

GENERAL DESCRIPTION

>> F2M03GX / GXA are Free2move's top of the line embedded Bluetooth™ v2.0+EDR modules with exceptional wireless transmission characteristics. They provide a fully Bluetooth™ compliant device for data and voice communications. With a transmit power of up to +19dBm and a receiver sensibility of down to -92dBm the F2M03GX / GXA are suitable for the most demanding applications. Developers can easily implement a wireless solution into their product even with limited knowledge in Bluetooth™ and RF. The modules are fully Bluetooth™ v2.0+EDR qualified and are certified according to CE and FCC, which give fast and easy Plug-and-Go implementation and short time to market.

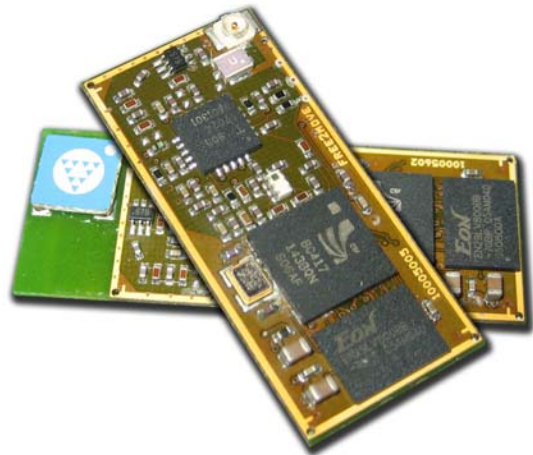
>> The F2M03GXA comes with an on board highly efficient omni-directional antenna that simplifies the integration for a developers Bluetooth™ solution.

>> The F2M03GX has an U.FL-connector, which gives the possibility to use many external antenna alternatives to provide a flexibility of size, performance and designs.

>> F2M03GX / GXA can be delivered with the exceedingly reliable and powerful easy-to-use Wireless UART firmware implementing the Bluetooth™ Serial Port Profile (SPP). All information sent to the serial interface is transmitted transparently via Bluetooth™ to the connected remote device. F2M03GX / GXA is also available with a HCI firmware. Customized solutions with the additional profiles; HSP, HFP, DUN, OPP or HID can be delivered.

APPLICATIONS

- >> Industrial and domestic appliances
- >> Cable replacement
- >> Medical systems
- >> Automotive applications
- >> Stand-alone sensors
- >> Embedded systems
- >> Cordless headsets
- >> Computer peripherals (Mice, Keyboard, USB dongles, etc.)
- >> Handheld, laptop and desktop computers
- >> Mobile phones



KEY FEATURES

- >> Fully qualified end product with Bluetooth™ v2.0+EDR, CE and FCC
- >> Two antenna options:
 - > Integrated high output antenna (F2M03GXA)
 - > U.FL-connector for external antenna (F2M03GX)
- >> Transmit power up to +19dBm
- >> Range: up to 1000m (line of sight)
- >> Piconet and Scatternet capability, support for up to 7 slaves
- >> Require only few external components
- >> Industrial temperature range -40°C to +85°C
- >> Enhanced Data Rate (EDR) compliant with v2.0.E.2 of specification for both 2Mbps and 3Mbps modulation modes
- >> USB v2.0 compliant
- >> Serial interface up to 4Mbps
- >> Extensive digital and analog I/O interface
- >> PCM interface for up to 3 simultaneous voice channels
- >> Large external memory for custom applications
- >> Supports many Bluetooth™ profiles
- >> Support for 802.11b/g Co-Existence
- >> RoHS compliant

TECHNICAL DETAILS

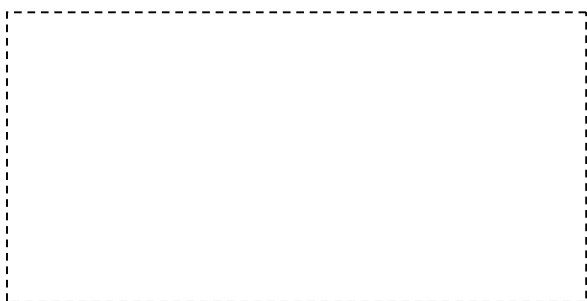
HARDWARE

- >> Bluetooth™ Class 1 radio
 - > Nominal transmit power: +19dBm
 - > Nominal sensitivity: -92dBm
 - > Frequency: 2.4GHz ISM band
 - > Chipset: CSR BC4-EXT
- >> Integrated high output antenna or U.FL connector
- >> External 8Mbit Flash for complete system solution
- >> 10 digital and 2x8bit analog I/O
- >> UART or USB host processor interface
- >> Optional I²C compatible interface
- >> Full speed USB v1.1 interface supports OHCI and UHCI host interfaces. Compliant with USB v2.0
- >> Serial interface of up to 4Mbps
- >> 13-bit PCM interface for Audio applications
- >> Operating temperature: -40°C to +85°C
- >> Physical size (LxWxH) [mm]:
 - > F2M03GX 33x15.2x2.1
 - > F2M03GXA 40x15.2x2.0
- >> Weight:
 - > F2M03GX: 1.5g
 - > F2M03GXA 1.7g
- >> Supply voltage: regulated 3.1-3.6 VDC

CONTACT INFORMATION

- >> Please find your local distributor below or visit www.free2move.net to find a distributor in your country for further information about our products.

Your distributor:



FIRMWARE

- >> Standard: Wireless UART compliant with the Serial Port Profile (SPP) with an easy to use command interface or HCI with USB-interface
- >> Customized: HSP, HFP, DUN, OPP or HID

CLASSIFICATIONS

- >> Bluetooth™ v2.0+EDR
- >> RoHS compliant
- >> CE and FCC

ORDER INFORMATION

- >> Standard modules:
 - > F2M03GX-S01 (Wireless UART; SPP)
 - > F2M03GX-S04 (HCI with USB-interface)
 - > F2M03GXA-S01 (Wireless UART; SPP)
 - > F2M03GXA-S04 (HCI with USB-interface)
- >> Evaluation kit:
 - > F2M03GX-KIT-YY
 - > F2M03GXA-KIT-YY
 - YY- Product code (01-Single Kit, 02-Dual Kit)

>> Related products:

- > F2M03GLA Low power module with antenna.
- > F2M03MLA Multimedia low power module with antenna

PRODUCT CODES

F2M03GXA-YYY

