

Momentum Data Systems

Policies on Warranty, Guarantee, Support, and Returns

Jan 27,2003.

If you have any questions about MDS support policies please do not hesitate to contact us.

1.0 Hardware Warranty

All MDS manufactured hardware is warranted to be free from manufacturing defects for a period of one year.

Exceptions:

1. Product damaged in shipping where customer has specified specific shipping method.
2. Product that has been tampered with or modified (including but not limited to addition of wires, removal, substitution, or replacement of components, modifications to firmware other than those changes specifically allowed for in the documentation or with written approval from MDS, provided such changes are done with the necessary level of craftsmanship to avoid damage).
3. Product that has been operated at improper voltages or environmental conditions, including temperature extremes, thermal shock, mechanical shock and/or vibration.

Products determined to meet one or more of these exceptions will be repaired at normal non-warranty rates.

1.1 Out of warranty repair

Products that are out of warranty, if repairable (as determined by MDS), will be repaired for a flat fee of \$150 plus shipping costs. If the product is still manufactured the customer may opt to receive a replacement in lieu of repairing the returned product; MDS will provide a quote for replacement product at a reduced price.

All repair work is warranted for 90 days.

1.2 Special note for hardware with processors

The functionality of hardware containing a processor device is limited to the capabilities of the processor as defined in the data book and restricted by device's errata sheet. Customers should check with the processor manufacturer prior to ordering to ensure the functionality defined by the data book and the errata limitations are appropriate for the intended application.

1.3 Advance Replacement

MDS understands that there are times that being without a particular board or development tool can create a real impact on a projects schedule. While we encourage purchase of spare hardware for all critical applications, we realize that not every contingency can be foreseen. As such MDS generally maintains a small stock of advance replacement boards on our more popular products. Please contact the MDS sales department for availability and terms should you require an advance replacement.

2.0 Customer satisfaction guarantee

MDS guarantees hardware and software products to operate as specified in their data sheets and manuals. Within 30 days of receipt, MDS supplied hardware or software may be returned for a refund less a restocking fee of 15% of the invoiced amount for the returned product. Alternately returned goods may be credited at the full amount towards other MDS products.

All returned material must be in good condition and free from damage.

3.0 Software upgrade coverage (excl. Mozart, DAE)

If MDS releases any software updates for MDS products within 90 days of shipment, these updates will be supplied at no charge.

3.1 Software items not covered

Compilers, linkers, debuggers, associated code generation tools, and other third party software that are supplied as part of a development kit or as standalone product are upgraded according to the policies of the software manufacturer. Generally all upgrades are purchased from the software manufacturer.

3.2 Software maintenance contracts

Some software products may offer maintenance plans, please consult the data sheet and/or MDS web site for specific information.

4.0 Product Support

For additional support options for Mozart II systems please also see Section 6.0, “Mozart I and II,” on page 6. For DDE/DAE options, please also see Section 5.0, “DAE,” on page 5.

4.1 90 Day Getting Started Support

This support is good for 90 days and is provided at no charge. It is available with our of board level products and Mozart and DDE systems (please see the Mozart and DDE sections for specific support issues for those products).

What is covered:

1. Help with installation of hardware and software. For some products this requires knowledge of RegEdit to modify driver settings.
2. Questions on the capabilities of the product.
3. Problems running installation verification software or diagnostics software.
4. Verification of environment for using development tools with MDS products.
5. How to rebuild example programs that are supplied as both source examples and executable. Note that the examples and any source code are provided as-is.
6. General questions relating to where to find additional information for programming peripheral chips. Assistance for programming peripheral chips is limited to providing examples of accessing the chips registers and not for programming the peripheral for a specific purpose.
7. Questions regarding expansion and external interface connectors.
8. Configuring MDS supplied JTAG based debugger hardware to access MDS processor hardware.

Unless noted otherwise, Windows 2000 and XP are the only supported host operating systems.

To establish proof of eligibility for free support the product serial number and a copy of the shipping invoice will need to be supplied for MDS products not purchased directly from MDS.

MDS will attempt to answer support questions within one business day, but some questions may require longer answer times.

4.2 Support items MDS answers without a charge

MDS provides support assistance with:

1. questions related to product capabilities
2. product failure

3. missing or incorrect documentation
4. bugs in MDS supplied software (exclusive of example programs)

4.3 Per Incident Support available after 90 Day Getting Started period

Continued support is available at \$100 per incident. MDS suggests checking support knowledge base and on-line resources prior to contacting MDS.

4.4 Questions not covered by the 90 Day Getting Started or Per Incident support

The following are not covered by the *90 Day Getting Started* support:

1. Questions regarding system architecture
2. Questions regarding software design
3. Questions regarding design trade-offs
4. Questions regarding algorithm implementation
5. Questions regarding the operation and programming of the processor device(s)
6. Questions regarding peripheral programming
7. Questions regarding protocol use and programming
8. Questions regarding application programming
9. Questions regarding custom/non-MDS hardware design

Generally these activities require design research and hardware and software engineering, and are available from MDS's contract engineering services group. Please contact MDS's sales department with your design requirements and we will be happy to provide a quotation.

Support questions requiring engineering services are sold in 20 hour blocks, with a 40 hour minimum. Purchased time must be used within one year from invoice date.

Support contracts are normally issued on a per-product basis. Users of multiple MDS products should inquire about custom all-product plans tailored to your organization.

Non-refundable fees associated with contract engineering projects are excluded from credit.

4.4.1 Free training class with first 40 hour support contract

If available, the purchase of a support contract entitles the purchaser to the first level training course for the corresponding product.

4.5 Training classes

MDS offers a number of training classes. They are an excellent way to quickly learn how to program a device and use its associated tools. Questions arising from materials and/or examples used in training classes are covered at no charge for 90 days from the date of a training class.

4.6 Non-MDS manufactured products supplied by MDS

4.6.1 Code Generation Tools (compiler/linker/assembler, etc.)

MDS will answer questions regarding settings for rebuilding example and tutorial programs supplied for use with the MDS hardware. All other questions should be directed at the tool manufacturer or their associated public resources such as knowledge bases, news-groups, etc.

4.6.2 FUSION software stack

MDS will answer questions regarding settings for rebuilding example and tutorial programs supplied for use with the MDS hardware using the supplied device driver. Problems with using the TCP/IP stack and associated libraries (DHCP client, DNS resolver, FTP server, etc.) should be directed to MDS. If appropriate MDS may escalate the problem to DSPOS (the supplier of FUSION). Support for custom Ethernet driver development should be purchased directly from DSPOS and is not covered as part of any warranty or guarantee from MDS.

4.6.3 Pegasus Block Diagram and CCG components

Questions on using these components of the Pegasus package should be directed to MDS. If needed, MDS will escalate any problem issues to Hyperception (the supplier of these components). Customers using the RIDE version of Block Diagram should contact Hyperception directly for any issues concerning the RIDE features.

5.0 DAE

Standard support for DAE units is provided only when the DAE is used in conjunction with the MDS DDE (DAE Development Environment). DAE Development Environment kits are sold with the same support and warranty plans as other MDS products.

DAE OEM module upgrade and warranty information are described in the OEM contract.

6.0 Mozart I and II

6.1 Special note for Mozart I owners

MDS will discontinue support for Mozart I units on December 15, 2002. Please contact MDS to purchase the Mozart I to II CPU card upgrade.

6.2 Support included with Mozart II purchase

Software examples supplied with Mozart are covered by the *90 Day Getting Started* support, per incident support, and exclusions as described for other MDS products (see Section 4.0, “Product Support,” on page 3).

Excluded from the *90 Day Getting Started* started support are:

1. Questions related to modifying the Performance Audio Framework
2. Debug of customer developed processing modules
3. Drivers for customer developed I/O hardware and/or processor cards
4. Usage of the 3rd party IP contained within ROM other than in the manner used by the Performance Audio Framework and the supplied examples
5. Debug of customer modifications of example programs
6. Debug of customer modifications to software related to the Mozart front panel user controls (display, LEDs, switches, knob, and IRdA interface)
7. Debug of customer modifications to Windows control examples
8. Integration of hardware connected to the 671x DSK expansion connector
9. Assistance with licensing, qualification, and certification tests from Dolby, DTS, THX and similar organizations

6.3 Extended support and engineering services plans

MDS staff has extensive knowledge of software and hardware development for AV Receiver/Home Theater Systems. By using the services of MDS’ Audio Product Group staff product development times can be substantially reduced. To reduce development risk and time MDS can also offer designs for license.

Please also see Section 4.4, “Questions not covered by the 90 Day Getting Started or Per Incident support,” on page 4.

6.3.1 Extended support

Typical extended support performed by MDS’ Audio Product Group include:

1. Assistance with peripheral device programming (i.e., questions like “How do I make the XYZ chip operate in the ABC mode”?)
2. Assistance with questions related to custom boot loaders
3. Assistance with creating applications that load from flash
4. Development of small, custom example programs to illustrate a particular operating mode
5. Design guidance with custom peripherals for standard expansion connectors

6.3.2 Engineering services

Typical activities performed by MDS’ Audio Product Group include:

1. System specification
2. Processor subsystem design
3. Mixed signal (A/D, D/A, and related components) subsystem design
4. Unit test systems, test software specification
5. Custom Mozart compatible Audio Cards
6. Peripheral device drivers for use with the Performance Audio Framework
7. Add-in sound field processing for use with the Performance Audio Framework
8. Custom filtering software for use with the Performance Audio Framework
9. Custom multichannel synthesis and reduction software with the Performance Audio Framework

6.4 software and firmware

MDS regularly updates the Performance Audio Framework to take advantage of the latest sound processing capabilities, as well as maintenance releases to address bugs. These updates are generally available at no charge from the MDS Audio Support web site.

Exceptions exist where added decoder/algorithm capability requires licensing or payment or royalties or license acquisition fees to 3rd parties. For this reason some upgrades or portions are available only upon request and may require proof of 3rd party license validity.

Upgrades to the Performance Audio Framework may also be available from Texas Instruments. MDS will attempt to make these updates available directly when allowed.

Support announcements will be posted on the MDS web site as well as via email, please check the support information on the MDS web site for information on subscribing to support announcements.

As features are added and enhanced the product documentation is updated and/or application notes are created. Before using any upgrade all relevant documentation should be checked for impact with your current system design.

MDS recommends against upgrading unless it solves a specific problem or offers a specific feature that you need to support, as there is no assurance of backwards compatibility with older APIs. This may mean to take advantage of an upgrade or maintenance release your software may need source code changes¹, recompilation, and/or relinking.

7.0 Revision notes

Derived from internal 1d release, 10/25/2002.

1. Note that MDS tries to avoid any change that requires source code changes, but there are certain scenarios where this is required to stay consistent with the need to enable new functionality, minimize memory and/or CPU footprint.