





Fig. 2—AUA16 Component Layout

signaling bits and Fs framing bits. The DCU-L pre-equalizes its output so that the signal meets the cross-connect capability specification at the connecting DSX-1.

In the receive direction (toward the Series 5 system T1 line), the DCU-L converts the incoming DS1 signal to the internal 4.096-Mb/s format. It also extracts the received ABAB signaling bits. The received PCM signal is sent to the DCU-R. The DCU-L monitors the received signal for bipolar violations, loss of frame, and loss of signal. Failures are reported to the bank controller (BC). Failures also cause the DCU-R to freeze the state of the signaling bits. After 2.5 seconds, the far end, if channelized, will enter trunk processing. If the far end is non-channelized (also using a DCU) it will transmit a blue signal away from the series 5 system.

The DCU-L does bank and digroup loopbacks, if ordered by the bank controller, so the bank controller can provide sectionalized failure information.

**B8ZS/ZCS Option:** This switch (S100, B/Z) selects between per-channel zero-code suppression (position Z) as used in a D4-type terminal, and the bipolar with 8 zero substitution (position B) line code. The switch should always be set to position Z.

**Fe/Fs Option:** This switch (S100, D/F) selects between the Fe frame format (position F) and the Fs frame format (position D). The switch should always be set to position D.

**EQUALIZATION Option:** These three switches (S400, 0, 1, 2) select the amount of pre-equalization based on

the distance between the bank and the DSX-1 cross-connect. Their setting is determined as shown in Fig. 2.

**FAIL (Red LED):** When lighted, this indicates that a failure has been sectionalized to the DCU-L.

**FAILED INPUT (Yellow LED):** When lighted, this indicates the DCU-L has detected excessive line errors, loss of frame, or loss of signal at its input.

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