DC9000 SmartMesh IP Starter Kit
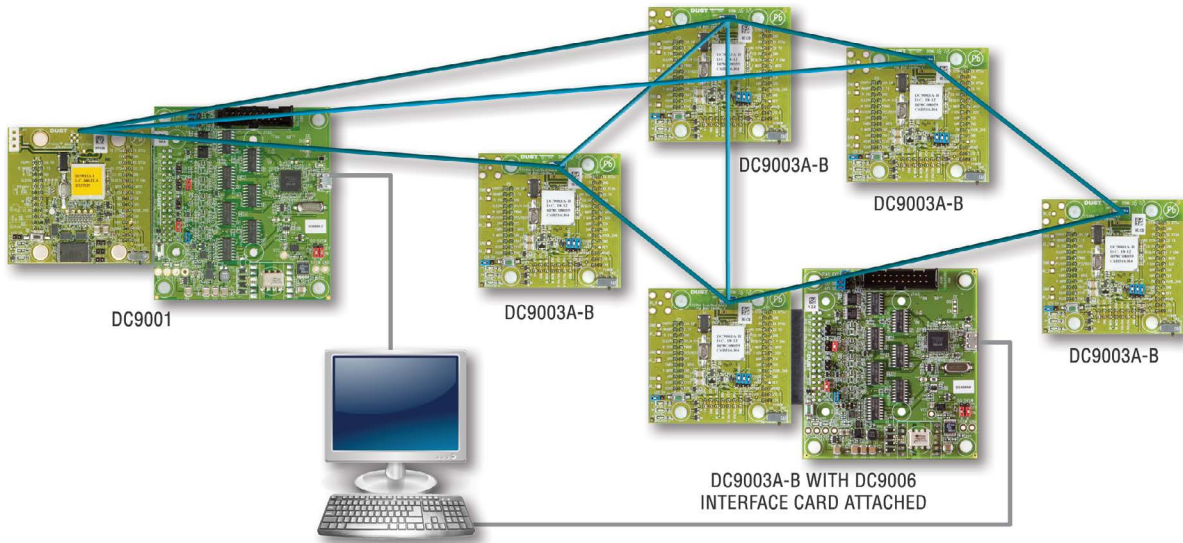

Wireless Mesh Network, Wired Reliability

The DC9000 SmartMesh IP™ Starter Kit provides all the tools for evaluating SmartMesh® network performance with respect to your application needs, including high reliability, ultralow power, scalability and ease of installation. This accelerates device integration and application software development.

The DC9000 Starter Kit includes five motes, or nodes (DC9003A-B), to enable you to quickly deploy a multi-hop mesh network in the RF environment specific to your application. The StarGazer evaluation software graphical user interface (GUI) allows you to quickly see the mesh network form, as well as key performance statistics, such as data reliability and latency.

The DC9003A-B Evaluation/Development Mote Modules feature easy-to-probe signal pins. In addition, the starter kit provides access to both manager and mote software application programming interfaces (APIs) over USB to enable application software development.

The DC9000 Starter Kit operates in the 2.4000GHz to 2.4835GHz international license-free frequency band. Starter kits and demo boards are for evaluation purposes only. It remains the customer's responsibility to verify proper and reliable operation in the actual end application.
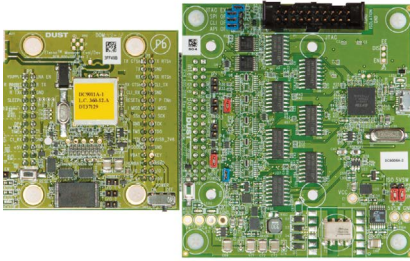
About SmartMesh IP
SmartMesh IP is built for Internet Protocol (IP) compatibility, and is based on 6LoWPAN and 802.15.4e standards. The SmartMesh IP product line achieves unsurpassed levels of networking resilience and reliability with advanced network management and comprehensive security. SmartMesh IP enables unmatched low power consumption, even in harsh, dynamically changing RF environments. Cost-effective, IP-compatible and widely applicable, SmartMesh IP serves an extensive range of applications, such as energy management, building automation, renewable energy and other implementations in smart infrastructure that call for ultralow power.
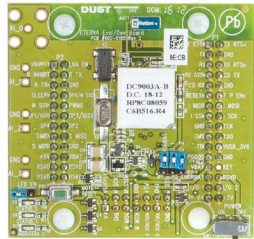
SmartMesh IP Components

DC9001 SmartMesh IP Evaluation/Development Network Manager

SmartMesh IP Network Manager anchors the SmartMesh IP product line. It provides core networking functionality, enabling the network to achieve unsurpassed levels of resilience, reliability and scalability, with advanced network management and comprehensive security features.

DC9001 Evaluation/Development Network Manager incorporates the LTC®5800-IPR SmartMesh IP Manager-on-Chip™ and provides a USB connection for both power and software access to the manager API UART port.
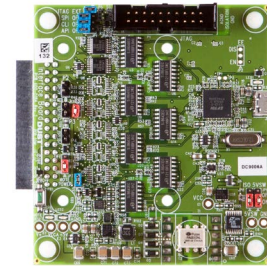
DC9003A-B SmartMesh IP Evaluation/Development Mote

SmartMesh IP Networks are populated by motes, the nodes on the network. Based on the Dust® breakthrough Eterna® technology, the motes are ultralow power, extending battery life to years and many times that of competing products. In addition to extra long battery life, the motes feature an advanced array of features.

DC9003A-B Evaluation/Development Mote incorporates the LTC5800-IPM SmartMesh IP Mote-on-Chip™, a chip antenna and a CR2032 coin cell.

DC9006 Eterna Interface Card

When connected to a DC9003A-B Evaluation/Development Mote, the **DC9006 Eterna interface card** provides a USB connection for both power and software access to the mote API UART port.

Part Number	Description
Starter Kit	
DC9000	SmartMesh IP Starter Kit—includes the following: • One Evaluation/Development Manager (DC9001) • Five Evaluation/Development Motes (DC9003A-B) • One Eterna Interface Card (DC9006) • Additional CR2032 Batteries • Cables
Additional Managers, Motes and Interface Cards	
DC9001	SmartMesh IP Evaluation/Development Manager
DC9003A-B	SmartMesh IP Evaluation/Development Mote
DC9006	Eterna Interface Card

To purchase the SmartMesh IP Starter Kit, please contact your local Linear Technology sales representative, or visit www.linear.com/demo/DC9000.