

# **Technical Support**

### from Altera Applications

February 1998, ver. 5.01

#### Introduction

Altera's technical support team includes over 80 Applications Engineers dedicated to resolving customers' technical issues promptly and accurately. Altera responds to customers' questions quickly and efficiently via e-mail, telephone, or fax. Applications Engineers are located at Altera headquarters in San Jose, California, and at Altera offices around the world.

Altera Applications offers the following services:

- Technical support hotline
- Electronic mail
- Web site
- Altera FTP site
- Technical publications
- Training courses
- Design evaluations
- On-site support
- Failure Analysis Service

# Technical Support Hotline



(408) 544-7000 (800) 800-EPLD



(408) 544-6401

### **Electronic Mail**



sos@altera.com

Customers in the United States and Canada can receive direct technical support for Altera devices and software by calling Altera Applications at (800) 800-EPLD between the hours of 6:00 a.m. and 6:00 p.m. Pacific Time. Customers outside the United States and Canada can receive technical assistance by calling an Applications Engineer at (408) 544-7000 between the hours of 7:30 a.m. and 5:30 p.m. Pacific Time, or by contacting their local Altera distributor or sales office. Customers can also fax technical support questions to (408) 544-6401.

Customers can use electronic mail (e-mail) to send technical questions about devices and software to Altera Applications at **sos@altera.com**. Altera e-mail is checked regularly throughout the day and is given the same priority as telephone calls. However, because e-mail delivery through the Internet can be delayed, either the technical support hotline or fax should be used for urgent issues.

#### Web Site



http:// www.altera.com Altera provides a web site for instant on-line access to the latest Altera product information. The site allows customers to browse through Altera product information and literature, as well as search for solutions on technical questions or problems with the Altera Technical Support (Atlas) database. The Atlas database contains hundreds of solutions that are searchable by both concept and keyword format. Access the Altera web site at <a href="http://www.altera.com">http://www.altera.com</a>, or contact the Altera Applications Department at (800) 800-EPLD for more information.

Altera provides a 24-hour file transfer protocol (FTP) site for instant Internet access to the latest Altera product information. On-line versions of Altera application notes, application briefs, data sheets, and software

utilities are available at **ftp.altera.com**. Customers can also use the FTP site to transfer design files to and from Altera Applications for technical

### **Altera FTP Site**



ftp.altera.com

support and review.

# Technical **Publications**



(888) 3-ALTERA



Altera produces a variety of technical literature to help customers select and design with programmable logic, including application notes and data sheets. Altera also provides *News & Views*, a quarterly newsletter that includes the latest information on Altera products, technical articles written by Altera Applications Engineers, and a question and answer section that addresses many commonly asked questions. All registered users of Altera products receive a free subscription to *News & Views*. Customers who wish to request Altera technical publications, or add their name to the *News & Views* mailing list, can contact Altera Literature Services at (888) 3-ALTERA or e-mail requests to lit\_req@altera.com. Technical literature is also available on the Altera world-wide web site and the Altera FTP site.

## Training Courses

Altera provides a variety of training courses that teach innovative and efficient design techniques. With these courses, customers can become more productive using the time-saving features of Altera's advanced comprehensive MAX+PLUS II development system, explore the design features of Altera's device families, and learn new skills to make the most of Altera products. Altera training courses are taught by Altera Applications Engineers. Small class sizes ensure that every student receives individual attention. Hands-on exercises with Altera devices and the MAX+PLUS II software reinforce lecture topics to maximize learning.

Altera's training program is divided into multiple courses that focus on various aspects of the Altera design environment. Course topics range from architecture and design labs to optimal hardware description language (HDL) usage. Training courses are offered on a regular basis at locations throughout the world. On-site training is also available. For more information about Altera's training courses, customers can contact their local Altera sales representative or the Altera Training Administrator at (408) 544-7000. Course descriptions, a schedule of training courses, and registration forms are available on Altera's web site at <a href="http://www.altera.com">http://www.altera.com</a>.

## Design Evaluations

Altera Applications Engineers and Field Applications Engineers can evaluate customer designs and recommend the most efficient design methods and the device(s) that will best fit customer needs. Altera will also estimate device performance. For more information, customers can contact their local Altera sales office.

# On-Site Support

Altera Field Applications Engineers are located around the world to provide on-site technical support. They are available to evaluate customer designs, demonstrate the MAX+PLUS II software, and provide on-site training. Customers can contact their local Field Applications Engineer by calling their local Altera sales office.

## Failure Analysis Service

Altera offers a Failure Analysis Service, which is designed to perform detailed analysis on suspected failing devices. Altera's Failure Analysis Service not only includes device examination, but also helps the designer troubleshoot device-related issues. Resolving an issue quickly, without requiring devices to be sent to Altera for analysis, helps the designer use Altera devices in your systems with greater ease. For more difficult issues, Altera will analyze the device to determine the cause of the failure. Altera will then inform the customer of the cause of the failure, as well as suggest ways to prevent the failure from occurring in the future.

To use Altera's failure analysis services, customers should contact their Failure Analysis Specialist (FAS). If customers are unsure of how to contact an FAS, call Altera Applications at (800) 800-EPLD or the local Altera sales office. If the FAS cannot resolve an issue immediately and device analysis is warranted, the FAS will issue an Evaluation Return Materials Authorization (ERMA) and send a Failure Analysis Kit. The ERMA number authorizes a customer to send devices directly to Altera for failure analysis. Altera will fax a confirmation upon receipt of the package. The initial production test results are faxed directly to the customer.

For more information on Altera's Failure Analysis service, contact the FAS or Altera at **fas@altera.com**.

# Revision History

The information contained in the *Technical Support from Altera Applications* version 5.01 supersedes information published in the *Technical Support from Altera Applications* version 5.0 in the **1998 Data Book**.

The *Technical Support from Altera Applications* version 5.01 contains the following changes minor textual, illustration, and style changes.

Copyright © 1995, 1996, 1997, 1998 Altera Corporation, 101 Innovation Drive, San Jose, CA 95134, USA, all rights reserved.

By accessing this information, you agree to be bound by the terms of Altera's Legal Notice.