

Eliminating Wirebonds in RF Modules: A New Class of Low-ESL Capacitors

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Introducing a new capacitor technology designed for military and space RF applications that combines the ultra-low parasitic performance of wire-bondable single-layer capacitors (SLCs) with the manufacturing advantages of standard surface-mount technology. Such components preserve the electrical benefits required for high-frequency operation while addressing the industry's shift toward flip-chip and bumped die, as well as increasingly complex multichip modules. With the recent finalization of a dedicated MIL-PRF specification, this technology is now qualified for high-reliability environments. Use-cases include die-level decoupling and high-frequency, high-power AC coupling.