

What's New

The 3rd Edition of the book, USB: The Universal Serial Bus, is now available. With this new edition and update, approximately 155 additional pages of information were added, for a total of 735 pages.

Additional Details and Information

A lot of new information was added. For example, information on xHCI streams and then the use of these streams to communicate with UASP (USB Attached SCSI Protocol) devices. This protocol allows for much faster file transfers. In some instances, I saw a transfer take only two seconds where the same transfer took almost ten seconds using Bulk Only Transport.

Added more detail and information on ISO transfers, showing information for all four controller types, as well as added more information to receive video from a video camera.

Added information and source code for booting from USB devices.

Added more details on Legacy support such as how the controller supports a USB keyboard for a non-USB aware operating system, as well as how to turn this support off when it is no longer needed.

Added more detail and explanation to the chapters describing each controller's schedule technique and how to get the maximum out of each.

Added more information about external hubs as well as Rate Matching Hubs.

The updated edition fixes and clarifies information, giving more details. For example, Chapter 2, the PCI, has been updated to be more detailed and included the PCI Express.

See the next few pages for some examples of additional information.

Availability

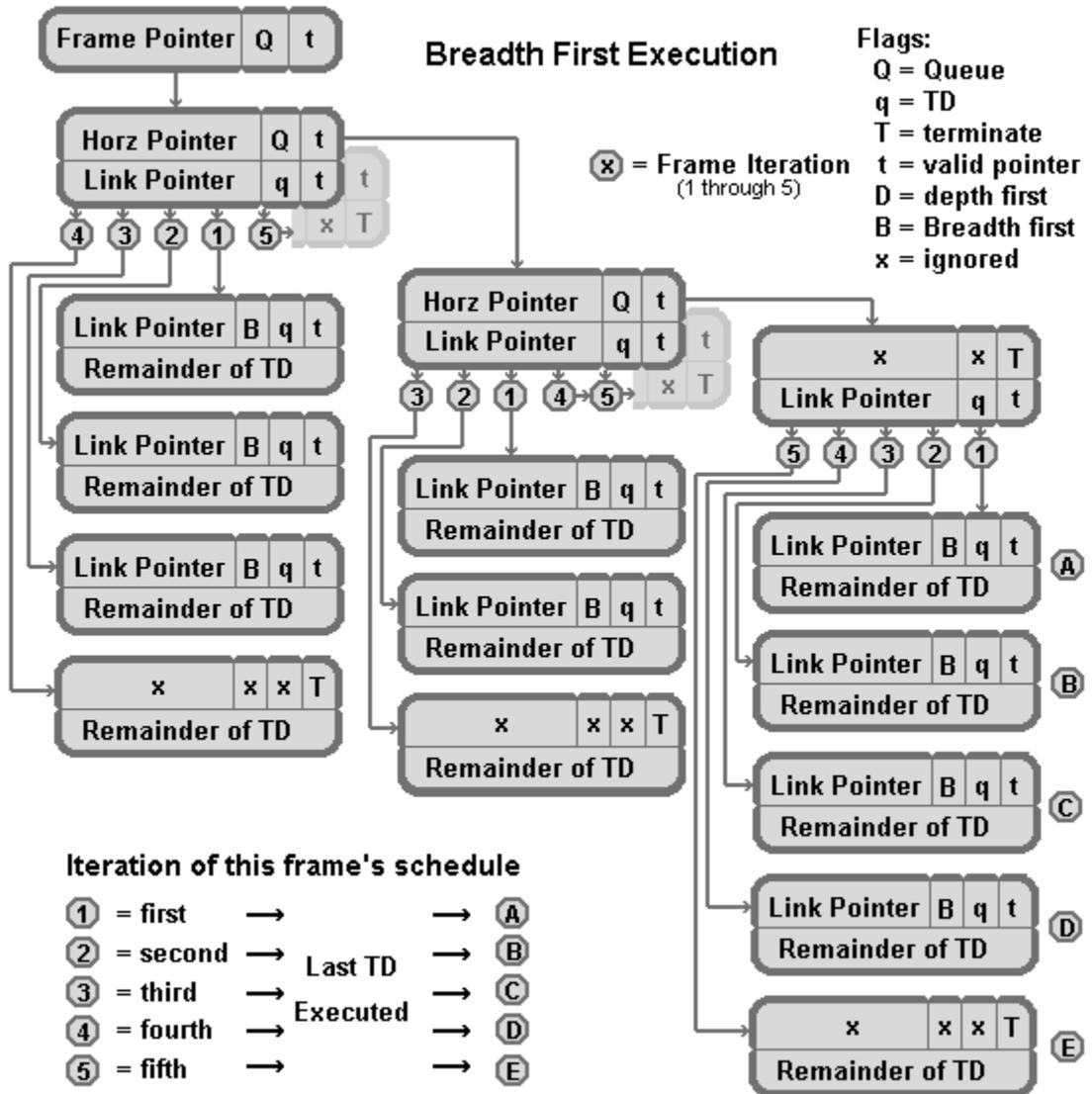
The process of publication allows me to update the book at any time, therefore once a new edition is created, the older editions are no longer available. As long as you purchase from Amazon.com as a new book, you will receive the latest edition. To verify, make sure that the Amazon.com site shows the book with 735 pages before you purchase. The back cover also shows "Updated 2022 Jan 01".

The 3rd Edition is currently available from:

http://www.fysnet.net/the_universal_serial_bus.htm

Many More Figures and Diagrams

Many more images and diagrams were added to help visualize the process. For example, Chapter 4 went from three figures to eleven figures. These figures are more pleasing to the eye as well. An example is shown below.



Added PCI Express information

This update now includes clarification and more detail about how to access the PCI and the new PCI Express bus to find and communicate with the USB. The following figure is an example from the first part of the book.

Figure 2-1: Accessing PCI Configuration Data



Other Comments

Other additions include more detailed examples and information about specifics pertaining to each chapter.

If there is something you feel is missing from this edition and update, please let me know. I will research your request and possibly include the information in the next release. I also may include your name in the credits. Contact information is shown below.

This has been an enjoyable project, and I am very grateful to all of those who have contributed in one way or another, and especially to those who have purchased or will purchase this book. The proceeds are a great incentive to continue my work on this and other books in this series.

Thank you to all,
Ben

fys [at] fysnet [dot] net