AT&T

SLC® Series 5 Carrier System

AUA73B Line Switch Unit DS1 Interface - 5SCS159

Data Sheet

This data sheet describes the AUA73B line switch unit (LSU) (COMCODE 105710271) and is intended for the end-user of the unit. The AUA73B LSU is used in both the *SLC*® Series 5 Carrier System central office terminal (COT) and the remote terminal (RT). The AUA73B provides an automatic protection switching feature for the DS1 line interface units, with or without the low bit rate voice (LBRV) option. The AUA73B supersedes the AUA13 and AUA73 LSUs.

This data sheet is reissued to add information on the AUA73B — the functional equivalent of the AUA73. Relative to the AUA73, the AUA73B unit radiates less electromagnetic interference.

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

The AUA73B also provides craft with the capability (via DIP switches on the faceplate) to force (f) or deny (d) the protection line interface unit (LIU) to any of the digroups in the 96-line channel bank.

The AUA73B LSU is under the control of the bank controller (BC). The bank control link terminator receives commands from the BC and transmits craft access information back to the BC. In addition to the bank control link (BCL), an NSR (active low service request) lead is used to interrupt the BC for service. NSR is an open collector logic output which will be active when there is a change (by craft) in the DIP switch setting, or when there is an illegal state in the bank control link terminator (BCLT) output registers or when the LSU is first plugged into the bank.

When the LSU is first plugged into the bank, the NSR will remain low until the BC initializes the BCLT, corrects its registers, and clears the NSR.

In the transmit path (LSU to LIU), the AUA73B selects a digroup and buffers the following signals to the spare LIU:

- The selected 4-MHz clock
- The selected superframe synchronization
- The selected transmit PCM
- The selected transmit 4-kHz reference clock. LIU.

In the receive path (LIU to LSU) the AUA73B:

- Samples the receive PCM from the protection LIU, delays it, and sends it to the selected transmit-receive unit (TRU) or trans-coder unit (TCU)
- Receives the 4-kHz clock from the protection LIU and sends it to both TRUs
- Routes the received PCM bitstream to all TRUs and TCUs.

FAIL (Red LED): When lighted, indicates three possible conditions (controlled by the BC):

- The LSU is defective if the LED stays lighted.
- The BC acknowledges the presence of the LSU with a 3-second *blink*.
- LED is being tested.

The AUA73B provides craft access via the DIP switches located on the faceplate (see Figure 2). The switches and their functions are as follows:

- **d D.** When ON, denies access of the D digroup to the protection line
- **f D.** When ON, forces the D digroup onto the protection line
- **d C.** When ON, denies access of the C digroup to the protection line
- **f C.** When ON, forces the C digroup onto the protection line
- **d B.** When ON, denies access of the B digroup to the protection line
- **f B.** When ON, forces the B digroup onto the protection line
- **d A.** When ON, denies access of the A digroup to the protection line
- **f A.** When ON, forces the A digroup onto the protection line.

VF CHANNEL RATE: Switch S2 selects inputs from either the TRU (**64**) or the TCU (**32**) to establish the data rate.

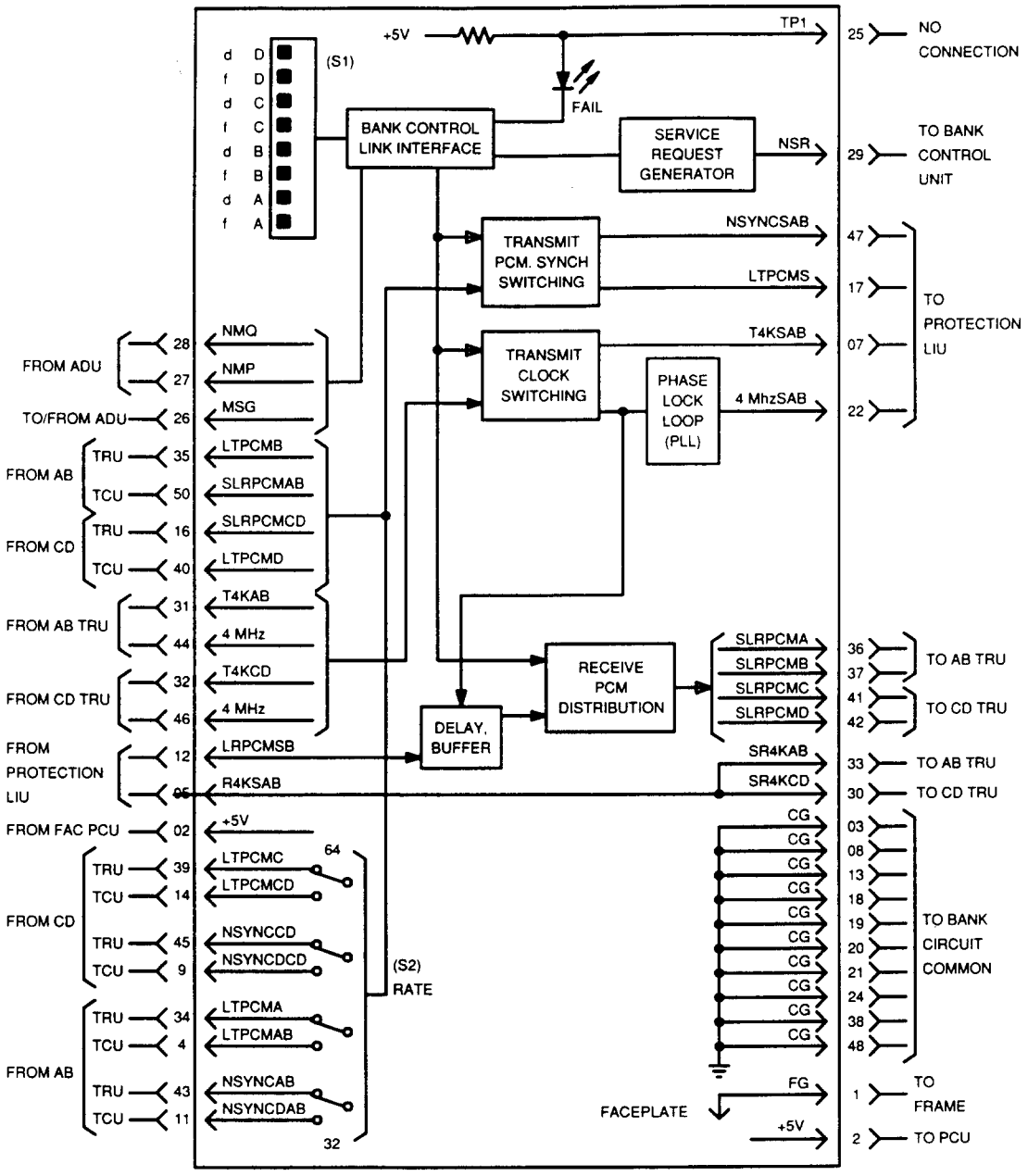

Figure 1. AUA73B Block Diagram

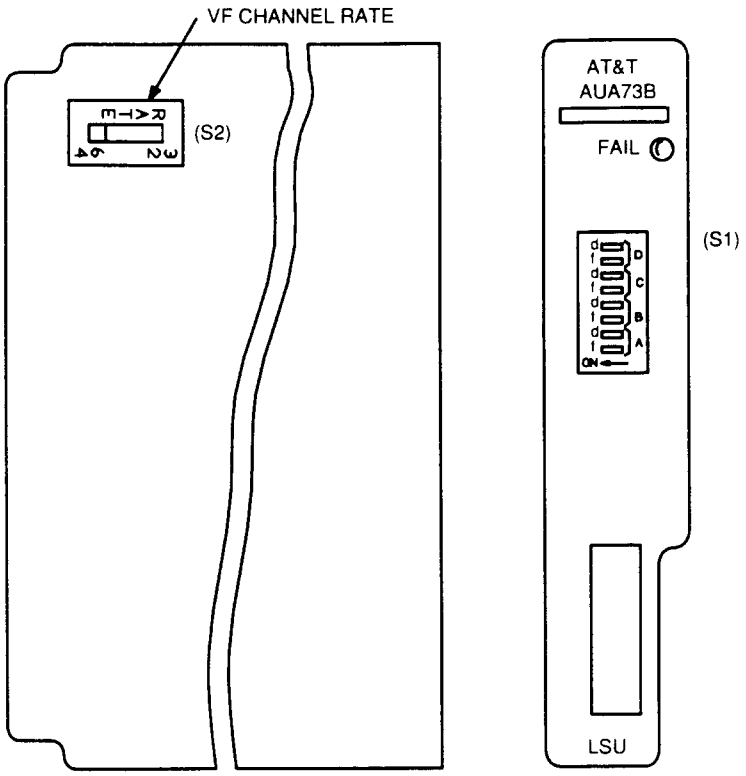

Figure 2. AUA73B Faceplate

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**.

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