



## High-Speed PCB Connectors for Extended Environmental Requirements



ept Colibri SMT connectors are now optionally available with a thicker gold coating

ept's Colibri PCB connectors, which have a pitch of 0.5 mm, are a reliable choice in COM express and high-speed applications up to 10 Gbps. In response to customer demand, these high-speed connectors are now also available as a Heavy Au version for deployment in challenging environments. A contact coating of 0.76  $\mu\text{m}$  gold ensures reliable contacting and excellent signal integrity even under challenging conditions such as shocks, vibration, and other environmental stresses. Thanks to the thicker gold layer, the operating temperature range is extended to  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .

The contact design, which is optimized for high data transfer rates, means that

the Heavy Au version of the Colibri connector achieves data rates up to 10 Gbps and beyond, all the while maintaining great signal integrity. This has been proven by signal integrity tests carried out by the Fraunhofer Institute. The testers compared the Colibri® connectors to compatible SMT connectors from other manufacturers and also tested the two connector types in combination, achieving excellent results in each scenario. The Colibri Heavy Au 0.5 mm-pitch SMT connectors are available for board-to-board distances of 5 mm and 8 mm. Both the plugs and receptacles of the Colibri range are available for pin counts of 40, 80, 120, 160, 200, and 220. There also is a 440-pin version, which is made up of two 220-pin plugs or receptacles held together by a soldering frame. This facilitates more accurate positioning of the connectors on the PCB - which, just like the tape-and-reel packaging, is perfect for fully automated assembly.

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