

SEARAN's ultra small Bluetooth stack, dotstack™, was designed for low cost and low power embedded devices. Bluetooth SIG compliant and well tested, dotstack™ has the smallest footprint, is easy to port and already runs on most popular platforms and OS.

dotstack™

- Written in ANSI C for embedded devices and easy portability
- All functions called from one thread
- Uses well defined protocols and profile API
- Supports Bluetooth specification version 2.1, +EDR, 4.0, 4.1
- PTS tested

OS

Android, Linux, Win, PowerPC, uC OS, ThreadX, FreeRTOS, no RTOS. Port with any OS on demand.

Protocols and Profiles

- L2CAP, RFCOMM, SDP, HCI, AVDTP, AVCTP, OBEX
- SPP, HID, GAP, HSP, HFP, OBEX, FTP, OPP, PBAP, A2DP, AVRCP, PAN, MAP, iAP
- BLE (GATT)

Interoperability

- **Stacks:** tested with Microsoft, Toshiba, Widvomm/Broadcom, MAC OS X, iOS, BlueZ and others
- **Controllers:** supports CSR, Broadcom, Intel, Marvell, TI, RDA, and any standard HCI controller
- **IOP testing** with more than 100 devices

Application development

- Embedded Application development with focus on low power, high data rate, minimum footprint, multiple connections
- Host demo application on iPhone and Android

Services

- Porting to different OS and platforms
- Embedded Application development
- Support and Maintenance

Processors

ARM

Cortex M0/M3

STM32L/F0/F1/F2/F3
EFM32
LPC17XX
SiM3L1

Cortex M4

STM32F4
Kinetics K2X

Cortex A5, A9, ARM7/9

Microchip

PIC24/32/33

Renesas

SH2A, RX

Texas Instruments

MSP430, C55XX

Imagination Tech

MIPS, MicroAptive

Support

Multiple devices, up to 7, including Android and iOS concurrently
Multiple channels with up to 1.5Mbps on a single channel
Multiple profiles working simultaneously

General Requirements

- 3KB RAM, 40KB Flash for minimum SPP configuration
- Footprint includes integration layers, FreeRTOS, demo app
- < 0.5 MIPS
- UART, PCM, SPI or USB interface
- Standard SDK using FreeRTOS.

Development Kits

- PIC24/32/33 PIM with Explorer 16 development kit
- STM32L/F0/F3/F4-DISCOVERY, STM3220G-EVAL, STM3240—EVAL
- STM32F103ZE-SK
- EFM32-Gecko Starter Kit, Giant Gecko, Tiny Gecko
- LPC1768, RX62N, MSP430, SiM2L dev boards

Controllers supported

- CC2560/2564
- CSR8810, 8811, 8831, 8510
- Avastar 88w8790

For more information please visit our website at www.searanllc.com

SEARAN LLC is the exclusive licensee of CandleDragon Inc Bluetooth technology otherwise known as dotstack™.

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dotstack™, Bluetooth stack, has been certified by the Bluetooth SIG as meeting all requirements of the Bluetooth Qualification Process.