

An Annotated Embedded Systems Bibliography

Stephen A. Edwards
Computer Science Department
Columbia University

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1 Books

Barr [4] is a readable general introduction that focuses on mundane issues such as compilers, linkers, and target boards.

Brown [12] is another very practical book, discussing such issues as compilers, linking, and interrupt latency. The book contains an extensive example of a pilot control panel.

Simon [38] is more comprehensive than Barr, speaking of RTOSes.

Burns and Wellings [14] is an academic text aimed at graduate students.

Grehan and Cyliax [25] talks more about RTOSes.

Ganssle [24] is a broad survey, covering issues such as which tools to buy. Probably fairly dated by now.

Wolf's textbook [41] is aimed at undergraduates.

Bentham [5] talks about implementing TCP/IP, both for "normal" systems and finally an incredibly stripped-down version that runs on a tiny 8-bit PIC microcontroller.

Thomas and Moorby [40] is the standard reference on Verilog, a widely-used language for modeling and specifying digital hardware.

Ellsberger et al. [19] is the most readable book on SDL, a graphical language used mostly in Europe to describe telecommunication protocols.

The first two chapters of Thoen and Catthoor [39] give a reasonable overview of some embedded systems issues. The rest of the book is devoted to their Petri-net-like model for embedded software.

Gajski et al. [21] resembles Thoen and Catthoor [39] in that the early chapters are a reasonable survey of what's going on in the field. The rest describe their particular little-used modeling language. A later book [22] describes another of their hardware/software modeling languages.

Balarin et al. [3] is a complete reference on POLIS, an academic tool designed mostly for the synthesis of automotive controllers that laid the foundation for Cadence's commercial VCC tool.

Gallmeister [23] describes the POSIX.4 standard, the real-time extensions to the Unix-centric POSIX standards. It's rather a heavyweight interface, not

clearly useful for all applications, but gives some insight into some things found in RTOSes.

Rubini [36] describes how to write Linux device drivers. Most embedded systems both use existing and require new device drivers of some sort.

Shaw [37] focuses on real-time systems, discussing issues such as scheduling, RTOSes, clock distribution, and execution time prediction. His motivating example is an air-traffic control system.

Labrosse [31] describes his MicroC/OS-II RTOS in excruciating detail. If you ever wondered how to implement a preemptive priority-based scheduler, this is the book to read.

2 Periodicals

Circuit Cellar magazine (www.circuitcellar.com) is a monthly magazine containing hobbyist projects that are usually embedded systems-like. One problem: they speak mostly about the design of the hardware and assume that you'll just go and download the software.

Embedded Systems Programming (www.embedded.com) is a trade magazine for embedded systems developers. It usually has some lightweight discussions of programming, real-time issues, and whatnot. Its view of embedded systems is off-the-shelf single-board computers running an RTOS.

Kluwer publishes Design Automation for Embedded Systems, a scholarly journal on embedded systems issues.

3 Companies

Wind River Systems (www.windriver.com) is the main supplier of RTOSes (Vx-Works) and IDE and development tools surrounding it.

TI (www.ti.com) is the leading supplier of DSPs.

Motorola (www.motorola.com) is another big supplier of embedded microprocessors, such as the 68000 series.

4 Papers

General surveys [15, 18]. An RTOS survey [34].

Polis-related: Verifying a CFSM network [2]. Synthesizing software from CFSMs [17, 1]. The shock-absorber example [16].

Synthesizing dataflow graphs [6, 11, 7, 9, 10, 8].

The El Greco project, which turned into Synopsys' CoCentric System Studio tool for modeling dataflow and control [13].

The multi-language approach [20].

Edward's view of what should be happening [32, 33].

Performance estimation [35].

Hermann Kopetz has long been promoting his Time-Triggered Protocol for communications within such real-time systems as cars. He's publishes extensively on the idea. A broad survey: [27]. The philosophy: [28, 29]. How to synchronize the clocks in TTP: [30]. Modeling time: [26].

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Enterprise Resource Planning Systems Research: An Annotated Bibliography. by J. Esteves and J. Pastor. 1. Volume 7, Article 8. August 2001. Enterprise resource planning systems. Research: an annotated bibliography.Â providing cross-organization integration of data through embedded business. processes. These software packages can be customized to cater for the specific. needs of an organization. During the 1990s ERP systems became the de-facto. standard for replacement of legacy systems in large, and particularly multi-national. companies [Parr and Shanks 2000]. Communications of AIS, Volume 7 Number 8. Enterprise Resource Planning Systems Research: An Annotated Bibliography. An annotated bibliography is organized in the same manner as the reference list. Alphabetize using the letter by letter system by the authorâ€™s last name. The Purpose of an APA Annotated Bibliography. An APA bibliography with annotations might seem useless but it has a very important purpose. It helps you to become a better researcher and focus your APA research topic.Â To write an APA annotated bibliography, you need to include the title "Annotated Bibliography," the citation, and the annotation. The citation varies based on the type of sources you use, such as a book, journal, or website. The annotation includes a summary, evaluation, reflection, or all three. Is an APA annotated bibliography double spaced? Yes, an APA annotated bibliography is double spaced. How to write annotated bibliographies at university. Includes guidance on how to structure them, what language and style to use, and how they are assessed.Â To find out how they work in practice, take a look at these two examples of annotated bibliographies created by an English tutor at the University of Leeds. Sample annotated bibliography: Mother of the Nation: Elizabeth Hamiltonâ€™s Reformist Politics. Sample annotated bibliography: Childrenâ€™s Animal Narratives, 1750â€“1820. How are they different to ordinary bibliographies? Ordinary bibliographies are lists of the sources that have been cited or used in your work (report, essay, or another form of assessment). They allow the reader to find the sources if they want to read in more detail.