Integrating the DSP563xx in Distributed Computing Environments

Application Note

by

Mihai V. MICEA,
Mircea TRIFU
and Adrian TRIFU

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How to reach us:

USA/EUROPE/Locations Not Listed: Motorola Literature Distribution; P.O. Box 5405, Denver, Colorado, 80217
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JAPAN: Motorola Japan, Ltd.; SPS, Technical Information Center, 3-20-1, Minami-Azabu, Minato-ku,
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ASIA/PACIFIC: Motorola Semiconductors H.K. Ltd., Silicon Harbour Centre, 2 Dai King Street,
Tai Po Industrial Estate, Tai Po, N.T., Hong Kong. 852-26668334

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Abstract and Contents

Distributed digital signal processing is the most suitable solution for many real-life applications involving digital data acquisition and processing from multiple signal sources scattered over large areas. The advantages of distributed computing over single-processor or other multi-processor architectures include high computing power at a low cost, flexibility, and scalability.

Several ways to implement distributed digital signal processing exist, each with certain strengths and weaknesses. Choosing the optimum implementation for a particular application is often difficult, depending largely on the requirements of the application.

This paper proposes a hardware and software structure for distributed digital signal processing which offers flexibility and scalability for many real-life applications.