AT&T

SLC® Series 5 Carrier System

AUA21B (RT) Transmit/Receive Unit - 5SCS309AXX

Data Sheet

This data sheet describes the AUA21B transmit/receive unit (TRU) (COMCODE 105710255) and is intended for the end-user of the unit. The AUA21B TRU is used in the remote terminal (RT) to provide the interface between two digroups of channel units (for example, 24 AUA58 dual-channel POTS units) and the digital facility interface [for example, two AUA64D DS1 line interface units (LIUs)].

This data sheet is reissued to add information on the AUA21B — the functional equivalent of the AUA21. Relative to the AUA21, the AUA21B unit radiates less electromagnetic interference.

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

The AUA21B receives three 4-kHz clocks — one from each of the two LIUs with which it works and one from the line switch unit (LSU). The TRU automatically selects one of these clocks as a reference and frequency locks its voltage controlled oscillator (VCXO) to that reference. The VCXO generates a 4.096-MHz clock. The AUA21B uses the VCXO output to synchronize its internal operation to the 24 channel units and the digital facility interface units that work with it. The AUA21B maintains all the plug-ins serving a 48-channel shelf of the SLC® Series 5 Carrier System in DS1-frame synchronism.

In the transmit direction, the AUA21B sends the channel polling signals to the channel units, gets the transmit-PCM bit streams from the channel units in each digroup, and time division multiplexes the channels into a 4.096-Mb/s internal PCM format, one for each digroup. The AUA21B dual feeds the formatted signal to the main digital facility interface (for example, the AUA64D) and to the LSU (for example, the AUA73). The AUA21B also accepts a 4-kb/s data link from the bank control unit (BCU) and inserts the information into the A digroup. While the AUA21B is used on both the AB and CD shelves, the Series 5 system only transmits the data link in the A digroup — the data link input to the CD-shelf TRU

is not used.

In the receive direction, the AUA21B gets 4.096-Mb/s receive-PCM inputs from both the main digital facility interface and the LSU. The AUA21B distributes the two receive-PCM formatted signals and the channel polling control signals to the two digroups (24 channel units) under its control. The AUA21B also extracts the 4-kb/s data link from the received signal and sends it to the BCU.

FAIL (Red LED): When lighted, indicates that a failure has been sectionalized to this TRU.

ON PROT (Two Yellow LEDs): When lighted, indicates that the digroup to which the associated arrow is pointing is currently being served by the protection line.
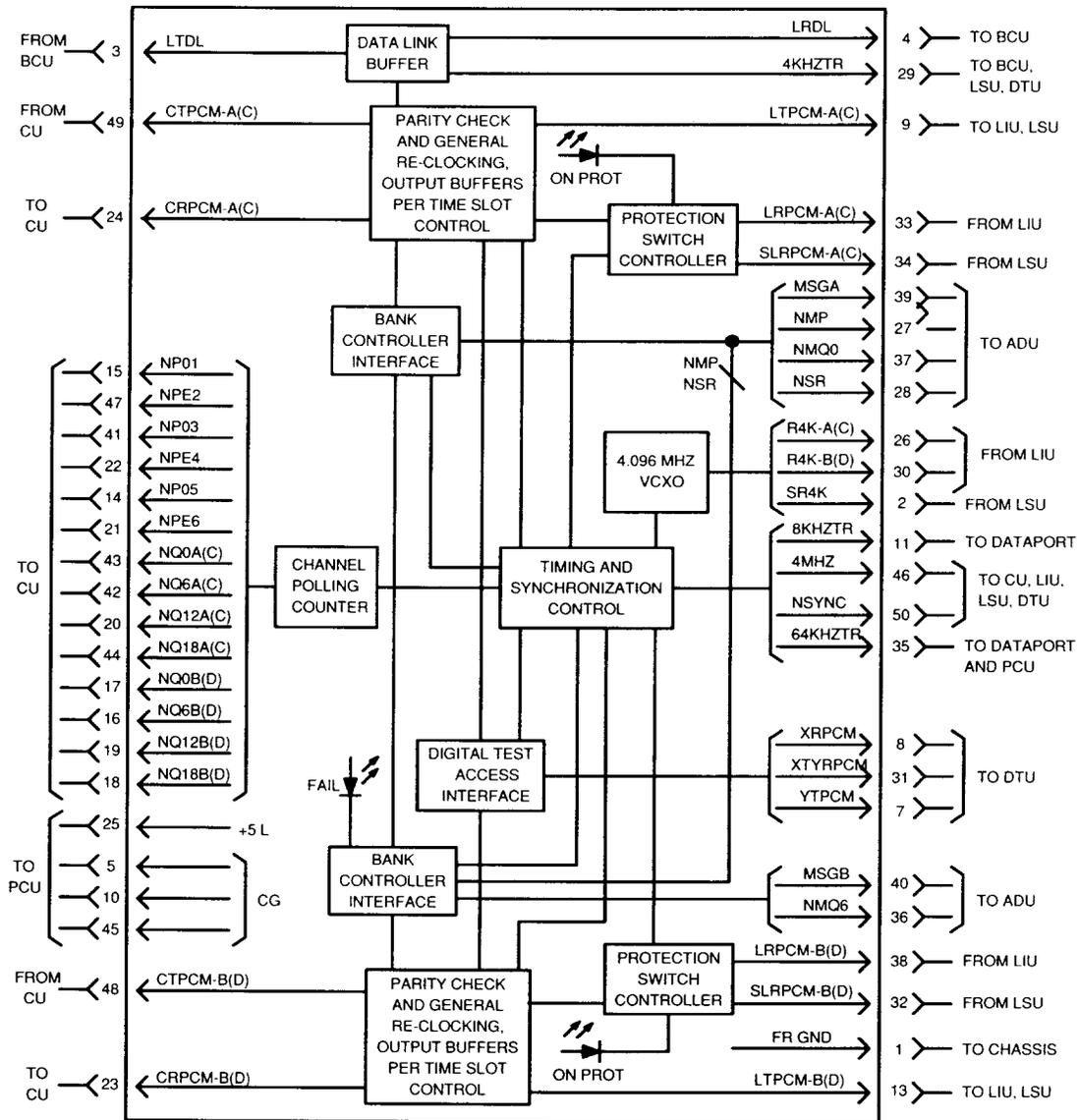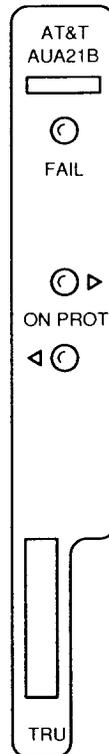
Figure 1. AUA21B Block Diagram

Figure 2. AUA21B Faceplate

In-hours or emergency out-of-hours technical assistance for the *SLC*® Series 5 Carrier System can be obtained by calling the Regional Technical Assistance Center at **1-800-225-RTAC**.

Additional copies of this document (AT&T 363-005-162) are available from the Customer Information Center — call 1-800-432-6600.

Comments about this document can be directed to:

AT&T
Document Development Organization
Attention: Publishing Services Department
2400 Reynolda Road
Winston-Salem, NC   27106