



General Specifications

ReFLEX[®] 50 Hardware 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 50
Operating Temperature	-40° to +85° C
Power Supply Requirements Main Supply	5-12Vdc, 1.4A minimum, 100mV p-p up to 5MHz ripple and 2A maximum if sourcing current on output pins
Power Backup/Transmit Supply	Backup: 3-9Vdc Transmit: 5-9Vdc, 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: 2.5V internal reference
Physical Dimensions (Board Level Device)	Length 3.75 inches Width 1.75 inches Thickness (w/o standoffs) 0.70
Antenna	External female SMA connector

Transmitter Specifications

ITEM	SPECIFICATION
Frequency	896-902 MHz
RF Power Output (at antenna port)	0.5-2.0 Watts
Transmit Data Bit Rate	9600 bps
Frequency Stability	1 ppm on transmit

Power Consumption

OPERATING MODE	CURRENT DRAIN (TYPICAL)
Standby	3-4 mA
Receive	85 mA
Transmit	1.2A

Receiver Specifications

ITEM	SPECIFICATION
Frequency	929-942 MHz
Receive Data Bit Rate	6400 bps

Creatalink[®] Wireless Products.

More Than Hardware. Ideaware.

Creatalink 2XT two-way transceivers are more than a simple alternative, they're an innovative alternative. Our advanced technology offers you an inexpensive, fast, easy way to create the designs you've always dreamed about.

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FINAL SIGNED APPROVAL: _____

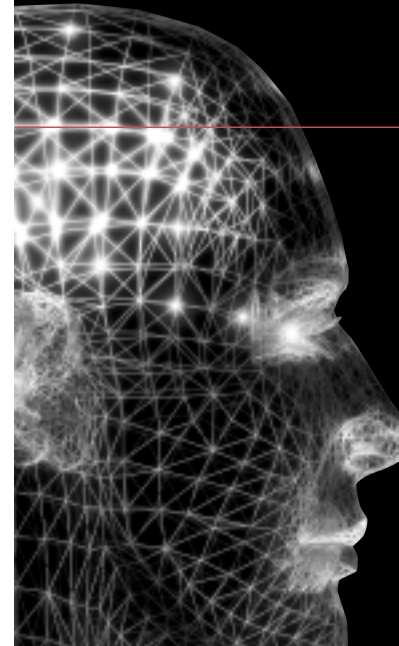


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Wireless
Products:

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THE HEART OF SMART.

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CreataLink 2XT two-way transceivers enable low-cost wireless data communication over a ReFLEX® paging network. They can:

- Initiate message transmissions as well as decode, store and forward messages to an interconnected host device.
- Meet the needs of Original Equipment Manufacturers (OEM) fixed telemetry and other applications requiring moderate message length wireless data communication.
- Execute a 3rd party embedded application.

CreataLink® Wireless Products:

More Than Hardware.



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CreataLink 2XT Two-Way Transceiver Features:

- FLEX Technology, a cost-effective, wireless medium for moving moderate amounts of data is utilized. Performs all necessary ReFLEX protocol processing to:
 - Maintain connection to the ReFLEX paging network
 - Receive and acknowledge messages accurately
 - Deliver messages in a manner that complies with protocol requirements
- Can automatically receive updates, notifications and important information almost anywhere with Motorola's Timeport™, Talkabout® and V. Series™ messaging products or through the internet.
- Broadcast group and individual outbound messaging supported.
- Robust Temperature Specification: -40° to +85° C.
- Confirmed Message Delivery supports up to 2,000 bytes of data per transmission.
- CLP (Communication Linking Protocol) allows for easy interfacing to other devices via a standard RS232 or TTL serial interface with connector.
- For 3rd party embedded applications, 40K of flash program memory and 32K+ of RAM storage are provided along with source level debugging tools. A total of 96K of flash program memory is available with ReFLEX 25.
- Adjustable transmitter power range from 0.25W to 2W for system balancing. Minimum transmitter power for ReFLEX 25 is 0.25W and for ReFLEX 50 is 0.5W.
- Eight individually configurable bi-directional I/O signals:
 - Allow control and monitoring of discrete signals
 - Enable the status to be routed over the serial port for external processing or internally processed by a 3rd party application
- Coasting up to 1° C per minute ambient temperature change, bare board without housing.*
- Interrupt driven parallel inputs for pulse counting & timing measurements.*

Motorola Developer's Kit Contents:

Hardware

- CreataLink 2XT two-way transceiver
- "Lab Development" board
- Interconnect cables
- Flat patch antennae and 6' cable

Software & Documentation

- CLP (Communication Linking Protocol) Serial Interface Manual
- Software Integrators Guide and Software diskette for on board application
- Hardware Integrators Guide and CLP diskette
- Programming Guide and Software diskette

* Only available in R25 modules. See specifications for details on R25 and R50 availability.



General Specifications

ReFLEX® 25 Hardware 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 25
Operating Temperature	-40° to +85° C
Power Supply Requirements Main Supply	5-16Vdc, 1.4A minimum, 100mV p-p up to 5MHz ripple and 2A maximum if sourcing current on output pins
Power Backup/Transmit Supply	Backup: 3-9Vdc Transmit: 5-9Vdc, 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: 2.5V internal reference
Physical Dimensions (Board Level Device)	Length 3.75 inches Width 1.75 inches Thickness (w/o standoffs) 0.70
Antenna	External female SMA connector

Transmitter Specifications

ITEM	SPECIFICATION
Frequency	896-902 MHz
RF Power Output (at antenna port)	0.25-2.0 Watts
Transmit Data Bit Rate	800, 1600, 6400, 9600 bps
Frequency Stability	1 ppm on transmit

Power Consumption

OPERATING MODE	CURRENT DRAIN (TYPICAL) (5 Volt Supply / 16 Volt Supply)
Standby	4-5 mA / 1.5-2.5 mA
Receive	80 mA / 30 mA
Transmit	1.1A / 0.5A

Receiver Specifications

ITEM	SPECIFICATION
Frequency	929-942 MHz
Receive Data Bit Rate	1600, 3200, 6400 bps

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CreataLink Spec Sheet 25-50
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