MSP430 Microcontroller Basics

**Book Information**

File Size: 88966 KB
Print Length: 668 pages
Publisher: Newnes; 1 edition (August 21, 2008)
Publication Date: August 21, 2008
Sold by: Digital Services LLC
Language: English
ASIN: B001FA0H4S
Text-to-Speech: Enabled
X-Ray: Not Enabled
Word Wise: Not Enabled
Lending: Not Enabled
Enhanced Typesetting: Not Enabled
Best Sellers Rank: #179,959 Paid in Kindle Store (See Top 100 Paid in Kindle Store) #18 in Books > Computers & Technology > Hardware & DIY > Microprocessors & System Design > Microprocessor Design #19 in Kindle Store > Kindle eBooks > Engineering & Transportation > Engineering > Industrial, Manufacturing & Operational Systems > Industrial Design #21 in Kindle Store > Kindle eBooks > Engineering & Transportation > Engineering > Electrical & Electronics >
Customer Reviews
The best all-around MSP430 book. Well-written, easy to follow. The coverage is impressive for a "Basics" book. Far more than a mere re-hashing of the online MSP430 User’s Guide, I like the way the CPU and peripherals are covered in a practical manner. For example, instead of just listing the assembler mnemonics, helpful tips are given about which assembly instructions to use for what purpose and which typical MCU instructions are missing. C is covered, as well, as are development environments and everything else necessary to getting up and running. Gotcha’s to watch out for are given throughout. This alone makes this book worth the price of entry. I wish I had this book when I was learning to code this uC. More explanation could be given on why certain peripheral control parameters are set up the way they are. One example is the sample code that reads the internal temperature sensor. The offset is hard-coded, as is the slope. No mention is made about this value varying widely amongst individual chips. You’ll need to calibrate your readings and although the best fit values can vary by 10% of the value given, neither this fact, nor the procedure is discussed. The slope, on the other hand varies far less from chip to chip, but no explanation for how it was arrived at is given, either. (The slope given is derived from the equation in the TI MSP430 User’s Guide, adjusted for Celsius, and should be close enough for most applications, but it would have been helpful to most users if this were explained, as well as how to get the result in degrees Fahrenheit.) There are similar issues with other peripheral sample code, but this does not purport to be an advanced-level book, even though it is so comprehensive that it seems like it could easily be taken that way.

Download to continue reading...
