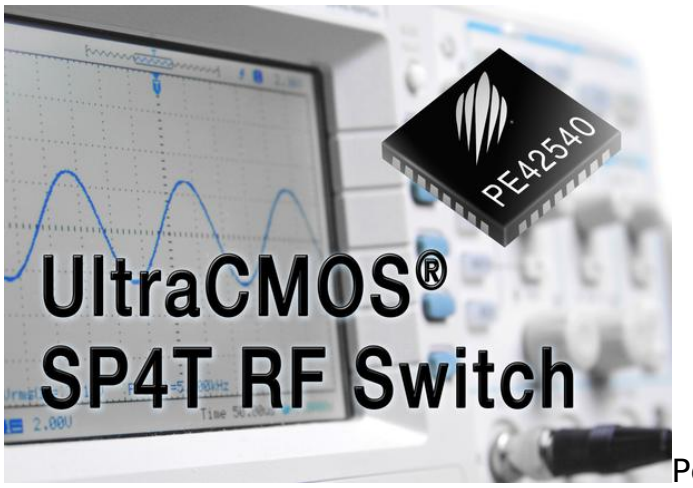
8 GHz SP4T RF Switch for Test-and-Measurement/ATE Applications



Peregrine Semiconductor announced from booth # 2009 at the International Microwave Symposium (IMS2012) in Montreal, the SP4T PE42540 RF switch. Designed on the latest UltraCMOS® process technology version, STeP5, the HaRP™ technology-enhanced PE42540 switch has a frequency range of 10 Hz to 8 GHz, with low insertion loss of 0.8 dB @ 3 GHz, 1.0 dB @ 6 GHz, and 1.2 dB @ 8 GHz. The result is a highly-linear switch that is well suited for applications requiring highly-linear RF performance and fast settling time, such as Test and Measurement (T&M), and Automated Test Equipment (ATE).

The absorptive PE42540 switch is comprised of four symmetric RF ports, with high isolation RFX to RFX of 45 dB @ 3 GHz, 39 dB @ 6 GHz, and 31 dB @ 8 GHz. On-chip CMOS decode logic facilitates a two-pin low voltage CMOS control interface and an optional external VSS feature. Additionally, the switch features high linearity of 58 dBm IIP3, with high ESD tolerance of 2 kV HBM on RFC, and 1 kV HBM on all other pins. It also has a maximum input-power-handling capability of 30 dBm @ 8 GHz into 50 ?.

“The PE42540 switch complements our PE42551 and PE42552 switches with extended frequency and low insertion loss,” said Mark Schrepferman, director of marketing for Peregrine’s High-Performance Solutions business unit. “We believe this is the industry’s highest-performance SP4T switch, in terms of bandwidth, insertion loss, and linearity.”

Packaging, Pricing & Availability The PE42540 switch is available in a 32-lead, 5 mm x 5 mm QFN package, for $4.87 each, in 10,000-unit quantities. Samples and volume-production quantities can be ordered in late June through Peregrine’s global sales representatives and worldwide distribution partners. For more information, visit www.psemi.com [1].

Posted by Janine E. Mooney, Editor

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