CHICAGO -- Faulty printed circuit boards are being blamed for ongoing problems with the Boeing 787 Dreamliner electrical system.

While the new jet's battery has been under much scrutiny, other electrical problems have also surfaced, according to reports.

A **United** 787 flight was diverted in December due to a short circuit and electrical arcing on the plane's power panel motherboard, top Boeing officials acknowledged. Boeing vice president and 787 chief project engineer Mike Sinnett said the fault has been "traced back to a single lot of (circuit) boards manufactured at one time by a subtier supplier." It has not been disclosed whether the defect was design-related or caused by poor workmanship or subpar materials.

Unidentified Boeing engineers have warned various media outlets of "a preponderance of electrical faults." Others point to the use of layers upon layers of subcontractors and a lack of oversight of those suppliers.

"The supplier management organization (at Boeing) didn't have diddly-squat in terms of engineering capability when they sourced all that work," one senior manager told the *Seattle Times*.

Thales provides the power conversion systems for the Boeing 787. Among Thales' suppliers are **CTS, Sanmina, Rockwell Collins, Celestica** and **APT Electronics,** although what each subcontractor suppliers to Thales has not been disclosed.

The Dreamliner's supply chain reportedly differs from Boeing's previous outsourcing chain. In this case, Boeing delegated control of the plane design to about 50 suppliers, which in turn selected and managed their own suppliers. The new model cut costs for Boeing, but also limited its view of the lower tier suppliers. Critics are now saying that approach is fundamentally

flawed.