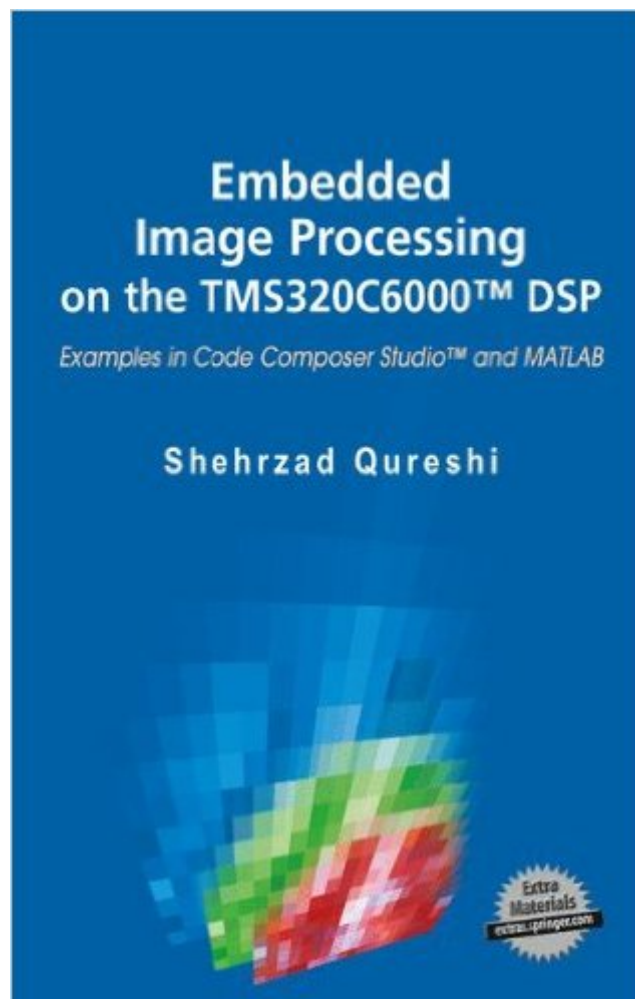# Embedded Image Processing On The TMS320C6000TM DSP: Examples In Code Composer StudioTM And MATLAB

Synopsis

This is an application-oriented book includes debugged & efficient C implementations of real-world algorithms, in a variety of languages/environments, offering unique coverage of embedded image processing. covers TI technologies and applies them to an important market (important: features the C6416 DSK)Also covers the EVM should not be lost, especially the C6416 DSK, a much more recent DSP.Algorithms treated here are frequently missing from other image processing texts, in particular Chapter 6 (Wavelets), moreover, efficient fixed-point implementations of wavelet-based algorithms also treated.Provide numerous Visual Studio .NET 2003 C/C++ code, that show how to use MFC, GDI+, and the Intel IPP library to prototype image processing applications

Book Information

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Customer Reviews

This is an extremely well laid out and understandable text. The coding examples are easy to understand and can be easily demonstrated on the TI DSK's. As a current TI employee with little experience with the C6x line of DSP's, Qureshi's book allowed me to learn a large amount of image processing background in a short time while becoming familiar with the workings of Code Composer Studio and the DSP. The book starts very simply and has clear instructions on how to obtain the tools to run all of the code samples on real DSPs.Starting with an overview of the tools involved and the C6x architecture, Qureshi moves into simple image processing concepts, such as contrast stretching and window/level processing. After clearly explaining the concept and the

implementation, the reader is led through the process of optimizing the code for the DSP environment. Later topics, such as edge detection and wavelets leave the reader with a clear understanding of the fundamentals of image processing, as well as code examples that make implementation a breeze.Overall, an excellently written book and a must for anyone interested in image processing, whether on TI DSPs or not.

There are many great examples of basic image processing techniques in this book. Topics like Image Filtering, Edge Detection and also some Wavelets. There is both theory and detailed examples which really helps when trying to get the DSP in a symbiotic relationship with Matlab, CodeComposer Studio and MS Visual Studio.There is a logical flow in how information is presented. First a basic description of the algorithm. Second some Matlab or pseudo-code. Then third he describes exactly how to implement it on the c6x dsp. Not only are there implementation details but also interfacing explanation for both Matlab and Visual Studio.Overall this is an excellent book for getting a project up and running in a timely fashion.

Good book.

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