

RF Transceiver Student Learning Kit Featuring the MC13192 family

Easily add RF capability to course or projects

Can be used in simple MAC (SMAC) or ZigBee® configurations

Common Course Applications

- Wireless sensing and control
- Introduction to communication protocols
- Wireless home automation

Use for courses/projects which:

- Require low-power, medium data rate wireless communication
- Illustrate a variety of network deployment configurations
- Are targeted for intermediate to advanced level students

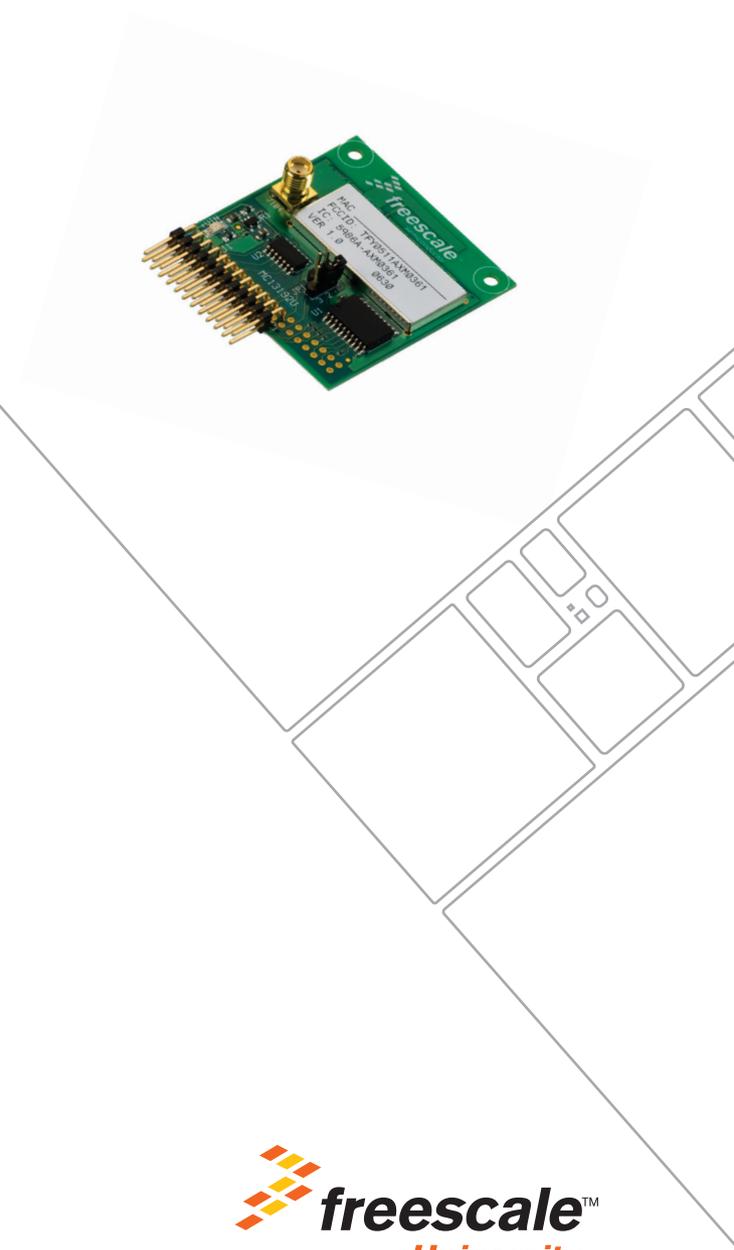
This application module can be:

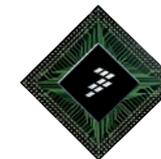
- Connected to an application module*
 - Plug the RF transceiver directly into the application module
- Connected to the Freescale project board (P BMCUSLK) for:
 - Increased I/O features
 - A more hands-on approach
 - Acceptance of multiple microcontrollers
 - Integrated USB-BDM interface
 - Larger bread-board area

To order, search by part number on www.freescale.com.

Part Number	Description
AP13192USLK	802.15.4 RF Transceiver

*Additional hardware may be required





Features

MC13192; QFN 32

- On-board antenna
 - 250 Kbps RF data rate
 - Voltage indicator
 - 3V on-board voltage regulator
 - Low operating power of 60 ma with transmit enabled
 - Three power saving modes
 - Full spread spectrum encode and decode
 - 16 RF channels with 5 MHz of separation
 - Transmit and receive data buffers for low MCU overhead
 - Packet or stream data transfer modes
 - Four timers to reduce host controller overhead
 - Optional programmable clock output
 - SPI slave mode serial communication—8 Mbps maximum
 - Two SPI selectable signal inputs
- J1 I/O connector: 2 x 12 R/A 0.1" grid
 - Compatible pin connection with application modules and the MCUSLK development board
 - SPI signals
 - SIN
 - SOUT
 - SCLK
 - SELECT 1 or 2
 - Status signals
 - Valid CRC
 - Idle
 - IRQ
 - Control signals
 - RESET In
 - ANT CTRL, Tx or Rx mode
 - RXTXEN, optional transfer control
 - ATTN_IN, wake up control

Specifications

- Module Size: 2" x 2.1"
- Power Input: 3.3V to 5.5V operation