

Multi-channels Radio System



- Two **1GHz A/D** digitizer channels
- Onboard **Virtex-5** and **Virtex-4**
- Dual **C6455** DSP engine
- Embedded **PowerPC** co-processors
- External **Clock** synchronisation
- **1U** compliant **19"** chassis

Overview >>>>

The Radio Giga development platform from Sundance provides designers with a Cross Technology Platform (XTP) that is flexible, user configurable by processing fabric, architecture, communication ports and protocol.

Radio Giga XTP integrated cutting edge multiprocessing technologies and backwards compatibility with already deployed architectures.

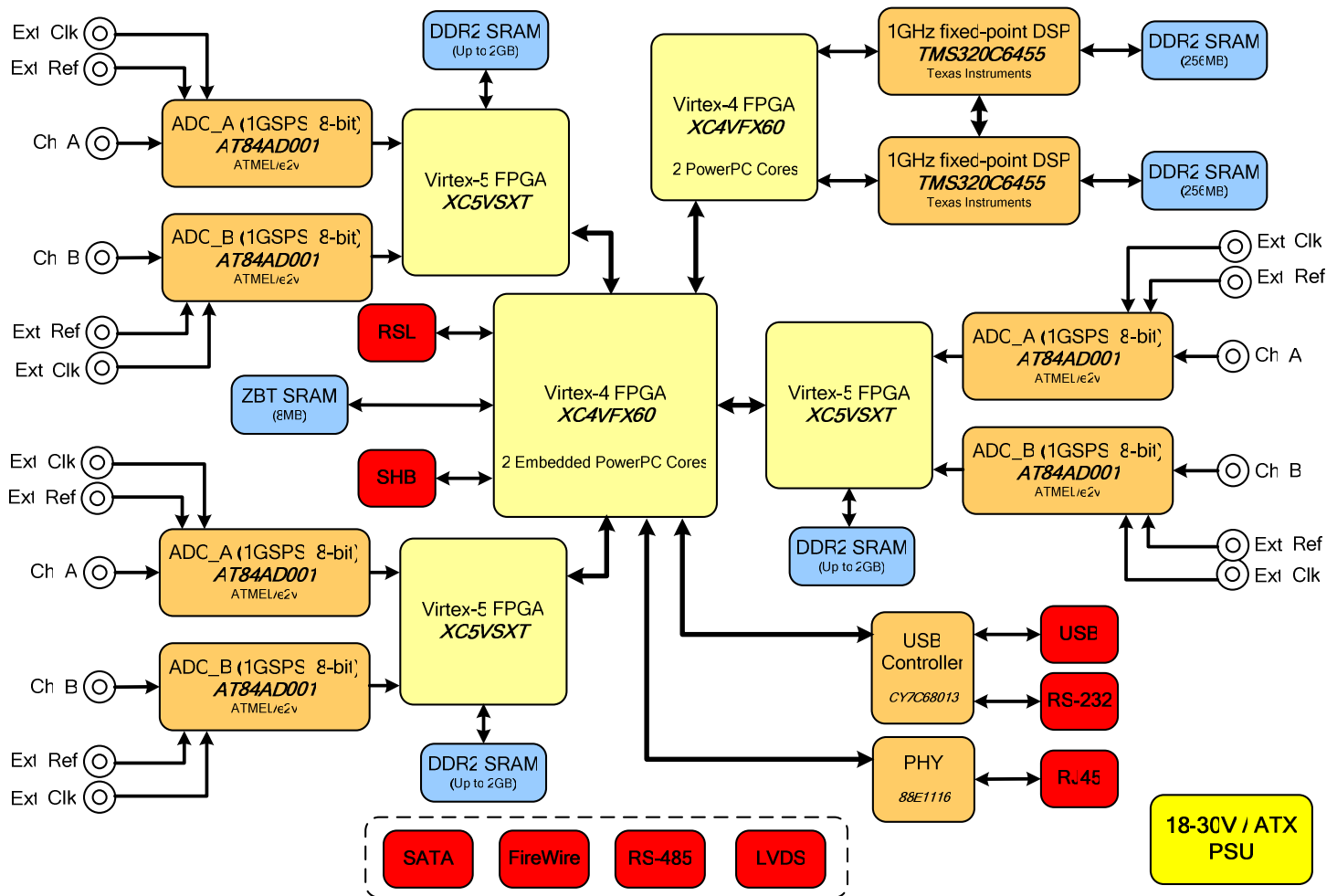
Up to six low-power GHz A/D channels enable RF-to-baseband processing applications with an architecture based on a mixed of dual 1GHz C6455 TI cores, multiple Xilinx Virtex-5 and Virtex-4 reconfigurable nodes and embedded PowerPC.

Being 1U compliant, Radio Giga delivers incredible rack real-estate efficiencies and offers both Gigabit Ethernet and USB interconnect.

Features

- Two C6455 fixed-point processors
- Fastest Xilinx Virtex™-5 SXT FPGA
- High-density DDR2 SDRAM (64-bit)
- Two 8-bit, 1GSPS A/D converters
- Sampling rate from 50MHz to 1GSPS
- 2GSPS sampling with interleaving mode
- USB interface to HOST computer
- Supported by 3L Diamond IDE design tools

Functional block diagram



Benefits

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

Applications

- Multiple antennas, MIMO technology
- Broadcasting for PDA and mobile units
- Advanced radio transceivers
- Commercial terrestrial communications
- Multi-channels satellite receivers

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.

RadioGIGA	Description
"RadioGIGA" Kit¹	Radio Giga system, Beyond 3G, High speed multi ADC, Dual C6455 @ 1GHz, USB2 interface
CCS²	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 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 RadioGIGA 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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