

Table 7-20 (continued)
Expansion slot signals

Pin	Signal	Description
42-49	D0-D7	Three-state buffered bi-directional data bus. Data becomes valid during $\phi 0$ high and remains valid until $\phi 0$ goes low. Each data line can drive one LS TTL load.*
50	+12V	+12 volt power supply. A total of 250mA is available for all peripheral cards.

* Loading limits are for each card.

† On slot 7 only, this pin can be connected to the graphics-mode signal GR: see text for details.

The auxiliary slot

The large connector at the left side of the Apple IIe's main circuit card is the auxiliary slot. It is a 60-pin PC-card edge connector with pins on 0.10-inch centers. A PC card plugged into this connector has access to all of the signals used in producing the video display. These signals are described briefly in Table 7-21. For further details, refer to the schematic diagram in Figure 7-15a-d (Figure 7-16a-d for the extended keyboard IIe).

Many of the internal signals that are not available on the expansion slots are on the auxiliary slot. By using both kinds of connectors, manufacturing and repair personnel can gain access to most of the signals needed for diagnosing problems in the Apple IIe.

Important In the extended keyboard IIe, the auxiliary slot is already occupied by the Extended 80-Column Text Card.

80-column display signals

The additional memory needed for producing an 80-column text display is on the 80-column text card, along with the buffers that transfer the data to the video data bus, as described earlier in this chapter in the section "Text Displays." The signals that control the 80-column text data include the system clocks $\phi 0$ and $\phi 1$, the multiplexed RAM address RA0-RA7, the RAM address-strobe signals PRAS' and PCAS', and the auxiliary-RAM enable signals, EN80' and R/W80.