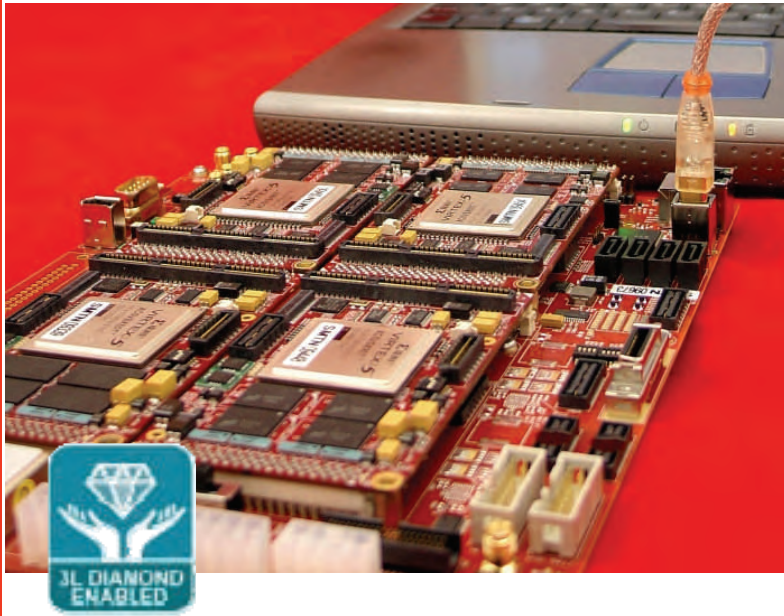


# RASS

SUNDANCE

## Reconfigurable, Accelerating, Scalable



- Four Xilinx **FPGA** accelerator nodes
- Virtex-5 **SXT** FPGA devices
- Up to 8GB **DDR2** SDRAM
- **550MHz** clock technology
- **Standalone** with **USB**, **Ethernet**...
- **Two** compute **RASS** per **slot-1U**

### Overview >>>>

*The Reconfigurable, Accelerating, Scalable, Supercomputing (RASS) solution offers a modular FPGA system architecture based on multiple Xilinx Virtex-5 nodes.*

To meet industry demand for extreme parallel processing, RASS uses the latest 25x18-bit XtremeDSP48E slices capable to deliver up to 2+TMAC/s.

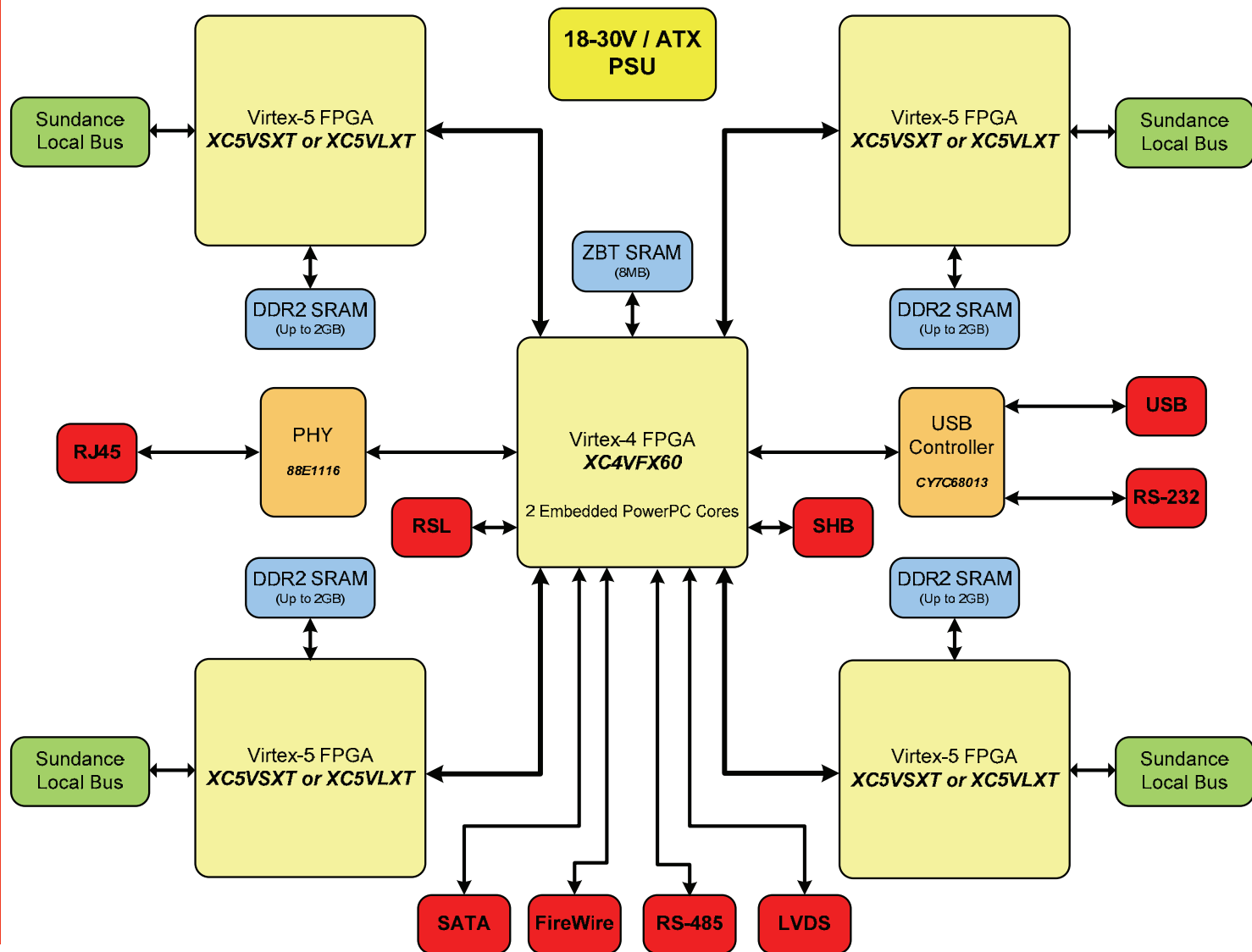
Multiple FPGA nodes can be connected via the Rocket-IO Serial Links and the S-Link to sustain the highest data transfer rates between all the FPGA accelerator nodes.

RASS is a platform adaptable to a variety of communication interfaces: USB, Gigabit Ethernet, SATA, FireWire, RS-485, RS-232 and LVDS I/O pairs. A complementary Xilinx Virtex-4 FX60 FPGA includes two PowerPC controller cores, leaving the main Virtex-5 nodes free for coprocessor acceleration.

### Features

- Fastest Xilinx Virtex™-5 SX95T FPGA
- Up to 2 banks 1GB DDR2 SDRAM (64-bit) per FPGA
- Advanced DSP48E slices
- Rocket-IO GTP transceivers
- USB interface to HOST computer
- Supported by 3L Diamond FPGA tools

## Functional block diagram



## Benefits

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

## Applications

- Parallel Computing Research
- Accelerated DSP Simulation
- Hardware-in-the-loop testing
- Supercomputing system architecture

# 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.

Included item	Item description	RASS-1	RASS-2	RASS-3	RASS-4
<a href="#">RASS-1<sup>1</sup></a>	RASS with 1 x SMT351T-SX95	YES	NO	NO	NO
<a href="#">RASS-2<sup>1</sup></a>	RASS with 2 x SMT351T-SX95	NO	YES	NO	NO
<a href="#">RASS-3<sup>1</sup></a>	RASS with 3 x SMT351T-SX95	NO	NO	YES	NO
<a href="#">RASS-4<sup>1</sup></a>	RASS with 4 x SMT351T-SX95	NO	NO	NO	YES
<a href="#">Diamond FPGA</a>	Diamond FPGA Single FPGA license	YES	YES	YES	YES
<a href="#">SMT6048</a>	USB Driver Support for SMT148-FX	YES	YES	YES	YES
	Normal Price	€18.317	€28.517	€38.733	€48.933
	Special University Price	€5.495 \$7,905	€8.555 \$12,310	€11.620 \$16,720	€14.680 \$21,125

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. All prices above are for volume orders of 10+ units, as per our official price list.

## Discounted Add-Ons

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

Add-on Module	Description
<a href="#">SMT310-XDS</a>	SMT310 XDS510 JTAG controller with 1-module site "HOST"
<a href="#">SMT6040</a>	Sundance < > Simulink® Toolbox for DSP & FPGA co-design and code generation
<a href="#">SMT6058</a>	Ethernet Server/Driver for SMT148-FX
<a href="#">PARS</a>	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](#)).

Where to Buy?

[University.Offers@sundance.com](mailto:University.Offers@sundance.com)