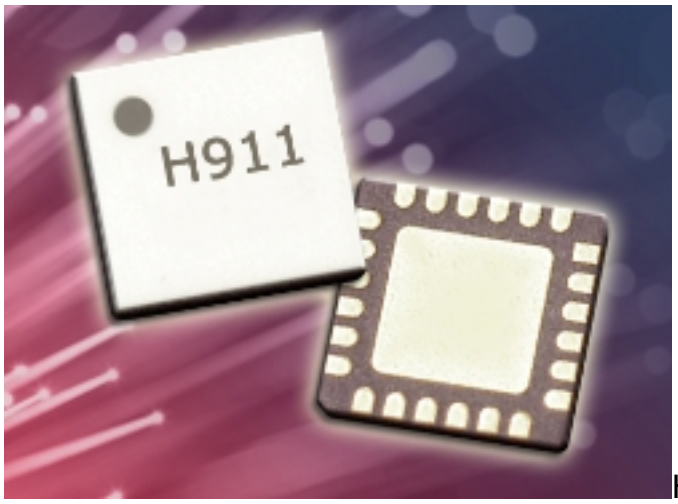
DC to 24 GHz Time Delay for 10G, 40G RZ-DQPSK & 100G DWDM RZ

Ideal for both clock & data lane alignment applications



Hittite Microwave Corporation, a supplier of complete MMIC based solutions for communication and military markets, has recently expanded its Broadband Time Delay/Phase shifter portfolio adding the HMC911LC4B, which is ideal for 10G, 40G RZ-DQPSK, 100G DWDM RZ Carver clock chain and skew adjustments in the fiber optic domain.

The HMC911LC4B is a DC to 24 GHz Broadband Time Delay product that provides a continuously variable delay from 0 ps to 70 ps while maintaining a constant differential output voltage swing. The device accepts either single-ended or differential input data, while the differential output swing is adjustable from 150 mVp-p to 800 mVp-p. The modulation bandwidth is 1.6 GHz, which is the highest phase modulation bandwidth available in the market. Suitable for both clock and data retiming applications, the HMC911LC4B features internal temperature compensation and bias circuitry to minimize delay variations with temperature. All RF input and outputs of the HMC911LC4B are internally terminated with 50 Ohms to Vcc, and may either be AC or DC coupled. Output pins can be connected directly to a 50 Ohm to Vcc terminated system, while DC blocking capacitors must be used if the terminated system input is 50 Ohms to a DC voltage other than Vcc.

The HMC911LC4B also complements many of Hittite’s limiting amplifiers, modulator drivers and high speed logic products to provide a complete solution for fiber optic and test equipment applications. The HMC911LC4B is housed in a ceramic RoHS compliant 4 x 4 mm SMT package, and is fully specified for operation from -40 °C to +85 °C.

Samples and evaluation PC boards for all SMT packaged products are available from stock and can be ordered via the company’s e-commerce site or via direct purchase order. Released data sheets are available on-line at www.hittite.com [1].

Posted by Ron M. Seidel, Editorial Intern

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http://www.wirelessdesignmag.com/product-releases/2012/03/dc-24-ghz-time-delay-10g-40g-rz-dqpsk-100g-dwdm-rz

Links:
[1] http://www.hittite.com