

# Airbee-ZNS Lite Version T12.04

## Release Notes



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# 1 Introduction

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This document provides the release notes for Airbee-ZNS Lite Version TI2.04

## 1.1 Purpose

The purpose of **Release Notes** is to communicate the major features & limitations in this release of the Airbee-ZNS Lite.

## 1.2 Definitions, Acronyms, and Abbreviations

MAC – Medium Access Control

PHY - Physical Layer

USART – Universal Synchronous Asynchronous Receiver and Transmitter

UART - Universal Asynchronous Receiver and Transmitter

SPI – Serial Peripheral Interface

# 2 About This Release

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This release contains the sample application demo Hex files and the IAR IDE workspace for custom application development.

# 3 Features

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1. Airbee-ZNS Lite is designed to work only on TI MSP430 compatible with the schematic SK05P2190109, Rev 09. This software will not support any other platform.
2. Application will be limited to 4 ZigBee ready devices only – additional devices will not be allowed to join the network.
3. No security implementation
4. Non-beacon mode
5. The chipcon initialization procedure has been changed as per the Chipcon's code example for CC2420 transceiver with TI MSP430 microcontroller (refer to [www.chipcon.com](http://www.chipcon.com))



## 4 Release Summary

Date of Release	23 <sup>rd</sup> September 2005
MAC Version	2.12_NBNS_MESHFIX
NWK Version	4.12b
PHY Version	2.09a_TI

## 5 Software Limitations

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1. All four devices must participate in the 4-node demo application.
2. The binding table will be updated only after all the devices are part of the network.
3. IEEE address cannot be modified by the application developer for any device.

## 6 Working Environment

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- The 6 MHz crystal **should be** connected to HFX TAL.
- The boards are powered with two AAA batteries.
- The USART1 is used for SPI communication with CC2420 transceiver.
- Peripherals/Microcontroller resources used by Airbee-ZNS Lite:
  - Timer A
  - Timer B
  - USART1
  - Digital I/O
    - CC2420 + MSP430F1611/1612 interface pins per the above referenced TI schematic
    - P1.3 (used for hopping indication as well as communication failure indication between the microcontroller & the transceiver)

### Note:

The above mentioned Microcontroller resources are used by Airbee-ZNS Lite and are not available for application development. The following resources are used in the 4-node application and can be utilized for custom application development.

- P1.4 ( connected to SW1 – used for switch/key application)
- P1.0 (connected to D1 – mapped to LED for data indication)
- P1.1 (connected to D2 – mapped to Join confirm/Network Formation confirm)
- P1.2 (not used in the 4-node demo application - available for custom



application development)

- USART0 (not used in the 4-node demo application - available for custom application development)