

Fusion Embedded Development Kit Quickstart Card

Kit Contents – M1AFS-EMBEDDED-KIT-2

Quantity	Description
1	Fusion Embedded Starter Kit board with M1AFS1500-FGG484 Fusion device
1	Low-cost programming stick (LCPS)
2	USB 2.0 A to Mini-B cables
1	5 V power pack and modular plugs for power supply

Note: Users are entitled to a free copy of Libero[®] SoC Gold Edition with unlimited renewals.





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Jumper Settings

Connect the jumpers using the default jumper connections below to enable the pre-programmed demo design to function correctly.

Jumper	Setting	Comment
JP10	Pin 1-2	Jumper to select either 1.55 V external regulator or Fusion 1.5 V internal regulator. Pin 1-2 = 1.5 V internal Pin 2-3 = 1.5 V external
J40 Pin 1-2		Jumper to select power source. Pin 3-2 = 5 V power block Pin 1-2 = USB

Running the Pre-Programmed Design

The design can be run in two modes: PIO mode and Webserver mode. On device reset, a menu appears on the organic light-emitting diode (OLED). The options available in this menu are:

- PIO SW2
- Webserver SW3

PIO Mode

Press SW2 to access the PIO main menu. The OLED displays the main menu options below. Use SW3 to step through individual readings.

- Multimeter mode (press SW2 once for Multimeter mode) Use the potentiometer (POT) to vary the input voltage.
- DAC mode (press SW2 two times for DAC mode) Use the POT to vary the input voltage.
- Auxiliary mode (press SW2 three times for Auxiliary mode) This mode allows external inputs to the board. Refer to the kit user's guide for more information.
- Self-Wakeup mode (press SW2 four times for Self-Wakeup mode)

All LEDs except for the green one will turn off. The Fusion device will then restart from the beginning with the Options menu.



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Webserver Mode

The Webserver demonstration can be run in two ways. If connected directly to the internet, it will use the local area network (LAN) with a dynamic host configuration protocol (DHCP) server; if connected only to a PC through a loopback cable, it will use the LAN without a DHCP server. Some features will not operate fully when using the loopback cable. Refer to the *Fusion Embedded Development Kit User's Guide* for more information.

Press SW3 to enter Webserver mode. The OLED displays a static internet protocol (IP) address for the board. The value will vary, but one example is shown below.



If the board is connected to the internet or connected through a loopback cable, you can open a web browser and enter the IP address shown on your OLED display. For the example above, enter:

http://192.168.0.155 (yours will be different)

This will open a web page and you can then step through various features:

POWER MATTERS MIAFS Embedded Webserver Demonstration			
Multi-meter	DAC		
VIT-Auxiliary	Text Terminal		
Waveform	Self-Wakeup		
Stock Ticker	Sleeping Stopwatch		
Real Time Data Display	Gadgets		

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Software and Licensing

Download and install the latest release of Libero[®] System-on-Chip (SoC) software from the Microsemi SoC Products Group website and register for your free Gold license. Then, install the most recent SoftConsole release to program and debug your processor-based application.

Libero SoC releases: www.microsemi.com/soc/download/software/libero

SoftConsole releases: www.microsemi.com/soc/download/software/softconsole

Documentation Resources

For further kit information, including user's guide, tutorial, and full design examples, refer to the Fusion Embedded Starter Kit page:

www.microsemi.com/soc/products/hardware/devkits_boards/fusion_embedded.aspx

Technical Support and Contacts

Technical support is available online at www.microsemi.com/soc/support and by email at soc_tech@microsemi.com.

Microsemi SoC Sales offices, including Representatives and Distributors, are located worldwide. To find your local representative visit www.microsemi.com/soc/company/contact.