AT&T

SLC® Series 5 Carrier System

AUA405 (RT) Channel Unit - SC4DS0
5SCF420

Data Sheet

This data sheet describes the AUA405 channel unit (CU) (COMCODE 104447941) and is intended for the end-user of the unit. The AUA405 CU is designed for standard 2-wire analog, single party, POTS applications with loop-start supervision. This unit is intended for use on *SLC*® Series 5 Carrier Systems featuring Fiber-To-The-Home and implements the Enhanced Testing Capability feature — metallic drop test and derived channel test. The AUA405 CU is always located in the remote terminal (RT) and provides four channels of service at the 1.544 Mb/s rate to a single customer over a fiber optic loop. The central office terminal (COT) end of the channel is terminated via an AUA31, AUA32, or AUA38 POTS CU — a fast forward disconnect is also provided. On the loop side, the unit interfaces an AYB1(B) optical unit (OU) via a balanced interface.

This data sheet is reissued to make minor corrections to the text.

Figure 1 is a functional block diagram of the unit and Figure 2 shows the faceplate. The AUA405 CU is a dual-width unit comprised of two printed wiring boards joined together with one common faceplate. It occupies two adjacent channel unit slots in the RT shelf.

With the Enhanced Test Capability feature, the mechanized loop test (MLT) can access the metallic drop beyond the distant terminal (DT). The Pair Gain Test Controller (PGTC) or the eXtended Test Controller (XTC) (in PGTC emulation mode) can test the derived channel with the test sequences as for a single-party POTS case. The Enhanced Test Capability feature requires the AUA404 or AUA405 CU at the RT, and the ASJ2 and EAF1 drop test module (DTM) at the DT.

In the transmit direction (toward the customer), the AUA405 CU takes four 16-bit time slots from the backplane bus, breaks them into pulse code modulation (PCM) and signaling bytes, buffers them, and then feeds them to the muldem.

The muldem multiplexes the time slots with framing bytes into a 1.544 Mb/s bit stream and feeds them to the AYB1(B) OU via a balanced interface using the line driver.

When data is received from the AYB1(B) OU, it is converted from balanced to unbalanced logic level — clock is recovered. The 1.544 Mb/s bit stream is demultiplexed by the muldem, checked for faults, and passed to the backplane access circuit for buffering and output to the backplane bus.

No *per-channel trunk processing* function is implemented on the AUA405 CU.

The LED indicators located on the faceplate of the AUA405 provide the following functions:

OOS [out-of-service (Amber LED)]: When lighted, indicates an out-of-frame condition at the RT.

BUSY (Red LED): When lighted, indicates an off-hook state at the distant terminal (DT) as well as ringing or channel test toward the DT.

There are no options or settings that need to be selected on this channel unit.

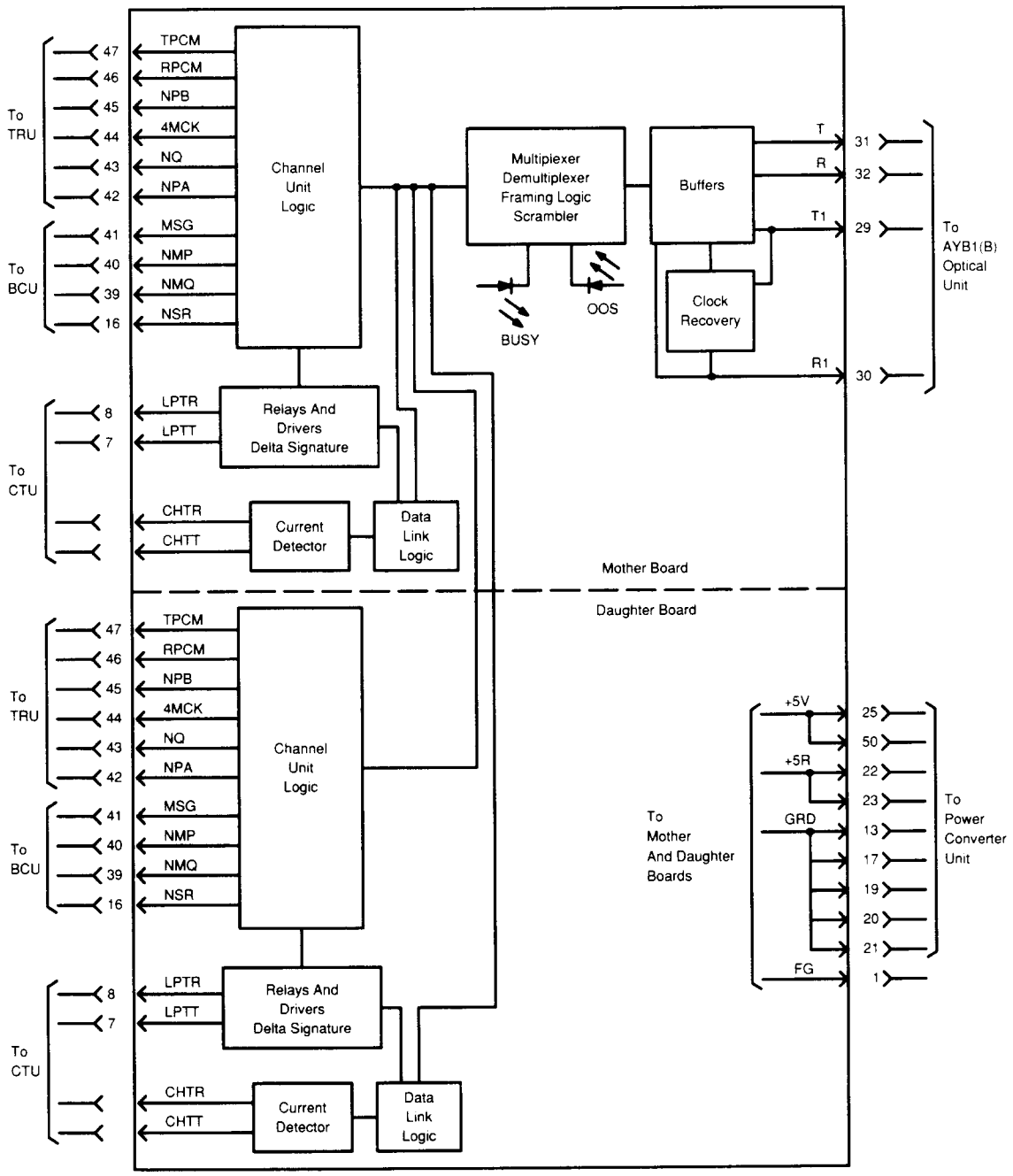

Figure 1. AUA405 Block Diagram

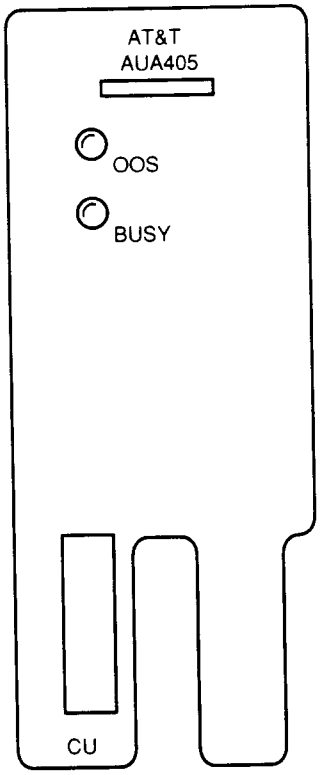

Figure 2. AUA405 Faceplate

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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