

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

Latest CML Product News:

CMX7031 and CMX7041 - Precise positioning in distress situations using Marine Digital Selective Calling (DSC) expansion sequence

The [CMX7031 and CMX7041](#) Multi-mode Two-way Radio (TWR) processors, operating in Marine VHF mode, have been enhanced to enable the ITU-R M.821 recommendation: Marine Digital Selective Calling (DSC) expansion sequences.

Continuous transmission mode has also been included for use in distress alert situations.

Standard marine DSC only allows a position resolution down to approximately one nautical mile (1nmi). In distress situations this is not accurate enough to pin-point a precise position. The DSC expansion sequences allow precise geographical coordinates to be transmitted, providing position accuracy to less than one metre (1m).

Imagine the situation of a diver in rough seas with strong currents, calling to be picked-up. Providing a 1 square nmi collection position will prolong recovery and potentially put the diver at risk. A Marine VHF radio with the DSC expansion sequences enabled, would allow the diver to transmit an accurate collection position, down to 1 square metre, helping to ensure a safe and swift recovery.

For more information on these products visit the [CMX7031 and CMX7041 Multi-mode Two-way Radio \(TWR\) processors page](#).



New RF Building Block the CMX972 Quadrature Demodulator with PLL and VCO

The [CMX972](#) is the latest addition to CML's [RF Building Block range](#) and features a low-power IF/RF Quadrature Demodulator with PLL/VCO, a wide operating frequency range and optimised power consumption.

The demodulator is suitable for superheterodyne architectures with IF frequencies up to 300MHz and the device may be used in low IF systems or in those converting down to baseband.

The small, RF-optimised 32-pin VQFN package and minimal external components make the device ideal for space-constrained applications.

Features:

- 10MHz Rx I/Q Bandwidth
- < 1 degree I/Q Phase Matching
- < 0.5 dB I/Q Gain Matching
- Low Power, 3.0V – 3.6V Operation

For more information, visit the [CMX972 Quadrature Demodulator product overview page](#).



CMX7011 Digital Voice Processor gains late-entry/re-entry functionality and output fine gain adjustment

Late-entry/re-entry functionality has been added to the [CMX7011](#). This offers two significant benefits to the device: It allows a receiving radio to join a call even if the initial synchronisation frame was missed, and to re-join an ongoing call that had dropped out due to a fading receive signal.

The analogue output gain stage now has fine gain control in addition to the existing coarse gain. Fine gain control allows the analogue output to be adjusted in 0.2dB increments.

For more information, visit the [CMX7011 Digital Voice Processor product overview page](#).

