Quadrature IF/RF Demodulator and Quadrature Modulator tout flexibility, high performance

The CMX973 Quadrature Modulator/Demodulator is the latest RF building block from CML Microcircuits following on from the CMX970 and CMX971. The RF Building Block range is designed to provide the flexible, high performance ICs required for HF/VHF/UHF, professional radios, wireless data terminals, wireless microphones, marine and avionics radio systems.

The CMX973 forms the basis of a high-performance RF transceiver system combining a flexible IF/RF quadrature modulator and quadrature demodulator, in a single chip. Wide signal bandwidth at RF, 0dBm output, low noise and serial bus control delivers maximum flexibility and high-performance, all at an attractive low operating power.

The demodulator is suitable for superheterodyne architectures with IF frequencies of 20MHz to 300MHz and the device may be used in low IF systems or those converting down to baseband. The modulator converts directly from baseband to the desired transmit frequency 20MHz to 1GHz and features quadrature phase correction to minimise unwanted spectral components.

The CMX973's quadrature architecture supports a wide range of modulation formats and standards. The differential inputs are ideal for direct connection to standard modems and interface ICs such as CML's CMX7163, CMX7164, CMX910, CMX981 and CMX7861.

The CMX973 is available now, comes in an RF-optimised 32-lead VQFN package, measuring only 5mm x 5mm x 1mm. The CMX973 offers the designer excellent performance, flexibility and fast time-to-market.

CML Microcircuits, www.cmlmicro.com [1]

Source URL (retrieved on *07/23/2014 - 1:16pm*):
http://www.ecnmag.com/product-releases/2012/06/quadrature-if/rf-demodulator-and-quadrature-modulator-tout-flexibility-high-performance

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