



XEMICS

Product Brief XE1401SK
Complete Bluetooth™
Starter Kit



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General Description

The XE1401SK is XEMICS' Bluetooth™ evaluation and development platform for the Bluetooth™ communication standard. The starter kit provides a low cost, easy to use, yet complete development environment for any battery powered Bluetooth™ voice and data communication application based on XEMICS' ultra low power products.

It demonstrates the key features of the Bluetooth™ wireless technology and even allows the developer to create an integrated application for prototype products.

The kit is designed for developing host-based applications and provides basic Bluetooth™ software including the Serial Port Profile (SPP) as well as the Head Set Profile (HSP).

The comprehensive documentation included in the kit gives you a jump-start into Bluetooth™ technology.

Starter Kit contents

- XE1401SK Mother-board with CODEC, power management circuits, baseband controller.
- Bluetooth™ radio module with Skyworks CX72303 radio device.
- RS232 and USB cable
- Standard headset
- 2 x AAA Batteries
- CD-ROM with Demo software and comprehensive documentation
- Bluetooth™ product information from XEMICS and 3rd parties.

User Benefits

- Complete and easy to use development tool, which gives you a head start for any Host based Bluetooth™ development.
- Low-cost Bluetooth™ evaluation tool.
- Includes Demo Software using the Headset (HSP) and Serial Port Profile (SPP).
- Proves the ultra low power features of the XEMICS Bluetooth™ solution.

Cool Solutions for Wireless Connectivity

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XEMICS ultra low power Bluetooth™ Baseband Controller IC – XE1401

The Bluetooth™ Baseband Controller IC - XE1401, with its unique low power features, is the core of the starter kit.

The XE1401 is designed to be manufactured in a 0.18µm CMOS process. It includes all required hardware blocks to comply with the Bluetooth™ communication standard rev.1.1.

The embedded baseband sequencer will manage all Bluetooth™ baseband tasks of the lower layer protocol up to the Host Controller Interface (HCI) and doesn't need any external memory.

The baseband controller insures a "transparent" usage of the Bluetooth™ wireless communication via the HCI. It receives the data directly from your application and then performs the various transmit, receive and protocol timing tasks without any interaction from the host controller.

Ultra low power CODEC –XE3000

The on board, ultra low power XEMICS' CODEC - XE3006 in combination with the included headset can be used to demonstrate a fully Bluetooth™ compatible headset link.

XEMICS' Bluetooth™ headset solution

In conjunction with our ultra low power Bluetooth™ baseband XE1401, the XEMICS CODEC is the ideal device for all Bluetooth™ headset applications. A complete headset can be built consuming less than 24mW @ 1.8V (HV3 link) from the antenna to the speaker (radio, baseband, CODEC, mic./speaker, host controller, LED's).

Skyworks Bluetooth™ Radio

The included radio module is based on the Skyworks CX72303 single-chip Bluetooth™ radio transceiver. The class 2 radio is manufactured in SiGe and optimized for low power consumption and able to operate down to 1.8V.

<http://www.skyworksinc.com>

IAR Bluetooth™ Software Development Tools

As a global player in the Bluetooth™ field, IAR Systems is providing an extensive range of products and services that helps you to add Bluetooth™ wireless technology to your products.

The enclosed demo program is based on the IAR Bluetooth™ protocol stack and allows users to connect to a remote device using an ACL or SCO link.

A Win32 DLL file showing a protocol stack implementation and including the SPP (Serial Port Profile) as well as the HSP (Headset Profile). This DLL can be used to test and evaluate the XE1401 using the PC as a Bluetooth™ Host.



A demo version of the IAR MakeApp for the Embedded Bluetooth™ Protocol Stack supporting the XE1401 is included as well.

Beyond Bluetooth™ and MicroController programming tools, IAR Systems offers a full range of consulting services to reduce the time to market of your Bluetooth™ enabled application to an absolute minimum.

<http://www.iar.com>

This product is for demonstration or development purposes only, and has not been tested for compliance with the Bluetooth™ specifications.

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