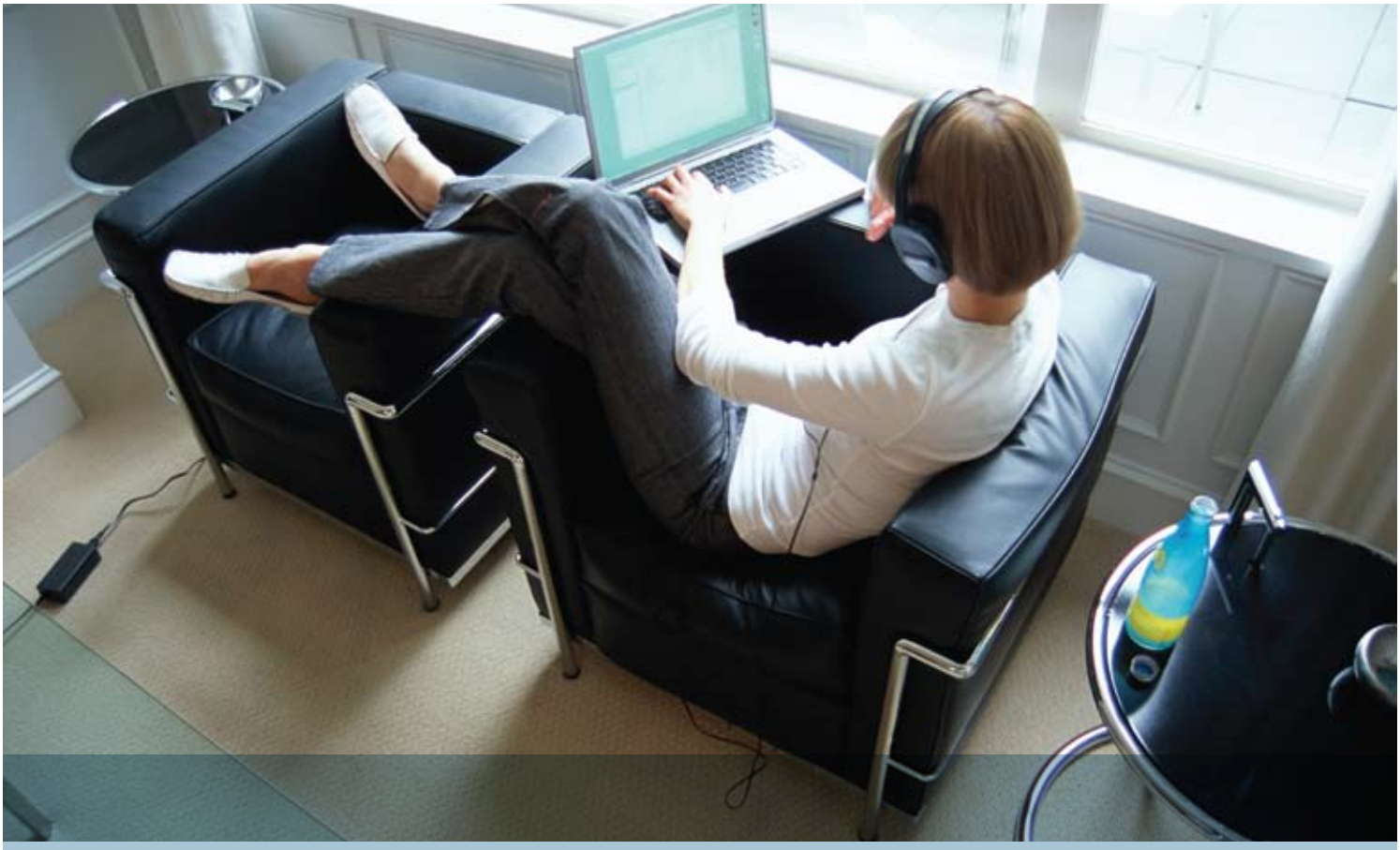

Wireless Connectivity

BeeKit™ Wireless Connectivity Toolkit

Fact sheet

Overview

Wireless networking has enabled application developers to enhance their product offerings and take their applications to new levels of functionality. This increase in functionality is traditionally followed by an increase in application complexity. Wireless link management and protocol management are among the new topics that developers need to concern themselves with as they head down the wireless networking road. BeeKit™ from Freescale provides a development environment where these design considerations can be managed in a straightforward, uncomplicated approach.

Target Markets:

- Cable Replacement
- RF Remote Control
- Wireless Toys and Gaming
- Home Automation
- Smart Energy
- Building Automation
- Security
- Patient Monitoring
- Process Monitoring and Control
- Factory Automation
- Industrial Control

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Technical Features

- Operating system support
  - Windows® 2000
  - Windows® XP
- The BeeKit graphical user interface (GUI) provides
  - Simple MAC (SMAC)
  - 802.15.4 MAC
  - SynkroRF
  - ZigBee RF4CE (BeeStack Consumer)
  - ZigBee/ZigBee Pro (BeeStack ZigBee)
- Target processor architectures supported
  - MC13224 (ARM7)
  - MC13213 (HCS08)
  - MC13212 (HCS08)
  - MC13211 (HCS08)
  - MC9S08GT60 (HCS08)
- Development kits supported
  - 1322XDSK
  - 1322XNSK
  - 1322XEVK
  - 1321XCSK
  - 1321XDSK
  - 1321XNSK
  - 1321XEVK
  - 1320XRFC
  - 1320XEQ128DSK plus M68EVB908GB60E
- Integrated development environments (IDE)
  - CodeWarrior® Development Studio for HCS08
  - IAR EWARM for ARM7
- Ordering information
  - BeeKit included with all development kits and downloadable from the web
  - 90-day evaluation copy of BeeStack with BeeKit download and in kits
  - BeeStack includes ZigBee RF4CE (BeeStack Consumer) and ZigBee/ZigBee Pro (BeeStack ZigBee) protocol stack alternatives

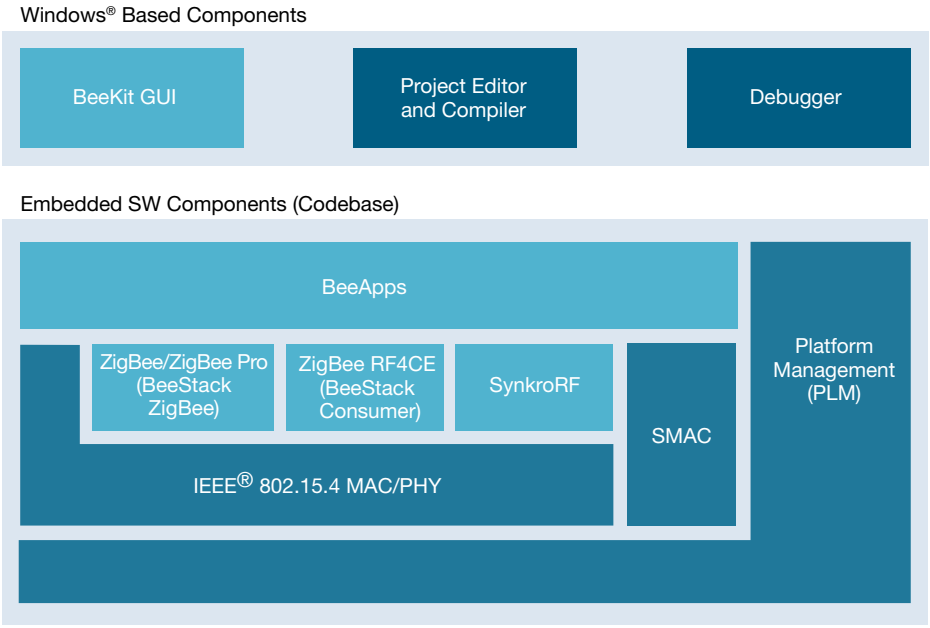
Development Environment

BeeKit is a stand alone software application targeting Windows operating systems. BeeKit provides a graphical user interface (GUI) in which the users can create, modify, save and update wireless networking solutions. With the solution explorer property list dialogs, users are able to set configuration parameters that will control the setup and execution behavior of the wireless link within their application. The configuration parameters can be validated inside the BeeKit to ensure all values provided are within acceptable ranges prior to the generation of a workspace. All this functionality provides a mechanism for developers to configure and validate their network parameters without having to navigate through multiple source files to configure these parameters.

In addition to the graphical user interface, the BeeKit includes a comprehensive code base of wireless networking libraries, application templates and sample applications. This code base provides the networking software infrastructure into which developers may tap when creating their own applications. The code bases include Freescale's ZigBee RF4CE (BeeStack Consumer) and ZigBee/ZigBee Pro (BeeStack ZigBee) protocol stacks and preconfigured application samples and templates. BeeStack supports the latest ZigBee RF4CE, ZigBee 2007, ZigBee Pro and the ZigBee Smart Energy profiles. BeeKit also provides a path for inclusion of 802.15.4 MAC, sample applications and templates—and Simple MAC, sample applications and templates.

Once a developer has completed the configuration of their wireless solution, BeeKit allows the solution to be exported to an integrated development environment (IDE). Within the IDE the designer may build and debug their application code.

BeeKit™ Block Diagram



Learn More: For more information about 802.15.4/ZigBee products, please visit **www.freescale.com/802154**.

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