

PROCESSOR
252 SHEET 4
DSP AUDIO

RECEIVER
246
RX-DET-AF, DCFB, SQL-DET, SQL-SET, FE-BIAS, RSSI, WB/NB, RX-LO, RX-ANT, GND

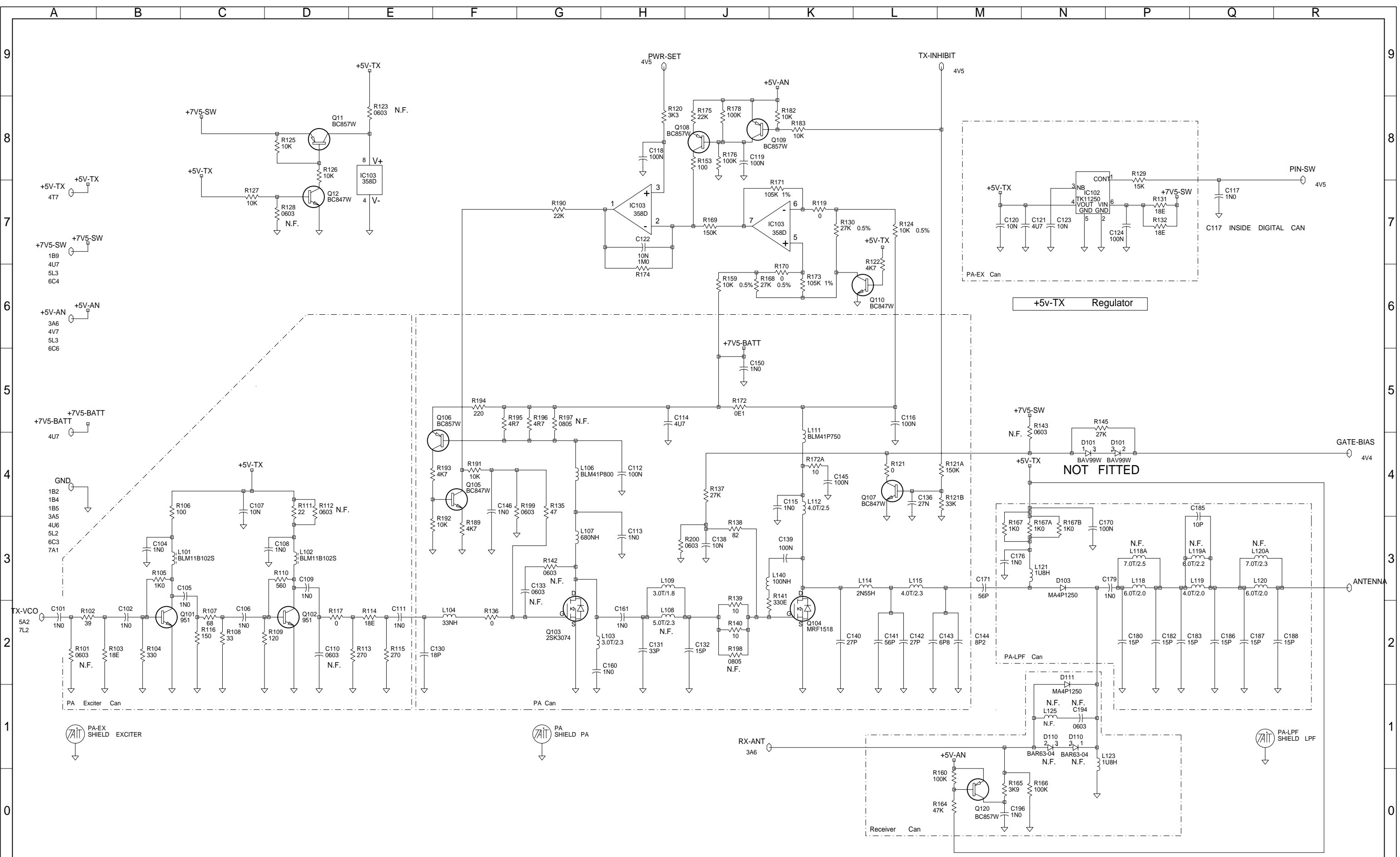
SYNTH-VCO
2922
LCK-DET, PWR-SAVE, /SY-EN, SY-CLK, TCXO-MOD, SY-DAT, VCO-MOD, +14V, RX-LO, GND

POWER-AMP
93
PWR-SET, GATE-BIAS, TX-INHIBIT, PIN-SW, +7V5-BATT, +7V5-SW, +5V-AN, +7V5-SW, +5V-TX, TX-VCO, TX-COM, GND, RX-ANT

03A	CCO NO. 1654-002	BRD		26-09-00
02A	CCO NO. 1654-001	BRD		09-8-00
01A	NEW PA LINEUP SYNTH RX	BRD		10/07/00
REV/ISS	AMENDMENTS	DRAWN	CHKD	D.O. APVD DATE



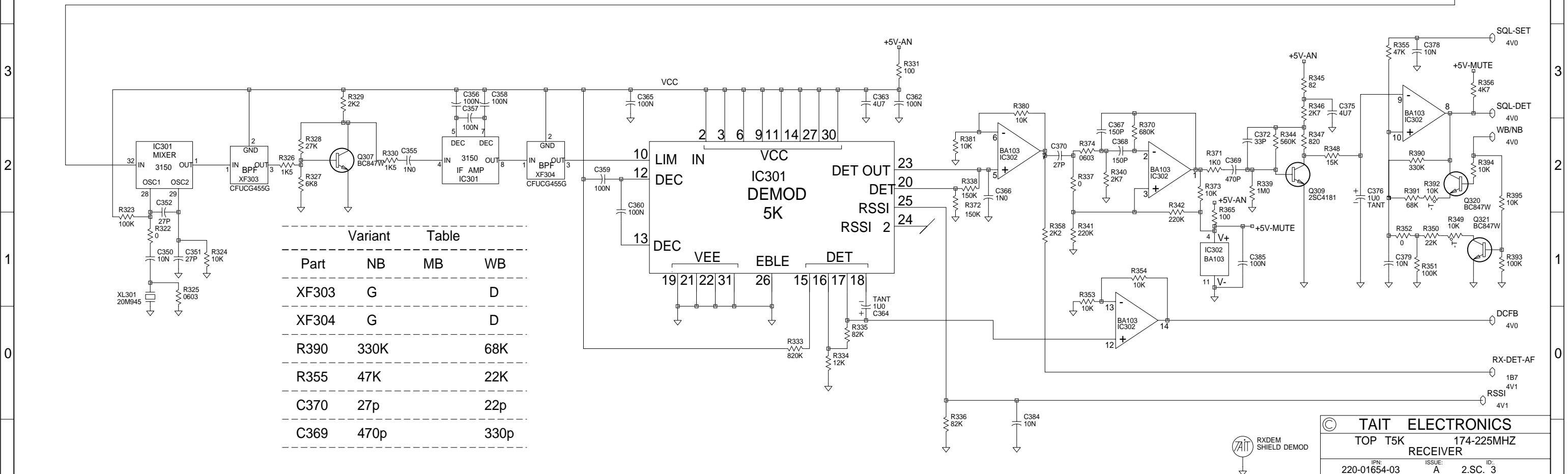
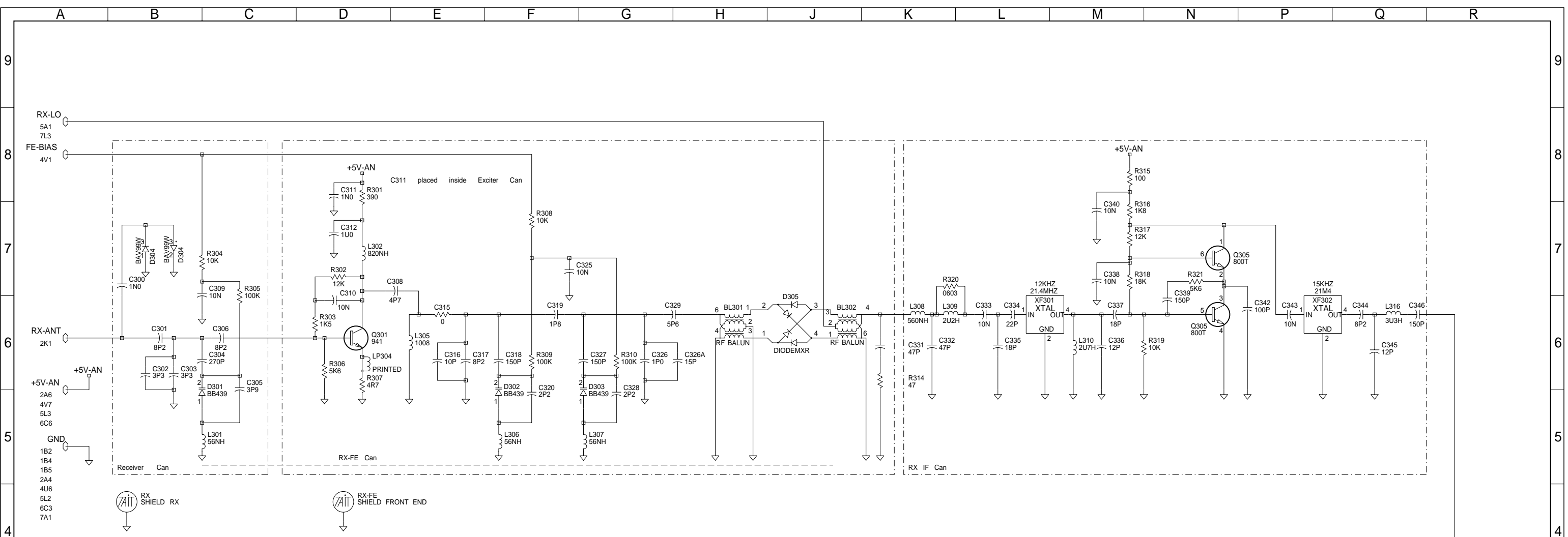
© **TAIT ELECTRONICS**
TOP T5K 174-225MHZ
SYSTEM DIAGRAM
IPN: 220-01654-03 ISSUE: A ID: 2.S.C. 1
PROJECT: TAIT ORCA DESIGNER: BRD FILE NAME: 165403a DATE: 16-Oct-00 NO.SHEETS: 7



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 TOP T5K 174-225MHZ
 POWER AMPLIFIER

IPN: 220-01654-03	ISSUE: A	ID: 2.S.C. 2
PROJECT: TAIT ORCA	DESIGNER: BRD	FILE NAME: 165403a
FILE DATE: 16-Oct-00	NO. SHEETS: 7	

REV/ISS	AMENDMENTS	DRAWN	CHKD	D.O.	APVD	DATE
A						

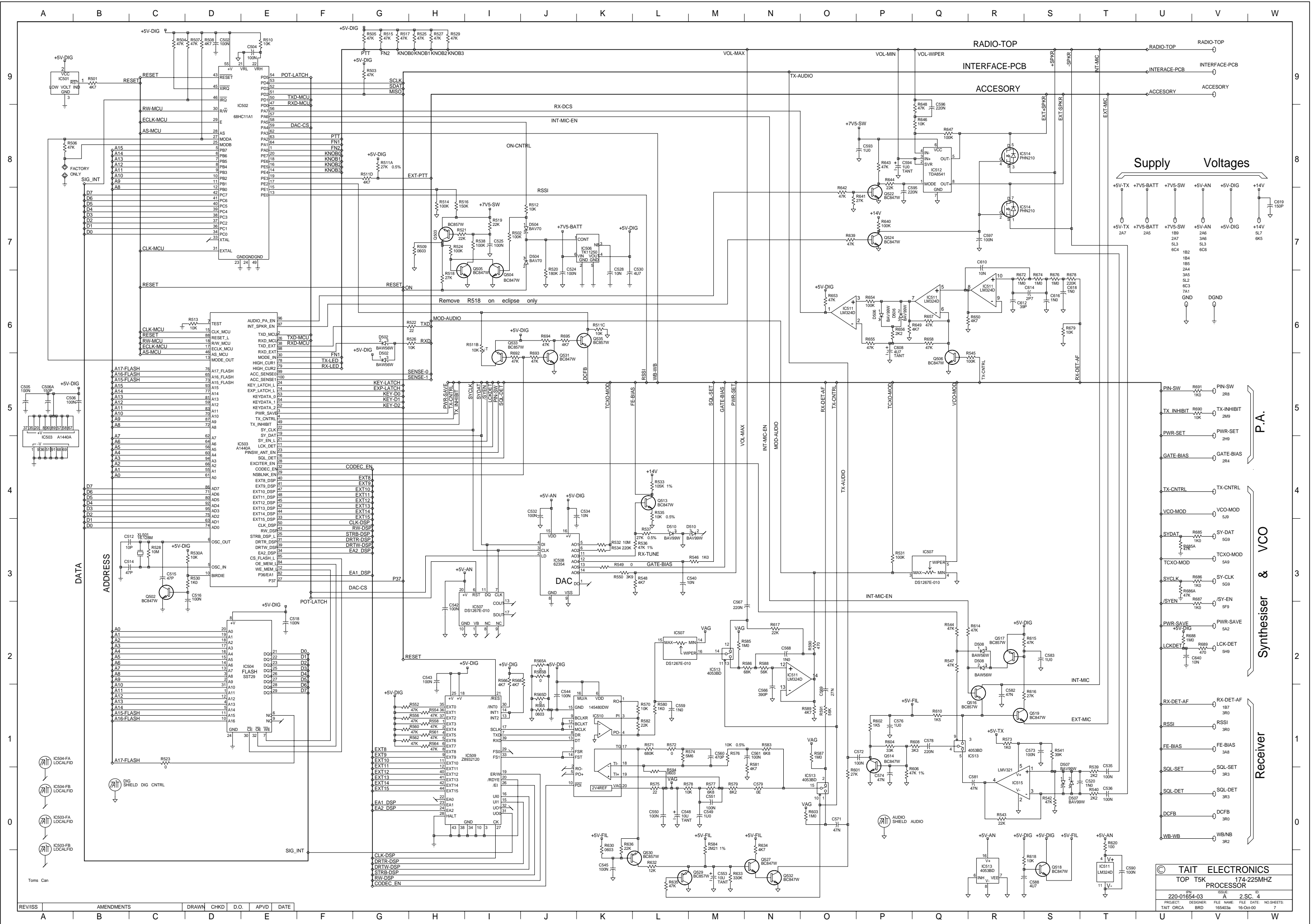


Variant Table

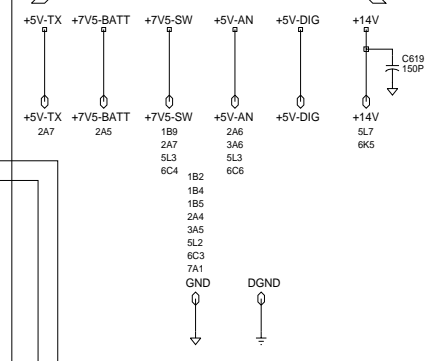
Part	NB	MB	WB
XF303	G		D
XF304	G		D
R390	330K		68K
R355	47K		22K
C370	27p		22p
C369	470p		330p

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 TOP T5K 174-225MHZ RECEIVER
 IPN: 220-01654-03 ISSUE: A 2.S.C. 3
 PROJECT: TAIT ORCA DESIGNER: BRD FILE NAME: 165403a FILE DATE: 16-Oct-00 NO.SHEETS: 7

REV/ISS	AMENDMENTS	DRAWN	CHKD	D.O.	APVD	DATE
A						



Supply Voltages



- PIN-SW 288
- TX-INHIBIT 289
- PWR-SET 289
- GATE-BIAS 284
- TX-CNTRL 289
- VCO-MOD 518
- SY-DAT 509
- TCXO-MOD 549
- SY-CLK 509
- SY-EN 509
- PWR-SAVE 542
- LCK-DET 549
- RX-DET-AF 380
- FE-BIAS 348
- SQL-SET 383
- SQL-DET 383
- DCFB 380
- WB-WB 382

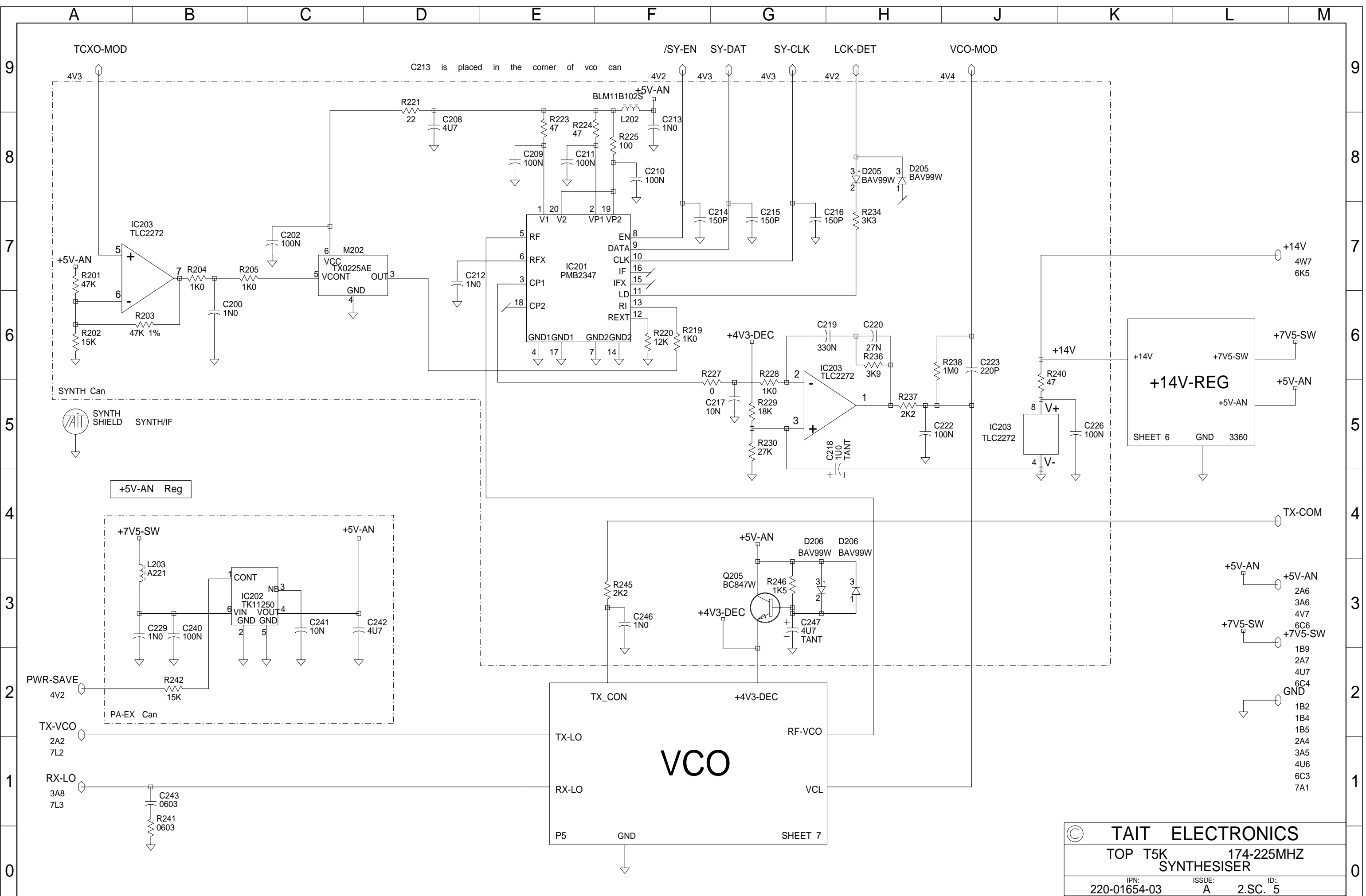
P.A.

Synthesiser & VCO

Receiver

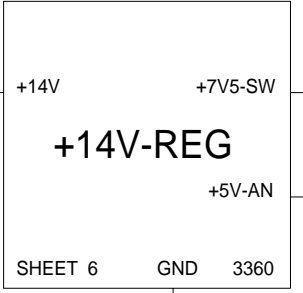
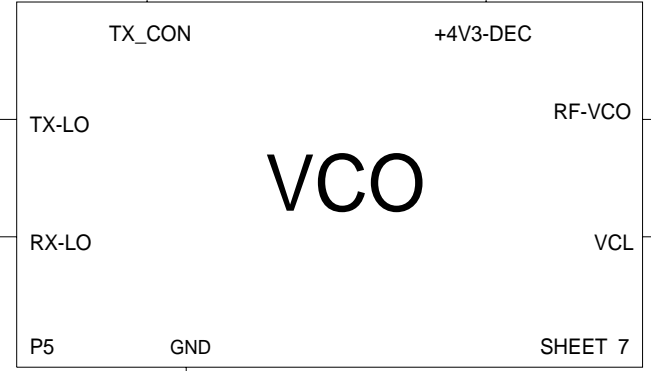
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 TOP T5K 174-225MHZ
 PROCESSOR
 220-01654-03 2-SC 4
 PROJECT DESIGNER FILE NAME FILE DATE NO SHEETS
 TAIT ORCA BRD 165403a 16-Oct-00 7

REV/ISS	AMENDMENTS	DRAWN	CHKD	D.O.	APVD	DATE
A						

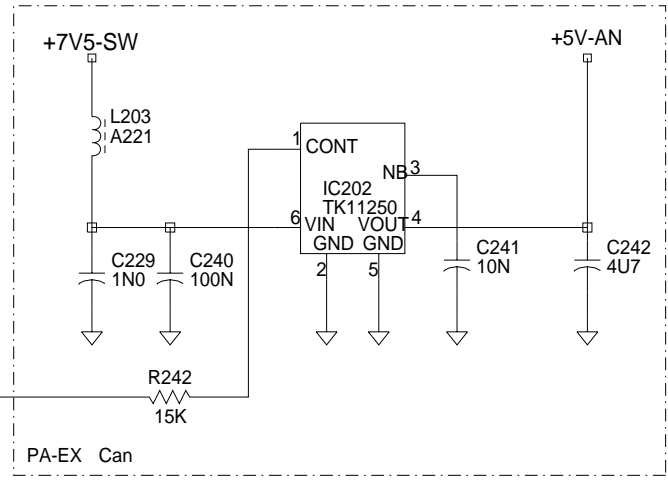


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TOP T5K		174-225MHZ		
SYNTHESISER				
IPN:	ISSUE:	ID.:		
220-01654-03	A	2.SC. 5		
PROJECT:	DESIGNER:	FILE NAME:	FILE DATE:	NO.SHEETS:
TAIT ORCA	BRD	165403a	16-Oct-00	7

REV/ISS	AMENDMENTS	DRAWN	CHKD	D.O.	APVD	DATE
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+5V-AN Reg



TCXO-MOD

VCO

+14V-REG

/SY-EN SY-DAT SY-CLK LCK-DET VCO-MOD

C213 is placed in the corner of vco can

TX_CON

+4V3-DEC

TX-LO

RF-VCO

RX-LO

VCL

P5

GND

SHEET 7

SHEET 6

GND

3360

+7V5-SW

+5V-AN

+5V-AN

+4V3-DEC

+5V-AN

+5V-AN

+7V5-SW

+7V5-SW

1B9

2A7

4U7

6C6

6C4

GND

1B2

1B4

1B5

2A4

3A5

4U6

6C3

7A1

PWR-SAVE

TX-VCO

RX-LO

2A2

7L2

3A8

7L3

4V2

2A6

3A6

4V7

AMENDMENTS

DRAWN

CHKD

D.O.

APVD

DATE

©

TAIT ELECTRONICS

TOP T5K

174-225MHZ

SYNTHESISER

IPN: 220-01654-03

ISSUE: A

ID.: 2.SC. 5

PROJECT: TAIT ORCA

DESIGNER: BRD

FILE NAME: 165403a

FILE DATE: 16-Oct-00

NO.SHEETS: 7

A

B

C

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E

F

G

H

J

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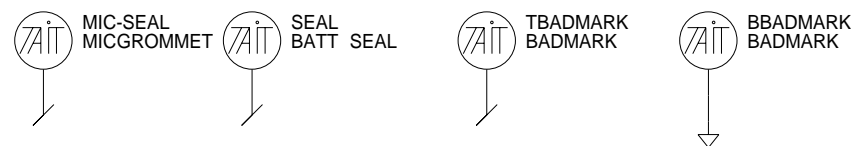
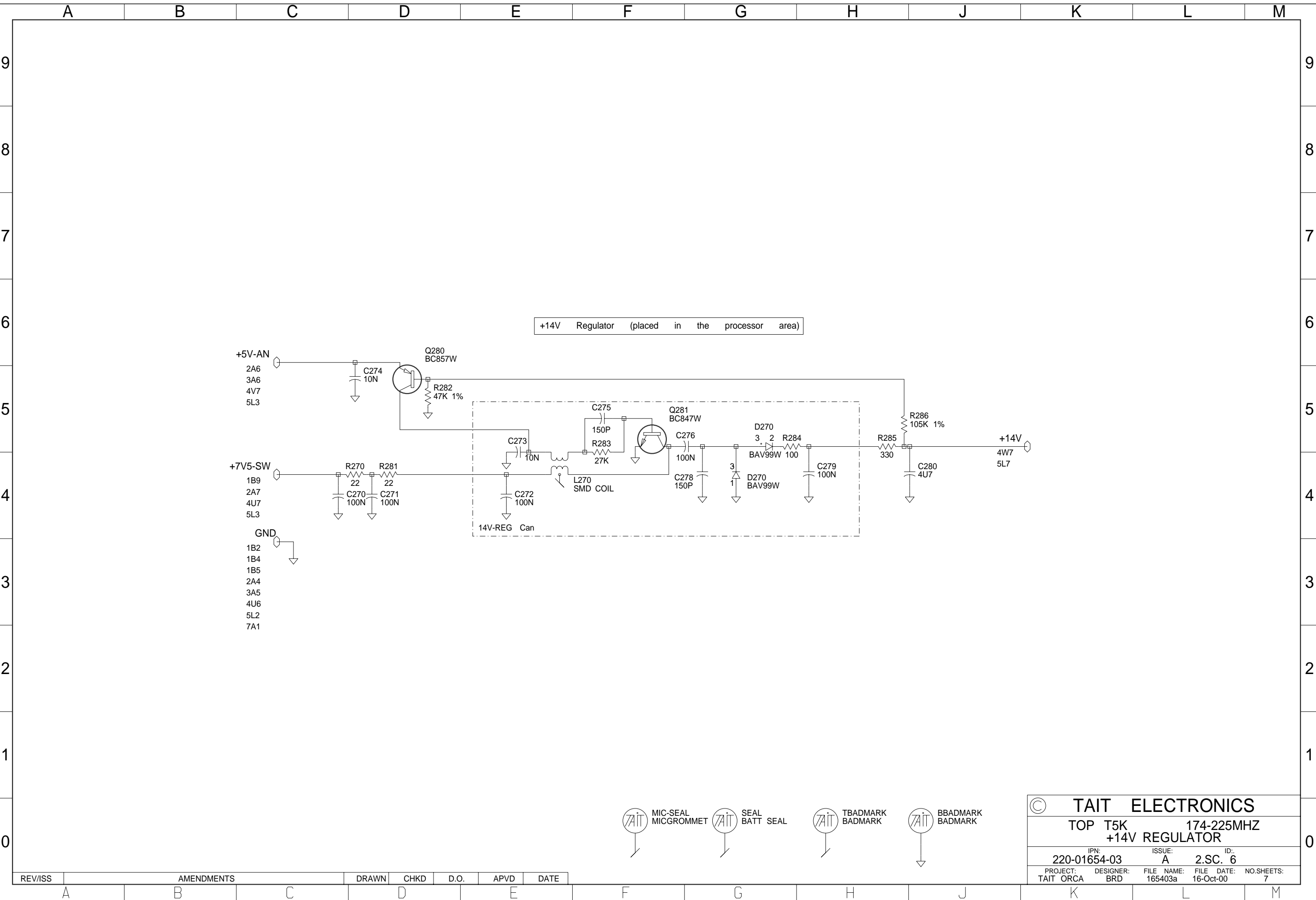
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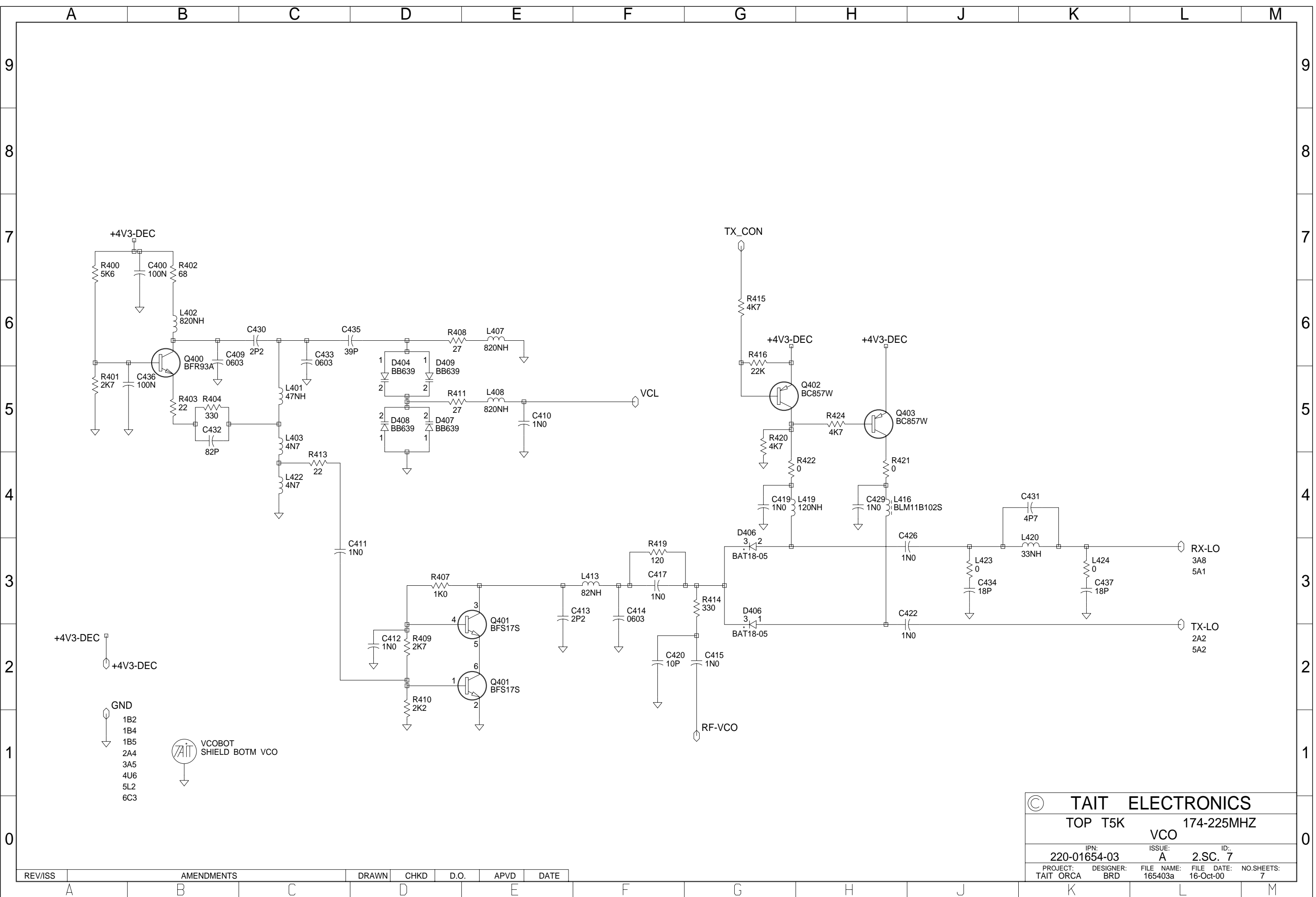
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TOP T5K	174-225MHZ
+14V REGULATOR	
IPN: 220-01654-03	ID: 2.SC. 6
ISSUE: A	FILE DATE: 16-Oct-00
PROJECT: TAIT ORCA	NO.SHEETS: 7

REV/ISS	AMENDMENTS	DRAWN	CHKD	D.O.	APVD	DATE
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+4V3-DEC

+4V3-DEC

GND

1B2

1B4

1B5

2A4

3A5

4U6

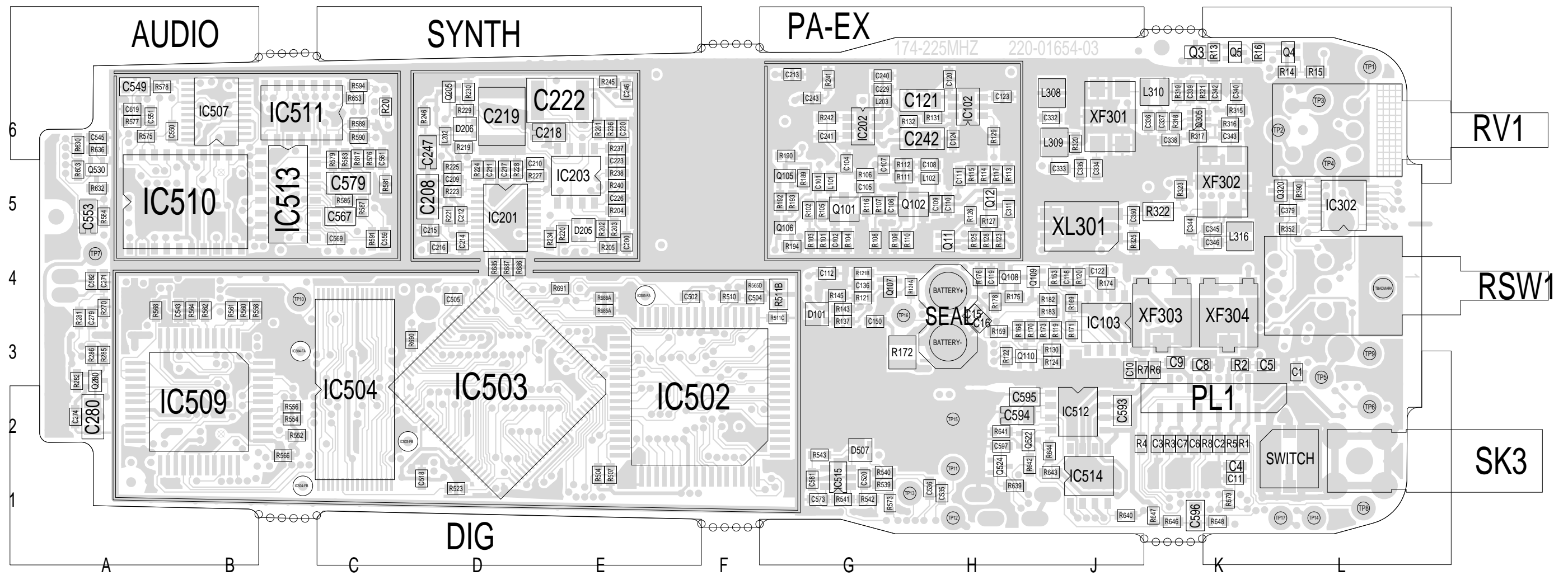
5L2

6C3

VCOBOT SHIELD BOTM VCO

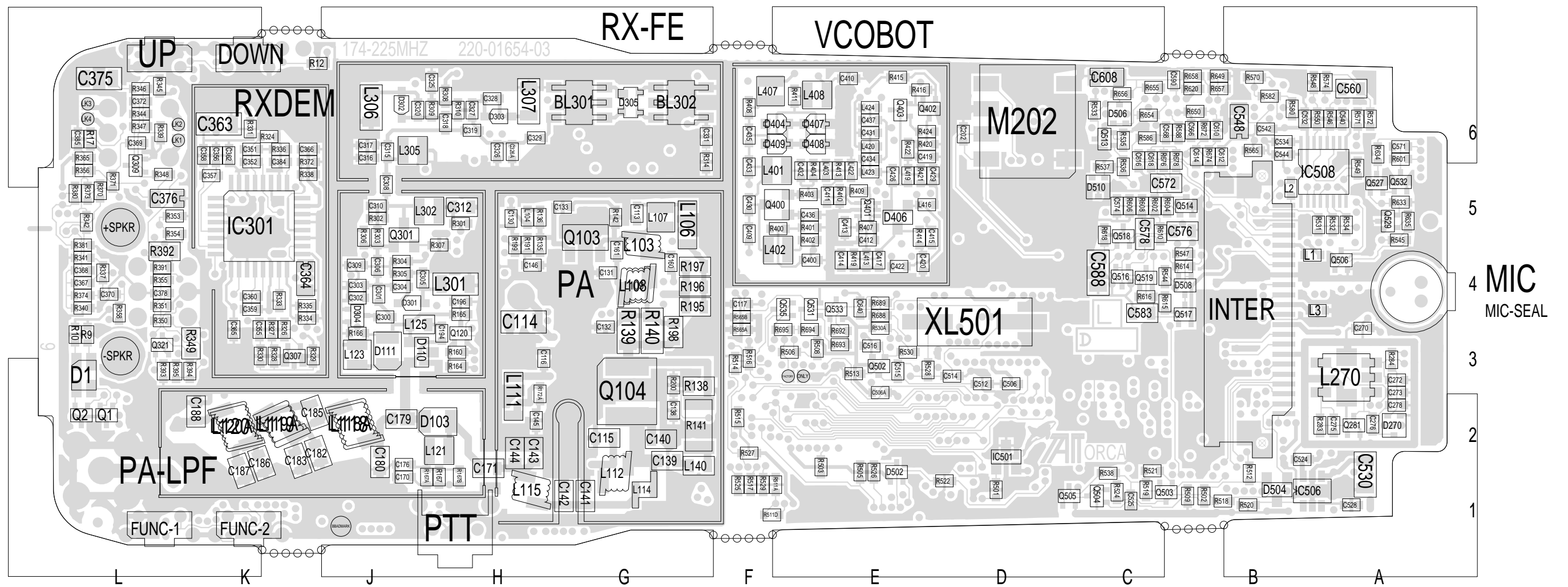
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TOP T5K	174-225MHZ
VCO	
IPN: 220-01654-03	ISSUE: A ID: 2.SC. 7
PROJECT: TAIT ORCA	DESIGNER: BRD FILE NAME: 165403a FILE DATE: 16-Oct-00 NO.SHEETS: 7

REV/ISS	AMENDMENTS	DRAWN	CHKD	D.O.	APVD	DATE



TAIT ELECTRONICS	IPN: 220-01654-03	ISS: A	ID: 1.TA	DATE: 16 Oct 2000
174-225MHZ PCB LAYOUT - TOP SIDE				

Scale: 2.3:1 ; Rotation: 0 degrees



TAIT ELECTRONICS IPN: 220-01654-03 ISS: A ID: 6.BA DATE: 16 Oct 2000
 174-225MHZ PCB LAYOUT - BOTTOM SIDE