

8.13 T2000-A66 Single Port UART Kit

The T2000-A66 single port UART kit allows computer control of a T2030, T2035 or T2040 Series II radio. With full remote control, either semi or fully automatic communication systems can be developed.

The following topics are covered in this Section:

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8.13.1 Components Required

The T2000-A66 kit contains the following components:

Quantity	Description
1	T2000-A66 UART PCB assembly
1	Data Interface Decoupling PCB assembly (refer to Section 7.17)
2	M2.5x10mm pan Pozi Taptite screws
2	M2.5 shakeproof washers
2	M2.5 nuts
1	locking screw kit (in plastic bag)
2	4-40x¼ pan Pozi Taptite screws (black)
20mm	foam tape

8.13.2 Fitting

Refer to Figure 8.13.1.

- 1 Remove the top cover of the radio by unscrewing the four cover screws, unclip the D-range blanking plate in the rear of the T2000 radio, unscrew the logic PCB and fold out.

2 T2000-A66 Mounting

Position the T2000-A66 PCB on the top side of the logic PCB, as shown, matching P1 on the bottom side of the T2000-A66 PCB to the pads labelled 'P1' on the logic PCB.

Use the two M2.5x10mm screws, nuts and shakeproof washers to secure in place.

Note: The screws are fitted from the *bottom* of the logic PCB, and secured with the nuts and washers on the *top* side of the UART PCB.

Torque the screws to 2.5in.lb. This ensures that the pressure connector, P1, makes contact with the corresponding pads on the logic PCB.

Caution: Over-tightening the screws will cause the T2000-A66 PCB to bend, resulting in possible track damage.

3 T2000 Data Interface Decoupling PCB Mounting

Fit the decoupling PCB to the T2000 chassis, guiding the PCB through the hole provided.

Holes are provided in the T2000 chassis for the D-range locking screws. Use the two black 4-40 Taptite screws provided in the kit to form threads.

Open the locking screw kit, discard the nuts, then secure the D-range using the two locking screws and spring washers.

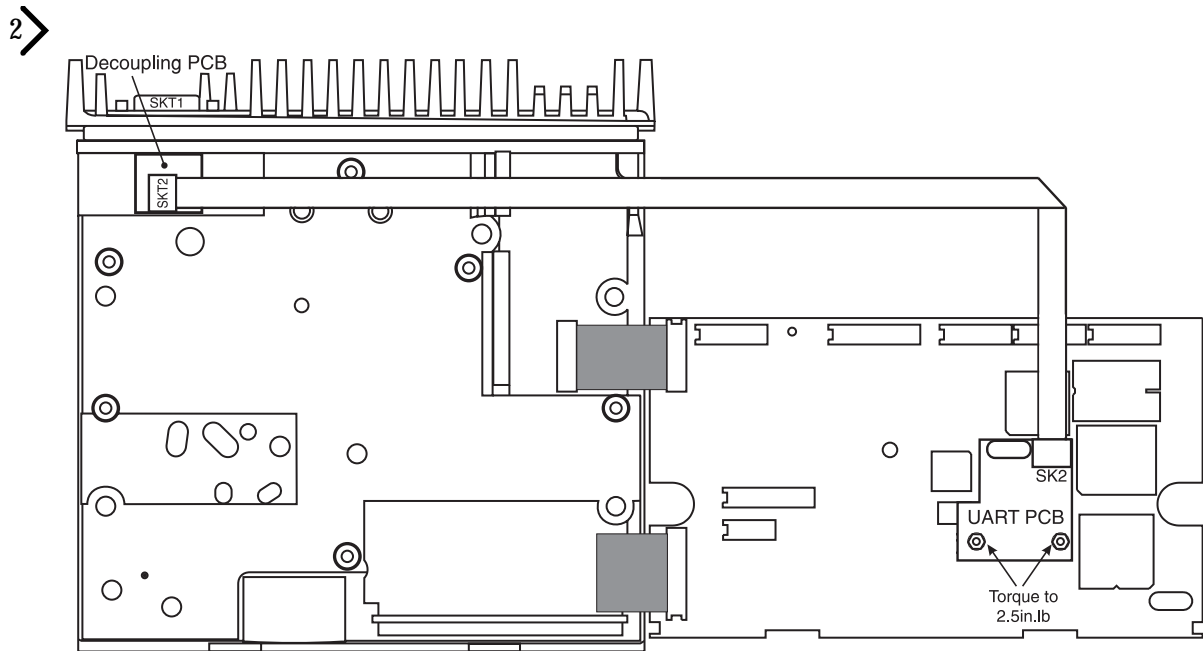


Figure 8.13.1 T2000-A66 Single Port UART PCB Mounting

- 4 Fold the T2000-A66 loom as shown, then plug into SKT2 on the decoupling PCB.
- 5 Fold the logic PCB back in position, and secure using the three logic PCB retaining screws and refit the top cover.

8.13.3 Signal Specifications

The following table describes the signals used on the decoupling PCB 9 way D-range connector (SKT1). The unused pins may be used for other signals, if required.

SKT1 Pin No.	Signal	Description
2	TXD	Transmit data: Serial data output from UART PCB. This signal complies with the electrical requirements of the RS-232 specification.
3	RXD	Receive data: Serial data input to UART PCB. This signal complies with the electrical requirements of the RS-232 specification.
5	DGND	Digital ground: Ground reference for all digital signals.

The following diagram shows the pin designations of SKT1, viewed from the rear of the radio.

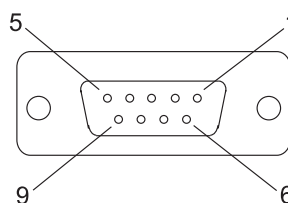
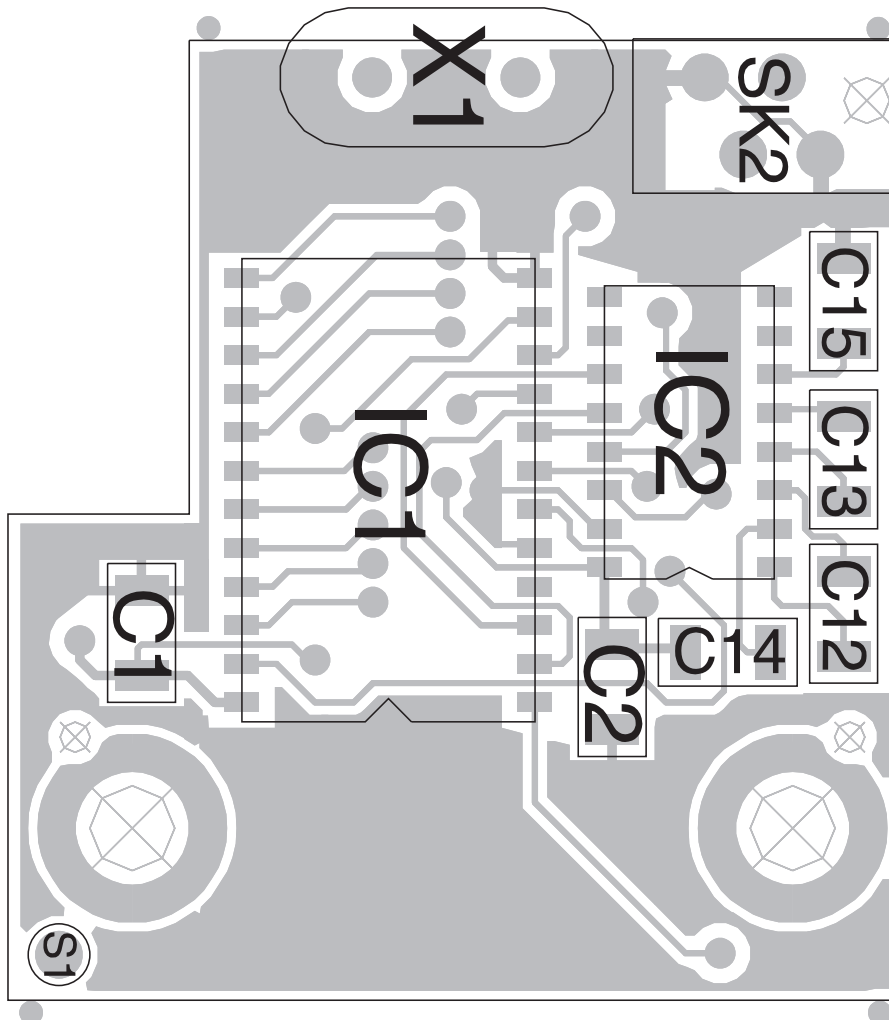


Figure 8.13.2 9 Way D-Range Connector (SKT1)

8.13.4 PCB Information

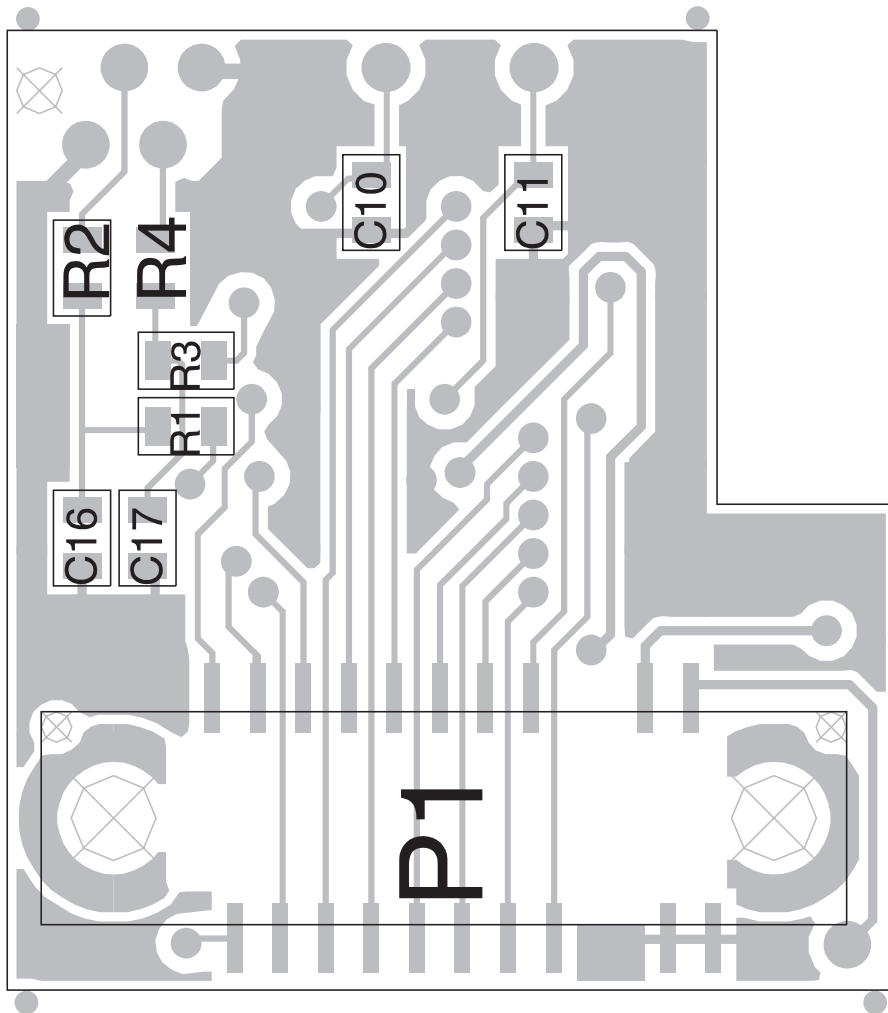
T2000-A66 Parts List (IPN 220-01348-04)

Ref	IPN	Description
C1	015-06100-08	CAP CER 1206 CHIP 100N 10% X7R 50V
C2	015-06100-08	CAP CER 1206 CHIP 100N 10% X7R 50V
C10	015-22220-01	CAP CER 0805 CHIP 22P 5% NPO 50V
C11	015-22220-01	CAP CER 0805 CHIP 22P 5% NPO 50V
C12	015-06100-08	CAP CER 1206 CHIP 100N 10% X7R 50V
C13	015-06100-08	CAP CER 1206 CHIP 100N 10% X7R 50V
C14	015-06100-08	CAP CER 1206 CHIP 100N 10% X7R 50V
C15	015-06100-08	CAP CER 1206 CHIP 100N 10% X7R 50V
C16	015-24100-08	CAP CER 0805 CHIP 1N 10% X7R 50V
C17	015-24100-08	CAP CER 0805 CHIP 1N 10% X7R 50V
IC1	002-10269-10	(LSH) IC SMD SCC2691 UART SOL24
IC2	002-10020-20	(LSH) IC SMD ADM202 RS-232 CONVERTOR SO-16
P1	240-10000-10	CONN SMD 20PIN SCREW DOWN PRICKLE CONTACT
R1	036-12560-00	RES M/F 0805 CHIP 56E 5%
R2	036-12560-00	RES M/F 0805 CHIP 56E 5%
R3	036-12560-00	RES M/F 0805 CHIP 56E 5%
R4	036-12560-00	RES M/F 0805 CHIP 56E 5%
SK2	240-00021-20	HEADER 4WAY PADDLE BRD STAGGERED PINS MICROMATC
X1	274-01056-00	XTAL 3.6864MHZ AT-51 HOLDER C/WTEFLON INS
	205-00010-53	CABLE FLAT RBBN 4 CRE 16/7/0.1 GREY (SCAP FRM 16C)
	220-01348-04	PCB T2000 S11 UART
	240-00026-22	PLUG 4WAY 2ROW MICROMATCH IDC CABLE 0-215083-4
	345-00020-02	SCREW M2.5*10MM PAN POZI BZ
	349-00020-07	(L) SCREW 4-40 X 5/16 PAN POZI TAPTITE BLACK
	352-00010-04	NUT M2.5 MACH HEX ST BZ
	353-00010-04	WASHER M2.5/M2.6 SHAKEPROOF INT BZ
	354-01041-00	FASTENER SCREW LOCK KIT (4-40 THREAD FOR DRANGE)
	356-00010-05	TAG SOLDER 4MM LONG M MT
	369-00020-35	TAPE PVC FOAM 1 SIDE S/A 9*10MM INSEAL 5375 1x 20mm TOP SIDE PCB OVER IC1
	X2DC01	T2000 INT FACE DE-COUPPING BOARD

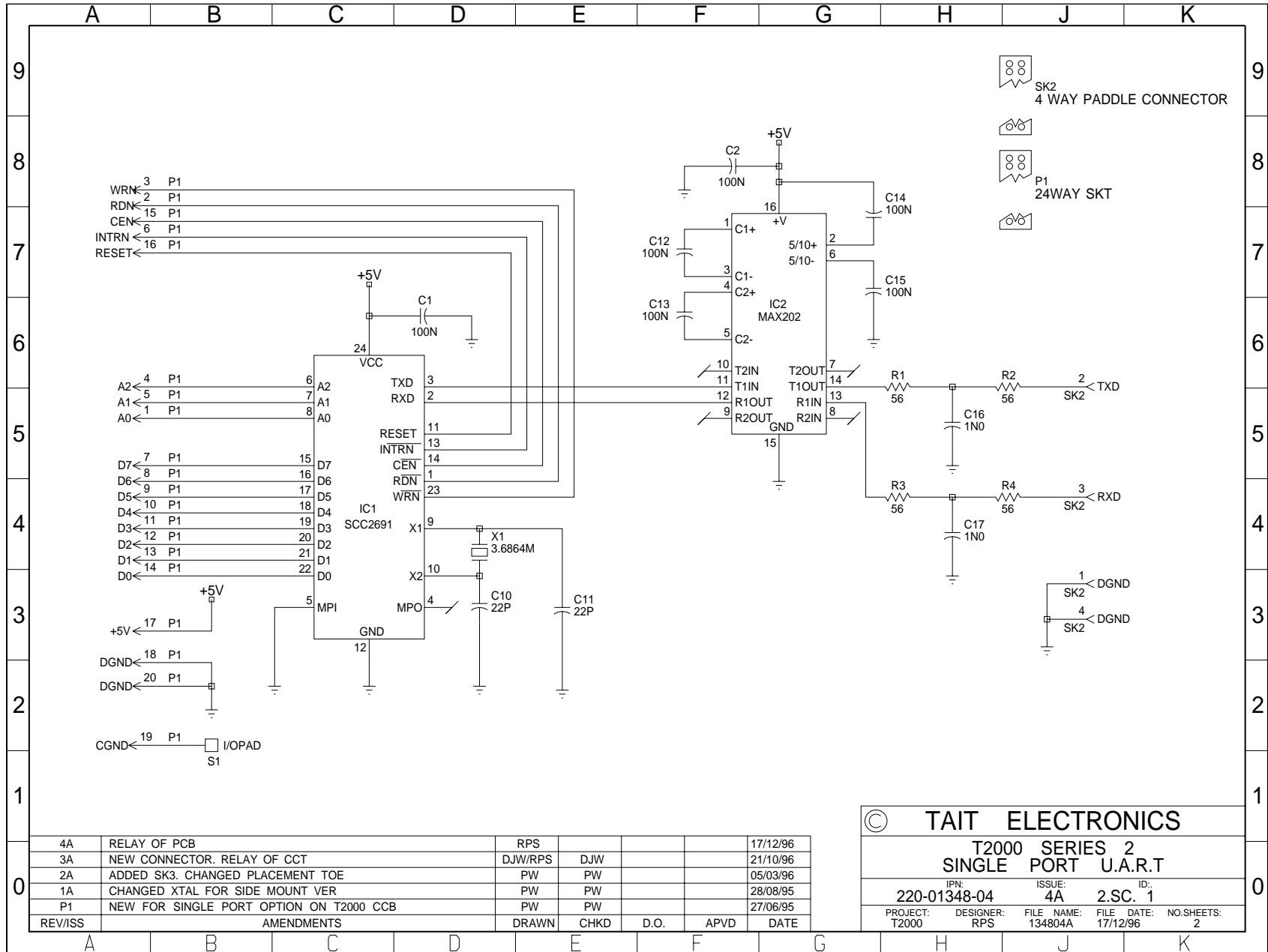


T2000-A66 Single Port UART PCB (IPN 220-01348-04) - Top Side

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T2000-A66 Single Port UART PCB (IPN 220-01348-04) - Bottom Side



4A	RELAY OF PCB	RPS			17/12/96
3A	NEW CONNECTOR. RELAY OF CCT	DJW/RPS	DJW		21/10/96
2A	ADDED SK3. CHANGED PLACEMENT TOE	PW	PW		05/03/96
1A	CHANGED XTAL FOR SIDE MOUNT VER	PW	PW		28/08/95
P1	NEW FOR SINGLE PORT OPTION ON T2000 CCB	PW	PW		27/06/95
REV/ISS	AMENDMENTS	DRAWN	CHKD	D.O.	APVD DATE

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T2000 SERIES 2 SINGLE PORT U.A.R.T					
IPN: 220-01348-04		ISSUE: 4A		ID: 2.S.C. 1	
PROJECT: T2000	DESIGNER: RPS	FILE NAME: 134804A	FILE DATE: 17/12/96	NO.SHEETS: 2	

