

3.1 System Baseboard

3.1.1 Sockets for Peripheral Boards

Figure 3.2 shows the system baseboard populated with the boards that plug into the baseboard. The baseboard has sockets for the CPU board, power board, three large boards (memory, PCMCIA, and one spare peripheral), and 11 small peripheral boards (LCD, two serial ports, IrDA port, keyboard, touch/audio, and five spares). The FPGA is hidden from view, below the CPU board. Figure 3.3 shows the unpopulated baseboard, with the FPGA (the large chip in the middle) and the development-section circuits visible. The horizontal rows of headers are logic-analyzer test points.

All boards must be inserted at the channel positions shown in Figure 3.1 and Figure 3.2 in order for the as-shipped FPGA configuration to work. It is not necessary to insert any boards in the spare channel positions.

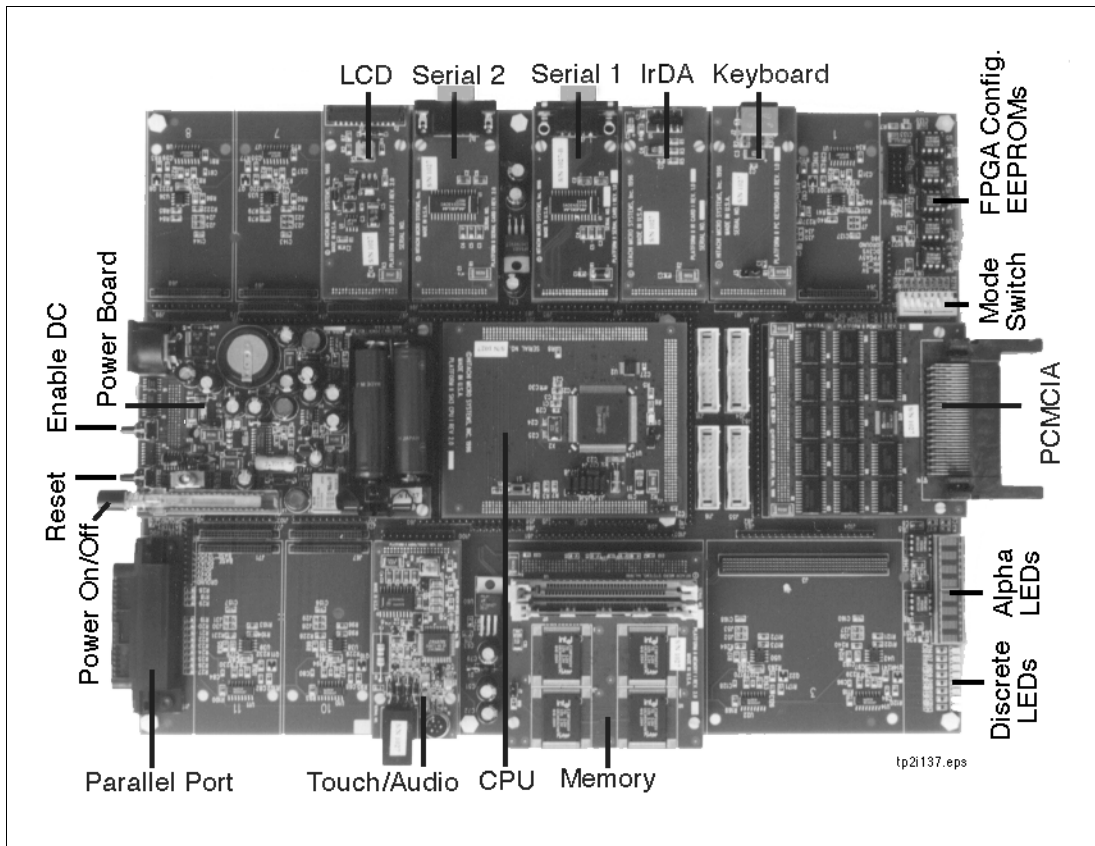


Figure 3.2 Base Board (Populated)

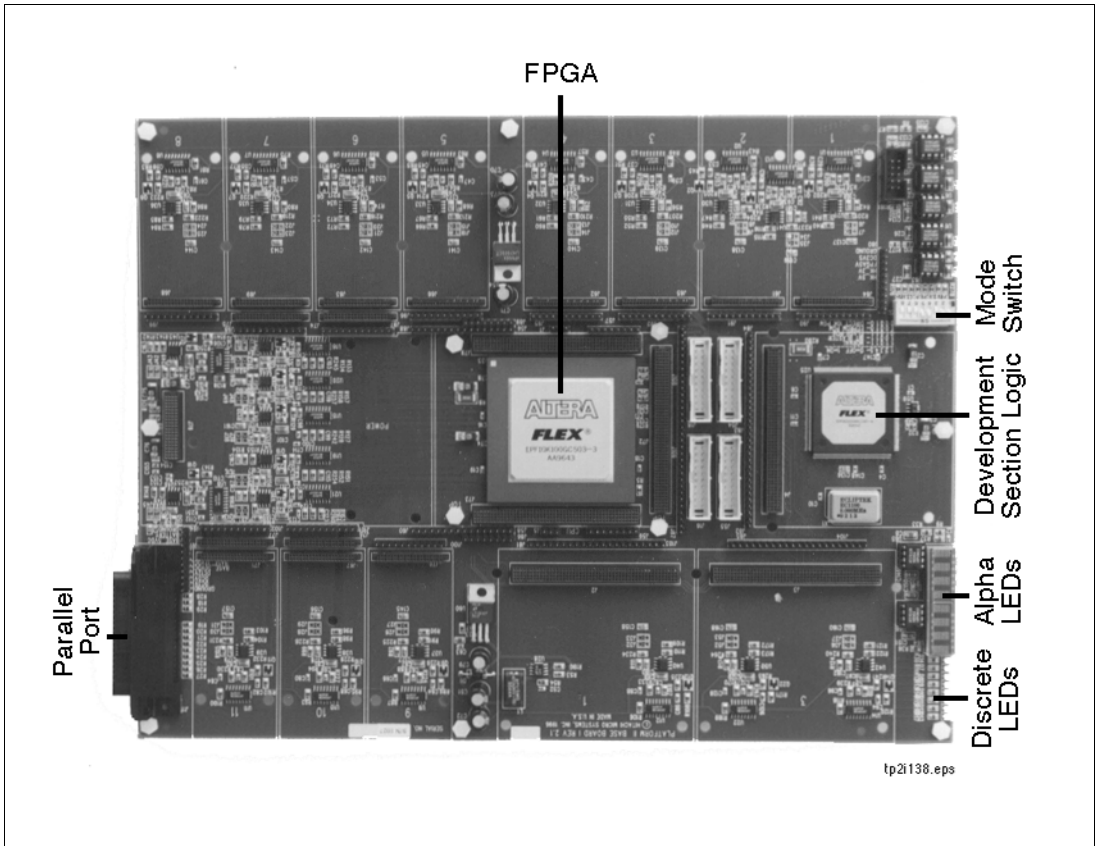


Figure 3.3 Base Board (Unpopulated)

3.1.2 Parallel-Port Connector

The baseboard uses a 36-pin, Centronics-type, parallel-port connector to connect with the parallel port on the host PC. Table 3.1 lists the parallel connector pin assignments.