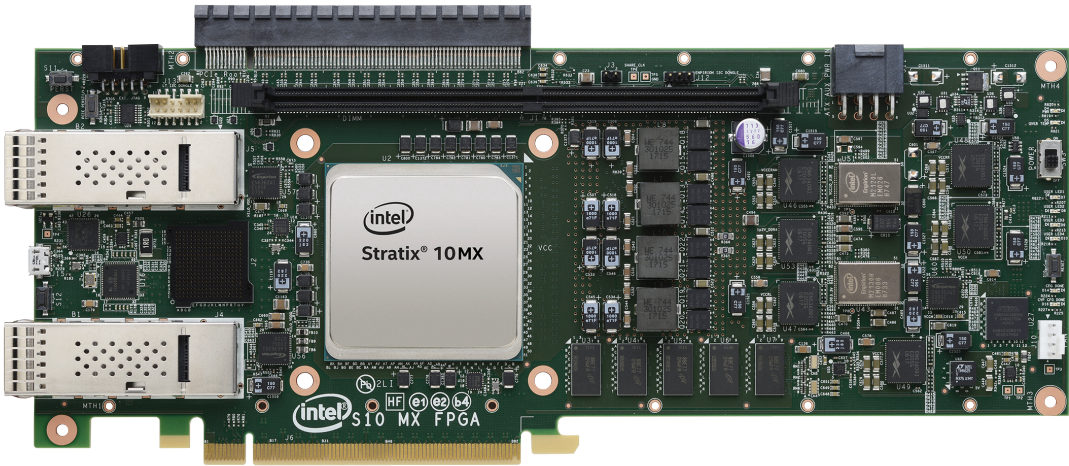# Intel® Stratix® 10 MX FPGA Development Kit

A Complete Development Environment

Intel® Stratix® 10 MX Board Features

- Intel Stratix 10 MX FPGA
  - To obtain the exact device part number, refer to the development kit website.

- Embedded Intel FPGA Download Cable II for FPGA programming/ debugging

- PCI Express® (PCIe®)
  - 1X Gen3 x16 Root port
  - 1X Gen3 x16 End port

- 2X 100GE QSFP28 ports

- 288-pin DIMM socket supporting DDR4 and DDR-T module

- 16GB on-board DDR4 SDRAM

- Micro USB port

What's in the Box

- Intel Stratix MX FPGA development board

- 1X USB cable micro

- 1X DDR4 DIMM memory card

- 1X 250W Power Adapter

- Quick Start Guide

Available Resources

The following software and tools are available for download:

- Documentation

- Schematics and design files

- Intel Stratix 10 MX FPGA Development Kit User Guide

- Golden System Reference Design User Manual

- Design and development tools

- Intel Quartus® Prime Pro design software

- Design examples

You can download the kit installer directly from
www.intel.com/content/www/us/en/programmable/products/boards_and_kits/dev-kits/altera/kit-s10-mx.html

Verify Basic Operation

Using the BTS

The BTS interface allows you to verify most of the components on your board. All design files for the BTS are included in the *<package root directory>\examples\board_test_system* directory.

BTS Interface

When you launch the **BoardTestSystem.exe** file in that directory, the screen shown in Figure 1 appears. To view each tab, select the design from the Configure menu. Each tab has options for interfacing to one or more of the board components. The Help menu provides further information about each test design.
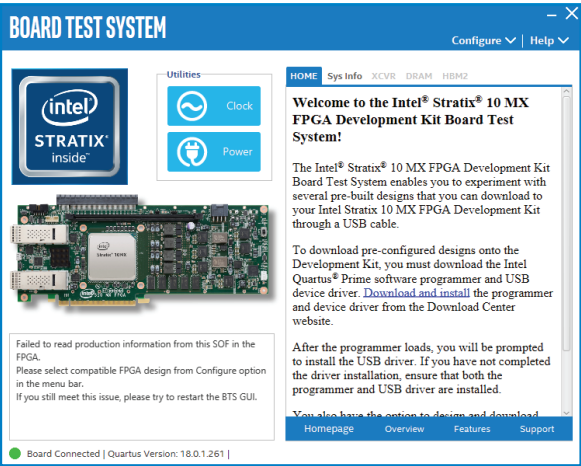
Figure 1. BTS Interface

Power Measurement Tool

The power measurement tool that is available via the buttons in the upper-left side of the BTS interface can be used to see how any design—including your custom design—affects the FPGA's power consumption.
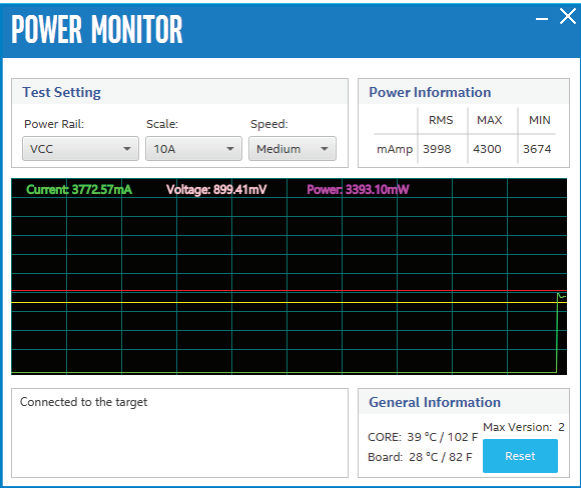

Figure 2. Power Measurement Tool

Related Links

Kit-specific Resources

- Intel Stratix 10 MX FPGA Development Kit
  www.intel.com/content/www/us/en/programmable/products/boards_and_kits/dev-kits/altera/kit-s10-mx.html

- Intel Stratix 10 FPGAs
  www.intel.com/content/www/us/en/products/programmable/fpga/stratix-10.html

General Design Resources

- Board Design Resource Center
  www.intel.com/content/www/us/en/programmable/support/support-resources/support-centers/board-design-guidelines.html

- Licensing
  www.intel.com/content/www/us/en/programmable/support/support-resources/support-centers/licensing.html

- Software Download Center
  www.intel.com/content/www/us/en/programmable/downloads/download-center.html

- Technical Support Center
  www.intel.com/content/www/us/en/programmable/support/support-resources.html

- Development Kits
  www.intel.com/content/www/us/en/programmable/products/development-kits/kit-index.html

- Intel FPGA Community
  forums.intel.com

Electromagnetic interference caused by any modification made to the kit contents is the sole responsibility of the user. This equipment is designated for use only in an industrial research environment.
Without proper anti-static handling, the board can be damaged. Therefore, use anti-static handling precautions when touching the board.

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