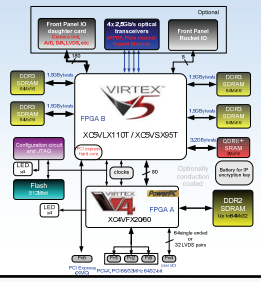
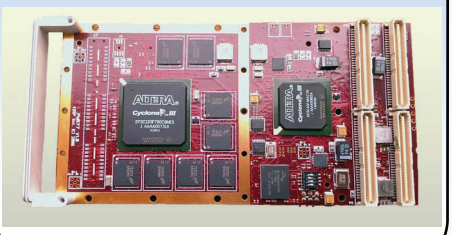
4DSP FOR DIGITAL SIGNAL PROCESSING DESIGN & SYSTEM INTEGRATION

4DSP eNews

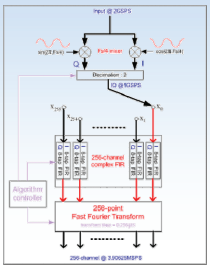
FM486 · Virtex-5 XMC



FM577 · Cyclone III PMC



Filterbank FPGA IP core



VID472 · Dual camera-link (base configuration)

FM577 · Dual Cyclone III FPGA PMC at a low cost

Low power consumption without compromising performance is promised by the FM577 FPGA platform introduced by 4DSP. Aimed at the next generation of vision systems, the innovative design company has created the new PMC based on a dual ALTERA® Cyclone III FPGA devices architecture. This maximizes performance while keeping costs low.

The FM577 features the highest density Cyclone III FPGA EP3C120 for data acquisition and processing as well as the middle range EP3C40 for communication interfaces. Both FPGA devices offer a total of 160K logic elements; 400 plus 18-bit embedded multipliers at 260MHz and up to 5-Mbits of on-chip SRAM. With up to 4GBytes of DDR2 SDRAM available on board, the FM577 is more than capable of meeting the needs of demanding image processing applications.

The FM577 is a smart and cool FPGA platform for original equipment manufacturers (OEMs) who wish to integrate Camera-Link frame-grabbing, high-performance imaging processing and real time JPEG2000 compression in a small form factor and at low cost.

Available off the shelf, the FM577's comes with a free 'Board Support Package' that helps developers to start designing applications immediately.

New Virtex-5 solutions for embedded computing

4DSP is proud to announce the new series of Virtex-5 FPGA-based XMC and PMC boards. These products are intended to be used in computing platforms for demanding signal and image processing applications.

The FM486's architecture is centered on the Xilinx Virtex-5 SX95T and LX110T devices. The Virtex-5 is tightly coupled with a second FPGA (Virtex-4 FX) that offers up to 2 PowerPCs embedded processors.

This product combines low latency, high throughput and high density memory devices with up to 512MBytes of DDR3, 8MBytes of QDR2 SRAM and 256MBytes of DDR2 SDRAM directly accessible to the PowerPC.

High Speed communication with a host computer is performed via the XMC and PMC connectors.

The Virtex-5's built-in PCI express core offers four 2.5Gbps express lanes with an aggregate throughput of 1.25GBytes/s on the FM486. With fast and efficient DMA engines, the PCI-X interface is also available from the Virtex-4 device when additional bandwidth is desired.

For systems where PCI express is not required, 4DSP has launched the FM485. This product is very similar to the FM486. Despite a different memory arrangement (up to 16MBytes of QDR2 and up to 512MBytes of DDR2), it offers the same FPGA computing performances as the FM486. The PCI-X bus on the FM485 will guarantee high speed communication with a host computer for applications where sustained throughput in excess of 400Mbytes/s is necessary.

Both the FM485 and FM486 are available today from 4DSP.

Designing IP Cores and complex algorithms

4DSP can assist with the development of IP cores and complex algorithms for FPGA devices. Our extensive experience in this domain coupled with an intimate knowledge of hardware resources available on board leads to efficient systems and successful projects completion. Please contact us today with your requirements and we will send you a free quotation.

4DSP, Inc · 955 S Virginia, Suite 214, Reno, NV 89502, USA · t. +1 800 816 1751 · sales@4dsp.com
4DSP, BV · Leidse Schouw 2, 2804 AE, Alphen a/d Rijn, Netherlands · t. +31 (0) 172 782 190 · saleseurope@4dsp.com