

# CMX969

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## Packet Data Modem

The CMX969 is a CMOS integrated circuit, containing baseband signal processing and Medium Access Control (MAC) protocol functions, that are required for a high performance DataTAC dual mode RD-LAP 19200bps and MDC 4800bps FSK wireless packet data modem suitable for use with the Motient/ARDIS network.

The modem interfaces with the host processor and radio modulation/demodulation circuits, delivering reliable two-way transfer of application data over the wireless link. The CMX969 assembles application data, adds forward error correction (FEC) and error detection (CRC) information and interleaves the result for burst-error protection. It then converts the packet into a filtered analogue baseband signal for modulating the radio transmitter.

In receive mode, the CMX969 performs the reverse function. After error correction and removal of the packet overhead, application data is supplied to the host processor. Any residual uncorrected errors in the data will be flagged and a readout of received signal quality is provided.

### **Features**

- DataTAC, dual mode RD-LAP and MDC systems
- Full data packet framing
- Low power requirement with powersave
- Optional autonomous frame sync detection

## **Applications**

- Two-way paging equipment
- Mobile data systems
- Wireless telemetry
- DataTAC terminals

## **Supply Requirement**

• 2.7 to 5.5V

The CMX969 uses signal filtering, data block formats and FEC/CRC algorithms, compatible with MDC and RD-LAP over-air standards.



CMX969 Block Diagram



# WHAT TO DO NEXT

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