


Introducing the . . . .  
**MICRF505 RadioWire® Transceiver**


The MICRF505 transceiver operates from 850MHz to 950MHz and supports FSK modulation at data-rates up to 200kbps. Many functions are user programmable including the frequency synthesizer, making the MICRF505 suitable for frequency hopping applications.


Reducing the overall size and lowering the total bill of materials (BOM) has been the primary objective in the design of the MICRF505. Through high integration the number of external components has been reduced to just a handful of capacitors, one inductor and a crystal. The MICRF505 is designed to accommodate low cost, low accuracy crystals. To address this, Micrel added a frequency error estimator to determine frequency mismatch between communicating transceivers, and an internal crystal tuning mechanism to enable automated crystal tuning on-the-fly. The MICRF505 also incorporates an internal clock recovery circuit to reduce the burden on its companion baseband device enabling the use of a lower cost micro-controller.



The MICRF505 features high sensitivity, selectivity and transmit power so RF performance has not been sacrificed in the process of driving down BOM cost. In fact by integrating the transmit/receive (T/R) switch there are no switch losses, making the system level RF performance even higher.

 [RadioWire® Overview](#) (Two page brochure providing an overview of RadioWire® products)

 [Try our Intelligent Product Selector](#) (please enable cookies and javascript)

 [RadioWire Homepage](#) (For more information on the entire RadioWire® family of transceivers and modules)

### MICRF505 Performance Summary


Device	Description	VCC	Rx Sensitivity	Max Tx Power	Max Baud Rate	Rx Icc	Tx Icc	Package
<a href="#">MICRF505</a>	850MHz - 950MHz	2.0 to 2.5V	-111 dBm	10 dBm	200kbps	13mA	28mA	32-Pin MLF™

## Design Tools and Resources

### Documentation


 [MICRF505 Datasheet](#) MICRF505 Datasheet

### Design Software

 [MICRF505 RF Test Bench](#) PC based design tool (calculates component values and register configuration)

 [MICRF505 RF Test Bench User Guide](#) User guide

### Development System

 [MICRF505DEV1 Development System](#) Development system hardware information (BOM, Schematics, Gerber files etc.)





 [MICRF505DEV1 Firmware](#) Development system firmware (C++)

 [MICRF505DEV1 User guide](#) Development system user guide

### Approved Design Partners

 [Venture Technologies](#)

## Additional Collateral and Information

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|---|--|
|  <a href="#">MICRF505 Product Presentation</a> | Product Overview (Microsoft Powerpoint)                        |
|  <a href="#">MICRF505 Advertisement</a>        | Advertisement (English version)                                |
|  <a href="#">MICRF505 Press Release</a>        | Press Release (English version)                                |
|  <a href="#">RadioWire® Overview</a>           | Two page brochure providing an overview of RadioWire® products |

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