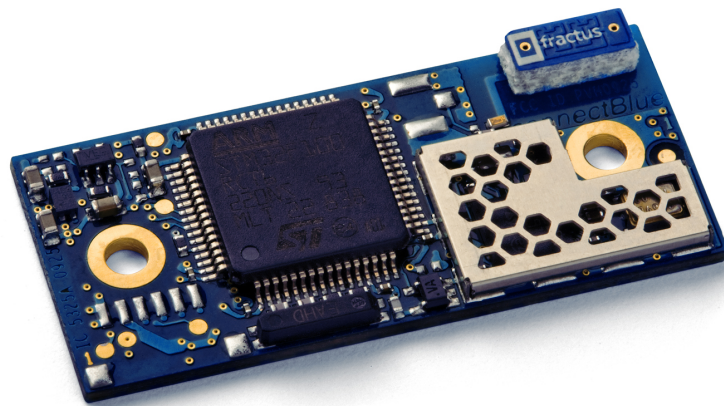


Bluetooth Serial Port Module



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 2.1 (Bluetooth 3.0 prepared via firmware upgrade). 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, US and Canada. It also has the connectBlue standard interface for compatibility over time and radio technologies.

- Embedded Bluetooth stack (SPP, DUN)
- Bluetooth 2.1 Qualified as End Product
- Bluetooth 3.0 prepared via firmware upgrade
- UART interface
- High throughput and low latency
- Easy configuration by AT commands
- Radio type approved for Europe, US and Canada
- 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

Bluetooth Support

Bluetooth version 2.1 (Qualified and Listed as Product).
Bluetooth version 3.0 prepared via firmware upgrade.
Supported Bluetooth Profiles:

- Generic Access Profile (GAP)
- Serial Port Profile (SPP)
- Dial-up networking Profile (DUN GW, DUN DT)

Output power: Class 1 +4 dBm (excluding antenna gain)
Receive sensitive level: -84 dBm
Range: 150 m (approximate, line-of-sight)

Bluetooth Chipset and Stack

Radio: ST-Ericsson STLC2500DB
Microprocessor: ST STM32F10x
Stack: connectBlue Embedded Bluetooth Stack

Software

All software embedded in the module (Bluetooth stack and application)
Configurable via AT commands (via Bluetooth or serial port)
Customer developed applications can be embedded
connectBlue Low Emission Mode™ for not disrupting other 2.4GHz radios

Hardware Interface

UART Logic-level
Supported baud rates: 300 bit/s - 460.8 kbit/s
Support for non-standard baud rates
Flow control: CTS/RTS (hardware) or none

Connectors

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

Power Supply

3.0 - 6.0 VDC

Current Consumption

Not connected, discoverable: 14.5 mA
Connected, not transmitting: 15.5 mA
Transmitting @115.2 kbps (average): 25.1 mA

Dimension/Size

Size: 16x36x3 mm (2 mm height on request)
Weight: 2 g

Type Approval

R&TTE (Europe), FCC/CFR 47 part 15 unlicensed modular transmitter approval, IC (Industrie Canada)

Environmental

Operating temperature: -30°C to +85°C (-40°C on request)
Storage temperature: -40°C to +125°C
Humidity RH 5-90% non-condensing

Certifications and Compliance

R&TTE Directive 1999/5/EC:

- Effective use of frequency spectrum: EN 300 328 V1.7.1 (2006-05)
- EMC: EN 301 489-1 V1.8.1 (2008-04), EN 301 489-17 V1.3.2 (2008-04), EN 61000-6-2 (2005)
- Health and safety: EN 50371:2002, EN 60950-1:2006 and/or IEC 60950-1:2005 (2nd Edition)

Medical Electrical Equipment:

- IEC 60601-1-2 (2007)

Article numbers

CB-OBS410i-04:

OEM Serial Port Adapter 410 with internal antenna, board-to-board and solder pads.

CB-OBS410x-04:

OEM Serial Port Adapter 411 with u.fl. connector for external antenna, board-to-board and solder pads.



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