7



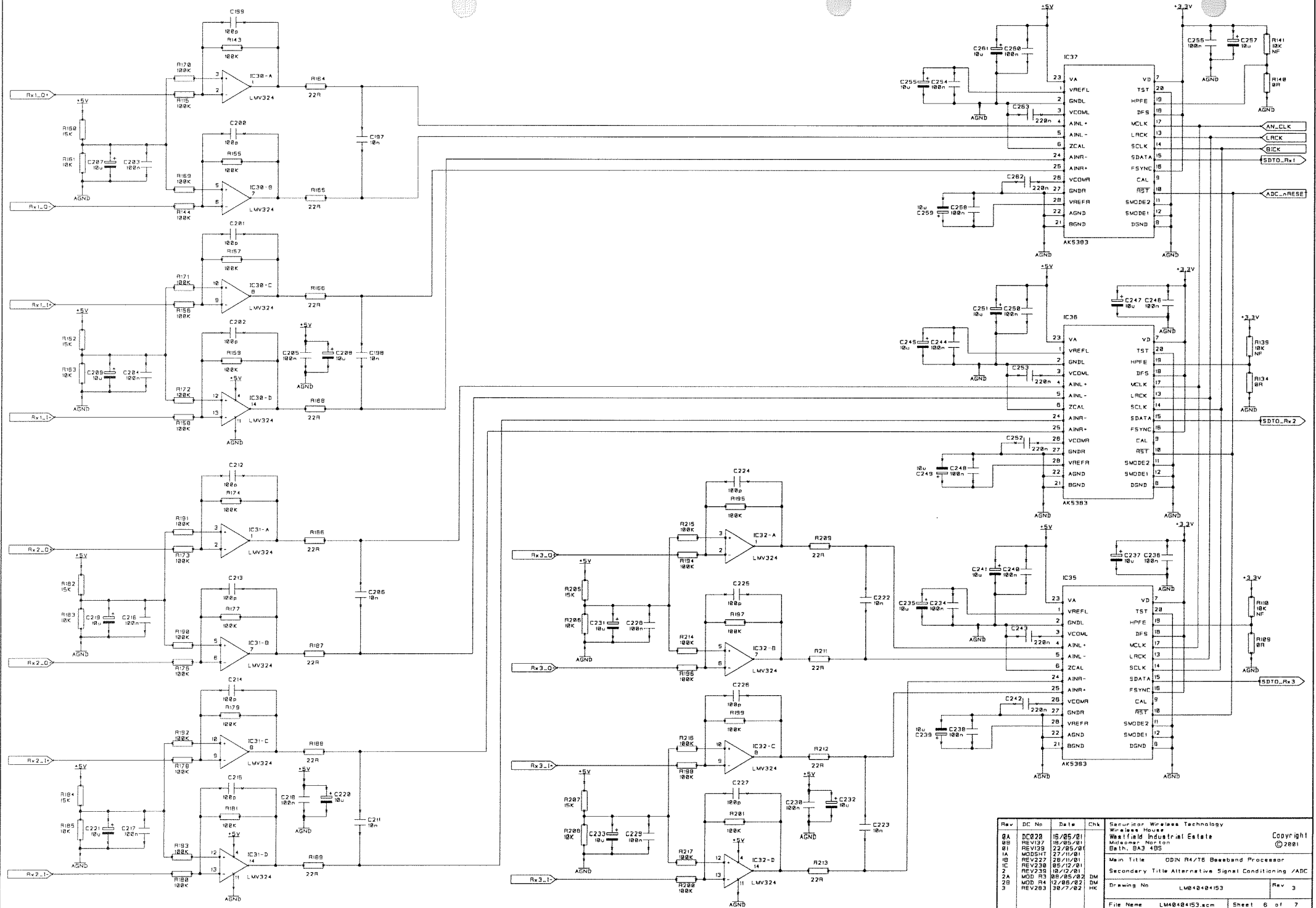
Rev	DC No	Date	Chk	Securicon Wireless Technology Wireless House Westfield Industrial Estate Middx. Nott'n Bath, BA3 4BS	Copyright © 2001
0A	DC028	15/05/01			
0B	REV137	15/05/01			
01	REV139	22/05/01			
1A	MOD54T	22/11/01			
1B	REV227	26/11/01			
1C	REV230	05/12/01			
2	REV238	05/12/01			
2A	MOD R3	05/05/02	DM		
2B	MOD R4	12/08/02	DM		
3	REV283	30/7/02	HK		

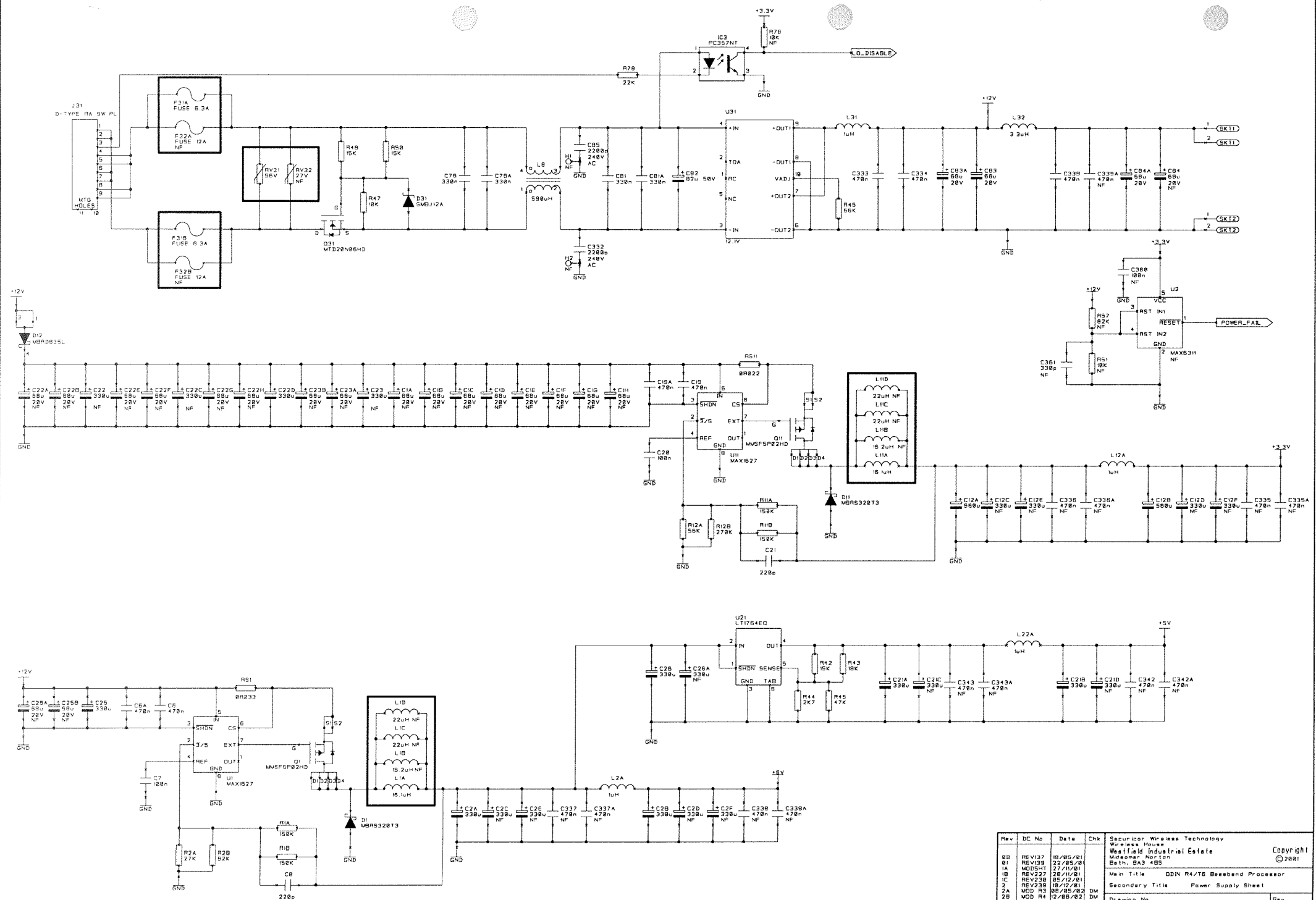
Main Title		ODIN R4/T6 Baseband Processor	
Secondary Title		Host Port Interface	
Drawing No	LM0404153	Rev	3
File Name	LM0404153.wcm	Sheet	4 of 7



Rev	DC No	Date	Chg	Securicor Wireless Technology
0A	DC020	15/05/01		Wireless House
0B	REV137	18/05/01		Wireless House
01	REV130	22/05/01		Wireless House
1A	MOD511	27/11/01		Wireless House
1B	REV227	28/11/01		Wireless House
1C	REV230	05/12/01		Wireless House
2	REV238	18/12/01		Wireless House
2A	MOD R3	08/05/02	DM	Wireless House
2B	MOD R4	12/05/02	DM	Wireless House
3	REV263	30/7/02		Wireless House

Mem Title	ODN R4/TB Baseband Processor
Secondary Title	Signal Conditioning / ADC&DAC
Drawing No	LM0404153
File Name	LM0404153.scm
Sheet	5 of 7





Rev	DC No	Date	Chk	Securix Wireless Technology Wireless House Wellfield Industrial Estate Middx. BA3 4BS	Copyright © 2001
08	REV137	18/05/01			
01	REV139	22/05/01			
1A	MOD511	27/11/01			
1B	REV227	28/11/01			
1C	REV230	05/12/01			
2	REV236	18/12/01			
2A	MOD R3	08/05/02	DM		
2B	MOD R4	12/05/02	DM		
3	REV283	30/7/02	HK		

Main Title		ODIN R4/T6 Baseband Processor	
Secondary Title		Power Supply Sheet	
Drawing No	LM0404153	Rev	3
File Name	LM0404153.scm	Sheet	7 of 7

