

Groton, May 19, 2003

For Immediate Release:

On Time Releases RTUSB-32

RTUSB-32 is a Universal Serial Bus (USB) host protocol stack for embedded systems. It contains the core protocol stack, the required host controller device drivers, a low-level communication API and high-level class drivers. Full source code is available.

A binary developer license (requires On Time RTOS-32 4.0) is available at \$1500. Source code is available at an additional cost of \$3000.

Here are the main features of RTUSB-32:

► **Supports all USB 1.1 and 2.0 UHCI, OHCI, and EHCI Host Controllers**

All major USB 1.1 and 2.0 host controller types are supported. These controller types are always supported, regardless of their respective vendor or model.

► **No Copy**

RTUSB-32 never needs to copy data transferred to or from a device. Even if application supplied buffers reside in the virtual address space, data transfers are always performed by DMA hardware from/to the USB bus to/from the application's buffer.

► **Class Drivers**

RTUSB-32 provides high-level class drivers for keyboards, mice, printers, and mass storage devices (disks, memory sticks, digital cameras, etc.). A hub class driver is integrated in the core USB protocol stack. Class drivers allow applications to use a device without being concerned about details. The source code of the class drivers is included with RTUSB-32. The mass storage device class driver requires a file system such as RTFiles-32.

► **Low-Level API**

RTUSB-32 also allows direct access to a device. An application can query a device's endpoints, supported transfer types and speeds, etc., and then communicate directly with the device. Thus, any USB 1.1 or 2.0 device can be used, even if no class driver is available or the device does not adhere to a standard USB class specification. Many examples are included with RTUSB-32 showing how an application can query and operate arbitrary USB devices.

► **Real-Time**

RTUSB-32 can call application supplied callbacks when data is received from an attached device. Depending on the transfer type, such callbacks can occur periodically or asynchronous with 1 millisecond (or even 125 microseconds on USB 2.0) resolution.

► **Portable**

RTUSB-32 is preconfigured to work with On Time RTOS-32, but can easily be ported to any other system. All OS-dependent code is placed in a configuration header file and a linkable system driver with a simple and small API containing functions for port I/O, memory management, interrupt handling, etc. RTUSB-32 is completely written in ANSI C and supports little- and big-endian CPUs.

► **No Run-Time Royalties**

Please visit On Time's Web site at <http://www.on-time.com> for detailed product information. In addition, the On Time staff will be pleased to answer any questions you may have about RTUSB-32 or On Time RTOS-32.

This document and the graphic at the top of this page are included in the root directory of the enclosed CD-ROM. Additional artwork files are available in all formats, see Graphics Contact below. Please let us know what you need!

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On Time Offices

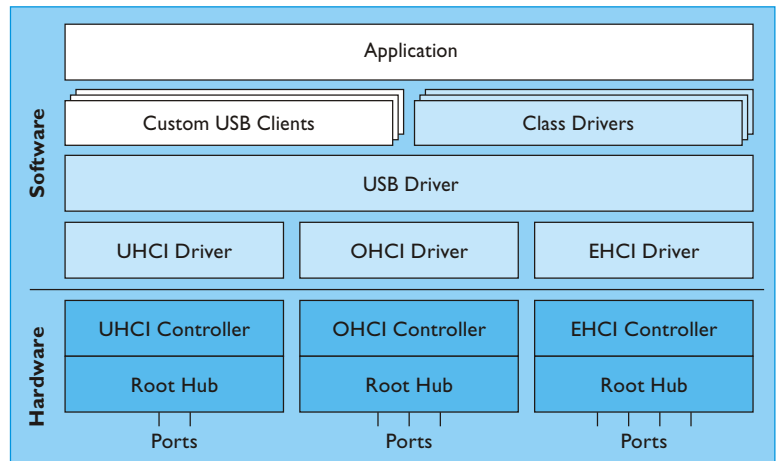
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Structure of RTUSB-32