SLC ® Series 5 Carrier System

MC97777A1( ) RT Bank Control Unit - 5SPQABA (MC97777A1), 5SPQAB8 (MC97777A1B)

Features/Functions

- Internal performance monitoring and fault diagnosis

- System options and system identification switching

- Embedded operations channel (EOC) data link path protection switching

- TR-303 EOC ASN.1 message support

- Per line circuit testing control

- Service with provisionable channel units (MC97777A1B only)

- System alarms.

Description

This data sheet describes both the MC97777A1 bank control unit (BCU) (COMCODE 106499635) and the MC97777A1B bank control unit (BCU) (COMCODE 107251373) and is intended for the end-user of the units. The MC97777A1( ) BCU is used in the *SLC* ® Series 5 Carrier System Feature Package 303 (FP303) remote terminal (RT). The firmware for the MC97777A1( ) BCU is specifically designed for applications where the RT connects directly to a TR-303 * local digital switch (LDS), such as the *5ESS* ® switch with an integrated digital carrier unit (IDCU).

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* Bellcore Technical Reference TR-NWT-000303 Issue 2, December 1992, *Integrated Digital Loop Carrier System Generic Requirements, Objectives, and Interface*.

The FP303 Release 1.0 MC97777A1 BCU provides TR-303 integration with service provided by non-provisionable channel units. The FP303 Release 2.0 MC97777A1B BCU provides TR-303 integration with service provided by both non-provisionable and provisionable channel units. For details, see the *SLC*® Series 5 Carrier Application and Planning Guide, 363-205-010, Issue 3.

Together, the MC97777A1( ) BCU and the AUB27( ) alarm display unit (ADU) form the bank controller for the FP303 RT.

The BCU contains a microcomputer that is the core of the bank controller. It also has system program memory, electrically erasable programmable read-only memory (EEPROM) for system configuration data and random access memory.

In FP303, the active and standby EOC and the time slot management channel (TMC) are sent in DS0 time slots 12 and 24 on both the A and C line interface unit (LIU) DS1 facilities. The EOC carries operations messages between the LDS and RT; the TMC carries call processing messages (such as time slot assignments) from the LDS to the RT. The EOC processor is on the BCU; however, the TRU extracts and inserts EOC messages into the bit stream for the BCU. The TMC processor is on the TRU.

The BCU controls the framing format. FP303 operates with the extended super frame/new data link (ESF/ndl) format with D4 counting.

Faceplate Features

The following LED indicators and pin jack are located on the faceplate of the BCU.

FAIL (Red LED): When lighted, this LED indicates a failure has been sectionalized to the BCU. This LED will light momentarily during BCU installation or system resets.

PMN (Yellow LED): When lighted, this LED indicates a failure in the AC power plant or the AC rectifier at the RT site.

MISC1 (Yellow LED): When lighted, this LED indicates that the RTMISC1 input closure at the RT has been activated.

MISC2 (Yellow LED): When lighted, this LED indicates that the RTMISC2 input closure at the RT has been activated.
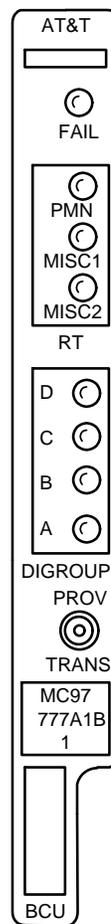
A (Red LED): When lighted, this LED indicates a failure on the LIU A DS1 facility.

B (Red LED): When lighted, this LED indicates a failure on the LIU B DS1 facility.

C (Red LED): When lighted, this LED indicates a failure on the LIU C DS1 facility.

D (Red LED): When lighted, this LED indicates a failure on the LIU D DS1 facility.

PROV TRANS (pin jack): When a pin is inserted into this jack, the BCU transfers provisioning coefficients from the ADU at the RT without first checking the cyclic redundancy check (CRC) bytes contained in the TRU. This feature is used when converting from earlier feature packages to FP303 Release 2 with the MC97777A1B BCU.

77a1bface.ps

Figure 1. MC97777A1B RT Bank Control Unit Faceplate

Compatibility

The MC97777A1( ) RT BCU is compatible with a TR-303[*] local digital switch (LDS), such as the *5ESS*® switch with an integrated digital carrier unit (IDCU). In a Series 5 RT, the MC97777A1( ) RT BCU is compatible with following common units:

Table 1. FP303 Common Unit Compatibility

ADU	TRU	TRU Faceplate Connector	LIUs	LSU
AUB27( )	AUA112	993A	C/D Series	AUA74

Technical Assistance

Follow local procedures for obtaining technical assistance. AT&T also provides in-hours or emergency out-of-hours help for the *SLC* Series 5 Carrier System. Call the AT&T Regional Technical Assistance Center at **1-800-225-RTAC**.

Ordering Information

Additional copies of this document (AT&T 363-005-195) are available from the Customer Information Center — call 1-800-432-6600.

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