

# Sundance Multiprocessor Technology

●●● embedded signal processing solutions

SUNDANCE

## Communications, Wireless & Satellite



- MIMO LTE
- WiMAX
- SATCOM

## Happy New Year!



Above is my first new product for 2010.

It only took a few hours and is mainly made of recycled materials. Hopefully Mr. Snowman will not last as long as the other new products we developed in 2009 and highlighted in this communication, but it was fun to make with my Kids.

Sundance, during this our **20th Anniversary year**, will invest in product development that offer lower-power consumption, more performance and a well-defined upgrade path. The introduction in November 2009 of the [SMT372T](#), with its **12x 700MHz DSP Cores**, is a testament to Sundance's commitment to this strategy. We introduced the first **DSP Module in 1993** that had a single 40MHz DSP and have since then introduced **a new Module every year** and we will continue on the same path for many years. The [EVP6472 Development Platform](#), with an introduction price of only **USD2000.00**, thanks to generous support from **Texas Instrument**, is going to enable prototyping of a broad range of application. Programming multiple DSP Cores is not as easy as building a snowman, but luckily we have excellent software support from [3L Diamond](#).

Another significant milestone has been the introduction of the **SMT7 Series of PXI Express Cards** and **SMT1 Series of PCI 104 Express Cards**. Both are supported by the growing-range of [Sundance Local Bus peripherals](#) daughterboards developed primarily for OEM customers. The highlight was shipping of the [SMT903 WiMax RF-Front-end](#) and the [SMT901 LTE FR-Front end](#). These products represent many man-years of effort and are now available with VHLD IP-Cores and schematics to allow integration into **YOUR** platform.



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P.S. The 'White-Spot' on the top of my hair is long-lasting, non-melting snow, I can reassure you! 😊

## Hot Products of the Year 2010

### Customizable Virtex-5 FPGA and PCI Express Technology



is a **rugged and scalable** solution that can be mounted into a strong 3U PXI chassis/ enclosure. The Series-1 is dedicated for embedded applications in which several SMT100s can be **stacked together** and be used in standalone mode or in combination with a single board computer.

Two major product families have been released in Year 2009: **Series-7 (SMT700)** and **Series-1 (SMT100)**, respectively **3U PXI Express and PCI/104-Express** form factors. Both hardware solutions feature a range of **Virtex-5 LXT, SXT and FXT** FPGA devices which implement a **PCI Express** interface (x4 lanes at 2.5Gbps), which is essential for high-bandwidth applications.

The SMT700



## Spotlight

### High-speed Serial ATA I/II Host Controller IP Core



The **SATA Host Controller I/O** IP core is used frequently in applications that require an FPGA and also access to SATA storage devices. It incorporates the Transport layer, the Link layer and the PHY layer on a **Xilinx Virtex-5 FPGA**. It is fully compliant with **Serial ATA II** specification at 1.5Gbps and 3Gbps (sustained 220MB/s for read and 200MB/s for write operations). The core can also be implemented with multiple instantiations for **RAID-type** applications.

VHDL source code and **DO-254** certified documentation are available.

### XDS510 USB JTAG Emulation

[XDS510.com](#) supplies **USB XDS510 JTAG emulators**, with or without Code Composer from TI. Over 20 TI DSP generations are supported and there are currently 3 versions available online. The emulators are USB bus-powered and support TI's device roadmap from 1.8v-5v. More development is planned so watch this space.



The XDS510 is available from only \$299