

MC97771A1 (RT) BANK CONTROL UNIT — 5SPQAAKAXX

DATA SHEET

SLC[®] SERIES 5 CARRIER SYSTEM

The MC97771A1 BCU (bank control unit) (COMCODE 105585376) is used in the following SLC Series 5 Carrier System RT (remote terminal) feature packages:

- FPB (Feature Package B) Mode 1 or Mode 2 (concentrated)
- FPC/AC (Feature Package C - AutoCut).

TABLE A lists RT applications using the MC97771A1 BCU. Figure 1 is a functional block diagram of the MC97771A1 bank controller unit and Figure 2 shows the faceplate.

Together the MC97771A1 BCU and the ADU (alarm display unit) form the bank controller for the SLC Series 5 RT. In FPB (Mode 96) applications, this BCU can operate with the AUB24 or AUB27 ADU depending on the services desired (see TABLE A). In FPC/AC this BCU is used with the AUB27 ADU to provide the capability for automatic cutover to an Integrated FPB Mode 1 configuration which supports provisionable special service channel banks.

The bank controller provides several functions:

- Conducts internal performance monitoring and fault diagnosis,
- Provides switches for system options and system identification,
- Provides memory for channel unit provisioning coefficients, controls per line testing via the extended test controller or the pair gain test controller,
- Provides T1 line protection switching.

The RT and COT or switch communicate with each other over a data link embedded in the A digroup. The BCU contains a microcomputer that is the core of the bank controller. It also has system program memory, EEPROM (electrically erasable programmable read-only memory) for the

semipermanent storage of channel unit provisioning coefficients and random access memory. The BCU controls a data link used to exchange system alarms, T1 protection switching, and circuit test information between the central office and the RT.

The BCU controls the framing format. In the SLC 96 Carrier System the Fs format with D1D counting is used. In FPC/AC the system operates with the ESF (extended super frame) (Fe) format with D4 counting. When the AUB27 ADU is optioned for automatic cutover, the BCU sets the framing format depending on the received line format. This permits automatic cutover from a FPC/AC configuration to an FPB configuration.

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

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

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 LED has been activated.

A (Red LED): When lighted, this LED indicates that the A digroup is in trunk processing.

B (Red LED): When lighted, this LED indicates that the B digroup is in trunk processing.

C (Red LED): When lighted, this LED indicates that the C digroup is in trunk processing.

D (Red LED): When lighted, this LED indicates that the D digroup is in trunk processing.

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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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TABLE A FPB/FPC-AUTOCUT APPLICATIONS								
SERVICE CONFIGURATIONS (NOTES 1 AND 2)	BCUs		ADUs		TRUs			LIUs
	MC97724A1	MC97771A1	AUB24	AUB27	AUA22	AUA109	AUA105	AUA61()/62()/64()
FPB WITHOUT PROVISIONABLE SPECIALS:								
FPB/U/M1	✓		✓		✓			ANY
FPB/U/M2		✓	✓		✓	✓	✓	D SERIES
FPB/I/M1	✓		✓		✓			ANY
FPB/I/M2		✓	✓				✓	D SERIES
FPB WITH PROVISIONABLE SPECIALS:								
FPB/SS/U/M1		✓		✓	✓	✓	✓	ANY
FPB/SS/U/M2		✓		✓			✓	D SERIES
FPB/SS/I/M1		✓		✓	✓	✓	✓	ANY
FPB/SS/I/M2		✓		✓			✓	D SERIES
FPC WITH AUTOCUT: (NOTES 3 AND 4)								
FPC/AC		✓		✓		✓	✓	C or D SERIES
Notes:								
1. Where more than one unit is checked for a particular configuration, any of the units checked may be used.								
2. In all cases, Mode 2 capability can be converted to Mode 1 by changing ADU option setting and adding two LIUs.								
3. FPC/AC supports all FPC services except DCU.								
4. FPC/AC automatically cuts to FPB/SS/M1. By initially selecting D LIUs and AUA105 TRU, the RT will be equipped for later conversion to a Mode 2 configuration.								
Abbreviations:								
ADU — Alarm Display Unit			LIU — Line Interface Unit					
BCU — Bank Control Unit			M1 — Mode 1					
DCU — Digital Connectivity Unit			M2 — Mode 2 (Concentrated)					
FPB — Feature Package B			SS — Special Services (Provisionable)					
FPC/AC — Feature Package C-AutoCut			TRU — Transmit/Receive Unit					
I — Integrated			U — Universal					

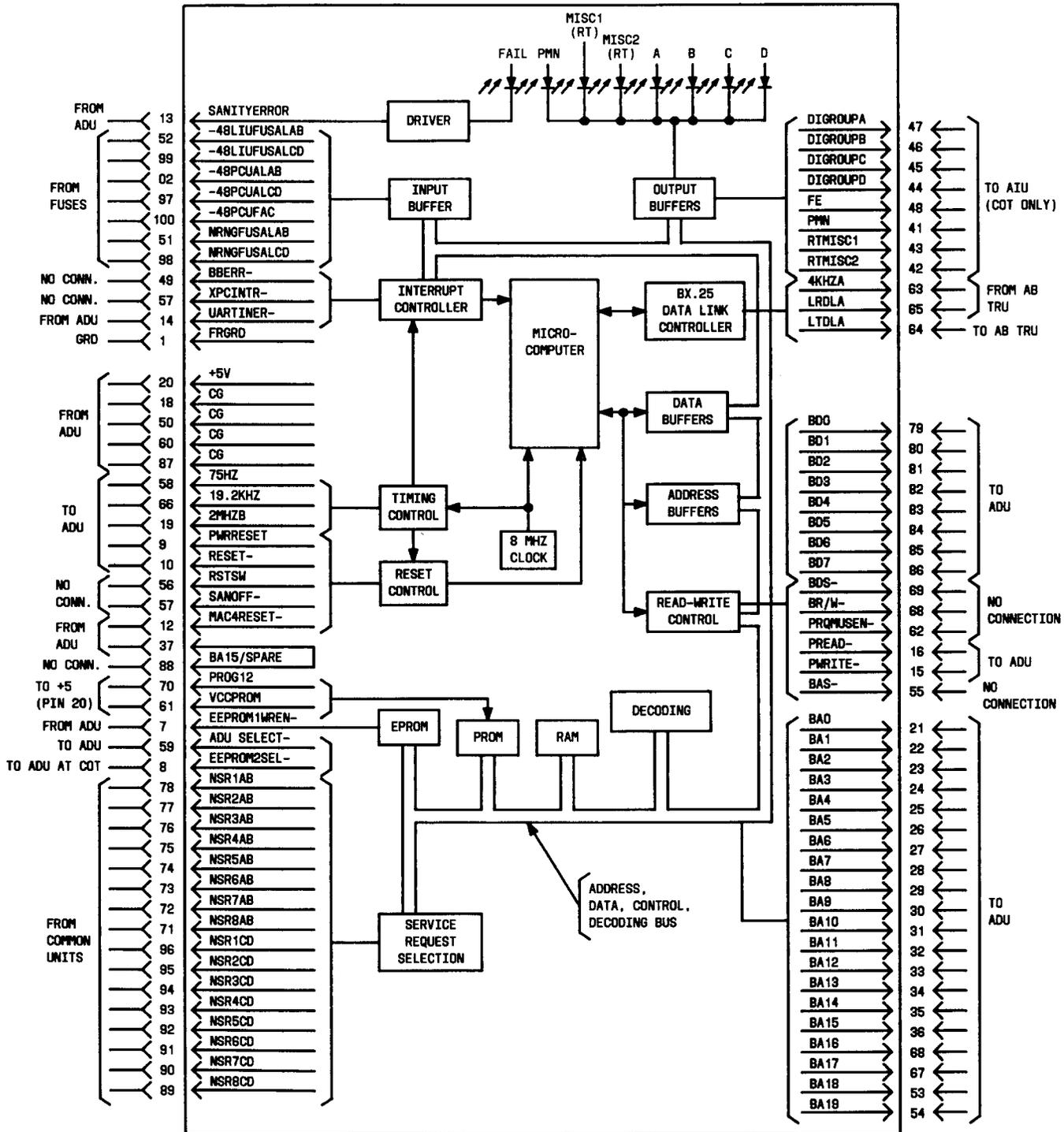


Figure 1—MC97771A1 RT bank control unit block diagram

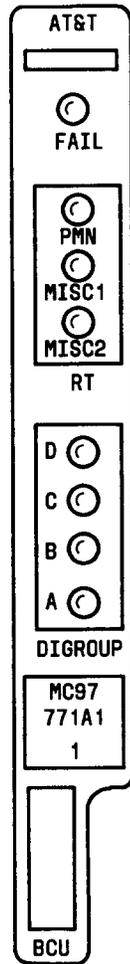


Figure 2—MC97771A1 RT bank control unit faceplate