VisionMAX-1 Multiprocessor Video-Imaging Kit

Overview >>>>>

VisionMax-1 is an advanced development platform featuring a complete imaging solution designed to develop real-time "video" applications.

Based on a coprocessor concept, the VisionMAX systems are fully supported by 3L Diamond RTOS and FPGA tool-suite. It is an easy-to-use task-based design model and user friendly integrated development environment.

Being a flexible & scalable platform, it has multiple video I/Os (PAL, Camera-Link, DVI...), video CODEC, a combination of DSP and FPGA processor devices with dedicated ZBT SRAM and SDRAM resources.

VisionMAX is scalable to multiple DSP processing units. Embedded in an air-cooled industrial chassis, all I/Os are accessible from the rear panel.

Features
- Embedded vision processing
- TI 720MHz DM642 DSP processor
- Xilinx Virtex-4 FX60 FPGA
- Two embedded PowerPC 405 cores
- Dual video inputs and outputs
- SLB FPGA mezzanine card
- USB2.0 and RS-232
- DVI transceiver unit

Optional: Dual Camera-Link B/M/F
16 CVBS inputs
Dual Gigabit Ethernet

Applications
- Video security
- Vision inspection
- Advanced image processing
- Medical imaging system
- Embedded camera
- CCTV capture and recording
Default Offer

The default Special University Offer features the “VisionMax_1” configuration.

**VisionMax_1**: Single 720MHz DM642 DSP and Xilinx Virtex-4 FX60 with PowerPC cores; includes SMT939 DVI Transceiver

**Benefits**

- About 70% Discount applied
- Modularity, flexibility, scalability & upgradability
- All required software included
- Online “Getting Started Support”

Extended Configurations

“VisionMax” is also offered in the following extended configurations. They are based on the quad-site SMT148-FX carrier board, instead of the SMT111 carrier.

**VisionMax_2**: Dual 720MHz DM642 DSP and dual Xilinx Virtex-4 FX60 with PowerPC cores  
**VisionMax_3**: Triple 720MHz DM642 DSP and triple Xilinx Virtex-4 FX60 with PowerPC cores  
**VisionMax_4**: Quad 720MHz DM642 DSP and triple Xilinx Virtex-4 FX60 with PowerPC cores

Optional Add-on Cards

**SMT909**: Multichannel Video Inputs (16 CVBS)  
**SMT922**: RS-422 interface for CEDIP Infrared Camera  
**SMT949**: Dual Camera-Link Base/Medium/Full  
**SMT945**: Dual gigabit Ethernet, RS-232, LVTTL I/Os, SDRAM, microSD Flash
Kit Contents

Clicking on the items of the first column of the table will take you directly to the product web pages where you can download FULL information and technical documentation such as user manuals, technical specifications, etc.

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<thead>
<tr>
<th>VisionMax</th>
<th>Description</th>
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<tbody>
<tr>
<td>VisionMax Kit&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Single 720MHz DM642 DSP and Xilinx Virtex-4 FX60 with PowerPC cores; DVI Transceiver included</td>
</tr>
<tr>
<td>CCS&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Code Composer Studio</td>
</tr>
<tr>
<td>Diamond DSP</td>
<td>Diamond DSP - Single DSP license, requires Code Composer Studio</td>
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<tr>
<td>Diamond FPGA</td>
<td>Diamond FPGA - Single FPGA license</td>
</tr>
<tr>
<td>SMT6048</td>
<td>USB Driver Support for SMT148-FX</td>
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1. Texas Instruments (TI) will donate a copy of the full version of Code Composer Studio (CCS).
   Europe: Sundance will take care to apply directly to TI Europe and will contact customers on this matter.
   Rest of the World: The procedure is different and customers can apply directly. Please click here.
   TI will send CCS directly to the end-user customers both in Europe and in the Rest of the World.
2. All prices above are for volume orders of 10+ units, as per our official price list.

<table>
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<th>Normal Price</th>
<th>€11,200</th>
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<tr>
<td>Special University Price</td>
<td>€3,360 $4,835</td>
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Discounted Add-Ons

Any Customer who buys a VisionMax Kit is entitled to a 50% discount on the following add-ons:

<table>
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<tr>
<th>Add-on Module</th>
<th>Description</th>
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<tr>
<td>SMT310-XDS</td>
<td>SMT310 XDS510 JTAG controller with 1-module site “HOST”</td>
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<tr>
<td>SMT6040</td>
<td>Sundance &lt;&gt; Simulink® Toolbox for DSP &amp; FPGA co-design and code generation</td>
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<tr>
<td>SMT6058</td>
<td>Ethernet Server/Driver for SMT148-FX</td>
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<tr>
<td>PARS</td>
<td>Model based development tool for Parallel Application</td>
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Training Course and Technical Support

The package comes with full documentation, examples, demo applications, source code and whatever essential to provide self-training to users. On top of that, SUNDANCE offers an online Technical Support System (http://support.sundance.com): each customer is allocated to a dedicated private FORUM and one or more engineers will provide Support through it.

Please download the document SUNDANCE HELP, which is intended to give you an overview of the hardware, firmware and software available from Sundance.

Support for TI Code Composer Studio is provided through the “ECSC” (Customer Support Center: Europe).

Where to Buy?

University.Offeres@sundance.com