



Implementation of Fast Fourier Transforms on Motorola's Digital Signal Processors

by
Guy R. L. Sohie and Wei Chen
Digital Signal Processing Division

Preface

The human body has inherently slow perception mechanisms. For instance, when listening to music, or speech; we do not hear individual pressure variations of the sound as they occur so quickly in time. Instead, we hear a changing pitch, or frequency. Similarly, our eyes do not “see” individual oscillations of electromagnetic fields (light); rather, we see colors. In fact, we do not directly perceive any fluctuations (or oscillations) which change faster than approximately 20 times per second. Any faster changes manifest themselves in terms of the frequency or rate of change, rather than the change itself. Thus, the concept of frequency is as important and fundamental as the concept of time.

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