SDR demonstrator intended for wireless data applications

CML Microcircuits has released a small demonstration platform for a complete Software Defined Radio (SDR) for wireless data applications.

The DE9941 [1] is a credit card sized demonstration board for a complete linear modulation-based Software Defined Radio (SDR) for wireless data. It is designed to be small and low-cost with minimal components/values. The small form factor is made possible by the high integration of key functions provided by CML's market-leading devices.

There is a growing market requirement for small, flexible Software Defined Radio (SDR) data modems. The technology to accomplish this is now available with the releases of CML's highly integrated RF and Baseband product offerings: the CMX998, CMX994 and CMX7164.

The CMX998 [2] is a market-leading Cartesian Loop Transmitter IC providing optimum PA linearisation for non-constant envelope/linear systems. The CMX994 [3] is the ultimate Direct Conversion Receiver, providing direct conversion from RF down to I/Q baseband. The CMX7164 [4] multi-mode Wireless Data Modem IC, based on FirmASIC technology, offers multiple modulation schemes that can be uploaded into the device via Function Image.

The DE9941 can be used to demonstrate transmit and receive performance with

4/16/64 QAM linear modulation and constant-envelope modulation schemes such as 2/4-level FSK and GMSK, which are also available on the CMX7164 Multi-mode Wireless Data Modem. Together with CML's PE0002 [5] interface board, a full transceiver can be demonstrated using a Function Image and control scripts.

Included on the board is a 1W power amplifier and RF performance is designed to be compliant with EN 302 561 and EN 300 113. Scripts are available from the CML Website, www.cmlmicro.com [6], to enable a quick-start evaluation of the board and components.

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http://www.ecnmag.com/product-releases/2012/09/sdr-demonstrator-intended-wireless-data-applications

Links:
[1] http://www.cmlmicro.com/products/index.asp?searchvalue=de9941&setindex=
[2] http://www.cmlmicro.com/products/index.asp?/Products/RF/CMX998.htm&searchvalue=998&setindex=1
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