



**HumRC™ Series**  
**Evaluation Module**  
**Data Guide**

**Wireless made simple®**



**Warning:** Some customers may want Linx radio frequency (“RF”) products to control machinery or devices remotely, including machinery or devices that can cause death, bodily injuries, and/or property damage if improperly or inadvertently triggered, particularly in industrial settings or other applications implicating life-safety concerns (“Life and Property Safety Situations”).

**NO OEM LINX REMOTE CONTROL OR FUNCTION MODULE SHOULD EVER BE USED IN LIFE AND PROPERTY SAFETY SITUATIONS.**

No OEM Linx Remote Control or Function Module should be modified for Life and Property Safety Situations. Such modification cannot provide sufficient safety and will void the product’s regulatory certification and warranty.

Customers may use our (non-Function) Modules, Antenna and Connectors as part of other systems in Life Safety Situations, but only with necessary and industry appropriate redundancies and in compliance with applicable safety standards, including without limitation, ANSI and NFPA standards. It is solely the responsibility of any Linx customer who uses one or more of these products to incorporate appropriate redundancies and safety standards for the Life and Property Safety Situation application.

**Do not use this or any Linx product to trigger an action directly from the data line or RSSI lines without a protocol or encoder/decoder to validate the data.** Without validation, any signal from another unrelated transmitter in the environment received by the module could inadvertently trigger the action.

**All RF products are susceptible to RF interference that can prevent communication.** RF products without frequency agility or hopping implemented are more subject to interference. This module does have a frequency hopping protocol built in, but the developer should still be aware of the risk of interference.

**Do not use any Linx product over the limits in this data guide.** Excessive voltage or extended operation at the maximum voltage could cause product failure. Exceeding the reflow temperature profile could cause product failure which is not immediately evident.

**Do not make any physical or electrical modifications to any Linx product.** This will void the warranty and regulatory and UL certifications and may cause product failure which is not immediately evident.



## Ordering Information

Ordering Information	
Part Number	Description
EVM-***-RC	HumRC™ Series Carrier Board
HUM-***-RC	HumRC™ Series Remote Control Transceiver
HUM-***-RC-MWA	HumRC™ Series Remote Control Transceiver with Antenna
HUM-***-RC-MWC	HumRC™ Series Remote Control Transceiver with Connector
MDEV-***-RC	HumRC™ Series Master Development System
EVAL-***-RC	HumRC™ Series Basic Evaluation Kit
MDEV-DEMO-RC-A	Development System Remote Control Demo Board, Type A
MDEV-DEMO-RC-B	Development System Remote Control Demo Board, Type B
MDEV-PGDOCK	Development System Programming Dock
MDEV-PROTO	Development System Prototype Board
CON-SOC-EVM	EVM Module Socket Kit

\*\*\* = Frequency; 900MHz, 2.4GHz

Figure 2: Ordering Information

## Absolute Maximum Ratings

Absolute Maximum Ratings				
Supply Voltage $V_{cc}$	-0.3	to	+3.9	VDC
Any Input or Output Pin	-0.3	to	$V_{cc} + 0.3$	VDC
RF Input		0		dBm
Operating Temperature	-40	to	+85	°C
Storage Temperature	-40	to	+85	°C

Exceeding any of the limits of this section may lead to permanent damage to the device. Furthermore, extended operation at these maximum ratings may reduce the life of this device.

Figure 3: Absolute Maximum Ratings



**Warning:** This product incorporates numerous static-sensitive components. Always wear an ESD wrist strap and observe proper ESD handling procedures when working with this device. Failure to observe this precaution may result in module damage or failure.

Please see the HumRC™ Series Transceiver module data guide for full electrical specifications.

# Pin Assignments

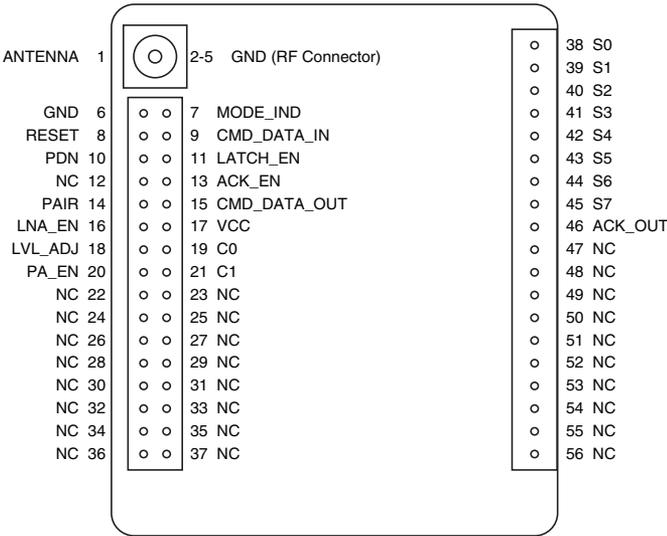


Figure 5: EVM-xxx-RC Pin Assignments

# Pin Descriptions

Pin Descriptions			
Pin Number	Name	I/O	Description
1	ANTENNA	—	50-ohm RF Antenna Port
2, 3, 4, 5, 6	GND	—	Ground
7	MODE_IND	O	This line indicates module activity. It can source enough current to drive a small LED, causing it to flash. The duration of the flashes indicates the module's current state.
8	$\overline{\text{RESET}}$	I	This line resets the module when pulled low. It should be pulled high for normal operation.
9	CMD_DATA_IN	I	Command Data In. Input line for the serial interface commands. If serial control is not used, this line should be tied to ground or POWER_DOWN to minimize current consumption.
10	$\overline{\text{POWER\_DOWN}}$	I	Power Down. Pulling this line low places the module into a low-power state. The module is not functional in this state. Pull high for normal operation. Do not leave floating.
11	LATCH_EN	I	If this line is high, then the status line outputs are latched (a received command to activate a status line toggles the output state). If this line is low, then the output lines are momentary (active for as long as a valid signal is received).

# Schematic

Figure 7 shows the schematic diagram for the evaluation module.

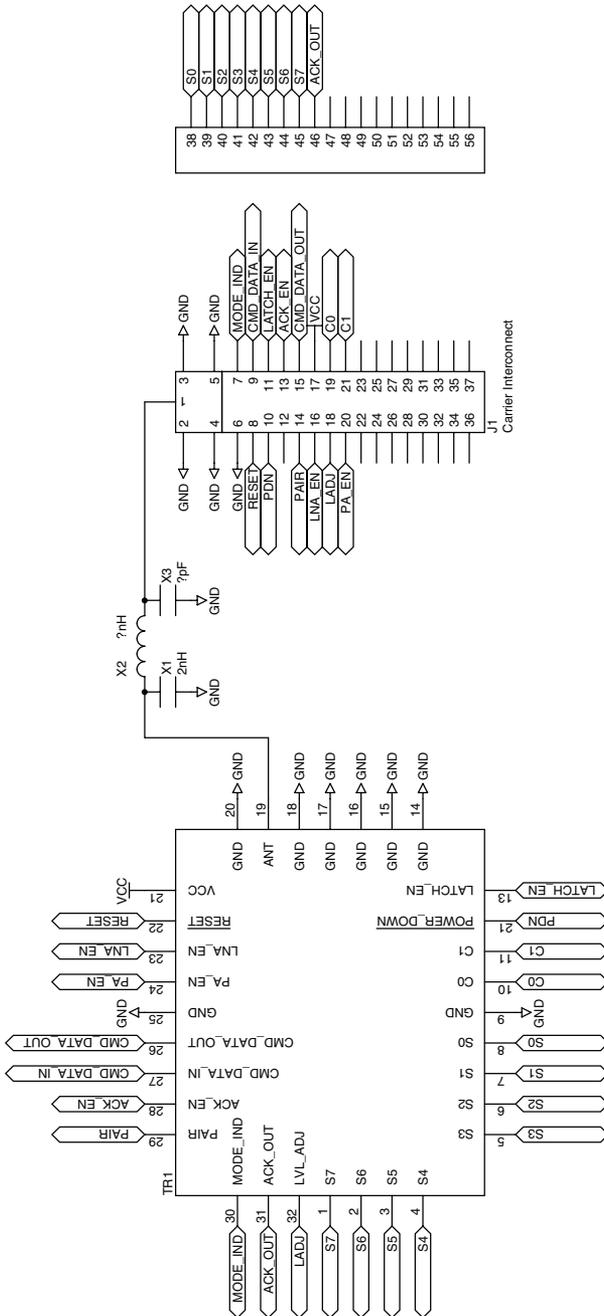


Figure 7: EVM-xxx-RC Schematic



Linx Technologies  
159 Ort Lane  
Merlin, OR, US 97532

3090 Sterling Circle, Suite 200  
Boulder, CO 80301

Phone: +1 541 471 6256  
Fax: +1 541 471 6251  
[www.linxtechnologies.com](http://www.linxtechnologies.com)

#### Disclaimer

Linx Technologies is continually striving to improve the quality and function of its products. For this reason, we reserve the right to make changes to our products without notice. The information contained in this Data Guide is believed to be accurate as of the time of publication. Specifications are based on representative lot samples. Values may vary from lot-to-lot and are not guaranteed. "Typical" parameters can and do vary over lots and application. Linx Technologies makes no guarantee, warranty, or representation regarding the suitability of any product for use in any specific application. It is Customer's responsibility to verify the suitability of the part for the intended application. At Customer's request, Linx Technologies may provide advice and assistance in designing systems and remote control devices that employ Linx Technologies RF products, but responsibility for the ultimate design and use of any such systems and devices remains entirely with Customer and/or user of the RF products.

**LINX TECHNOLOGIES DISCLAIMS ANY AND ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL LINX TECHNOLOGIES BE LIABLE FOR ANY CUSTOMER'S OR USER'S INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR RELATED TO THE DESIGN OR USE OF A REMOTE CONTROL SYSTEM OR DEVICE EMPLOYING LINX TECHNOLOGIES RF PRODUCTS OR FOR ANY OTHER BREACH OF CONTRACT BY LINX TECHNOLOGIES. CUSTOMER AND/OR USER ASSUME ALL RISKS OF DEATH, BODILY INJURIES, OR PROPERTY DAMAGE ARISING OUT OF OR RELATED TO THE USE OF LINX TECHNOLOGIES RF PRODUCTS, INCLUDING WITH RESPECT TO ANY SERVICES PROVIDED BY LINX RELATED TO THE USE OF LINX TECHNOLOGIES RF PRODUCTS. LINX TECHNOLOGIES SHALL NOT BE LIABLE UNDER ANY CIRCUMSTANCES FOR A CUSTOMER'S, USER'S, OR OTHER PERSON'S DEATH, BODILY INJURY, OR PROPERTY DAMAGE ARISING OUT OF OR RELATED TO THE DESIGN OR USE OF A REMOTE CONTROL SYSTEM OR DEVICE EMPLOYING LINX TECHNOLOGIES RF PRODUCTS.**

The limitations on Linx Technologies' liability are applicable to any and all claims or theories of recovery asserted by Customer, including, without limitation, breach of contract, breach of warranty, strict liability, or negligence. Customer assumes all liability (including, without limitation, liability for injury to person or property, economic loss, or business interruption) for all claims, including claims from third parties, arising from the use of the Products. Under no conditions will Linx Technologies be responsible for losses arising from the use or failure of the device in any application, other than the repair, replacement, or refund limited to the original product purchase price. Devices described in this publication may contain proprietary, patented, or copyrighted techniques, components, or materials.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Sub-GHz Development Tools](#) category:*

*Click to view products by [Linx Technologies](#) manufacturer:*

Other Similar products are found below :

[EVAL-ADF7021DBJZ](#) [EVAL-ADF7021-NDBZ2](#) [MICRF219A-433 EV](#) [MICRF220-433 EV](#) [AD6679-500EBZ](#) [130436-HMC1010LP4E](#)  
[EVAL-ADF7901EBZ](#) [EVAL-ADF790XEBZ](#) [110976-HMC453QS16G](#) [STEVAL-IKR002V7D](#) [STEVAL-IKR002V3D](#) [SKY66188-11-EK1](#)  
[SKY66013-11-EVB](#) [DRF1200/CLASS-E](#) [1096](#) [1098](#) [MDEV-900-PRO](#) [DVK-SFUS-1-GEVK](#) [DVK-SFUS-API-1-GEVK](#) [US-SIGFOX-](#)  
[GEVB](#) [STEVAL-IKR002V2D](#) [107755-HMC454ST89](#) [DM182017-2](#) [110961-HMC453ST89](#) [SX1272MB2DAS](#) [3179](#) [DC689A](#) [DC1513B-](#)  
[AB](#) [3229](#) [3230](#) [3231](#) [3232](#) [DC963B](#) [DC1250A-AA](#) [DC1513B-AC](#) [DC1513B-AD](#) [DC1513B-AA](#) [TEL0075](#) [131903-HMC921LP4E](#) [EU-](#)  
[SIGFOX-GEVB](#) [856512-EVB](#) [856512-EVB-1](#) [856704-EVB](#) [856882-EVB](#) [856908-EVB](#) [3071](#) [3073](#) [4072](#) [4073](#) [4074](#)