

TECHNICAL SUPPORT & MAINTENANCE

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DOCUMENT HISTORY

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11/05/2006	SM	1.0	New document based on the previous technical support policy document
17/05/2006	MA	1.1	A few minor grammar changes and missing words added
30/06/2006	SM	1.2	A few minor modifications added
12/02/2007	SM	1.3	Minor updates: support terms and duration

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1. SCOPE

Sundance's technical support services help you to find efficient and optimised solutions to resolve development issues that may compromise your project.

The Sundance team comprised experienced Application and Design Engineers who will take the time to understand your specification and deliver an optimum solution.

This policy document defines the limits to such service.

1.1. INTRODUCTION

Sundance offers several support plans, each tailored to meet specific needs. The plans are designed to meet your needs from the development, right through to the deployment of your product and application.

1.2. RESOURCES

Sundance provides the following resources and information:

1.2.1. Online Services

The Sundance Web Site, www.sundance.com provides the following information:

- [Boards information, features, high-resolution pictures, PCB layout, Block diagrams,](#)
- [Specification documents, help files, user manuals, application notes, presentations,](#)
- [Dedicated application notes,](#)
- [Software tools information,](#)
- [Press releases, Newsletters, Technical publications, Case Studies.](#)

1.2.2. Knowledge Base

The Sundance Knowledge Base can be consulted by all registered users of the Sundance Support Forum (<http://support.sundance.com>).

It comprises two sections:

- [Sundance News](#): Newsletters,
- [Product Questions](#): This section contains a [getting started section](#), useful tips and the frequent asked questions (FAQ) regarding the products and software.

1.2.3. On-site Technical Support

Sundance can provide a dedicated, on-site Support Design Engineer during your critical development periods. The Support Design Engineer can be deployed to help troubleshoot problems encountered, or act in the role of an application consultant helping your team make better use of the System.

1.3. PRODUCT SUPPORT PACKAGES

The Product Support Packages are installed by running the [Sundance Wizard](#).

1.3.1. Processor modules

The Processor modules are supported by:

- The [SMT6400 support package](#) (Help file, software API and ANSI C-program samples using TI CCS (DSP side), and the SMT6025 (Host side))
- The [SMT6500 support package](#) (Help file, VHDL IP Cores, Firmware VHDL sources and Xilinx ISE project, software functions to configure a FPGA from a DSP)
- [3L Diamond DSP](#) (User manual and software examples illustrating the functions and Diamond features)

1.3.2. FPGA-only modules

The FPGA-based modules are supported by:

- The [SMT6500 support package](#) (Help file, VHDL IP Cores, Firmware VHDL sources and Xilinx ISE project, software functions to configure a FPGA from a DSP)
- [Presentation](#) to learn how to configure a FPGA module
- [3L Diamond FPGA](#) (User manual and examples illustrating the features)

1.3.3. Data acquisition modules

The DAQ modules are supported by:

- The [SMT6600 support package](#) (Documentation and system examples using 3L Diamond only)

1.3.4. System applications

The [SMT6700 support package](#) provides a GUI interface that allow run a executable for a demo application on Sundance systems.

1.3.5. Carrier boards

The [SMT6300 support package](#) provides the documentation and diagnostic for the Sundance carrier boards. It provides device drivers, diagnostic utility tools and a confidence test.

1.4. [SOFTWARE TOOLS](#) AND HELP FILES

- [Sundance help file](#) gives you an overview and the Basic Knowledge to be able to use Sundance Products.
- [SMT6001](#) is the Flash Programming Utility for DSP modules.
- [SMT6300](#) is the Board Info utility for Carrier Boards. It provides the drivers for the carrier boards and an EEPROM programming utility.
- [SMT6012](#) is the Sundance Drivers for TI Code Composer Studio.
- [SMT6025](#) is the DSP SDK for Host Side development under Windows.
- [SMT6026](#) is the FPGA-only SDK for Host Side development under Windows.
- [SMT6035](#) is the DSP SDK for Host Side development under Linux.
- [SMT6036](#) is the FPGA-only SDK for Host Side development under Linux.
- [SMT6055](#) is the SDK for Host Side development under QNX.
- [SMT6065](#) is the SDK for Host Side development under VxWorks.
- [SMT6040](#) is the Sundance<>Simulink toolbox for VHDL code generation.
- [SMT6041](#) is the Sundance<>System Generator for VHDL code generation.
- **SMT6042** is the Sundance<>System Generator for VHDL code generation.
- [SMT6050](#) is the Sundance<>Simulink toolbox for DSP code generation.
- [GDD libraries](#) for DSP are optimised libraries of ANSI-C and ASM functions
- **Board support packages** for SMT363XC2 ([SMT6060](#)), SMT387 ([SMT6087](#))
- [TI Code Composer Studio](#) is the design environment for TI DSPs. Sundance uses some of the features of CCS to access the DSP via a JTAG connection. CCS is mandatory to be able use the SMT6001 and SMT6400.
- [3L Diamond](#) is multiprocessor and co-design Tools from 3L which provide an optimised API for DSP and a methodology for mixed FPGA+DSP architectures.
- [PARS](#) use model-based design to generate parallel applications that target mixed DSP and FPGA architectures from a single Simulink model.

2. STRATEGY

Sundance implements the Technical Support and Maintenance Policy by:

2.1. INFORMATION TO THE CUSTOMER

The Customer and Sundance can communicate via the [Sundance Support forum](#), via emails and by telephone.

2.2. CONTRACT FOR THE TECHNICAL SUPPORT POLICY

The support policy contract provides access to the Technical Support Team by using the support forum, emails or directly by telephone. The Technical Support Team is competent to deal with the customer to provide the best support and service available. However, the support contract is limited in both duration and effort that will be provided by Sundance's engineers, as described below:

2.2.1. Number of engineers allowed

The present support policy contract limits the number of engineers allowed to provide technical support for a customer. Up to a maximum of three engineers can support a customer (2 Hardware and 1 Software).

2.2.2. Technical Support packages

Sundance offers three support plans:

- **Initial Package:** Once you initially receive your Hardware from Sundance, you may require assistance to understand the hardware and software tools. This does not include any advice for your custom design or application. This is a one-month limited support, available on receipt of your hardware platform. This Initial Package runs for any new purchase order.
- **Advanced Package:** This Advanced support plan is ideal during prototyping and development phases. It gives you a dedicated engineer as a support contact within Sundance. You can interact with Sundance's Engineers to provide assistance with your project. This plan does not include any custom development, but our engineers can give you guidelines to help you to succeed.
- **Premium Package:** The Premium support package is ideal for a custom project development phase. It provides the same benefits as the Advanced Package with the addition of custom designed examples to help you during your product development.

	Initial Package	Advanced Package	Premium Package
Support time	3 Hours	20 Hours	60 Hours
Duration	1 Month	6 Months (or until all hours are used)	18 Months (or until all hours are used)
Software maintenance	Yes	Yes	Yes
Response time	~ 1 working Day	~ 1 working Day	~ 1 working Day
Dedicated contact engineer	No	Yes	Yes
Support Forum	Yes	Yes	Yes
Number of users	Unlimited	Unlimited	Unlimited
Cost	Free of Charge	£2,600 ¹	£6,400 ¹
Extra hours	None	£100 ¹ per extra hour	£80 ¹ per extra hour

Response time: Sundance generally respond to any Support cases posted in the Sundance Support Forum within one working day, as our Technical Support Teams are located in Europe (UK and Italy), USA and China.

Software maintenance: Sundance maintains and updates the Sundance tools regularly to improve the service to Customers. The Sundance Wizard automates the installation of our new software releases. You should use the up-to-date version of the Wizard that is available from our main [Webpage](#).

Number of users: this represents the number of people from a same institution, or company, that can interact with Sundance via the Support Forum.

2.2.3. Day training at Sundance Multiprocessor Technology Ltd.

Sundance offers training, at our headquarters in Chesham, on your new system prior to delivery. This could prove to be invaluable at the start of your. You will have access to Sundance's resources and Design Engineers. You will setup your system in our offices and leave with a working solution to start your own development.

This service is available for up to two engineers at a time. One-day training can be purchased for £500¹.

¹ All costs are expressed in British Pounds Sterling (£)

2.3. CONTRACT FOR CUSTOM DEVELOPMENT POLICY

The Custom development contract is a service provided by Sundance to design and develop a solution to meet a specific customer requirement. The development can involve Hardware, Software or both.

The Custom development will only be undertaken on Sundance provided product, either hardware or software. If development is required involving third-party product then this will be subject to a separate custom design contract. Custom development has to be defined by a detailed specification document. This needs to be established by the Customer, and reviewed in collaboration with the customer by Sundance. When both parties agree with the design specification, it will form the basis of the development contract.

The custom development specification will need to contain the following information:

- **Design Inputs** What information, documents, specifications, software routines and technical descriptions define the product, and who is responsible for providing them.
- **Timescales** What timescales can be expected for the delivery of the project. It also outlines any milestones required.
- **Deliverables** What hardware, software and firmware is considered to constitute the project. Where required, which aspects of the project will need to be delivered, and at which milestones.
- **Verification** What processes and procedures are required to ensure that the deliverables meet the criteria set out at the start of the design project.
- **Validation** What processes and procedures will be undertaken by the customer to ensure that the deliverables meet their expectations, as outlined in the initial specification.
- **Warranty** The time period over which Sundance can reasonably be expected to modify the deliverables where they are found not to meet the initial project criteria.
- **Production Schedule** Where the project is designed to be part of a "production" development, what timescales are to be expected for the delivery of the production item, and the associated costs. (production, shipping etc)

All such development projects can only be "signed off" by the Managing Director of Sundance and the equivalent competent person from the customer.

2.4. OTHER SERVICES

Sundance may also offer specific contracts to extend the Hardware Warranty and to avoid the obsolescence of your solution.

2.5. TECHNICAL SUPPORT AND MAINTENANCE CONTACT

All support will be using your dedicated support section to get in touch with our Engineers.

Sundance Support Forum: <http://support.sundance.com>

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