

BACKPLANE COMMUNICATION SYSTEM AND RACK ASSEMBLY OF THE SAME

ABSTRACT

A backplane communication system (100) comprises a backplane (104) having mating windows (120) that extend through the backplane, and a rack assembly (106) having an engagement side (140) and an array of electrical connectors (110) that are disposed along the engagement side. The rack assembly has a plurality of guide pins (124) each having a central axis (256) and a cross-sectional diameter (D_C) taken transverse to the central axis. The backplane has guide holes (130). The backplane interfaces with the engagement side such that the guide pins (124) extend through corresponding guide holes (130) and the electrical connectors (110) are aligned with the mating windows (120). Each of the guide pins has a leading segment (260) that extends through the corresponding guide hole and a trailing segment (262) that is disposed within the corresponding guide hole. The cross-sectional diameter (D_C) along the trailing segment (262) is greater than the cross-sectional diameter (D_C) along the leading segment (260).

Figure 1