High Speed Flash Demo Board User Manual

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1 Target

The High-Speed SPI Flash Demonstration Board features a high-speed SPI-based flash memory chip that can communicate over SPI at up to 50 MHz. Specifications for the SPI flash memory chip can be found on the manufacturer's website. Below you will find the part number and a link to online resources for the part.

Please note that the sites that the links point to are not maintained by Total Phase and thus may change without notice. For the latest information about these targets, please visit our website: https://www.totalphase.com/.

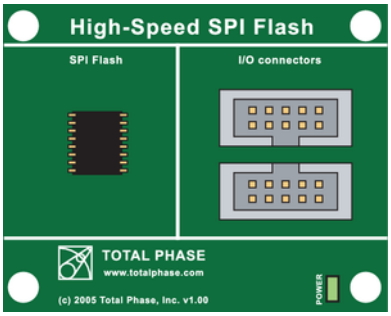


***Figure 1** : Schematic of the High-Speed SPI Flash Demonstration Board*

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1.1 SPI Flash Memory

W25Q32JV
32 Mbit, Low Voltage, Serial Flash Memory With 50 MHz SPI Bus Interface
(Winbond)
https://www.winbond.com/hq/product/code-storage-flash-memory/serial-nor-flash/?__locale=en&partNo=W25Q32JV

2 Connectors

There are two connectors on the High-Speed SPI Flash Demonstration Board. These connectors can be used connect up to two devices. For example, a Cheetah SPI Host Adapter can be connected to the board to interface with the SPI Flash Memory and a Beagle I^2C/SPI Protocol Analzyer can also be attached to monitor the bus.

These two connectors are connected together pin-for-pin with the exception of SS2 (Pin 1) and SS3 (Pin 3).

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2.1 Powering the Activity Board

To power the High-Speed SPI Flash Demonstration Board, the Cheetah or Aardvark adapter must be configured to send target power to the board. This can be accomplished via the Rosetta Language Bindings, the Aardvark Control Center Software or the Cheetah GUI Software. When powered-on, the board's POWER LED will be lit.

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2.2 Cross Connecting Aardvark and Cheetah Adapters

When cross connecting two adapters, the board must be powered on. Otherwise, results may be unpredictable. If you experience problems, please make sure that the Power LED on the board is lit.

3 Examples

Sample C code for the Cheetah SPI Host Adapter can be freely downloaded from the Total Phase website. While not all the examples will work with the High-Speed SPI Flash Demonstration Board, the `flash.c` example code was specifically developed against this target. The examples package include a README.txt file with instructions on how to compile the examples.

4 Legal / Contact

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4.3 Contact Information

Total Phase can be found on the Internet at https://www.totalphase.com/. If you have support-related questions, please go to the Total Phase website. For sales inquiries, please contact sales@totalphase.com.

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