

Design failures causing decrease in PCB reliability in space applications

O. Anttalainen (1)

(1) Lappeenranta University of Technology, Department of Electrical Engineering

PCB design driven by limited layout space can cause decrease in PCB reliability due to improper soldering conditions during assembly. Some common design practices are shown to lead to decrease in soldering quality and the background philosophy behind the bad practices is explained. Alternative and practical design guidelines are given and PCB review checkpoints are pinpointed to avoid these problems, and to ease both design and assembly of the space quality PCBs.