MEMS-based Differential Oscillators Feature High Stability to Â±10 ppm

MSC Vertriebs is offering SiT9121 and SiT9122 MEMS-based differential oscillators from SiTime. These differential oscillators feature a high stability of up to Â±10 ppm and 500 fs of integrated RMS phase jitter. They are suited for use in centralized and edge routers, SATA / SAS / Fibre Channel Host Bus Adapters (HBAs), cloud storage systems, servers, wireless base stations and 10G Ethernet switches. Both the SiT9121, designed for the frequency range 1 MHz to 220 MHz, and the SiT9122, for use in the high-frequency range 220 MHz to 650 MHz, are configurable to individual customer requirements. The frequency, which is programmable with up to six decimal places of accuracy, guarantees the highest level of accuracy.Furthermore, 50,000 g shock resistance, 70 g vibration resistance as well as a mean time between failures (MTBF) of 500 million hours ensures high reliability even under harsh environmental conditions.
The differential oscillators are equipped with configurable LVPECL and LVDS signaling levels and are offered both in the extended commercial temperature range from -20Â°C to +70Â°C and in the industrial temperature range from -40Â°C to +85Â°C. The devices operate optionally with a supply voltage of 2.5 V or 3.3 V. In addition, the SiT9121 and SiT9122 are available in industry-standard packages with dimensions of 5.0 mm x 3.3 mm and 7.0 mm x 5.0 mm respectively and are 100% drop-in replacements for differential quartz oscillators without any design or layout changes.

MSC
49 (0) 72 49 910 â€“ 0, www.msc-ge.com
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[1] http://www.msc-ge.com