Software Engineering for Embedded Systems

Description: This Expert Guide gives you the techniques and technologies in software engineering to optimally design and implement your embedded system. Written by experts with a solutions focus, this encyclopedic reference gives you an indispensable aid to tackling the day-to-day problems when using software engineering methods to develop your embedded systems.

With this book you will learn:

- The principles of good architecture for an embedded system
- Design practices to help make your embedded project successful
- Details on principles that are often a part of embedded systems, including digital signal processing, safety-critical principles, and development processes
- Techniques for setting up a performance engineering strategy for your embedded system software
- How to develop user interfaces for embedded systems
- Strategies for testing and deploying your embedded system, and ensuring quality development processes
- Practical techniques for optimizing embedded software for performance, memory, and power
- Advanced guidelines for developing multicore software for embedded systems
- How to develop embedded software for networking, storage, and automotive segments
- How to manage the embedded development process

Includes contributions from:

Frank Schirrmieister, Shelly Gretlein, Bruce Douglass, Erich Styger, Gary Stringham, Jean Labrosse, Jim Trudeau, Mike Brogioni, Mark Pitchford, Catalin Dan Udma, Markus Levy, Pete Wilson, Whit Waldo, Inga Harris, Xinxin Yang, Srinivasa Addepalli, Andrew McKay, Mark Kraeling and Robert Oshana.

- Road map of key problems/issues and references to their solution in the text
- Review of core methods in the context of how to apply them
- Examples demonstrating timeless implementation details
- Short and to-the-point case studies show how key ideas can be implemented, the rationale for choices made, and design guidelines and trade-offs

Contents:

Overview of Embedded and Real-Time Systems
Embedded Systems hardware/software co-design
Specification and Modeling techniques
Architecture and design patterns
Real-Time building blocks
HW interface to embedded software
Embedded Software Programming and Implementation Guidelines
Software Reuse by Design in Embedded Systems
Embedded Operating systems
Linux, Android and OSS
Software Performance Engineering
Optimizing Embedded Software for Performance
Optimizing Embedded Software for Memory
Optimizing Embedded Software for Power
User interfaces for embedded systems
Integration and testing techniques and quality for embedded systems
Software Development Tools for Embedded Systems
Multicore SW Development for Embedded Systems
Safety-Critical Software Development for Embedded Systems
Intellectual Property Issues with Embedded Software
Managing embedded software development
Agile for embedded
Embedded Software for Automotive Applications
Embedded Software Development for Storage and I/O
Performance Engineering Case Study
User Interface Design Case Study
Multicore Case Study
Sensor programming case study

Ordering:

Order Online - http://www.researchandmarkets.com/reports/2299004/

Order by Fax - using the form below

Order by Post - print the order form below and send to:

Research and Markets,
Guinness Centre,
Taylors Lane,
Dublin 8,
Ireland.
Fax Order Form
To place an order via fax simply print this form, fill in the information below and fax the completed form to 646-607-1907 (from USA) or +353-1-481-1716 (from Rest of World). If you have any questions please visit http://www.researchandmarkets.com/contact/

Order Information
Please verify that the product information is correct.

<table>
<thead>
<tr>
<th>Product Name:</th>
<th>Software Engineering for Embedded Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web Address:</td>
<td><a href="http://www.researchandmarkets.com/reports/2299004/">http://www.researchandmarkets.com/reports/2299004/</a></td>
</tr>
<tr>
<td>Office Code:</td>
<td>SCAYNBZ3</td>
</tr>
</tbody>
</table>

Product Format
Please select the product format and quantity you require:

<table>
<thead>
<tr>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard Copy (Hard Back)</td>
</tr>
<tr>
<td>USD 86 + USD 28 Shipping/Handling</td>
</tr>
</tbody>
</table>

* Shipping/Handling is only charged once per order.

Contact Information
Please enter all the information below in BLOCK CAPITALS

<table>
<thead>
<tr>
<th>Title:</th>
<th>Mr</th>
<th>Mrs</th>
<th>Dr</th>
<th>Miss</th>
<th>Ms</th>
<th>Prof</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Name:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last Name:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Email Address:</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Title:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organisation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postal / Zip Code:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone Number:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fax Number:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Please refrain from using free email accounts when ordering (e.g. Yahoo, Hotmail, AOL)
Payment Information

Please indicate the payment method you would like to use by selecting the appropriate box.

☐ Pay by credit card: You will receive an email with a link to a secure webpage to enter your credit card details.

☐ Pay by check: Please post the check, accompanied by this form, to:
Research and Markets,
Guinness Center,
Taylors Lane,
Dublin 8,
Ireland.

☐ Pay by wire transfer: Please transfer funds to:

Account number: 833 130 83
Sort code: 98-53-30
Swift code: ULSBIE2D
IBAN number: IE78ULSB98533083313083
Bank Address: Ulster Bank,
27-35 Main Street,
Blackrock,
Co. Dublin,
Ireland.

If you have a Marketing Code please enter it below:

Marketing Code: _______________________

Please note that by ordering from Research and Markets you are agreeing to our Terms and Conditions at http://www.researchandmarkets.com/info/terms.asp

Please fax this form to:
(646) 607-1907 or (646) 964-6609 - From USA
+353-1-481-1716 or +353-1-653-1571 - From Rest of World