**MOTOROLA**

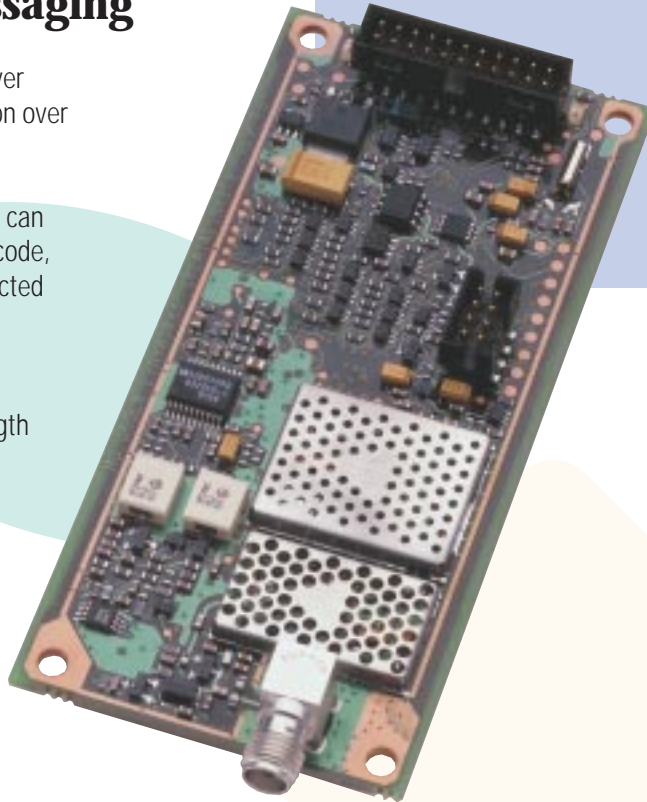# Explore the World of Integrated Two-Way Wireless Messaging

The CreataLink™ 2 XT two-way data transceiver enables low-cost wireless data communication over a ReFLEX™ paging network.

The CreataLink2 XT two-way data transceiver can initiate message transmissions as well as decode, store and forward messages to an interconnected host device.

Ideal for OEM fixed telemetry and other applications requiring moderate message length wireless data communication.

Features confirmed message delivery and supports up to 2,000 bytes of data per transmission.

The CreataLink2 XT transceiver can execute a 3rd party embedded application.



**CREATALINK 2 XT™**
**ReFLEX™ Two-Way Data Transceiver**

## Product Features

► Uses FLEX™ Technology - cost effective wireless medium for moving moderate amounts of data
► Performs all necessary ReFLEX protocol processing to:

  **1.** maintain connection to the ReFLEX paging network
  **2.** accurately receive and acknowledge messages
  **3.** deliver messages in a manner which complies with protocol requirements

► Supports broadcast group and individual outbound messaging
► Robust Temperature Specification: -40º to +85ºC
► CLP™ - Communication Linking Protocol - allows for easy interfacing to other devices via a standard RS232 or TTL serial interface with connector

► Eight individually configurable bi-directional parallel I/O signals:

  **1.** allow for control and monitoring of discrete signals
  **2.** status can be routed over the serial port for external processing or internally processed by a 3rd party application

► For 3rd party embedded applications, 40K of flash program memory and 32K+ of RAM storage are provided along with source level debugging tools.
► Compact single board OEM level product in a form factor that facilitates mounting in an off-the-shelf housing.
► Battery connector interface is available for applications requiring backup battery or a secondary power source during transmissions
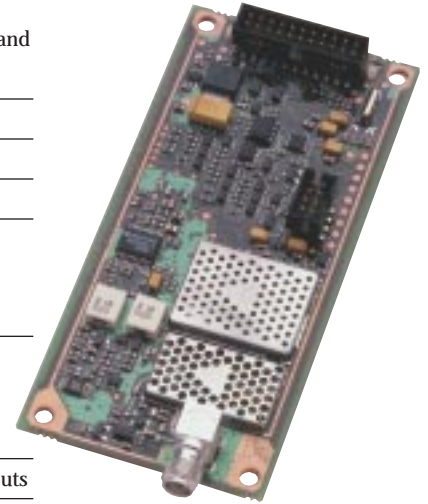
Available January 1999

# Hardware Specifications

**CREATALINK₂ XT**
*ReFLEX™ Two-Way Data Transceiver*

## General Specifications

| Item | Specification |
|---|---|
| 22 pin connector | keyed Male 2mm pitch header, Molex Mini-Grid 87332-2220, used for power, ground, serial communications, parallel I/O, A/D and backup transmit power source |
| 8 pin JTAG connector | keyed Male 2mm pitch header, Molex Mini-Grid 87332-0820 |
| Coding Format | ReFLEX |
| Operating Temperature | -40C to +85C |
| Power Supply Requirements | |
|    Main Supply | 5-12 $V_{DC}$, 1.4A minimum, 100mV p-p up to 5MHz ripple and 2A maximum if sourcing current on output pins |
|    Power Backup/Transmit Supply | Backup: 3Vdc minimum<br>Transmit: 5vdc minimum, 1.4A maximum, 100mV p-p up to 5 MHz ripple |
| Serial Port Specifications | RS232 compliant or TTL compliant via designated connector pinouts |
| Parallel Port Specifications | Outputs: Open collector or TTL compliant via designated connector pinouts |
| A/D Port Specifications | Voltage range:   0-2.5V |
| | Resolution:   10 bit |
| | S/N Ratio:   58dB |
| | Ref voltage:   2.5 volt internal reference |
| Physical Dimensions (board level device) | Length 3.75 inches |
| | Width 1.75 inches |
| | Thickness (w/o standoffs) 0.70 inches |
| Antenna | External female SMA connector |

**ReFLEX™ Two-Way Wireless Messaging**

## Transmitter Specifications

| Item | Specification |
|---|---|
| Frequency | ReFLEX NBPCS Networks (901-902 MHz) |
| RF Power Output (at antenna port) | 1.75-2.0 Watt   **Preliminary** |
| Transmit Data Bit Rate | ReFLEX 25: 800, 1600, 3200, 9600 bps<br>ReFLEX 50: 9600 bps |
| Frequency Stability | 1 ppm on transmit |

## Power Consumption

| Operating Mode | Current Drain | |
|---|---|---|
| Standby | 1 mA | **Preliminary** |
| Receive | 45 mA | **Preliminary** |
| Transmit | 1.4 A | **Preliminary** |

| Item | Specification |
|---|---|
| Frequency | 929-942 MHz |
| Receive Data Bit Rate | 6400 bps |

Specifications are subject to change.

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