CMX589A

Versatile Full-duplex GMSK Modem

The CMX589A is a full-duplex synchronous data pump/modem, designed for Wireless Data Applications. The modem employs Gaussian filtering for Minimum Shift Keying (GMSK) baseband modulation applications. The CMX589A features a wide range of available data rates from 4kbps to 200kbps and the choice of BT (0.3 or 0.5) to meet different system requirements.

The Tx and Rx digital data interfaces are bit serial, synchronised to generated Tx and Rx data clocks. Separate Tx and Rx Powersave inputs allow full or half-duplex operation. Rx input levels can be set by suitable AC and DC level adjusting circuitry.

Acquisition, Lock and Hold of Rx data signals are made easier and faster by the use of Rx Control Inputs and can be set by the µProcessor.

Features

- Full duplex (GMSK)
- Data rates: 4kbps to 200kbps
- Selectable BT: 0.3 or 0.5
- Low Current Non-DSP Solution

Applications

- Meets RCR STD-18
- Wireless LAN/modems
- Rx-only AIS monitors
- Automatic vehicle location links
- Wireless data links for PCs, laptops and printers
- Point-of-sale terminals
- Wireless bar-code readers and stock controllers
- Wireless local loop
- Amateur packet radio
- Wireless ISDN

Supply Requirement

- 3.0 to 5.5V
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.