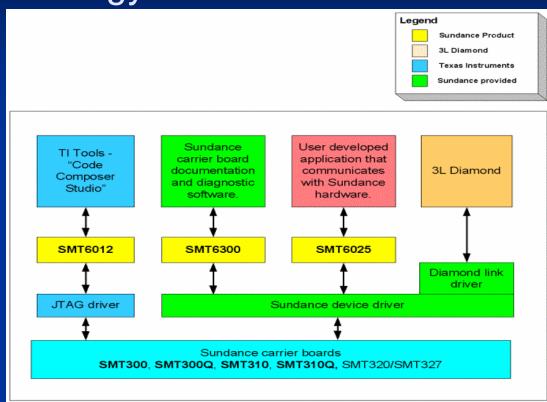
# Sundance

#### Multiprocessor Technology Ltd



#### SOFTWARE UTILITY TOOLS

High-tech DSP solutions. Giving you the freedom to design

#### **Sundance Wizard**

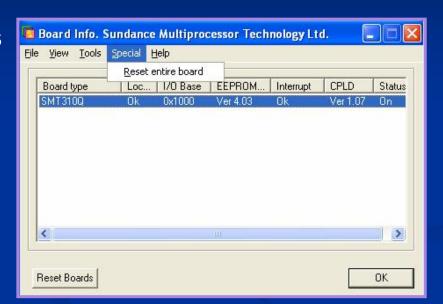
- This provides help information
- This installs software utility tools
- This automates for hardware and software updates
- This detects and configures the hardware system
- This sets-up Code Composer Studio



#### Basic software drivers and Board Info

#### (SMT6300)

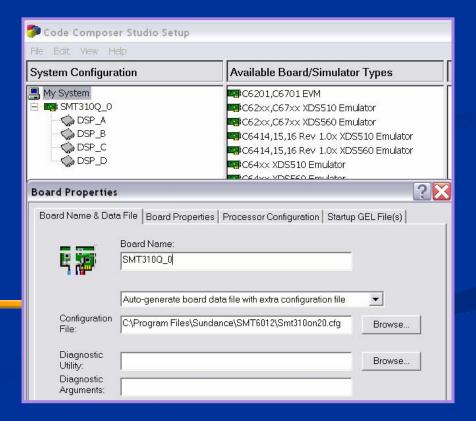
- Device drivers for the carrier boards
- This provides diagnostic utility tools
  - PCI I/O information
  - Software comport switches
  - TIM and JTAG resets
  - Confidence test
  - Record of the drivers and software installed



### **Drivers for Code Composer Studio**

(SMT6012)

- This installs drivers for Code Composer Studio
- This allows JTAG debugging
  - On-board
  - Off-board
- This provides a help file



### Flash utility

(SMT6001)

- This manages the Flash ROM
- This uses Code Composer Studio
  - This analyzes the contents of the Flash
  - This programs data into the Flash
- This erases the Flash memory
- This provides a help file



### Support package for DSP

(SMT6400)

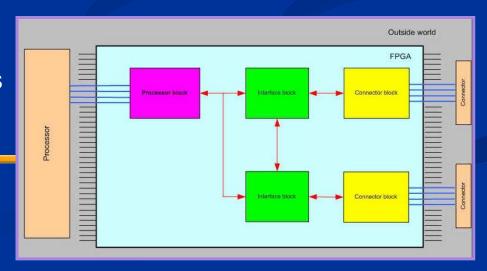
- Examples illustrating the use of processor-TIM resources
  - DSP applications
  - Host/DSP applications
- Module support library
  - ANSI C functions for Code Composer Studio
- Help file
  - Communications resources
  - Registers

```
** Write a word to the comport number cpno.
** The function polls the status of the output
** FIFO to determine when there is space to
** write another word to the comport.
void cpwrite(unsigned int cpno, unsigned int value)
 volatile unsigned int *cpcsr = CPN_CSR(cpno); /* comport control and status register
 volatile unsigned int *cpdat = CPN_DAT(cpno); /* comport data register
 while ((*cpcsr) & CP_CSR_OFF) {}
                                                /* wait for space to write a word
                                                /* write to the data register
 *cpdat = value;
  Read a word from the comport number cpno
** The function polls the state of the input
** FIFO to determine when there is a word
** available to read.
unsigned int cpread(unsigned int cpno)
 volatile unsigned int *cpcsr = CPN_CSR(cpno); /* comport control and status register
 volatile unsigned int *cpdat = CPN_DAT(cpno); /* comport data register
 while ((*cpcsr) & CP_CSR_IFE) {}
                                                /* wait until there is a word to read
 return *cpdat;
                                                /* read the comport data register
```

## Support package for FPGA

(SMT6500)

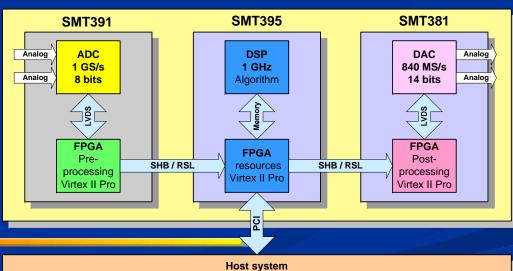
- Examples illustrating the design of the firmware
- Firmware model (design flow description)
- Software tools
  - Bitstream download utility (Host interface)
  - Library of ANSI C functions
- Help file
  - Communication interfaces
  - FPGA configuration



### Support package for DAQ

(SMT6600)

- Examples illustrating the typical systems
  - 3L Diamond application
- Data analysis tools
  - MATLAB application
- Help information
  - Systems user manuals
  - Application notes

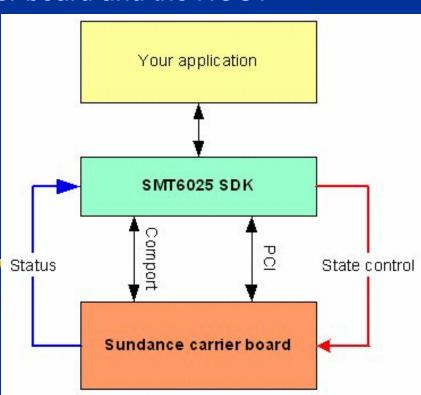


Control / Display / Data storage / Debug

## Software Development Kit (Win/Linux)

(SMT6025/SMT6035)

- Carrier board support code
  - Control from the Host
  - Transfer data between the carrier board and the HOST
- C++ interface
- Host side support library
- Help file



#### **Diamond RTOS**

(3L)

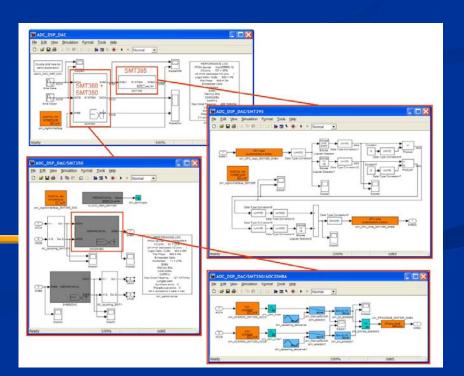
- Operating system for multiprocessor DSP systems
- Powerful API:
  - Multi-tasking, multi-treading, link and Host communications...
- ANSI C library
- Host server program for I/O and control
- Utility to build applications



### Simulink toolbox to C & VHDL

#### (SMT6040)

- Generates both C code for DSPs and VHDL code for FPGAs
- Fully compatible with Simulink® libraries
- Simulink-like block library
- Product Presentation



### **Support Forum**

- Online support forum
  - Private forum area for each Client
  - FAQ database
- Dedicated team of support engineers
  - Work closely with the design engineers
- Information sharing

#### Sundance Support Site

Sundance Design and manufacture multi-DSP and multi-FPGA modules. This support WEB site is for the **EXCLUSIVE** use of our customers.



Sundance Support Site Forum Index

Sundance Support Site - Registration Agreement Term

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By clicking Register below you agree to be bound by these conditions

I agree to these terms



#### **Sundance Website**

- Product database
  - Presents the range of products
  - Software overview
- News room (press releases, news letters, papers, adverts)
- User guides, technical application notes
- Other information

