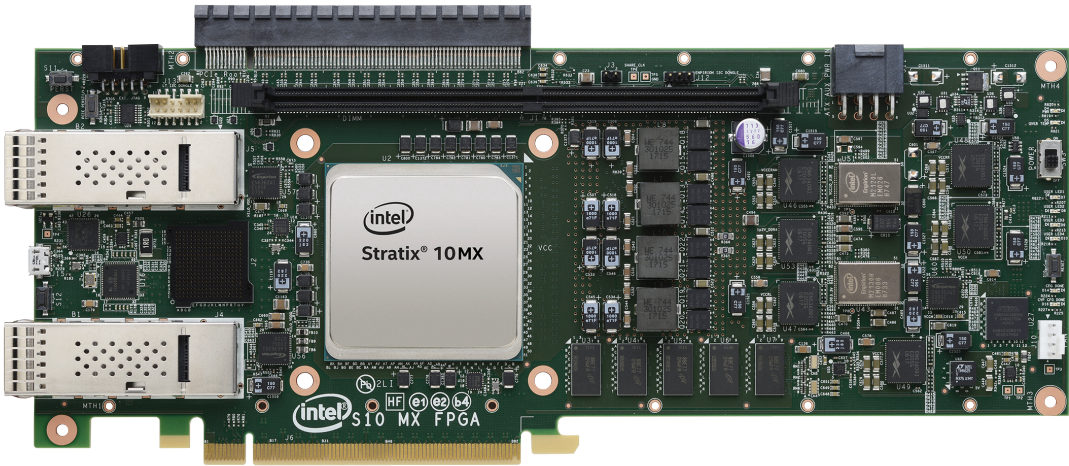


# Intel® Stratix® 10 MX FPGA Development Kit

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

## 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.

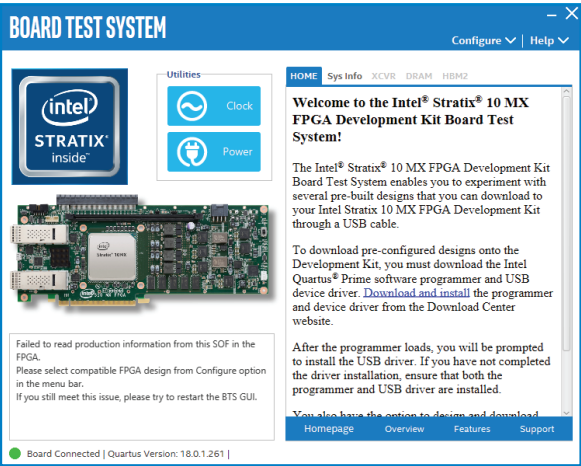


Figure 1. BTS Interface

### 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.

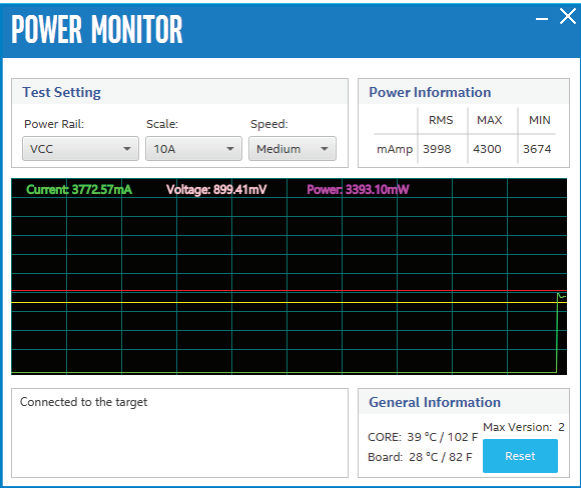


Figure 2. Power Measurement Tool

## 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](http://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](http://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](http://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](http://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](http://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](http://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](http://www.intel.com/content/www/us/en/programmable/products/development-kits/kit-index.html)
- Intel FPGA Community  
[forums.intel.com](http://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.



FCC NOTICE: This kit is designed to allow:

- (1) Product developers to evaluate electronic components, circuitry, or software associated with the kit to determine whether to incorporate such items in a finished product and
- (2) Software developers to write software applications for use with the end product. This kit is not a finished product and when assembled may not be resold or otherwise marketed unless all required FCC equipment authorizations are first obtained. Operation is subject to the condition that this product not cause harmful interference to licensed radio stations and that this product accept harmful interference. Unless the assembled kit is designed to operate under part 15, part 18 or part 95 of this chapter, the operator of the kit must operate under the authority of an FCC license holder or must secure an experimental authorization under FCC Part 5 of CFR Title 47.