AUA90 T-BRITE CHANNEL UNIT — 5SC1EE0AXX

DATA SHEET

SLC® SERIES 5 CARRIER SYSTEM

The AUA90 T-BRITE (T-Basic Rate Interface Transmission Extension) channel unit (COMCODE 104043823) supplies the *SLC* Series 5 carrier system with the ability to provide basic rate ISDN service (2B+D) directly to a customer's terminal equipment over the 4-wire T interface. This eliminates the need for a NT1 (network termination). Each AUA90 supplies 2B+D service to one customer and uses three DS0 channels.

Figure 1 is a functional block diagram of the AUA90 channel unit and Figure 2 shows the faceplate.

The AUA90 supports point-to-point transmission to a customer's terminal at distances up to 1 kilometer from the channel unit. The channel unit also supports point-to-*multipoint* transmission to multiple customer terminals located in a cluster at distances up to 0.5 km from the channel unit. The switch must also support multipoint transmission. For the *5ESS*® switch, the 5E5 generic supports multipoint T-BRITE service. In EFPB (enhanced feature package B) and in the INA-RT (integrated network access-remote terminal), the AUA90 is used only in the RT . In EFPB, a Mode 96 RT is connected to a *SLC* 96 carrier COT (central office terminal) which is equipped with a AHG13 U-BRITE unit. In the INA-RT, a *SLC* Series 5 carrier system RT is connected to a D4 channel bank at the central office equipped with a AHG13 U-BRITE unit.

The AUA90 has built-in protection circuitry for lightning and power cross. When the T interface length restrictions are met, the AUA90 can be used in the outside environment (i.e., in an 80-type cabinet).

The AUA90 does not require provisioning by the CIU (craft interface unit) and has no option switches. It is automatically programmed for operation at the RT by the BCU (bank control unit). The AUA90 implements ZBS (zero byte substitution), substituting a nonzero fixed pattern for a zero byte. This substitution is required when interfacing with some versions of DS1 multiplexers which are not compatible with the B8ZS (bipolar with eight zero substition) format.

When used in the CO (central office), BRITE channel units must be synchronized to the DDS composite clock. The interfaces to the office clock are a SSU (special service unit) for a *SLC* 96 carrier COT and an OIU (office interface unit) for a D4 channel bank. Due to the fact that the AUA90 uses three DS0 channels to provide the 2B+D service, it should never be placed in slots 3, 6, 9, or 12 in a digroup.

Maintenance and turn-up testing on the AUA90 is performed using a 950A test set (see AT&T Practice 363-005-238). This test set connects to a jack on the faceplate of the AUA90 and allows local or remote loopbacks and circuit monitoring. The 950A has jack access for connecting KS20908 receiver and KS20909 transmitter data sets. There is no CIU or special services test access capability.

FAIL (Red LED): This LED lights to indicate a fault. The fault may be when the AUA90 fails a self test, when the BCU tries to write to the AUA90 and fails, or when an incompatibility exists in the placement of either the AUA90 or adjacent channel units in the Series 5 digroup shelf. If the FAIL LED is lighted prior to a lamp test, it will remain lighted during the test if the fault is due to either the AUA90 failing a self test or the BCU failing in a write to the AUA90. If the fault is due to an incompatibility in channel unit placement, the LED is not lighted during the lamp test. Also, FAIL flashes when a plug-in is inserted into the bank.

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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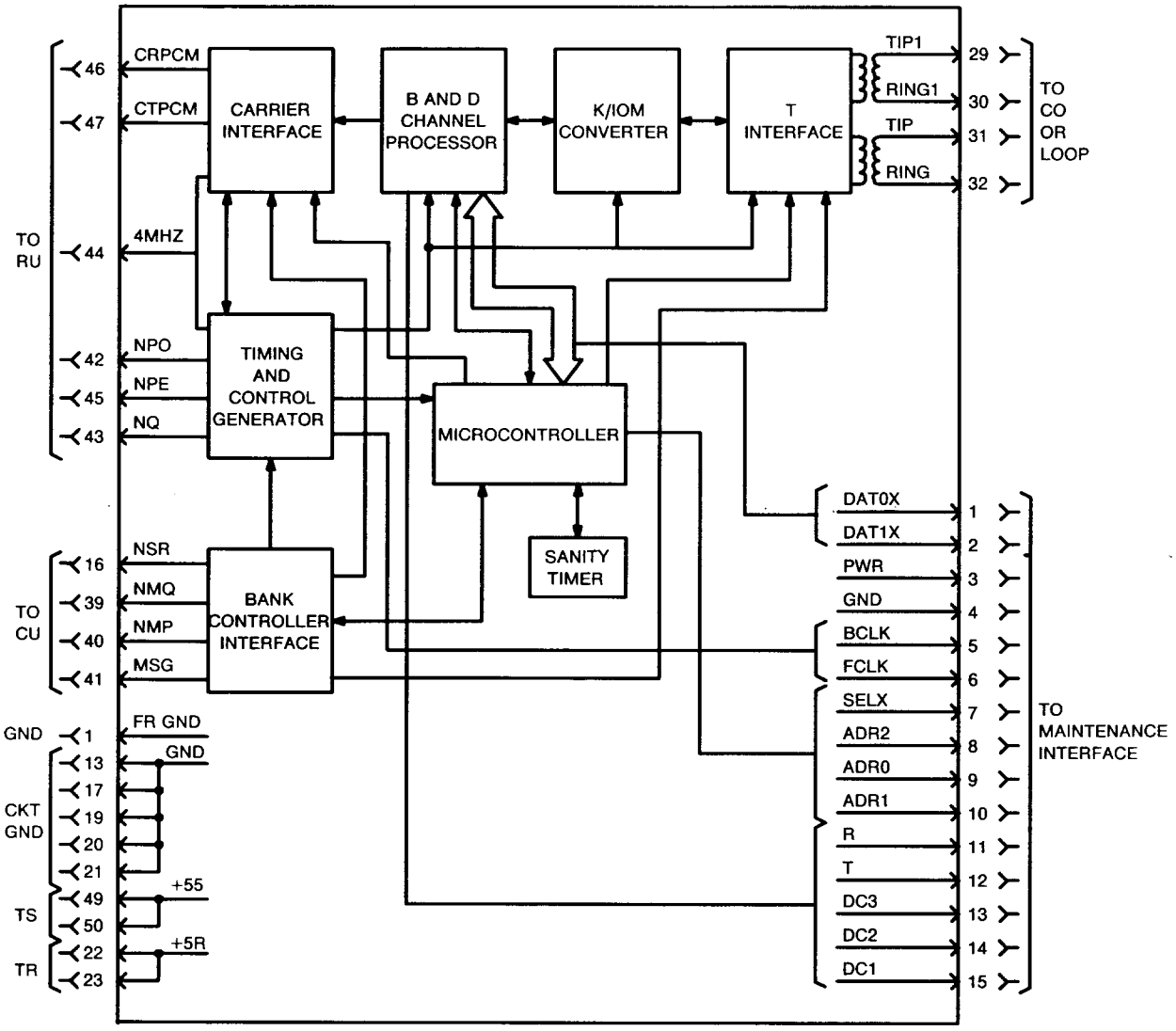

Figure 1—AUA90 Block Diagram

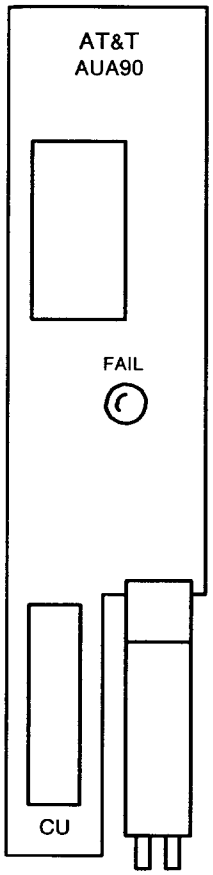

Figure 2—AUA90 Faceplate