

# DVIP

SUNDANCE

## Digital Video Infrastructure Platform



- Two **C6455** DSP devices with **SRIO**
- **DM642** **video/imaging** processor
- **Virtex-4** FPGA with **PowerPC** Cores
- **Standalone** with **USB** and **Ethernet**
- Sundance Local Bus mezzanines:
  - Dual **Camera-Link** interfaces
  - DVI** transceivers
  - RS-422** for CEDIP Cameras

### Overview >>>>

*Responding to the need for high bandwidth in HD video applications for broadcast, video surveillance and compression technologies, the DVIP platform offers a complete and fully integrated solution for digital video systems.*

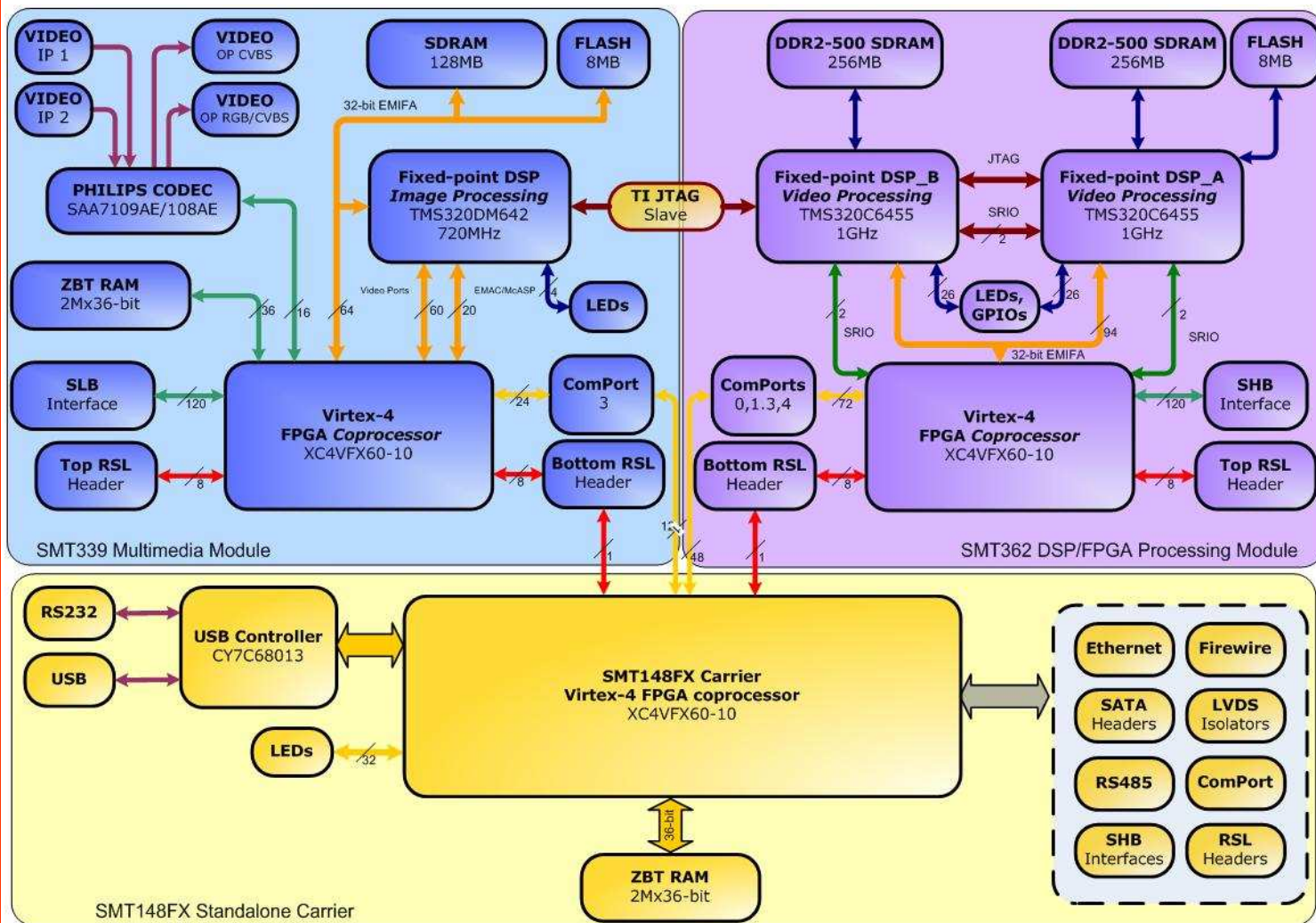
Built on Sundance's modular and scalable multiprocessing concept, the DVIP platform leverages the performance and flexibility of two TI C6455 digital signal processors and a DM642 DSP-based digital media processor.

The 1GHz C6455 DSPs allow multiple processors to be connected via a Serial Rapid I/O (SRIO) interface. Additionally, the infrastructure platform incorporates Xilinx Virtex-4 FX60 devices with the capacity to implement FPGA IP Cores from leading compression suppliers to perform real-time encoding and decoding.

### Features

- Two Xilinx Virtex™-4 FX60 FPGA devices
- Two C6455 DSP Processors
- DM642 Multimedia Processor
- DDR2 SDRAM and ZBT SRAM
- USB interface to HOST computer
- Gigabit Ethernet PHY interface and RJ45
- Supported by 3L Diamond design tools, MathWorks, Impulse C...

## Functional block diagram



## Benefits

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

## Applications

- Video Security and Networks
- Multiple Video Surveillance
- Defence Imaging Equipments
- Broadcast Development Infrastructure

## 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.

DVIP	Description
DVIP Kit <sup>1</sup>	Digital Video Infrastructure Platform
CCS <sup>2</sup>	Code Composer Studio
Diamond DSP	Diamond DSP - Single DSP license, requires Code Composer Studio
Diamond FPGA	Diamond FPGA - Single FPGA license
SMT6048	USB Driver Support for SMT148-FX

1. Customers will have to apply for the donation of Xilinx FPGAs part of the system. To request a Xilinx donation, check out this webpage: [http://www.xilinx.com/univ/don\\_program.htm](http://www.xilinx.com/univ/don_program.htm) and specify to have the chips delivered to Sundance.
2. Texas Instruments will provide a copy of the full version of Code Composer Studio (CCS) to each University who buys one of these packages. TI will send CCS directly to the purchasers after they will have placed their order with SUNDANCE.
3. All prices above are for volume orders of 10+ units, as per our official price list.

## Discounted Add-Ons

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

Add-on Module	Description
SMT310-XDS	SMT310 XDS510 JTAG controller with 1-module site "HOST"
SMT6040	Sundance <> Simulink® Toolbox for DSP & FPGA co-design and code generation
SMT6058	Ethernet Server/Driver for SMT148-FX
PARS	Model based development tool for Parallel Application

## 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).



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