# Self-Test and Boot Routines

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## The Routines

Self-test and boot routines are stored in ROM on the System Card and Module Control Cards.

The self-test routine verifies that a card is functioning normally.

The boot routines download operating systems and utility programs to the cards and start them running.

The System Card's boot routine includes initiating the self-test and boot routines on the Module Control Cards.

The self-test and boot routines run in the following sequence:

- When the System Card is powered by turning on the PDU its self-test runs automatically. When the testhead is booted — with the **testhead power on** function — the System Card is reset and its self-test runs again.
- 2 When the System Card self-test is completed, it runs its boot routine which downloads its operating system and utility programs from the system controller.
- 3 When the System Card boot is completed, it enables power to the Module Control Cards. This initiates the Module Control Cards' self-test routines.
- 4 When a Module Control Card's self-test is completed, it runs its boot routine which downloads its operating system and utility programs from the system controller.

You can determine the operational status of the System Card and Module Control Cards by observing the LEDs (light-emitting diodes) on the cards. Boot status messages are also displayed on the monitor immediately after a testhead power on.

## Location of the LEDs

### System Card LEDs

The System Card has eight red/green LED-pairs located along the rear edge of the card as shown in Figure 13-1. The LED 0 (LSB)<sup>1</sup> is on the right; LED 7 (MSB) is on the left.

Figure 13-1 System card LEDs

#### Module Control Card LEDs

The Module Control Card has four red/green LED-pairs located along the rear edge of the card as shown in Figure 13-2. The LED 0 (LSB) is on the right; LED 3 (MSB) is on the left.

Figure 13-2 Module Control Card LEDs

LED Pairs

7 6 5 4 3 2 1 0

Component Side

1. LSB = least-significant bit; MSB = most-significant bit.

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