

# CMX970

## IF/RF Quadrature Demodulator

The CMX970 is an IF/RF quadrature demodulator, featuring a wide operating frequency range (up to 300MHz) and low power consumption. The device may be used in low IF systems or those converting down to baseband.

The CMX970 is controlled either by serial bus or by direct control (with reduced functionality). The small VQFN package and minimal external components makes the device ideal for space-constrained applications. Programmable features include the local oscillator divider ratio (2 or 4).

### Features

- 20—300 MHz IF/RF demodulator with VGA
- 10MHz I/Q bandwidth
- Serial bus or direct control operation
- <1 degree I/Q phase matching
- <0.5 dB I/Q gain matching
- Low power 15mA @ 3.3V
- Small 16-lead VQFN package

### Applications

- Wireless data terminals
- HF/VHF and UHF mobile radio
- Avionics radio systems
- Software defined radio (SDR)

### Supply Requirement

- 3.0 to 3.6V

The demodulator has best in class intermodulation performance, excellent phase and amplitude balance and has two gain control elements, (independently controlled), allowing users to optimise gain/noise/linearity characteristics—depending on their system requirements.



CMX970



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**PRODUCT  
DATA RESOURCE**

## WHAT TO DO NEXT

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## CML Microcircuits Benefits

### Faster time to market

Developing proven high performance and field tested ASSP ICs, CML is helping engineers to cope with increasing pressure in delivering shorter project design cycles.

### Design flexibility

CML's *FirmASIC*® reconfigurable technology with the use of a Function Image upload enables a single hardware platform to be used for multiple communications systems.

### High Quality

With 100% of products being tested before shipping, customers are assured of the highest reliability.

### Product Longevity

Designing with CML products, manufacturers are rewarded with longer product life cycles and a stable BOM, ensuring minimum engineering costs and maximum profit.

### Low Power

Being at the forefront of low power chip technology, manufacturers can develop smaller equipment with extended battery life.

### Superior Support

Internal and field based applications teams worldwide provide focused customer support to ease the development process.

[www.cmlmicro.com](http://www.cmlmicro.com)

United Kingdom  
United States  
Singapore

Tel: +44 (0) 1621 875500  
Tel: +1 336 744 5050  
Tel: +65 62888129

email: [sales@cmlmicro.com](mailto:sales@cmlmicro.com)  
email: [us.sales@cmlmicro.com](mailto:us.sales@cmlmicro.com)  
email: [sg.sales@cmlmicro.com](mailto:sg.sales@cmlmicro.com)