Chapter 14. Interblock Mounting of Electronic Equipment

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Abstract: The chapter elucidates the assortment of inter-block mounting contact connections and their corresponding implementations: crimping wires with terminals, employing elastic connections facilitated by conductive rubber, and embedding connectors onto flat cables. The integration of multilayer printed circuit boards, configured as junction panels housing robust ground and power circuits made with metal-capacitive layers, has presented considerable challenges for technologists during assembly. The massive ground and power layers act as proficient heat sinks during soldering and reflow processes, leading to the migration of heat towards these layers and consequently causing unsoldered holes. To address this issue, soldered connections have been supplanted by nonsoldered "Press-Fit" types, achieved through the application of special bulging on the contact pin, inducing elastic deformation upon insertion into the metallized hole of the board. This transition necessitates an exploration of various "Press-Fit" connections, the mechanism underlying the establishment of a nonremovable connection between the pin and the metallized hole, as well as the requisite equipment for executing this process.

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