

BENEFITS

- Ideal, cost effective platform that enables rapid deployment of Bluetooth products and applications
- Significant on-chip MIPS and data memory for powerful capability in running embedded applications
- Easy implementation of a wide range embedded /non-embedded Bluetooth applications, such as Serial and USB cable replacement
- Significant time-to-market advantage via integrated embedded Bluetooth stack and cable replacement applications
- USB Host Controller on-chip, provides cost-effective Bluetooth cable replacement solutions for various computer devices
- Smooth and rapid integration of any 3rd party Bluetooth Upper Protocol Stacks and profiles, using BIC2102's HCI-API interface

OVERVIEW

The BIC2102 is a Bluetooth application processor designed for highly integrated, cost-effective Bluetooth application-on-chip solutions for host-less implementation in various applications. It includes a Bluetooth Baseband engine, 32-bit RISC processor, USB host controller, 144KB internal RAM and a wide set of USB/Serial/PCM interfaces and GPIOs. The BIC2102 meets the toughest requirements of mobile and wireless applications.

APPLICATIONS

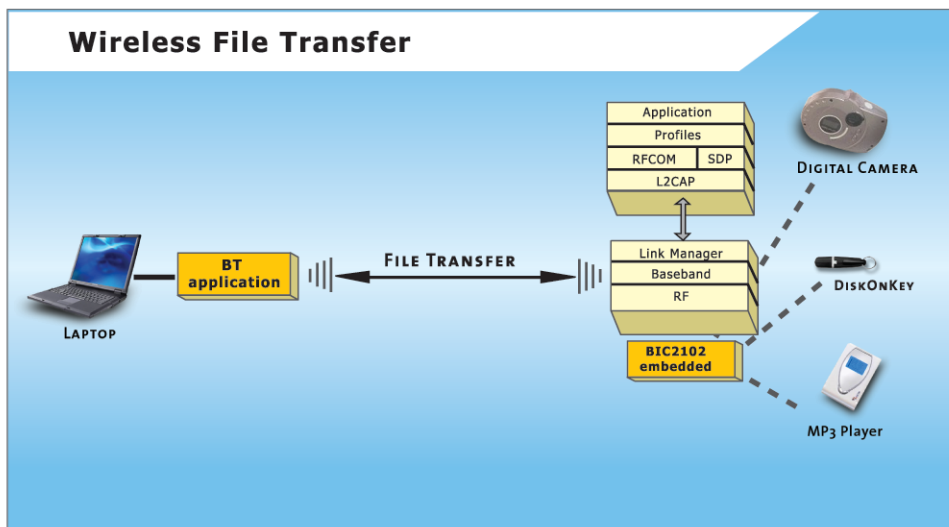
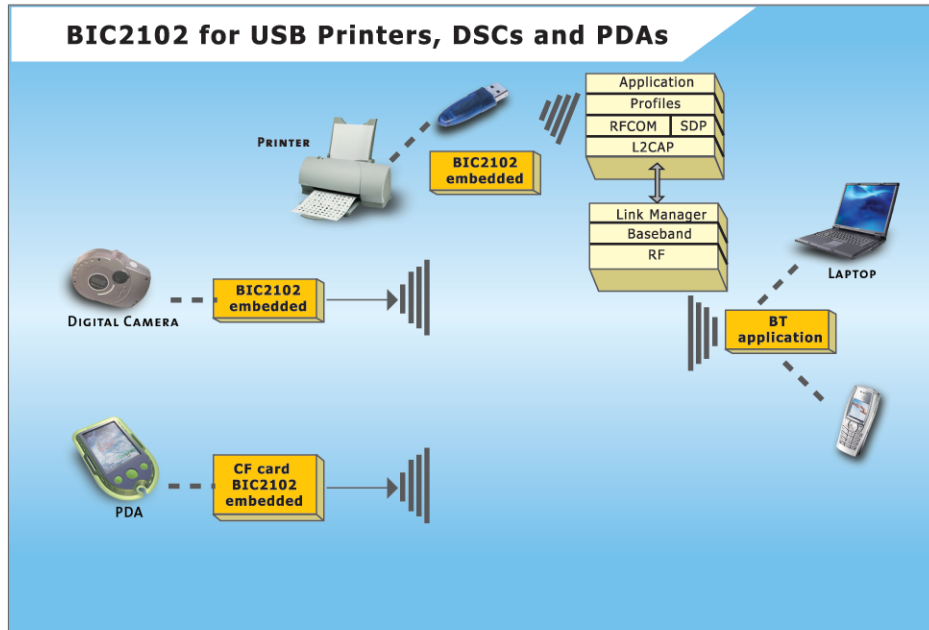
- USB Bluetooth Printer Adapter
- Digital Still Cameras
- Direct printing from Digital Still Camera to Printer
- Generic RS-232 cable replacement modules
- CF Card
- Mass-storage device including MP3 players and disk on key
- Point of Sale devices
- Tailored on-chip Bluetooth applications for mobile devices including radio-based games, medical, and industrial devices

FEATURES

- Fully compliant and qualified for Bluetooth specifications 1.1 Complete Solution-on-Chip
 - Bluetooth Baseband core
 - Integrated ARC3 RISC processor. Up to 28 MIPS available for upper protocol stack and application
 - 144 KB integrated SRAM for protocol stack and application support
- Industry standard communication interfaces
 - Full Speed USB at 12 Mbps with embedded transceiver
 - UART up to 1.5 Mbps
 - Extended GPIO
- USB dual core for host and device modes
- Programmable RF interface, compliant with BlueRF
- Power management for RF and internal block shut down, with support for active/park/sniff/hold modes
- I2C/SPI control buses
- Ready for memory extension
- JTAG interface with debug capability
- Small footprint 10 X 10 mm BGA package
- 1.8V core, 3.0V I/O

IMPLEMENTATION

Host-less and host-based implementations are available for the BIC2102. The Host-less implementation is powered with the BrightAPI and the HCI-API interfaces, enabling rapid stack integration and embedded application development completely running on the BIC2102 chip.



For more information, please visit our website at www.flextronics.com/wireless or contact us at Bluetooth@flextronics.com
Flextronics is an associate member of the US-based Bluetooth Special Interest Group (SIG).