MC97745A1 XTC TEST UNIT D — 5SXT510CXX

DATA SHEET

SLC ® SERIES 5 CARRIER SYSTEM

The MC97745A1 XTC (eXtended Test Controller) XTUD (XTC test unit D) (COMCODE 105070445) is one of the peripheral boards for the XTC. The XTUD, XTUC (AUB67), and XTUB (AUB68) form the XTU (XTC tester unit) for the XTC.

This practice is reissued to clarify the function of the TST/OPR switches located on the circuit board.

Figure 1 is a functional block diagram of the MC97745A1 XTUD, and Figure 2 shows the faceplate and associated components.

The XTUD design is based on an on-board microcomputer which in turn is controlled by the XCU (XTC controller unit). The MC97745A1 performs both metallic and digital tests on SLC Series 5 banks as directed by the XCU. The XTUD controls operation of the AUB67 (XTUC) and AUB68 (XTUB) to configure the XTC to test channel units and to provide access to both SARTS (Switched Access Remote Testing System) and MLT (mechanized loop testing). PCM (pulse code modulation) encoded VF (voice-frequency) signals enter and leave the XTUD at the 64-kb/s rate via the DS0 (digital signal zero, rate) timing interface. The DS0 timing interface buffers and re-times the bitstream.

Three leads on the MC97745A1 are used to coordinate communication with the XCU. Another lead is a 75-Hz clock that the XTUD uses for timing. Six leads provide digital access to an XTC XDAU (digital access unit) (on an XTC expansion shelf) for a future feature. The remaining leads transfer control information and digital signals between the XTUD and the two analog boards of the XTU, the XTUC, and the XTUB.

A DSP (digital signal processor) performs arithmetic operations on PCM encoded VF signals to generate tones and measure levels and noise.

TST/OPR (Board-mounted switches): These switches are used for manufacture test of the XTUD at the factory.

Caution: These switches must be set to OPR for operation in the field — these switches are set to the TST position only for factory testing.

FAIL (Red LED): When lighted, this LED indicates that a failure has been detected on the MC97745A1 (XTUD), AUB67 (XTUC), or AUB68 (XTUB). The XTUD unit notifies the XADU (XTC alarm display unit) of an alarm by grounding the common ALMBUS (alarm bus).

Technical assistance for the SLC Series 5 Carrier System can be obtained by calling the Regional Technical Assistance Center at **1-800-225-RTAC**. This telephone number is staffed 24 hours per day.

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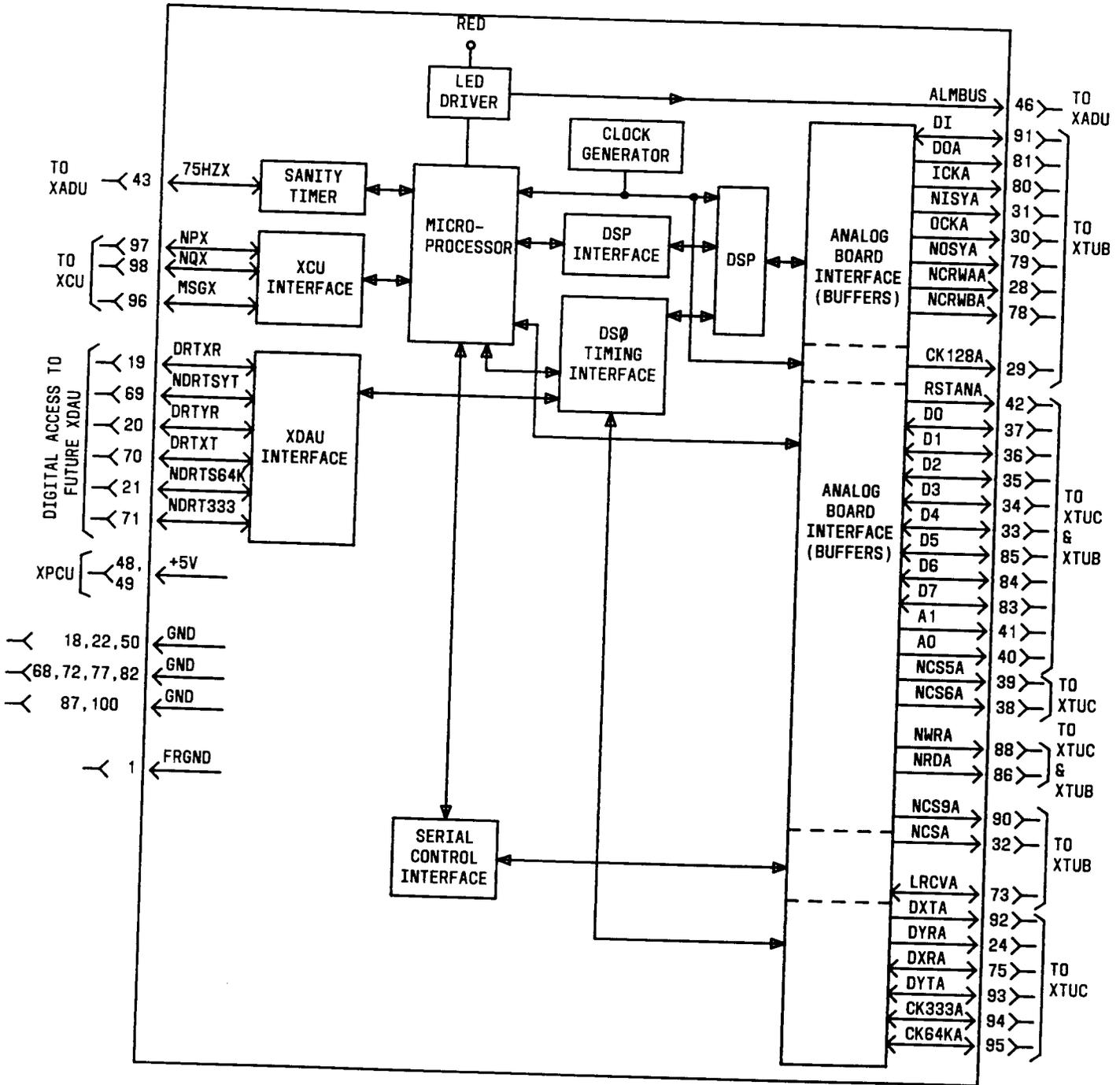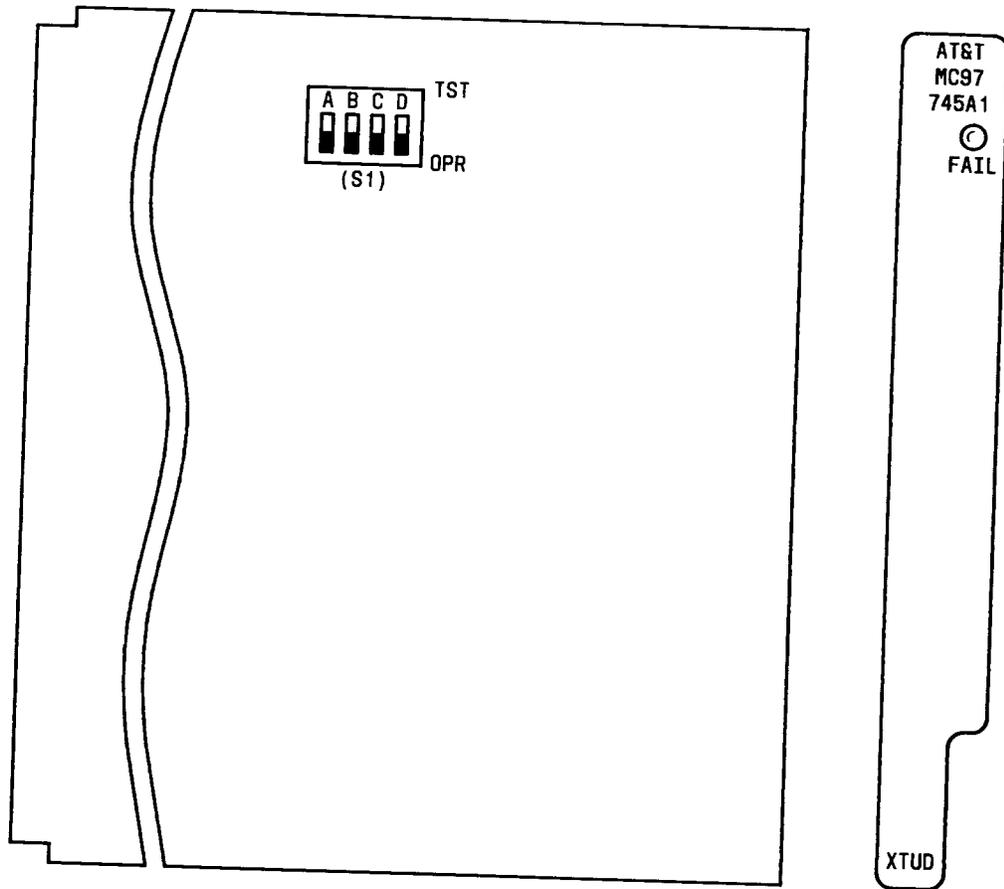The AT&T Documentation Management Organization.

Figure 1—MC97745A1 XTUD block diagram

Figure 2—MC97745A1 faceplate and component layout