

CML Microcircuits (CML) is the leading authority in the design, manufacture and marketing of integrated circuits. Through many years' experience of designing both standard and full-custom products, CML excels in producing innovative solutions containing mixed signal, RF, analogue, memory, digital and DSP design. The information provided below is intended to keep you up to speed with all the new products released by CML.

Latest CML Product News:

CMX7161 – 2-Slot TDMA Digital Radio Processor

The CMX7161 provides a direct connection to the market-leading CMX994 Direct Conversion Receiver (DCRx) enabling a highly integrated DMR radio to be implemented. The CMX7161/CMX994 is a unique chip-combo that is specifically targeted at encouraging new DMR designers/manufacturers to enter the digital PMR arena, with market leading product offerings.

CMX7161 Features:

- 9600bps 4FSK modem
 - Hard/soft decision data bits
 - Root-raised-cosine pulse shaping
 - Automatic Frame sync detection
 - Automatic tracking of symbol timing and input I/Q dc offsets
- Embedded codecs (Analogue to digital conversion)
- RAMDAC capability for PA ramping control
- Two-point modulation analogue outputs
- Direct connection to CMX994 Direct Conversion Receiver IC



For more information, visit the CMX7161 product overview page: [Click Here](#).

DE9943 – SDR 2-Slot TDMA Digital Radio Demonstrator

The DE9943 is a compact demonstration/evaluation platform for 2-slot TDMA Digital Radio designs incorporating the CMX7161 TDMA Digital Radio Processor, the CMX7262 TWELP Professional Radio Vocoder and the CMX994 Direct Conversion Receiver.

The board can be used to demonstrate a complete RF transceiver and baseband function supporting a direct conversion receiver and VCO two-point modulation transmitter.

DE9943 Features:

- Direct Conversion Digital Radio Demonstrator
- Provides a demonstration platform for:
 - Direct Conversion Receiver CMX994
 - TDMA Radio Processor CMX7161
 - TWELP Professional Radio Vocoder CMX7262
- Can function in the following modes:
 - Completely stand-alone
 - Controlled by scripts running via a PC
 - User-defined host controller interface
- Designed to meet ETSI EN 300 113
- 'C' code for rapid development of host drivers
- Powered by external 4.5V power supply or 3 X AA batteries
- On-board
 - ARM Host Processor (cortex M3)
 - Frac-N PLL and VCO for 444 MHz to 450 MHz Operation



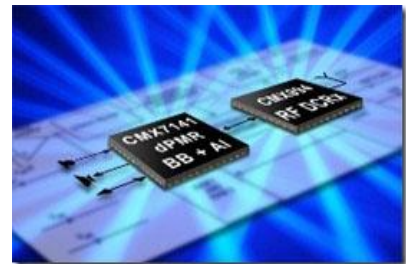
For more information, visit the DE9943 product overview page: [Click Here](#).

CMX7131/7141 – The Ultimate FDMA Multi-standard PMR processors

The CMX7131 and CMX7141 are half-duplex processor IC platforms built on *FirmASIC* technology that are suitable for use in multi-standard digital PMR (dPMR) and dual-mode (analogue/digital) systems. *FirmASIC* component technology allows on-chip sub-systems to be reconfigured by a Function Image (FI): this is a data file that is uploaded during device initialisation that defines the device's function and feature set. Dual mode and multi-mode digital PMR radios can now be developed based on a single radio platform conforming to a number of digital PMR systems/standards all with full analogue PMR backward compatibility.

CMX7131/7141 Features:

- Multi-standard Digital PMR Processor including Analogue PMR Operations
- Automatic Frame Sync Insertion and Detection (AFSD)
- Two and four Auxiliary ADCs
- Three Analogue inputs with Programmable Gain
- Auxiliary C-BUS Interface to CMX608 or CMX618
- Tx Outputs for Two-Point or I/Q Modulation
- Soft Decision Decoding Option
- Two RF Synthesisers (CMX7131 Only)
- Vocoder Connectivity, Management, Control and Data Transport
- RALCWI and Third-party Vocoder



For more information, visit the CMX7131/7141 product overview page: [Click Here](#).

DE9944 – SDR FDMA Digital/Analogue Radio Demonstrator

The DE9944 is a compact demonstration/evaluation platform for FDMA Analogue / Digital Radio designs based on the CMX7131/CMX7141 FDMA PMR Processor and incorporating the CMX618 RALCWI Vocoder, the CMX7262 TWELP Professional Radio Vocoder, and the CMX994 Direct Conversion Receiver.

The board can be used to demonstrate a complete RF transceiver and baseband function supporting a direct conversion receiver and VCO 2-point modulation transmitter.

DE9944 Features:

- Direct Conversion Digital Radio Demonstrator
- Provides a demonstration platform for:
 - Direct Conversion Receiver CMX994
 - FDMA Radio Processor CMX7131/7141
 - TWELP Professional Radio Vocoder CMX7262
 - RALCWI Vocoder with integrated Voice Codec CMX618
- Can function in the following modes:
 - Completely stand-alone
 - Controlled by scripts running via a PC
 - User-defined host controller interface
- Designed to meet ETSI EN 301 166 and ETSI EN 300 086
- 'C' code for rapid development of host drivers
- Powered by external 4.5V power supply or 3 X AA batteries
- On-board
 - ARM Host Processor (cortex M3)
 - Frac-N PLL and VCO for 444 Mhz to 430 Mhz Operation



For more information, visit the DE9944 product overview page: [Click Here](#).