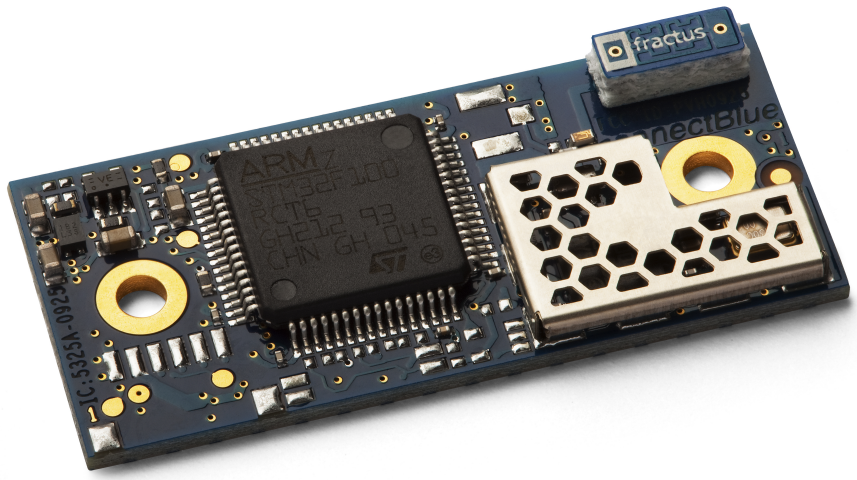
Bluetooth Serial Port Module



Product Brief OEM Bluetooth Serial Port Module OBS410

The Bluetooth Serial Port Module OBS410 supports the Serial Port Profile (SPP) for fast and secure transparent serial data transmissions. The module has a small form factor, low build height, and supports Bluetooth v2.1. With the Bluetooth stack embedded you can be up and running quickly as there is no need for a driver or stack in your host. The module is fully Bluetooth qualified and radio type approved for Europe, Japan, US and Canada. It also has the connectBlue standard interface for compatibility over time and radio technologies.

- Embedded Bluetooth stack (SPP, DUN)
- Bluetooth v2.1 Qualified as End Product
- UART interface
- Android support
- High throughput and low latency
- Easy configuration by AT commands
- Radio type approved for Canada, Europe, Japan and US
- Compliant with EMC, Safety and Medical standards
- connectBlue Low Emission Mode™
- Internal or external antenna
- Industrial and Automotive temperature range -30°C to +85°C
- Possible to load customer specific configuration in production
- Individually tested in production

Technical Data - OEM Bluetooth Serial Port Module OBS410

Wireless Standard
Classic Bluetooth technology

Standard Specification
Bluetooth v2.1 (Qualified and Listed as Product)
Supported Bluetooth Profiles:
- Serial Port Profile (SPP)
- Dial-up networking Profile (DUN GW, DUN DT)

Radio, Chipset and Stack
Internal antenna (range & max output power incl. antenna): 75m & 5dBm
External antenna (range & max output power incl. antenna): 150m & 6dBm
2.4 GHz channels: 1-79
Radio: ST-Ericsson STLC2500DB
Microprocessor: ST STM32F10x
Stack: connectBlue Embedded Bluetooth Stack

Type Approvals
Europe (R&TTE)
US (FCC/CFR 47 part 15 unlicensed modular transmitter approval)
Canada (IC)
Japan

Interface
UART Logic-level
Via external transceiver, RS232 and RS422/485 option
Max baud rate: 460.8 kbit/s
Support for non-standard baud rates
Flow control: CTS/RTS (hardware) or none
9 digital I/O pins

Features
Throughput: 350 kbps
All software embedded in the module (Bluetooth stack and application)
Configurable via AT commands (via Bluetooth or serial port)
connectBlue Low Emission Mode™ for not disrupting other 2.4GHz radios
Maximum number of slaves: 1 (point-to-point)
Simple Pairing
Quality of Service (QoS)
Supports SPP Bluetooth connection to Google Android OS devices

Power
Power supply voltage: 3.0 - 6.0 VDC
Current consumption (minimum): 14 mA @3.0V
Current consumption (average Tx): 25 mA @3.0V

Connectors
Board-to-board connector
Solder land pads
U.fl. antenna connector (external antenna version only)

Mechanical
Operating temperature: -30°C to +85°C
Machine mountable
Mounting holes
Dimensions: 16x36x3 mm (2 mm height on request)
Weight: 2 g

Certifications and Compliance
R&TTE Directive 1999/5/EC:
- Effective use of frequency spectrum: EN 300 328
- EMC: EN 301 489-1, EN 301 489-17, EN 61000-6-2
- Health and safety: EN 50371, EN 60950-1 and/or IEC 60950-1

Medical Electrical Equipment:
- IEC 60601-1-2

Article numbers
For article number descriptions, please see www.connectblue.com

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