

BeRTOS

Not only Kernel

BeRTOS is a real-time operating system designed to build applications for embedded systems such as reference boards, test boards or custom boards.

It has a modular structure: its modules can run on many different architectures, ranging from 8-bit microcontrollers (Atmel AVR), through ARM architectures, to Linux or Win32 applications (for debugging purposes).

BeRTOS includes tens of ready to use portable libraries to let the programmer focus on application code writing.

Do you need to drive a motor?

BeRTOS already includes libraries to manage stepper motors with ramps, DC motors with PIDs, etc.

Do you need to draw on a display?

BeRTOS has a powerful graphics library, designed for small LCDs, which features fonts, windows, drawing primitives, etc.

Do you have a flash memory?

BeRTOS features a small but powerful filesystem, with low overhead and wear-levelling!

Do you need to use a serial port?

Not only BeRTOS offers a powerful serial management library, but it also includes a complete parser for textual protocols and a powerful, scalable and multi-process command dispatcher.

Have a look on the right to get a glimpse of what is ready-made in BeRTOS!

Features

- 100% open source.
- Modular structure (8bit -> W32).
- Multitasking kernel.
- IPC, semaphores, priority levels, messages.
- Communication protocols.
- File system.
- Full graphics subsystem.

Algorithms

- Checksum and hash.
- XMODEM protocol.
- RLE compression algorithm.
- Full hash table.
- Command history.
- Console with command parser.
- Lists e FIFOs.
- Exception handling.

BeRTOS Drivers

- ADC management.
- Flash/E2PROM memories.
- Keyboard management.
- Text and graphical displays.
- Stepper and DC motors.
- Triac for power control.
- PWM/NTC/thermostats.

10 reasons to choose BeRTOS

1. Real-time multitasking kernel;
2. Tens of ready-made drivers (motors, memories, displays);
3. Tens of ready-made libraries (protocols, data structures, graphics);
4. Minimal overhead for process and low RAM and ROM impact;
5. English commercial support;
6. High reliability;
7. Simple graphical wizard for project creation and editing;
8. Integration with IDE and toolchains on Windows;
9. Completely modular (you can turn off the kernel, if you like so!);
10. **It's free! No royalties nor licenses!**

Headquarter

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Benchmark and tests

- A few KB of flash space is needed with all kernel modules active (semaphores, signals, etc)
- RAM space is linear with the number of processes
- Minimum stack: 200 bytes on 32-bit ARM, 100 bytes on 8-bit AVR
- Context switching speed: 2.2uS on ARM CPU at 48MHz
- From 25% to 30% faster than other RTOS systems

Use BeRTOS without license costs nor royalties

If you are company which build embedded commercial products, you can:

- Download and use BeRTOS as you wish.
- Sell BeRTOS based products without paying license nor royalties.
- Include BeRTOS with any product, distributed with any license.
- Modify BeRTOS as you like in every part.
- Sell BeRTOS based products without releasing the source code.

Discover the graphical Wizard

You can edit and modify quickly your projects with the step-by-step graphical wizard:

- Select which BeRTOS version you want to use.
- Select the micro and the toolchain.
- Select the modules for your application.
- Configure the modules directly from the GUI.
- Generate a project ready for CodeLite or GNU Make.
- Wizard available on Windows, Linux and Mac.

With just a few clicks you are ready to write your application!

BeRTOS Installer

Try the new BeRTOS Installer for Windows, a simple graphical installer with many features:

- BeRTOS new versions download and update.
- Download and update of ARM and AVR toolchains.
- Download and update of BeRTOS Wizard.
- Download and update of CodeLite, the free IDE certified by Developer for BeRTOS (with integrated compiler and debugger!)

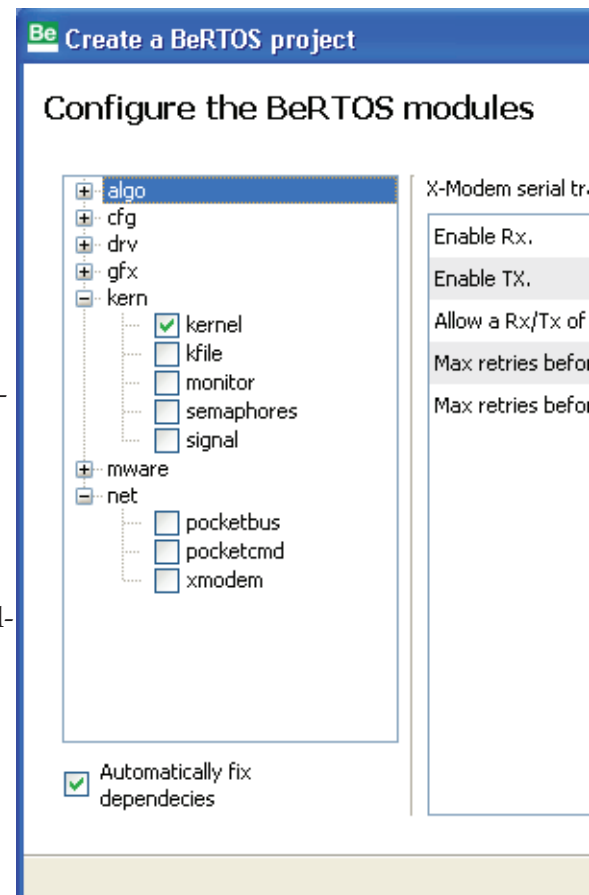
Custom Developer services

- BeRTOS porting on your board.
- Custom driver programming.
- BeRTOS introductory courses.
- Professional support by email or phone.

Contact us for an evaluation!
info@bertos.org

Keep in touch

If you want to follow BeRTOS development, subscribe to:
www.bertos.org/list



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