Products

Incorporating years of experience in algorithm and firmware design, SEDA Solutions® has developed a number of products for increasing the efficiency of code development and execution. SEDA Solutions® has developed multimedia signal processing products and programmable processor development tools for firmware applications in three main areas: Integrated Development Tools; Voice and Audio Processing; and Video and Image Processing.

Integrated Development Environment

SWEEP IDE, SEDA Solutions'® integrated software development tool environment, is custom designed to meet the needs of engineers. The concept of SWEEP IDE was developed at SEDA Solutions® to provide a man-to-machine interface that speeds code development by creating a uniform and easy to use environment for software and firmware engineers. Currently, processor vendors have multiple cores which all have different development environments. **SWEEP IDE enables the use of one development environment for multiple processor cores**.

Video and Audio Processing

SEDA Solutions'® Voice and Audio processing applications aim to enhance the quality of perceived signals. Our patented Flexpeech® compression technology can give as much as 17 times efficiency compared to standard 64000 bps digital techniques.

SEDA Solutions'® MPEG-1 Layer 3 Audio Encoder design (commonly known as MP3) has the lowest processing and memory storage requirement of any known encoder in the market today. The design can be on either floating point or 16/32 bit fixed point precision modeling.

Video/Image Processing

The race to get multimedia applications to end-users has meant a surge of video processing developments in consumer products. At SEDA Solutions® we have established a team that has built a reference "C" model. The SEDA Solutions® team is capable of transferring and mapping specifications set by the standard bodies onto our clients' choice of processors and system design. SEDA Solutions'® MPEG-4 and H.264 video technologies are modified based on the application, profile, layer and the clients' targeted platform.

At SEDA Solutions® we have already identified and defined the Software/ Hardware partitioning for a variety of MPEG-4 and H.264 video applications ranging from mobile telephony to high definition broadcasting. The functionality of these modules is defined in a high level environment, using C/C++ simulation and related documentation. These specifications are now available for designing co-processors and/or hardware accelerators. SEDA Solutions'® list of hardware accelerators or coprocessor modules is defined below:

- RGB to YUV Conversion
- YUV to RGB Conversion
- Motion Estimation
- DCT / IDCT
- 4x4 bock transform
- Quantizer / Inverse Quantizer
- Interpolation
- De-Block Filtering
- Variable Length Coding
- Post Filtering

For more information on Voice related products and services please visit our web site at **www.sedasolutions.com** or contact us by email at **info@sedasolutions.com**.

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