Tango – 2Mbps RF Module

The Tango is a low power, high over the air data rate, FCC/IC/CE certified 2.4GHz RF Module with a 100mW PA/LNA for extended range operations. The micro form factor module includes either an SMA antenna connector or a built in trace antenna. Tango is based on the Nordic nRF24L01+ radio incorporating an Enhanced ShockBurst™ hardware protocol accelerator which offloads time critical protocol functions from the application microcontroller enabling the implementation of advanced and robust wireless connectivity with low cost 3rd-party microcontrollers.

Tango can be used with the nRFgo SDK for easy code development. The nRFgo SDK is a fully featured Software Development Kit for Nordic nRF24L Series 2.4GHz RF System-on-Chips (SoCs). Used in conjunction with the nRFgo Starter Kit and nRFgo Studio, it contains everything needed for code development and debugging, including integration with Keil µVision™ IDE, a comprehensive library of hardware abstraction layers (HAL), Nordic Gazell 2.4GHz RF protocol stack, USB stack, and example applications.
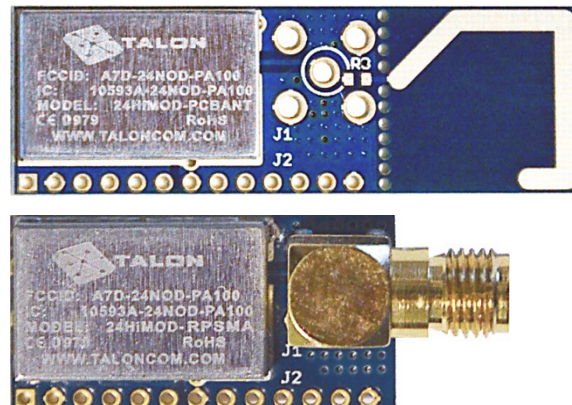
Low cost wireless development platform

Tango is an easily integrated RF Module that greatly reduces the risk of wireless application development, shortens time to market and saves certification expense. The Tango platform was designed to provide easy installation, simple operation and, above all, low manufacturing cost. These factors, plus low total NRE costs, will help you justify the integration of the Tango module in your next product.

Applications

The FCC/IC/CE certified 24 Tango micro form factor offers a low risk wireless option for a wide range of applications including:

- IoT
- Security
- JPEG
- Industrial Control

- Commercial Automation
- Long Range Monitoring
- Lighting Control
- Asset Tracking

Tango- Features

Radio
- Worldwide 2.4GHz ISM band operation
- 250Kbps, 1Mbps and 2Mbps data rate modes
- 1Km (3,300 ft) LoS range
- +20dBm (100mW) Nominal Transmit Power
- +5dB Receive Sensitivity increase with LNA
- Nominal 110dB Link Budget at 2Mbps
- Nominal 122dB Link Budget at 250Kbps
- 79 Channels
- Enhanced ShockBurst™ hardware accelerator
- Automatic Packet Handling
- SMA or trace antenna options
- Low Power Modes (<1µA hibernate)
- Nordic Gazell Protocol Stack
- SPI Serial Interface

Physical
- 27mm x 14mm x 10mm form factor (SMA)
- 42mm x 14mm x 1.7mm form factor (Trace Ant.)
- SMT or Right Angle mounting
- -40°C to +85°C Operation
- 1.8v to 3.6v Operation
- 5.0v Tolerant Inputs (Radio only, not PA)
- RoHS Compliant
- FCC/IC/CE Certified

For more information please contact:

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TALON COMMUNICATIONS
WIRELESS PRODUCT DEVELOPMENT

ANT+

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