



**HumPRO™ 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-***-PRO	HumPRO™ Series Carrier Board
EVM-900-PRO-CAS	HumPRO™ Series Carrier Board with Certified module, Castellated Connection
EVM-900-PRO-UFL	HumPRO™ Series Carrier Board with Certified module, UFL Connector
HUM-***-PRO	HumPRO™ Series Data Transceiver
HUM-***-PRO-CAS	HumPRO™ Series Data Transceiver with Castellated Connection
HUM-***-PRO-UFL	HumPRO™ Series Data Transceiver with u.FL Connector
MDEV-***-PRO	HumPRO™ Series Master Development System
MDEV-PGDOCK	Development System Programming Dock
MDEV-PROTO	Development System Prototype Board
CON-SOC-EVM	EVM Module Socket Kit

\*\*\* = Frequency; 868, 900MHz

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.

# Pin Assignments

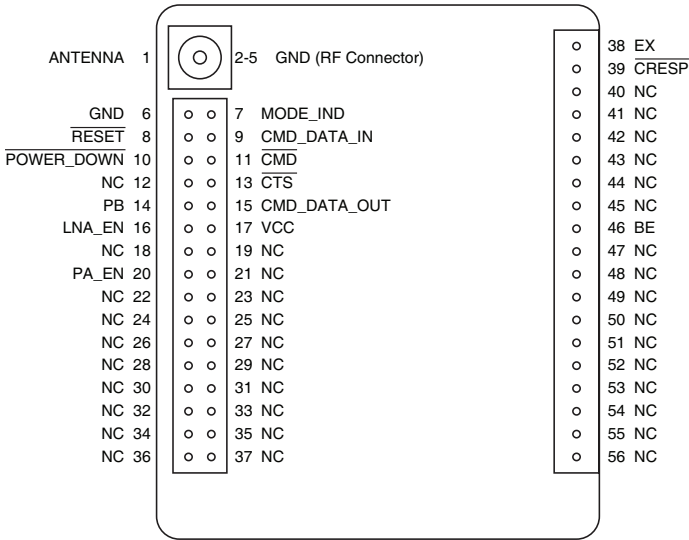


Figure 5: EVM-xxx-PRO Pin Assignments

# 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	Mode Indicator. 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	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 data (CMD is high) and serial commands (CMD is low).
10	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	CMD	I	Command Input. When this line is low, incoming bytes are command data. When high, incoming bytes are data to be transmitted.
12, 18, 19, 21–37, 40–56	NC	—	No Electrical Connection. Do not connect any traces to these lines.

# Schematic

Figure 7 shows the schematic diagram for the evaluation module.

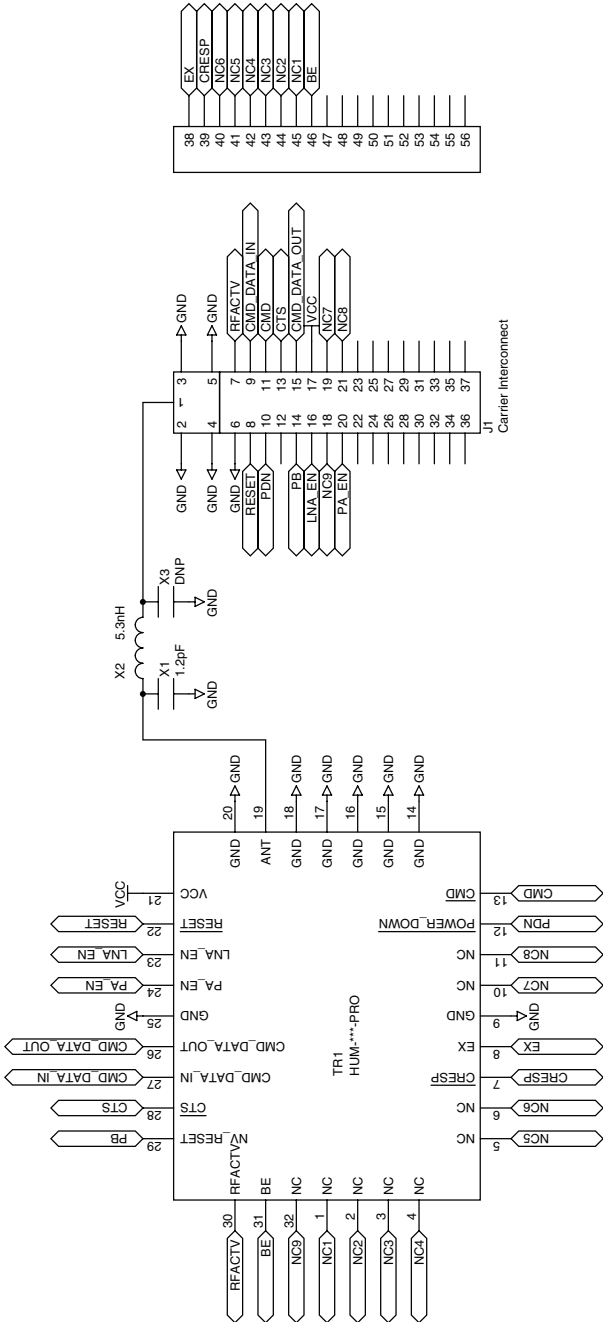


Figure 7: EVM-xxx-PRO Schematic



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