

SmartDesign MSS

Watchdog Configuration

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Configuration Options

The SmartFusion Microcontroller Subsystem (MSS) provides a Watchdog timer peripheral that guards against system crashes by requiring that it is regularly serviced by the ARM Cortex-M3 or by a processor in the FPGA Fabric.

The actual behavior of the SmartFusion MSS WATCHDOG core must be defined at the application level using the *SmartFusion MSS Watchdog Driver* provided by Actel.

This document describes the ports that are available on the Watchdog core in the SmartDesign MSS Configurator. For more details about the MSS Watchdog hard peripheral, please refer to the [Actel SmartFusion Microcontroller Subsystem User's Guide](#).

Using MSS to Fabric Watchdog Interrupt port - You can have your FPGA fabric monitor the MSS watchdog interrupt signal. Click the **Use MSS to Fabric Watchdog Interrupt (WDINT)** checkbox to expose the WDINT port ([Figure 1](#)). This port is automatically promoted to the top level of the MSS Configurator Canvas so that it is available at the next level of hierarchy.



Figure 1 · WATCHDOG Configuration

Port Description

Table 1 · MSS WATCHDOG Port Description

Port Name	Direction	PAD?	Description
WDINT	OUT	No	This is asserted (if enabled) when a counter timeout occurs and interrupt (instead of reset generation) has been selected

Product Support

Actel backs its products with various support services including Customer Service, a Customer Technical Support Center, a web site, an FTP site, electronic mail, and worldwide sales offices. This appendix contains information about contacting Actel and using these support services.

Customer Service

Contact Customer Service for non-technical product support, such as product pricing, product upgrades, update information, order status, and authorization.

From Northeast and North Central U.S.A., call **650.318.4480**

From Southeast and Southwest U.S.A., call **650.318.4480**

From South Central U.S.A., call **650.318.4434**

From Northwest U.S.A., call **650.318.4434**

From Canada, call **650.318.4480**

From Europe, call **650.318.4252** or **+44 (0) 1276 401 500**

From Japan, call **650.318.4743**

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Fax, from anywhere in the world **650.318.8044**

Actel Customer Technical Support Center

Actel staffs its Customer Technical Support Center with highly skilled engineers who can help answer your hardware, software, and design questions. The Customer Technical Support Center spends a great deal of time creating application notes and answers to FAQs. So, before you contact us, please visit our online resources. It is very likely we have already answered your questions.

Actel Technical Support

Visit the [Actel Customer Support website \(www.actel.com/support/search/default.aspx\)](http://www.actel.com/support/search/default.aspx) for more information and support. Many answers available on the searchable web resource include diagrams, illustrations, and links to other resources on the Actel web site.

Website

You can browse a variety of technical and non-technical information on Actel's [home page](http://www.actel.com), at www.actel.com.

Contacting the Customer Technical Support Center

Highly skilled engineers staff the Technical Support Center from 7:00 A.M. to 6:00 P.M., Pacific Time, Monday through Friday. Several ways of contacting the Center follow:

Email

You can communicate your technical questions to our email address and receive answers back by email, fax, or phone. Also, if you have design problems, you can email your design files to receive assistance. We constantly monitor the email account throughout the day. When sending your request to us, please be sure to include your full name, company name, and your contact information for efficient processing of your request.

The technical support email address is tech@actel.com.

Phone

Our Technical Support Center answers all calls. The center retrieves information, such as your name, company name, phone number and your question, and then issues a case number. The Center then forwards the information to a queue where the first available application engineer receives the data and returns your call. The phone hours are from 7:00 A.M. to 6:00 P.M., Pacific Time, Monday through Friday. The Technical Support numbers are:

650.318.4460

800.262.1060

Customers needing assistance outside the US time zones can either contact technical support via email (tech@actel.com) or contact a local sales office. [Sales office listings](#) can be found at www.actel.com/company/contact/default.aspx.



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