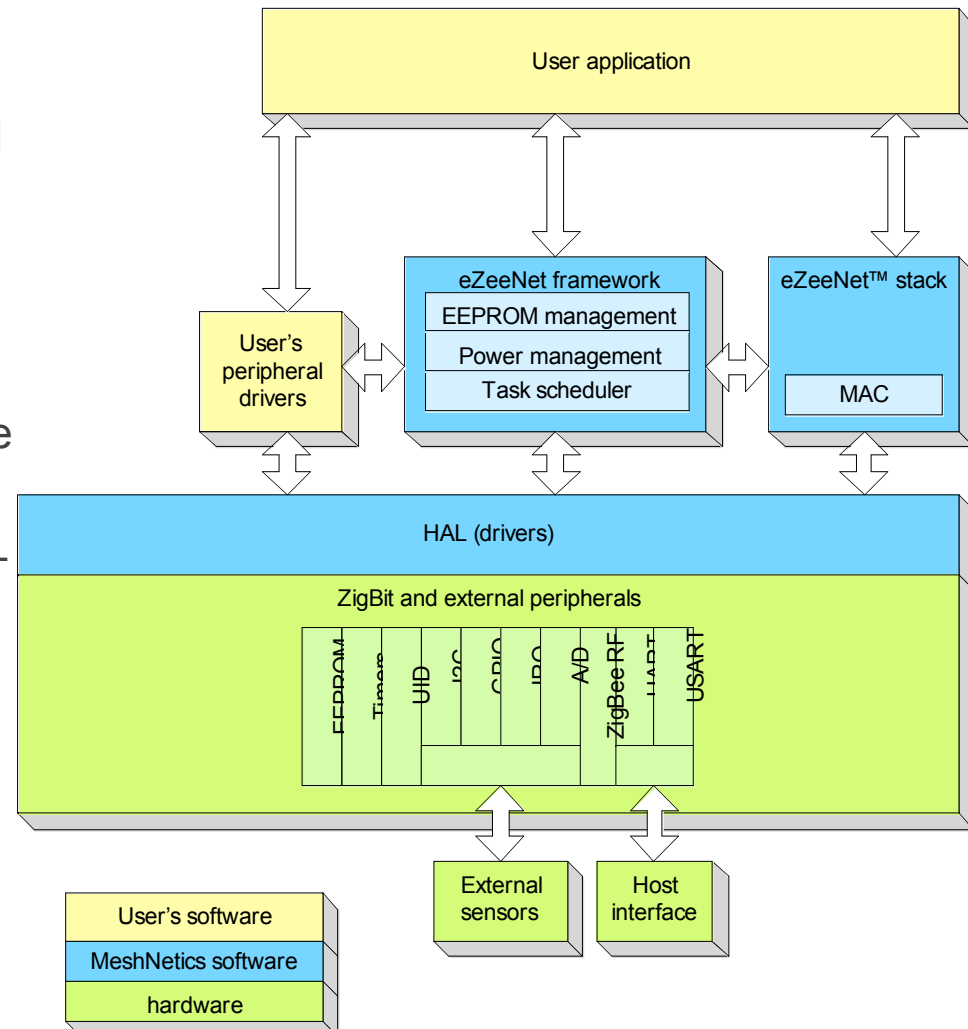
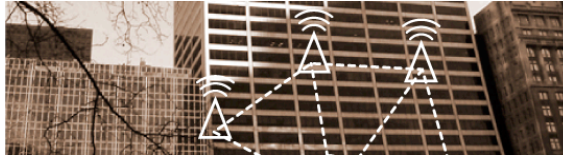


# Introducing MeshNetics OpenMAC

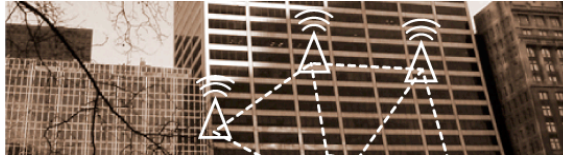
- **ZigBee and OpenMAC**
  - eZeeNet is a full-featured commercial ZigBee stack based on TinyOS 1.1
  - OpenMAC is IEEE802.15.4 MAC layer at the bottom of that stack
- **OpenMAC**
  - Intended for embedded software experts and enthusiasts
  - Open sourced MAC layer + HAL layer for peripheral integration
  - Supports peer-to-peer and star topologies only
  - Distributed under Common Development and Distribution License (CDDL)





## OpenMAC Overview

- **OpenMAC is *True, No Strings Attached* Open Source**
  - Distributed under CDDL
  - Community-supported (MeshNetics support available)
  - Just a download away...
    - [www.meshnetics.com/opensource/mac](http://www.meshnetics.com/opensource/mac)
    - [www.sourceforge.net/projects/openmac](http://www.sourceforge.net/projects/openmac)
- **OpenMAC Overview**
  - MeshNetics implementation of IEEE 802.15.4 MAC layer
  - Provided as source code and library images to be linked with user applications
  - Supports C99 and nesc-written user applications
  - Toolchains available for Linux and Windows (limited) dev. environments
  - Provided with sample applications
- **Supported platforms**
  - ZigBit module & MeshBean2 development board
  - Atmel RZ200 and RZ502 Development Kits



## OpenMAC Sample Applications

- **OpenMAC sample applications**
  - Sample applications in C (2x) and nesc (1x)
  - Demonstrate most common functionality
  - Range Measurement Tool (come check out our demo!!)
  - Low-Power App
- **Range Measurement Tool**
  - ZigBit range performance measurement
  - C and nesc versions available
  - Dynamic input of channel number, output power, transmitter mode
- **Low-Power App**
  - Sleeping end device (RFD) communicating with coordinator (FFD)
  - C version available
  - RFD
    - Wake up periodically and
    - If delta exceeds certain threshold, send temperature to coordinator