

SmartBond™ Bluetooth® mesh SDK

Software Development Kit for Bluetooth mesh solution using DA14682/3 and DA14585/6

Dialog Semiconductor offers a complete solution for the recently adopted Bluetooth mesh specification

Traditionally used for close-range, point-to-point communications for pairing devices, the Bluetooth® protocol has been greatly enhanced by the new mesh specification. The recently adopted Bluetooth mesh specification enables a 'many-to-many' communication topology offering both an extended range and a greater number of nodes.

Mesh functionality opens up a wide range of new applications for Bluetooth in markets such as smart home, lighting, industrial automation, beaconing and asset tracking. To make the most of these new opportunities, you need to design the new mesh capabilities into your products, easily and quickly.



Dialog offers you the perfect way to achieve this with complete mesh software support for the latest SmartBond™ products, starting with the DA14682 and DA14683, and then closely followed by the DA14586 and DA14585, including its high temperature derivatives.

The software include a full set of development tools for Bluetooth mesh applications, tool chain and reference application source code which are all available within our very own SmartSnippets™ development environment. Dialog also provides an iOS and Android application to allow their customers to provision, configure and control Bluetooth mesh nodes from their smartphone or tablet.

Applications

- Smart Home applications
- Smart lighting
- ► Industrial automation
- ► Sensor networks
- Commercial networks
- Cloud connected applications







Key Features

Open, global and fully defined standard

- ► Bluetooth SIG certified
- Guaranteed cross-vendor interoperability
- ► Security architecture that can be publicly audited

Robust performance, scalability and reliable

- ► Fast network (by a wide margin)
- ► Self-healing mesh with multicast and multi-path delivery
- ► Scalability to thousands of nodes

Ease of deployment, ease of use

- ► No unnecessary complexity
- ► Compatible with an enormous installed base of devices (smartphones, tablets and laptops)
- ► No hub or gateway required
- ► Reduced technical risk and fast time-to-market
- ► Low memory footprint and low MIPS requirement
- ► Highly configurable to suit the product needs
- ► Support for Software Over The Air firmware updates (SUOTA)
- ► Reference applications
- ► Android and iOS App provided
- ► Flexible Hardware Development kits with onboard debugger For example: DA14683 Development Kit-USB, including the mikroBUS™ interface, enabling easy connections to multitude of sensor shield.



DA14683 Development Kit - USB

For more information and purchasing please visit https://support.dialog-semiconductor.com/connectivity/



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