PA Control PCB Test Points [220-02000-04]

TAIT ELECTRONICS	IPN: 220-02000-04
PA CONTROL PCB LAYOUT	

Connector PIN outs

Control Bus
SK100
1: SUMMARY-ALARM
2: I2C-DATA
3: I2C-GND
4: I2C-CLK
5: 28V-OUTPUT
6: REV-PWR-ALARM
7: TB8000-SYSTEM
8: FWD-PWR-ALARM
9: AMB-TEMP
10: UIF-SPEAKER
11: REV-PWR-ANA
12: PA-KEY
13: PA-FAN-CONTROL
14: FAN-GND
15: PSU-FAN-CONTROL
16: FWD-PWR-ANA

Power Supply
SK101
1: GND
2: +28V-FILT
3: +28V-FILT
4: GND

RF Power Control
SK102
1: POWER-CONTROL
2: RF-DET
3: PA-KEY-COAX
4: DRIVER-TEMP

6W Control
SK103
1: STANDBY
2: DRIVE-CURRENT
3: DRIVER-BIAS
4: +10V-SWITCHED

60W Isolated Control
SK104
1: FINAL1-CURRENT
2: FINAL1-BIAS
3: FINAL1-TEMP
4: GND

60W Final1 Control
SK105
1: FINAL1-CURRENT
2: FINAL1-BIAS
3: FINAL1-TEMP
4: GND

60W Control
SK106
1: FINAL1-CURRENT
2: FINAL1-BIAS
3: FINAL1-TEMP
4: GND

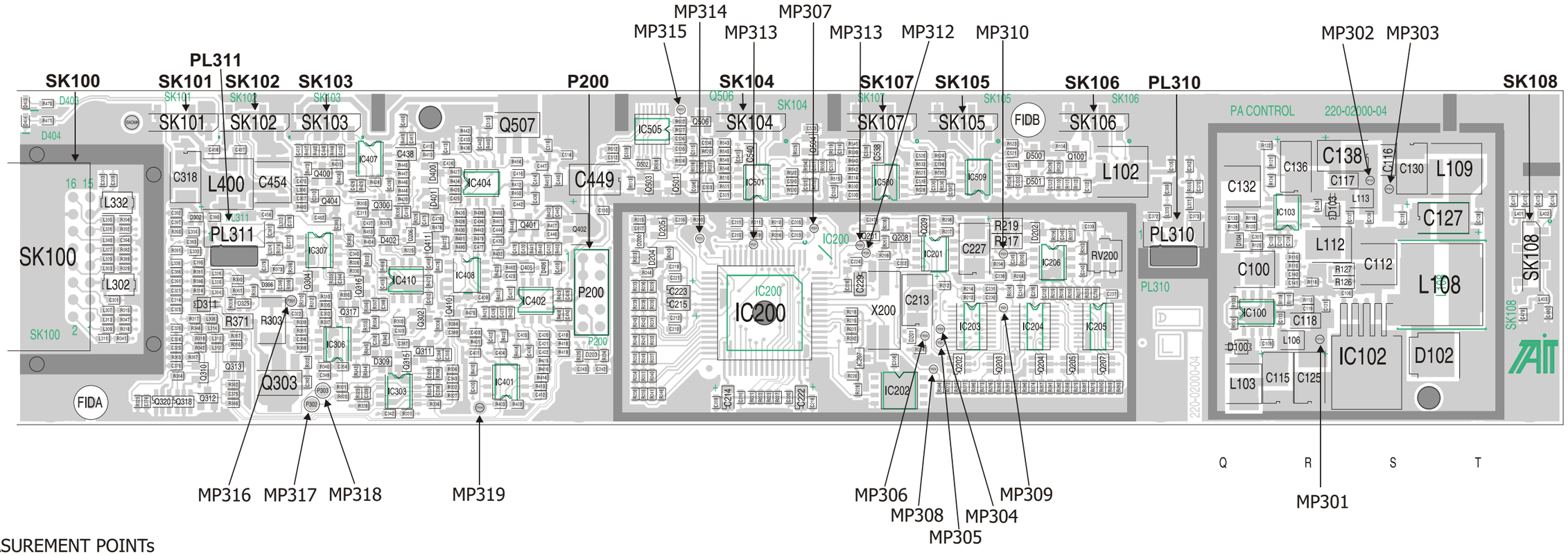
60W Final2 Control
SK107
1: FINAL2-CURRENT
2: FINAL2-BIAS
3: FINAL2-TEMP
4: GND

RF Power Sens
SK108
1: FWD-PWR-DC
2: REV-PWR-DC
3: +10V-LPF
4: LPF-DC-ROM

Factory only
P200
1: GND
2: 4
3: GND
4: 6
5: GND
6: RESET
7: +5V
8: PROG-VOLTS
9: OSC-1
10: NC

Temp Sens
PL310
1: TEMP
2: GND
3: +5V

Temp Sens
PL311
1: TEMP
2: GND
3: +5V



MEASUREMENT POINTs

T8000 UHF PA MICROPROCESSOR Schematic Test points

CCT Sheet 1
MP301 ->TP100[1K3] +5V-DIG
MP302 ->TP102[1L6] +10
MP303 ->TP103[1P7] -3V

CCT Sheet 2
MP304 ->TP200[2K6] NC
MP305 ->TP201[2K5] NC
MP306 ->TP202[2E7] PROG-VOLTS
MP307 ->TP203[2G5] ATTN-BIAS-ENABLE
MP308 ->TP204[2R9] POWER-LEVEL
MP309 ->TP205[2K5] FAN-CONTROL
MP310 ->TP206[2C1] SUPPLY-VOLTS
MP311 ->TP207[2E0] PA-KEY-SENSE
MP312 ->TP208[2E1] PA-KEY-MICRO
MP313 ->TP209[2G1] RF-DET-SENSE
MP314 ->TP210[2G4] PA-RAMP-MICRO
MP315 ->TP211[2J4] KEY-CONT

CCT Sheet 3
MP316 ->TP301[3P3] PA-FAN-CONTROL
MP317 ->TP302[3K7] FWD-PWR-ANA
MP318 ->TP303[3G4] REV-PWR-ANA

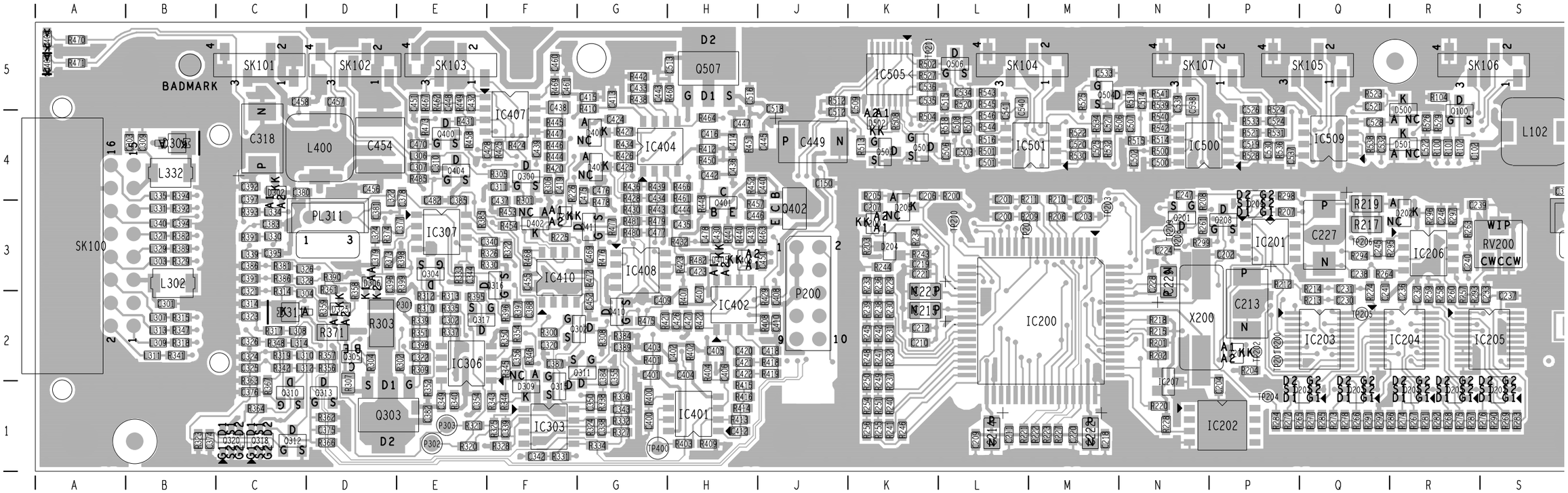
CCT Sheet 4
MP319 ->TP400[4D6] POWER-LEVEL

INSPECTION POINTs

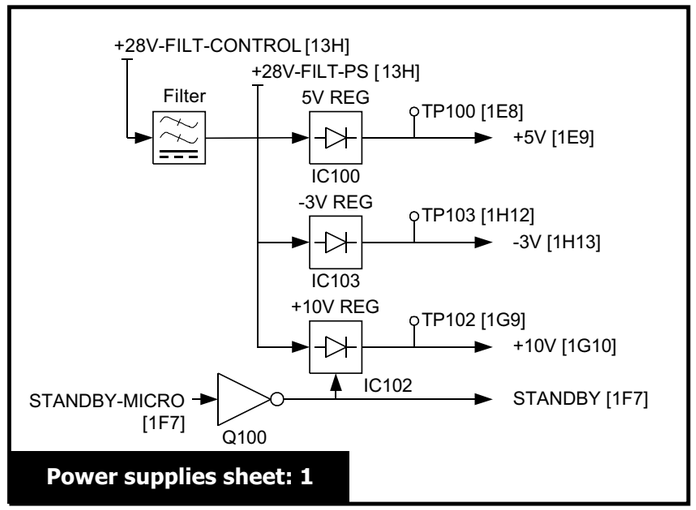
MP320 ->	[___]	MP330 ->	[___] .....
MP321 ->	[___]	MP331 ->	[___] .....
MP322 ->	[___]	MP332 ->	[___] .....
MP323 ->	[___]	MP333 ->	[___] .....
MP324 ->	[___]	MP334 ->	[___] .....
MP325 ->	[___]	MP335 ->	[___] .....
MP326 ->	[___]	MP336 ->	[___] .....
MP327 ->	[___]	MP337 ->	[___] .....
MP328 ->	[___]	MP338 ->	[___] .....
MP329 ->	[___]	MP339 ->	[___] .....

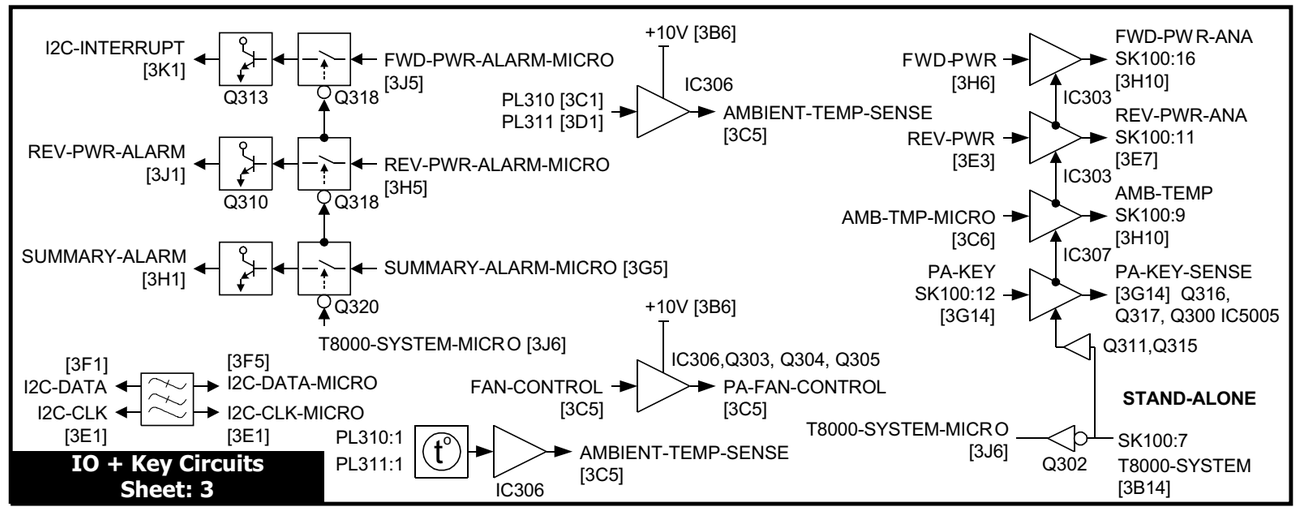
TAIT ELECTRONICS	PRODUCT TB8100 PA	ID: SMQ xoH7	DATE: 2004
TRAINING SERVICES PA CONTROL			Page 1

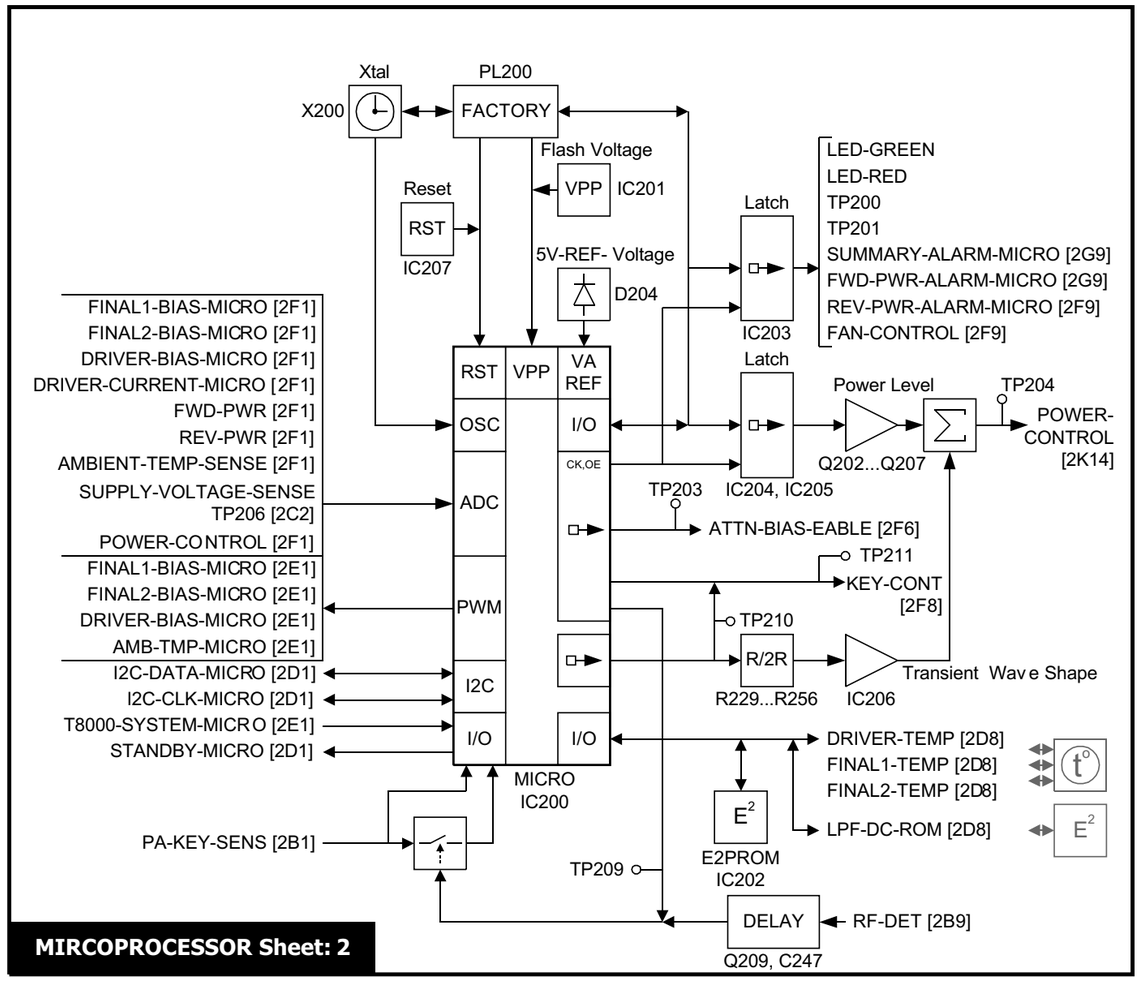
TAIT ELECTRONICS	IPN: 220-02000-06
PA CONTROL LAYOUT	

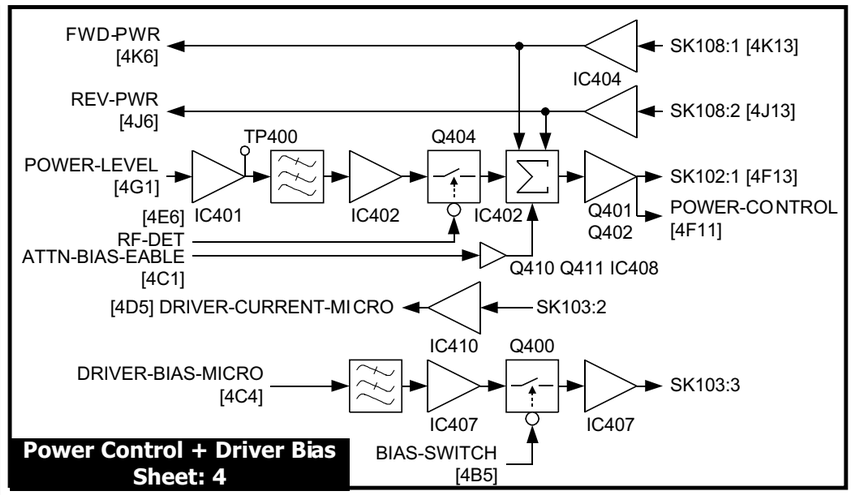


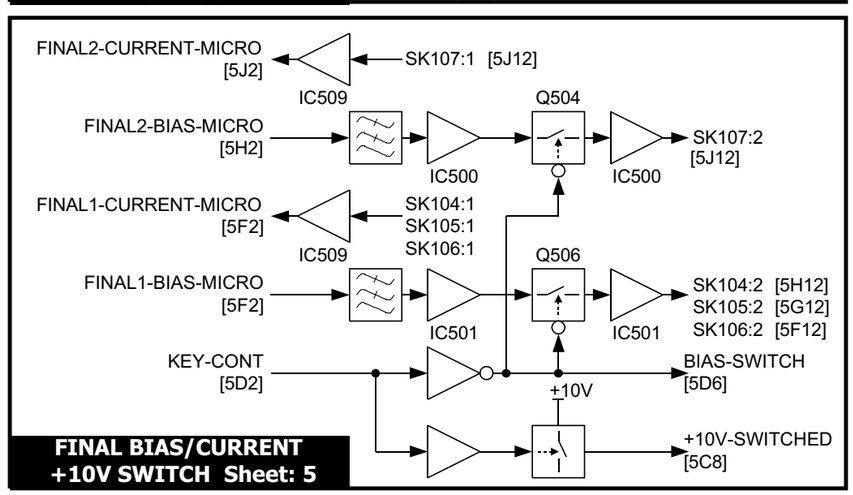
TAIT ELECTRONICS	PRODUCT TB8100 PA	ID: SMQ xoH7	DATE: 2004
TRAINING SERVICES TB8100 PA Control			Page 2

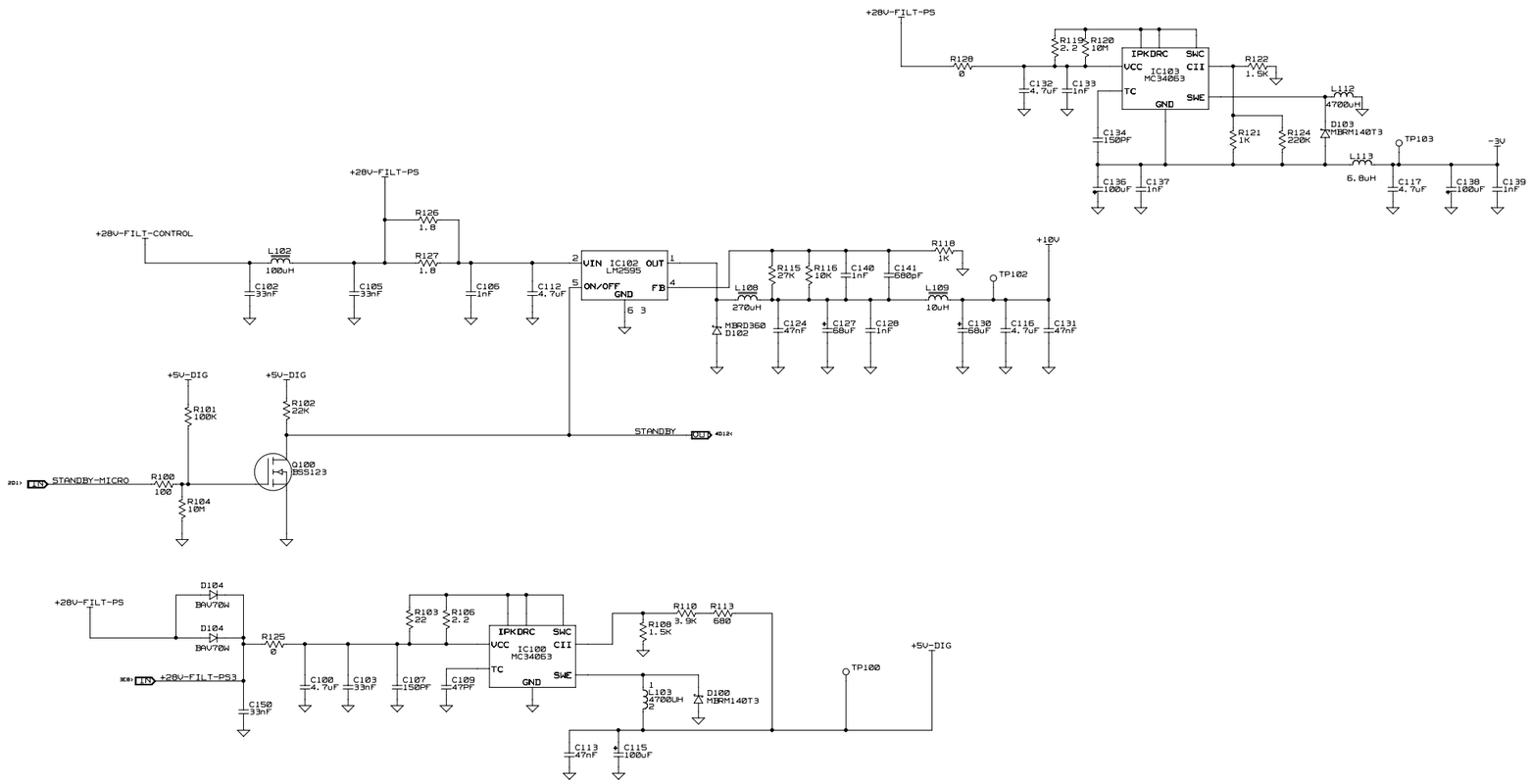

+28V-FILT-CONTROL [13H]
+28V-FILT-PS [13H]
Filter
5V REG
TP100 [1E8]
+5V [1E9]
IC100
-3V REG
TP103 [1H12]
-3V [1H13]
IC103
+10V REG
TP102 [1G9]
+10V [1G10]
IC102
STANDBY-MICRO [1F7]
Q100
STANDBY [1F7]
Power supplies sheet: 1


I2C-INTERRUPT [3K1]
Q313
Q318
FWD-PWR-ALARM-MICRO [3J5]
REV-PWR-ALARM [3J1]
Q310
REV-PWR-ALARM-MICRO [3H5]
SUMMARY-ALARM [3H1]
Q320
SUMMARY-ALARM-MICRO [3G5]
T8000-SYSTEM-MICRO [3J6]
+10V [3B6]
IC306
PL310 [3C1]
PL311 [3D1]
AMBIENT-TEMP-SENSE [3C5]
FWD-PWR [3H6]
FWD-PWR-ANA SK100:16 [3H10]
IC303
REV-PWR [3E3]
REV-PWR-ANA SK100:11 [3E7]
AMB-TMP-MICRO [3C6]
AMB-TEMP SK100:9 [3H10]
IC307
PA-KEY SK100:12 [3G14]
PA-KEY-SENSE [3G14] Q316, Q317, Q300 IC5005
Q311,Q315
STAND-ALONE
SK100:7 T8000-SYSTEM [3B14]
Q302
[3F1]
I2C-DATA
I2C-CLK
[3E1]
[3F5]
I2C-DATA-MICRO
I2C-CLK-MICRO
[3E1]
FAN-CONTROL [3C5]
IC306,Q303, Q304, Q305
PA-FAN-CONTROL [3C5]
PL310:1
PL311:1
IC306
AMBIENT-TEMP-SENSE [3C5]
IO + Key Circuits Sheet: 3


Xtal
X200
PL200
FACTORY
Flash Voltage
VPP
IC201
Reset
RST
IC207
5V-REF- Voltage
D204
Latch
IC203
LED-GREEN
LED-RED
TP200
TP201
SUMMARY-ALARM-MICRO [2G9]
FWD-PWR-ALARM-MICRO [2G9]
REV-PWR-ALARM-MICRO [2F9]
FAN-CONTROL [2F9]
FINAL1-BIAS-MICRO [2F1]
FINAL2-BIAS-MICRO [2F1]
DRIVER-BIAS-MICRO [2F1]
DRIVER-CURRENT-MICRO [2F1]
FWD-PWR [2F1]
REV-PWR [2F1]
AMBIENT-TEMP-SENSE [2F1]
SUPPLY-VOLTAGE-SENSE TP206 [2C2]
POWER-CONTROL [2F1]
FINAL1-BIAS-MICRO [2E1]
FINAL2-BIAS-MICRO [2E1]
DRIVER-BIAS-MICRO [2E1]
AMB-TMP-MICRO [2E1]
I2C-DATA-MICRO [2D1]
I2C-CLK-MICRO [2D1]
T8000-SYSTEM-MICRO [2E1]
STANDBY-MICRO [2D1]
RST
VPP
VA REF
OSC
I/O
CK,OE
ADC
PWM
I2C
I/O
I/O
MICRO IC200
Latch
Power Level
TP204
POWER-CONTROL [2K14]
Q202...Q207
TP203
IC204, IC205
ATTN-BIAS-EABLE [2F6]
TP211
KEY-CONT [2F8]
TP210
R/2R
R229...R256
IC206
Transient Wave Shape
DRIVER-TEMP [2D8]
FINAL1-TEMP [2D8]
FINAL2-TEMP [2D8]
LPF-DC-ROM [2D8]
PA-KEY-SENS [2B1]
TP209
E2PROM IC202
DELAY
RF-DET [2B9]
Q209, C247
MIRCOPROCESSOR Sheet: 2

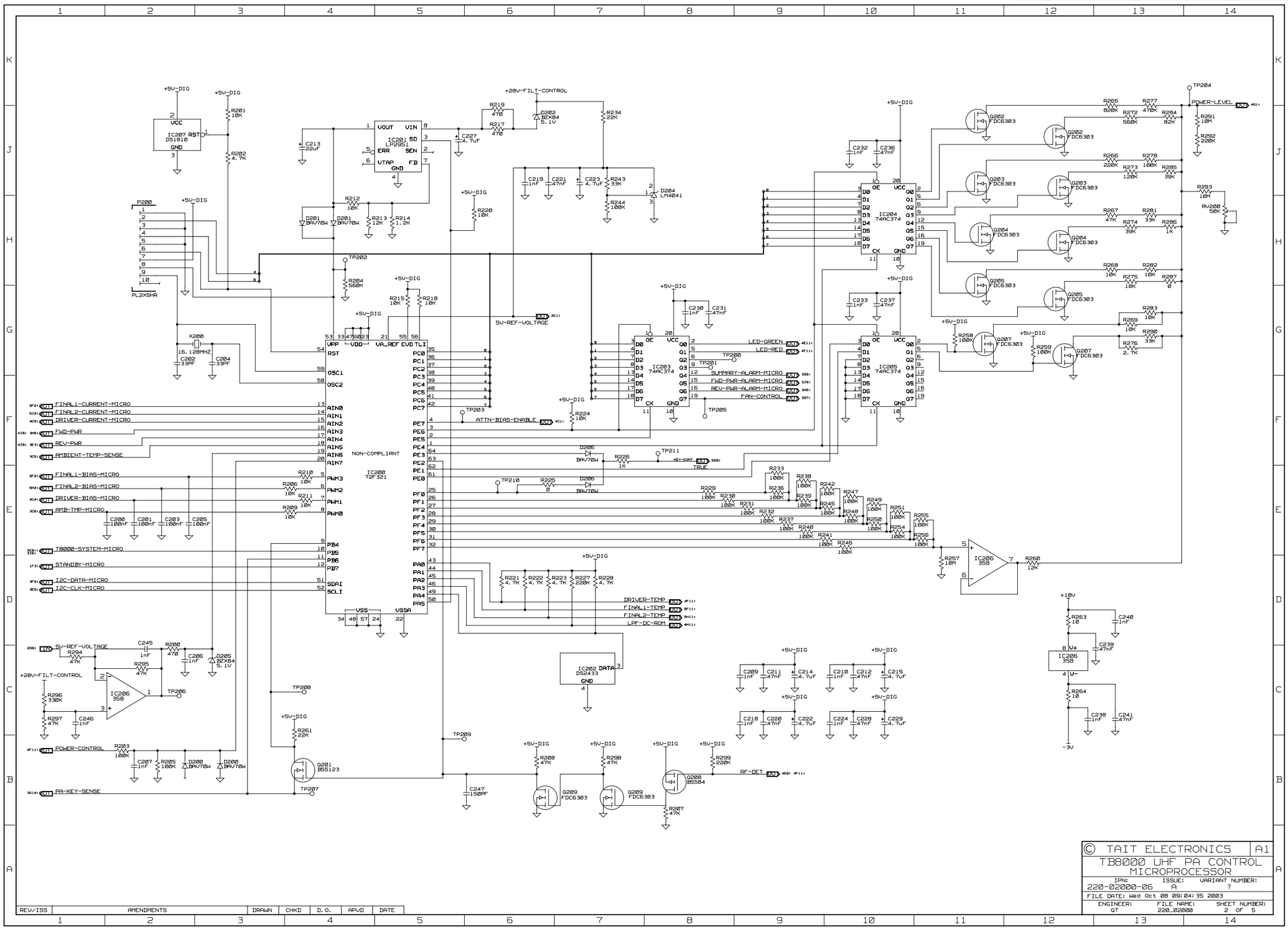

FWD-PWR [4K6]
REV-PWR [4J6]
IC404
SK108:1 [4K13]
SK108:2 [4J13]
POWER-LEVEL [4G1]
TP400
Q404
[4E6]
IC401
IC402
IC402
Q401
Q402
SK102:1 [4F13]
POWER-CONTROL [4F11]
RF-DET
ATTN-BIAS-EABLE [4C1]
Q410 Q411 IC408
[4D5] DRIVER-CURRENT-MICRO
SK103:2
IC410
Q400
DRIVER-BIAS-MICRO [4C4]
SK103:3
IC407
IC407
BIAS-SWITCH [4B5]
Power Control + Driver Bias Sheet: 4


FINAL2-CURRENT-MICRO [5J2]
SK107:1 [5J12]
IC509
Q504
FINAL2-BIAS-MICRO [5H2]
SK107:2 [5J12]
IC500
IC500
FINAL1-CURRENT-MICRO [5F2]
SK104:1
SK105:1
SK106:1
IC509
Q506
FINAL1-BIAS-MICRO [5F2]
SK104:2 [5H12]
SK105:2 [5G12]
SK106:2 [5F12]
IC501
IC501
KEY-CONT [5D2]
BIAS-SWITCH [5D6]
+10V
+10V-SWITCHED [5C8]
FINAL BIAS/CURRENT +10V SWITCH Sheet: 5



REV/ISS	AMENDMENTS	DRAWN	CHKD	D.O.	APVD	DATE
06A	ECO 101200253	BAM	OW	CK	OW	14/10/03
05A	COPIED FROM 226-00281-03 REF ECO 101200226	BAM	OW	CK	OW	07/10/03

	A1
TB8000 UHF PA CONTROL POWER SUPPLIES	
IPN: 220-02000-06	ISSUE: A / VARIANT NUMBER: 7
FILE DATE: Fri Feb 27 13:35:55 2004	
ENGINEER: QT	FILE NAME: 220_02000 / SHEET NUMBER: 1 OF 5



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

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TB8000 UHF PA CONTROL MICROPROCESSOR

IPN:	ISSUE:	VARIANT NUMBER:
220-02000-06	A	?

FILE DATE: Wed Oct 08 09:04:35 2003

ENGINEER:	FILE NAME:	SHEET NUMBER:
OT	220_02000	2 OF 5

I2C-INTERUPT
REV-PWR-ALARM
SUMMARY-ALARM
I2C-DATA
I2C-CLK
I2C-GND
FWD-PWR
REV-PWR
FAN-CONTROL
AMBIENT-TEMP-SENSE
AMB-TMP-MICRO
FWD-PWR-ANA
REV-PWR-ANA
FWD-PWR-ALARM-MICRO
REV-PWR-ALARM-MICRO
SUMMARY-ALARM-MICRO
I2C-DATA-MICRO
I2C-CLK-MICRO
T8000-SYSTEM-MICRO
10V-STAND-ALONE
+5V-DIG
+10V
+28V-FILT-PS3
+28V-FILT-CONTROL
PA-KEY-COAX
PA-KEY-SENSE
PA-KEY
PSU-FAN-CONTROL
28V-OUTPUT
UIF-SPEAKER
PA-FAN-CONTROL
FAN-GND
AMB-TEMP
T8000-SYSTEM

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

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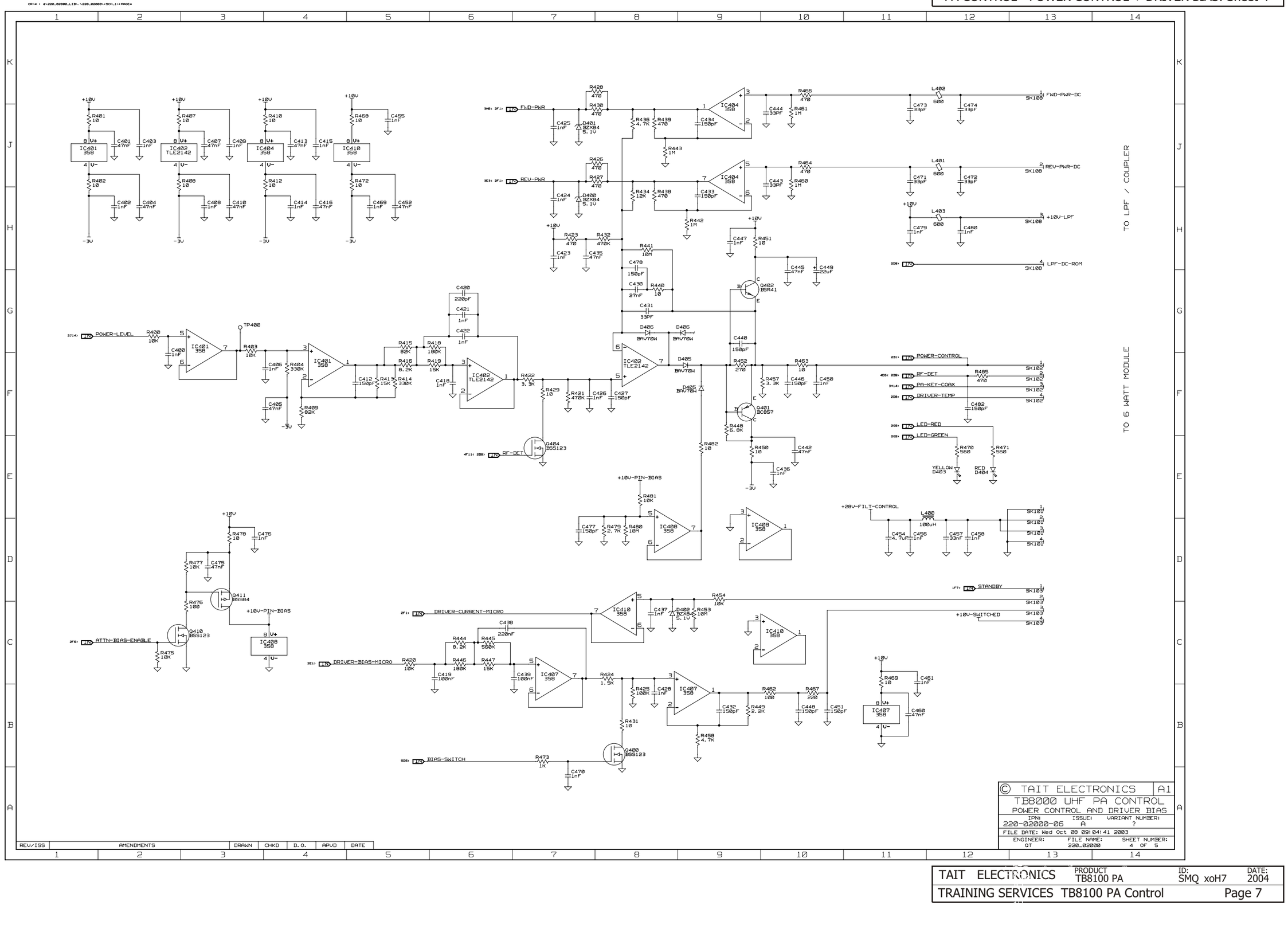
TB8000 UHF PA CONTROL
I/O AND KEY CIRCUITS

IPN: 220-02000-06 | ISSUE: A | VARIANT NUMBER: ?

FILE DATE: Wed Oct 08 09:04:39 2003

ENGINEER: QT | FILE NAME: 220_02000 | SHEET NUMBER: 3 OF 5



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

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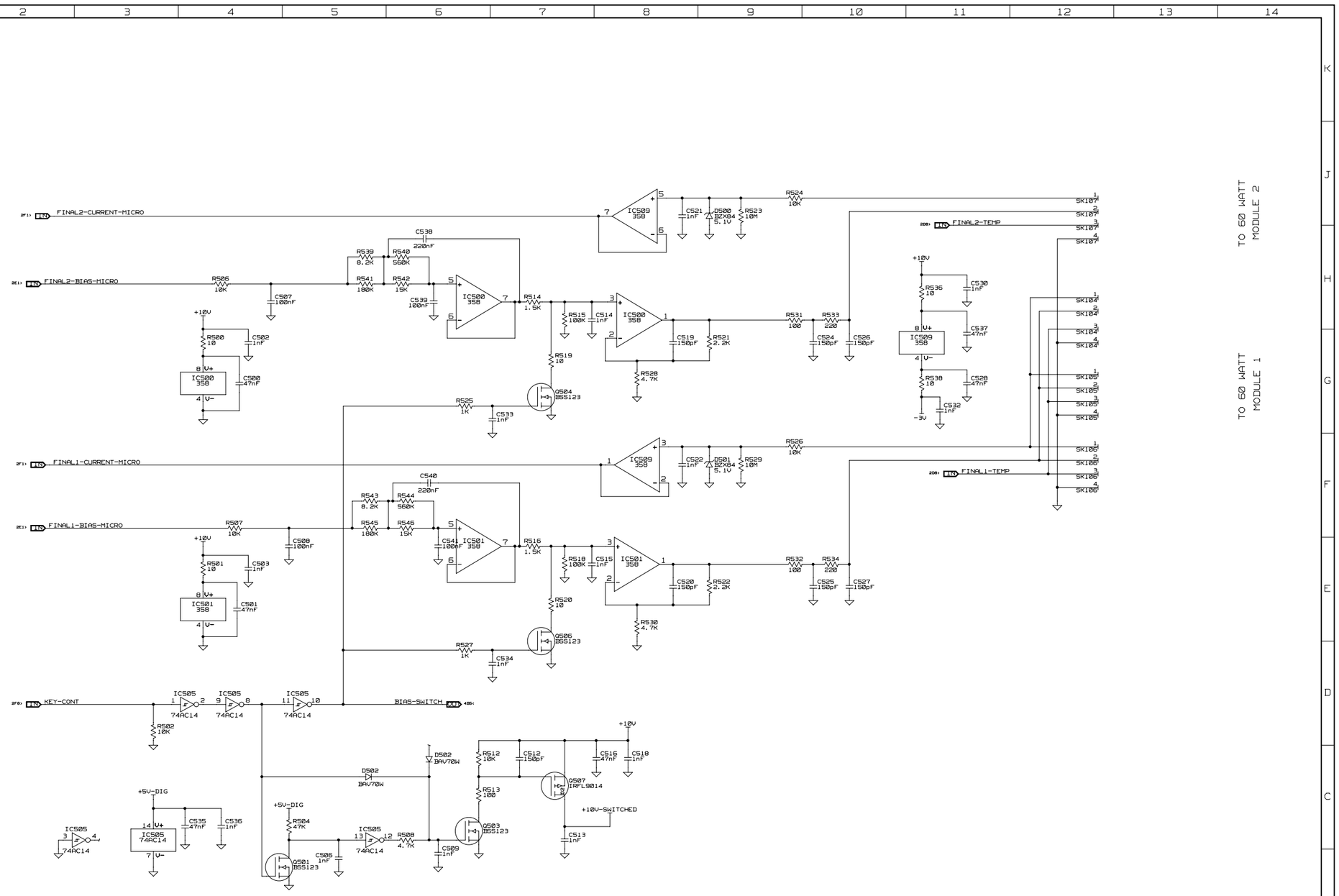
TB8000 UHF PA CONTROL
POWER CONTROL AND DRIVER BIAS

IPN:	ISSUE:	VARIANT NUMBER:
220-02000-06	A	?

FILE DATE: Wed Oct 08 09:04:41 2003

ENGINEER:	FILE NAME:	SHEET NUMBER:
OT	220_02000	4 OF 5



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

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TB8000 UHF PA CONTROL
FINAL BIAS/CURRENT & 10V SWITCH

IPN:	ISSUE:	VARIANT NUMBER:
220-02000-06	A	?

FILE DATE: Wed Oct 08 09:04:43 2003

ENGINEER:	FILE NAME:	SHEET NUMBER:
QT	220_02000	5 OF 5