

8.17 T2000-A37 Selcall Kit

The T2000-A37 Selcall PCB plugs into an options connector on the top side of the logic PCB, and provides selective tone calling (Selcall) facilities for T2010, T2015 or T2020 Series II radios.

This option allows selective individual or group calls within a fleet of radios, on channels that have Selcall programmed. Selcall parameters and features are set up and enabled during radio programming. Both Sigtec and International group formats are supported by the T2000-A37 Selcall PCB.

T2010 and T2015 radios require version 3 radio firmware when a T2000-A37 Selcall kit is fitted. If your radio uses an earlier firmware version, a version 3 microprocessor can be purchased as a separate item, with IPN 002-26870-62.

The T2000-A37 does not support the EIA tone set. The following topics are covered in this Section:

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8.17.1 Components Required

The T2000-A37 Selcall kit contains the following components:

Quantity	Description
1	T2000-A37 PCB assembly
12mm	PVC foam tape

8.17.2 Fitting

- 1 Refer to Figure 8.17.1.

Remove the top cover of the radio by unscrewing the four cover screws, unscrew the logic PCB and fold-out.

- 2 **T2010 & T2015 Radios (if a firmware version upgrade is required)**

Use a PLCC extractor to remove the existing microprocessor from SK505, located on the top side of T2010/T2015 logic PCB.

Fit the new microprocessor and check that pin 1 is correctly aligned.

Remove PCB link resistor #R714.

Fit PCB link resistor #R715 (use a 0Ω resistor or a solder short).

Note: On logic PCB IPN 220-01377-00 or IPN 220-01377-01, “#R715” is designated “#R714A”.

- 3 Position the T2000-A37 PCB as shown, and plug into the connector on the T2000 logic PCB, as follows:

Model	PCB IPN	Connector Circuit Reference
T2010 & T2015	220-01377-0X	P1
T2020	220-01344-0X	#T3K44

- 4 Position the foam tape provided on top of X1 and X2 on the T2000-A37 Selcall PCB.
- 5 Carefully fold the logic PCB back in position and secure using the three logic PCB retaining screws.
Refit the top cover.
- 6 Refer to the T2000 Programming Software User’s Manual (IPN 439-22000-02, or later) for set-up information.

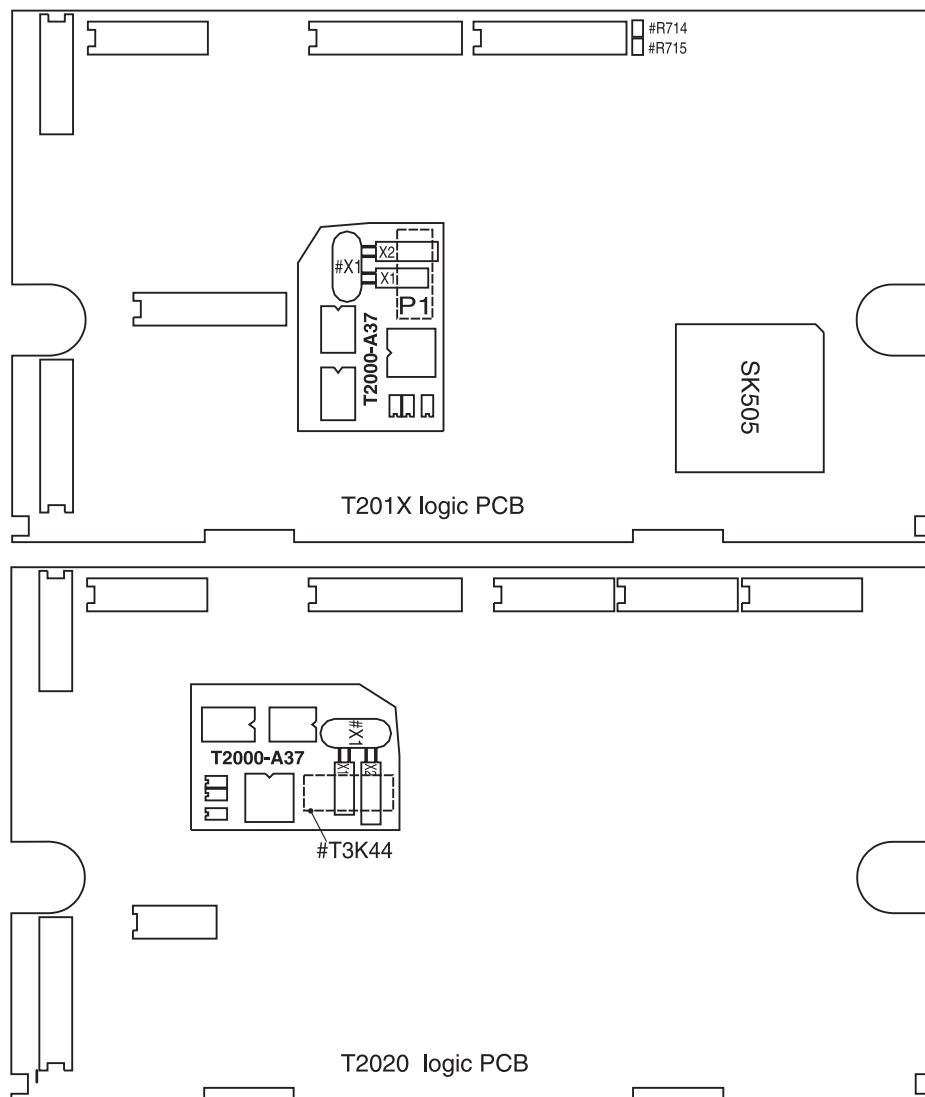
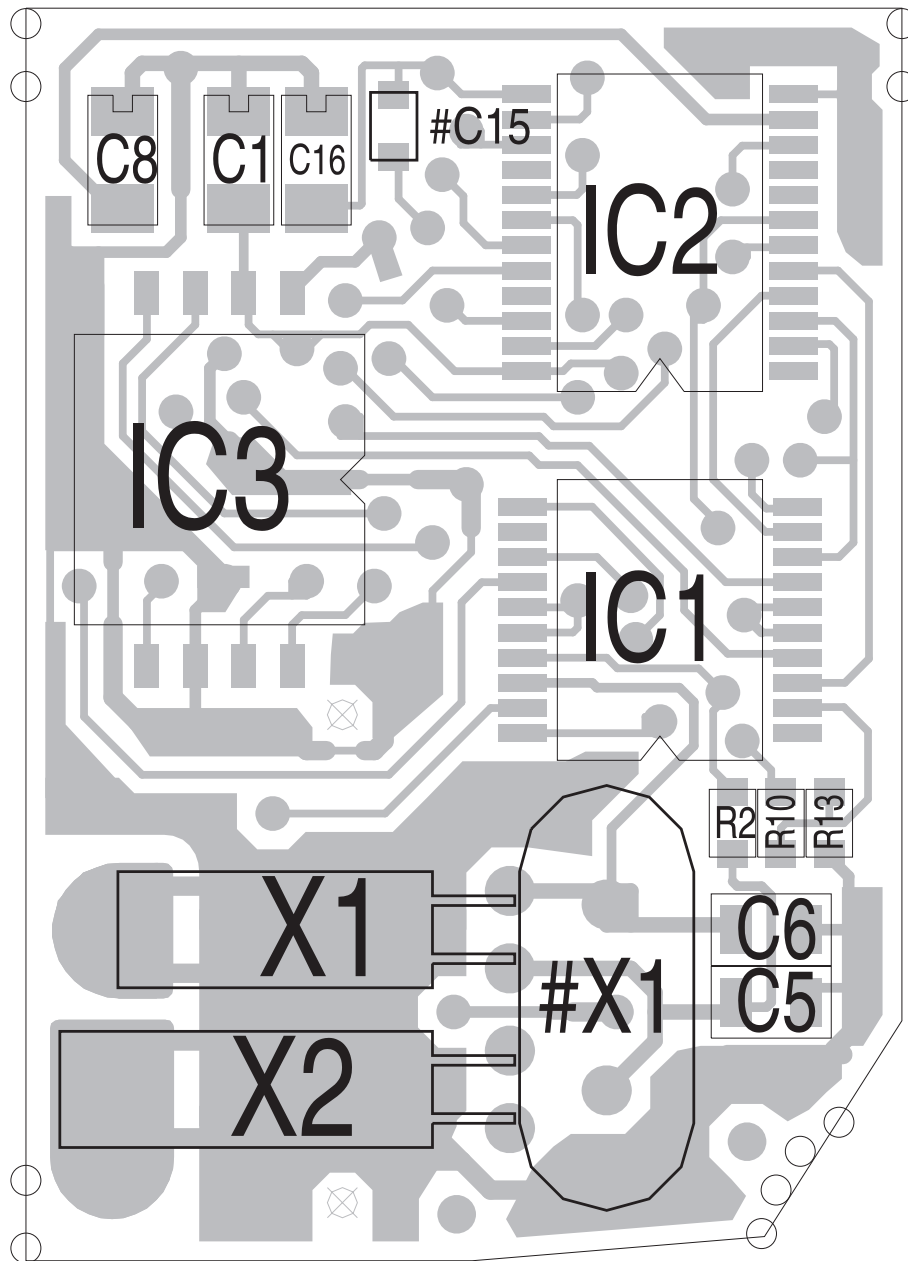


Figure 8.17.1 T2000-A37 Selcall PCB Mounting

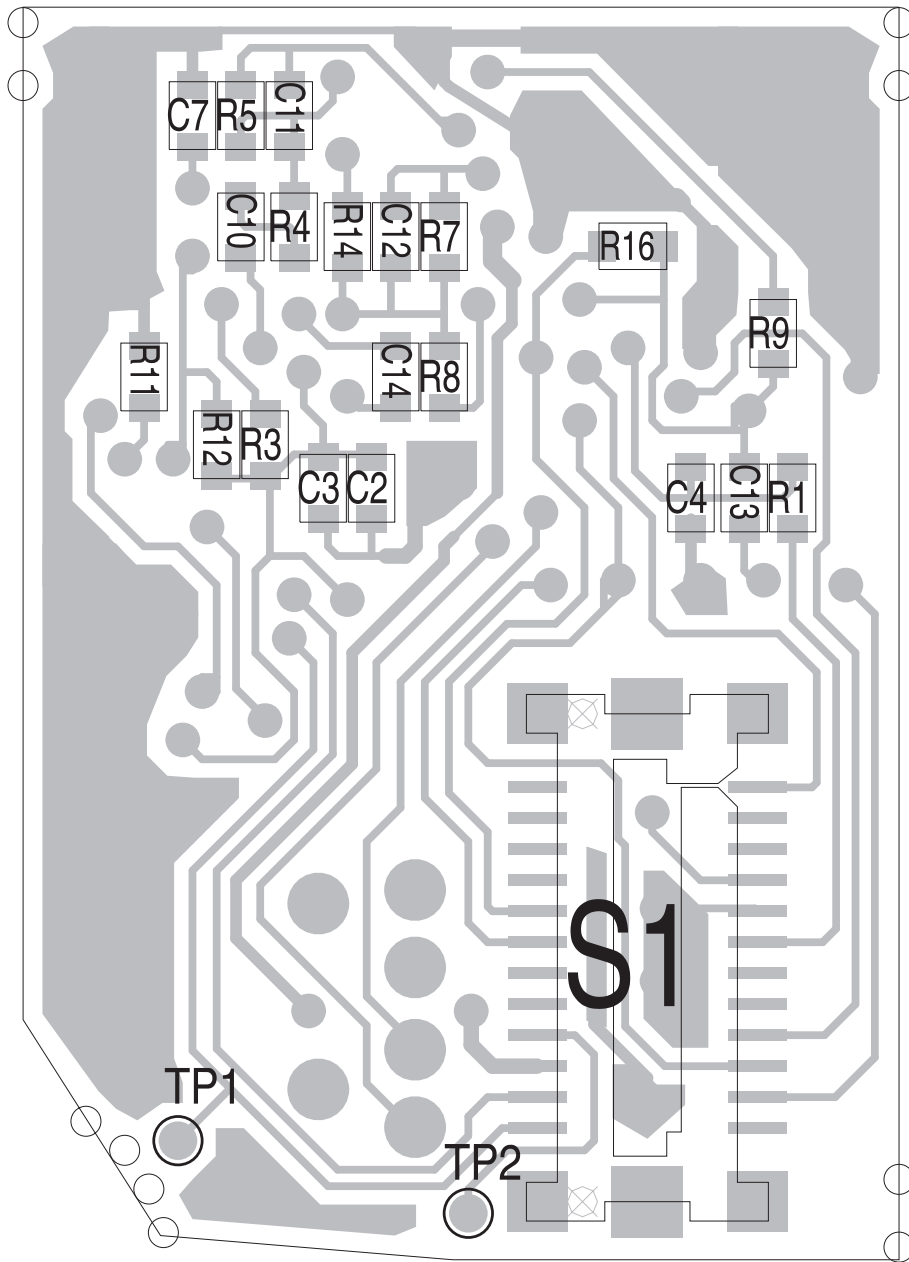
8.17.3 PCB Information

T2000-A37 Parts List (IPN 220-01600-01)

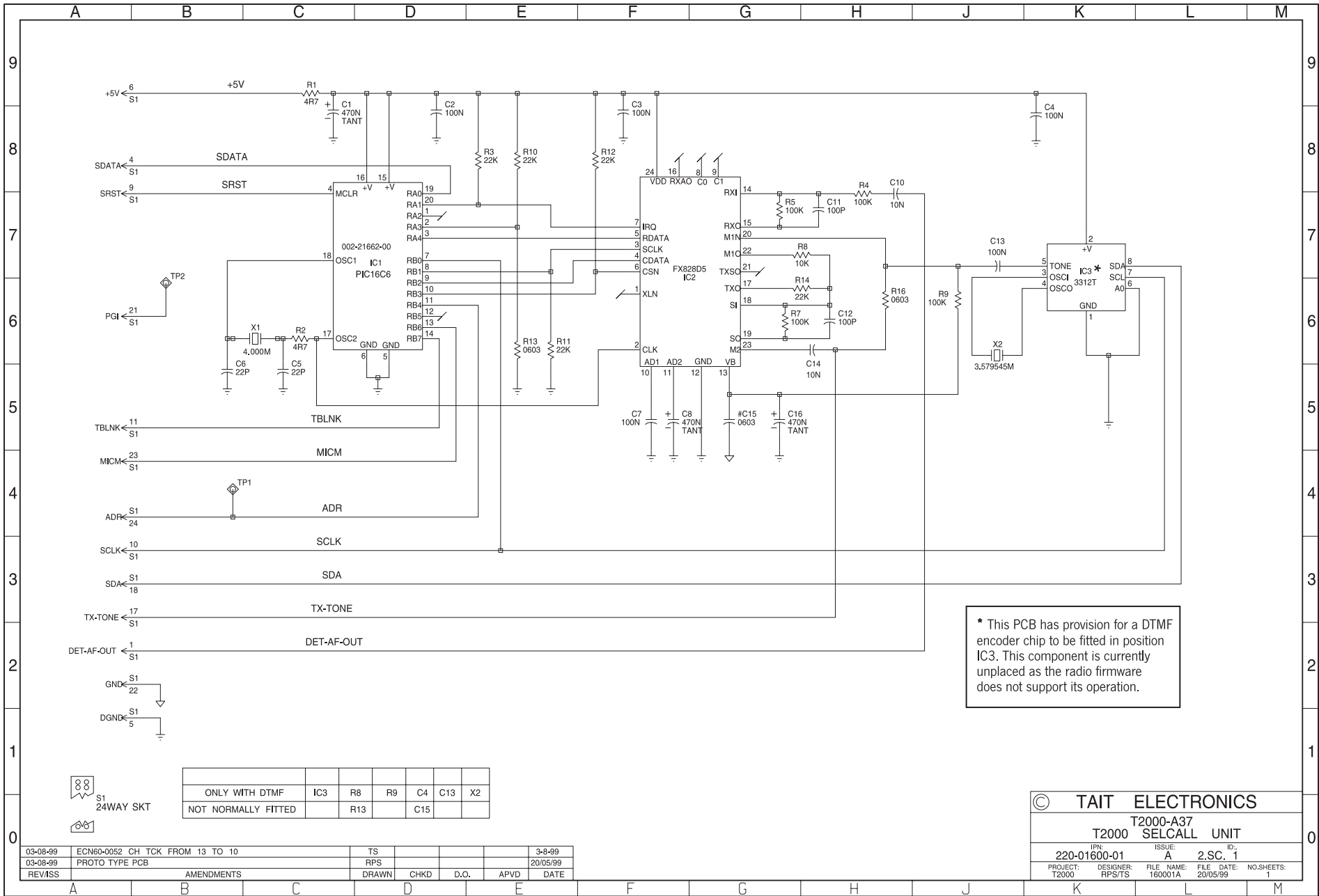
Ref	IPN	Description	Ref	IPN	Description
C1	014-06470-00	CAP 470N 25V +-20%			
C10	018-15100-00	CAP 0603 CHIP 10N 50V X7R+-10%			
C11	018-13220-00	CAP 0603 CHIP 220P 50V NPO+-5%			
C12	018-13220-00	CAP 0603 CHIP 220P 50V NPO+-5%			
C14	018-15100-00	CAP 0603 CHIP 10N 50V X7R+-10%			
C16	014-06470-00	CAP 470N 25V +-20%			
C2	018-16100-01	CAP 0603 100N +80-20% Y5V 16V			
C3	018-16100-01	CAP 0603 100N +80-20% Y5V 16V			
C4	018-16100-01	CAP 0603 100N +80-20% Y5V 16V			
C5	018-12220-00	CAP 0603 CHIP 22P 50V NPO +-5%			
C6	018-12220-00	CAP 0603 CHIP 22P 50V NPO +-5%			
C7	018-16100-01	CAP 0603 100N +80-20% Y5V 16V			
C8	014-06470-00	CAP 470N 25V +-20%			
IC1	002-21662-00	IC 8-BIT PIC16C622 EPROM			
IC2	002-20008-28	IC FX828D5 DCS SEL PRCSR			
R1	038-11470-00	RES 0603 CHIP 4E7 1/16W +-5%			
R10	038-15220-00	RES 0603 CHIP 22K 1/16W +-5%			
R11	038-15220-00	RES 0603 CHIP 22K 1/16W +-5%			
R12	038-15220-00	RES 0603 CHIP 22K 1/16W +-5%			
R14	038-15220-00	RES 0603 CHIP 22K 1/16W +-5%			
R2	038-11470-00	RES 0603 CHIP 4E7 1/16W +-5%			
R3	038-15220-00	RES 0603 CHIP 22K 1/16W +-5%			
R4	038-16100-00	RES 0603 CHIP 100K 1/16W +-5%			
R5	038-15470-00	RES 0603 CHIP 47K 1/16W +-5%			
R7	038-16100-00	RES 0603 CHIP 100K 1/16W +-5%			
S1	240-10000-09	CONN SMD 24WAY			
X1	274-01070-00	XTL 4.000MHZ HC49U/S ULATOR			
	220-01600-01	L)PCB T2000 SELCALL X2S370A			
	365-00011-54	LABEL WHITE RW1556/2 90*24MM			
	365-00100-20	LABEL WHITE S/A 28X11MM QKSTIK			
	369-02054-00	TAPE SA TESA 12*6.4MM 15M ROLL			
	399-00010-86	BAG STATIC SHIELDING 127X203MM			
	410-01064-01	PKG HEADER CARD (NEW LOGO)			
	418-23700-00	FTTNG INS T2000-A37 SEL KIT			



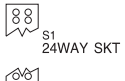
T2000-A37 Selcall PCB (IPN 220-01600-01) - Top Side



T2000-A37 Selcall PCB (IPN 220-01600-01) - Bottom Side



* This PCB has provision for a DTMF encoder chip to be fitted in position IC3. This component is currently unplaced as the radio firmware does not support its operation.



ONLY WITH DTMF	IC3	R8	R9	C4	C13	X2
NOT NORMALLY FITTED		R13		C15		

03-08-99	ECN60-0052 CH TCK FROM 13 TO 10	TS			3-8-99
03-08-99	PROTO TYPE PCB	RPS			20/05/99
REVISS	AMENDMENTS	DRAWN	CHKD	D.O.	APVD
					DATE

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T2000-A37 SELCALL UNIT					
IPN:	A	ISSUE:	2.S.C.	ID:	1
PROJECT:	T2000	DESIGNER:	RPS/TS	FILE NAME:	160001A
		FILE DATE:	20/05/99	NO. SHEETS:	1

