Chipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Thread / ZigBee SE2.0 – 802.15.4 RF Module

The Oasis RF module is an ultra-low power IEEE 802.15.4 compliant, FCC/IC/CE Certified 2.4GHz RF Module with an 100mW PA/LNA for extended range operations. The micro form factor module includes a dual antenna design to support receiver diversity systems. The Oasis is based on the Freescale MKW22D512V fourth-generation ZigBee Pro/IP platform which incorporates a low power 2.4GHz IEEE 802.15.4 compliant radio frequency transceiver combined with a powerful Kinetis mixed signal ARM® Cortex™ M4 MCU, hardware acceleration for both the IEEE 802.15.4 MAC and AES security, and a full set of Microcontroller Unit (MCU) peripherals.

The module comes preloaded with the Simple Media Access Controller (SMAC) Connectivity Test for validating the RF characteristics of the module. Full debug and programming capabilities are included for development of custom applications. Module programming can be done through the JTAG or the embedded serial bootstrap in the MKW22D512V.
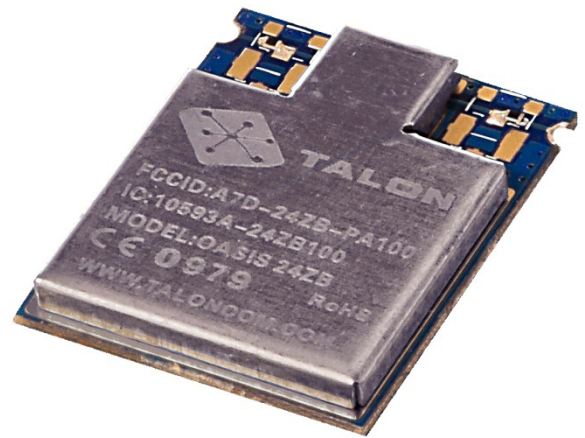
Low cost wireless development platform

Oasis RF Module is an easily integrated RF Module that greatly reduces the risk of wireless application development with a proven ZigBee SE 2.X/Pro/IP stack. The Oasis 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 Oasis module in your next product. The module brings out all the functional pins of the MKW22D512V MCU for maximum usability and flexibility, including:

- 2 UART's
- 7 ADC Inputs
- SPI bus
- I2C bus
- I2S bus
- Timers
- JTAG
- 8 KBI's

Applications

The Oasis micro form factor offers a low risk wireless option for a wide range of applications including:

- Smart Energy
- M2M
- Automatic Meter Reading
- Industrial Control
- Residential Automation
- HVAC Control
- Lighting Control
- Asset Tracking

Oasis - Features

Radio
- 2.4GHz ISM band at 250 kbits/s
- IEEE 802.15.4 Compliant - 16 channels
- +20dBm (100mW) Nominal Transmit Power
- Dual Antenna for Receiver Diversity
- 2.36-2.4GHz Medical Band (MBAN)
- MMCX, u.fl or off-module RF connection
- Two certified antenna choices

MCU
- 32 bit 50MHz ARM® Cortex™ M4
- 512 Kbyte FLASH, 64 Kbyte SRAM
- 16 bit ADC
- Serial UART, I2C, SPI and USB Interfaces
- Low Power Modes (0.85uA hibernate)
- PWM, Motor Control Timers
- 128 bit Unique ID
- NXP Thread, BeeStack™ Pro, SynkroRF or SMAC

Other Features
- Micro 25mm x 20mm x 2.8mm form factor
- -40°C to +105°C Operation
- 2.7v to 3.6v Operation
- RoHS Compliant
- AES 128 Encryption
- FCC/IC/CE Certified

For Oasis RF Module information please contact:

Email: sales@taloncom.com

Oasis Radio Module Development Platforms

Arduino - Freescale Freedom or Tower or TWRPI - Sierra IoT Platform

Thread / ZigBee SE2.0 – 802.15.4 RF Development Platforms

The Oasis RF module is a low power IEEE 802.15.4 compliant, FCC Certified 2.4GHz RF Module with a 100mW PA/LNA for extended range operations. The micro form factor module includes a dual antenna design to support transmit or receive diversity systems for difficult indoor environments.

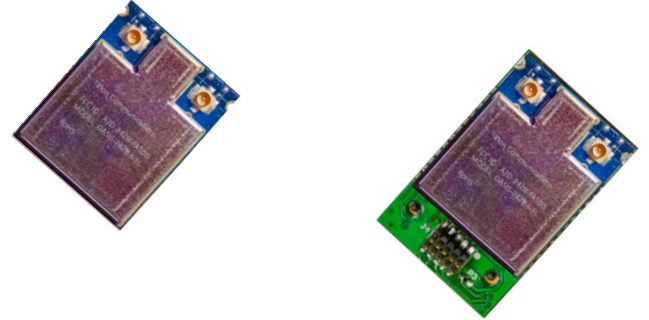### Choice of Wireless Development Platform

Talon offers 5 different options to allow quick development and progress on your project. Which will you choose ?

Applications

The Oasis micro form factor RF Module offers a low risk wireless option for a wide range of applications including:

- Smart Energy
- M2M
- Automatic Meter Reading
- Industrial Control

- Residential Automation
- HVAC Control
- Lighting Control
- Asset Tracking

Oasis RF Module

TWRPI

Sierra Wireless mangOH™ IoT

Freescale Tower

Arduino / Freedom

This information is subject to change without notice.

www.taloncom.com