

## Overview

**Cordio-Mesh** extends network range of Bluetooth low energy (BLE) by enabling many-to-many device communications. Mesh is optimized for creating large-scale device networks. It is ideally suited for building automation, sensor networks, and other IoT solutions.

### Cordio-Mesh consists of:

- Complete implementation of the Bluetooth Mesh Profile Specification 1.0
  - All models supported as defined in Specification
  - Supports all Mesh Profile 1.0 optional features

### Key features:

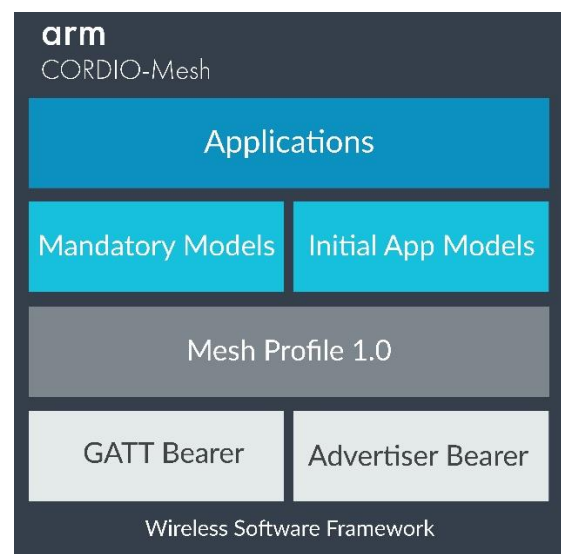
- Ease of use: APIs designed with applications in mind – optimized for battery powered resource constrained devices.
- Efficient memory usage: Designed for minimum RAM and code size.
- Flexible API for generic Models to allow for building custom Models.
- Compatible with both Cordio-B50 and Cordio-B42 Stack offerings
- Portable to any third-party Bluetooth Low Energy stack.
- Bluetooth qualified subsystem
- Mesh Security: encryption and authentication based on 128-bit AES

### Cordio-Mesh key deliverables:

- Mesh profile stack and model stack available as source code.
- Sample Applications: light, switch, provisioner available as source code
- Documents:
  - Mesh Model APIs.
  - Mesh Profile APIs.
  - Mesh Abstraction APIs.
  - Make files and user manual describing how to build source code deliverables and sample applications.

### Sample applications:

- Light application features:
  - Relay, proxy and friend feature
  - Can be provisioned over GATT bearer
  - Light HSL Server
  - Turn hardware LED on/off
- Light Switch application features:
  - Low Power feature
  - Can be provisioned over advertising bearer
  - Light HSL Client
  - Hardware pushbutton sends on/off
- Provisioner application features:
  - Provisioner feature: Provisioning over GATT and advertising bearer
  - Configuration Client: Supporting configuration of Light and Light Switch applications.
  - Proxy Client: Send Light HSL Client message over GATT bearer.



The URL is <http://www.arm.com/Cordio>

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