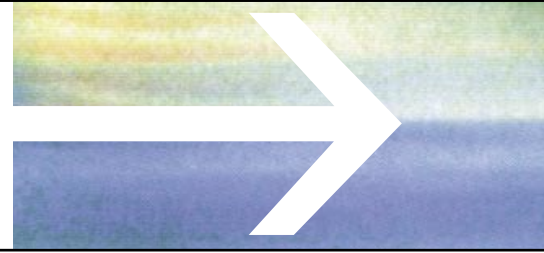


MICROCONTROLLER FACT SHEET

MCU FLASHKIT SERIAL PROGRAMMER



General Description

The MCU FlashKit Serial Programmer is a development tool for programming Fujitsu Flash Microcontrollers. It supports all Flash MCUs within the 16LX and FR families, and special devices in the 8L family, which can be programmed via a serial interface. Basically, the development kit supports both serial synchronous and serial asynchronous programming.

Asynchronous Programming Mode

In the asynchronous programming mode, the CPU is able to communicate directly with the PC through a standard RS232 interface. Therefore, if the RS232 line interface is provided on the user target board, and the CPU mounted on the board supports the asynchronous programming mode, no additional hardware is needed for programming the CPU. The PC can be connected directly to the target board via an RS232 line transceiver. The maximum communication speed is 38400Baud, so 128kBytes could be programmed in about 50 seconds.



MCU FlashKit Serial Programmer

Synchronous Programming Mode

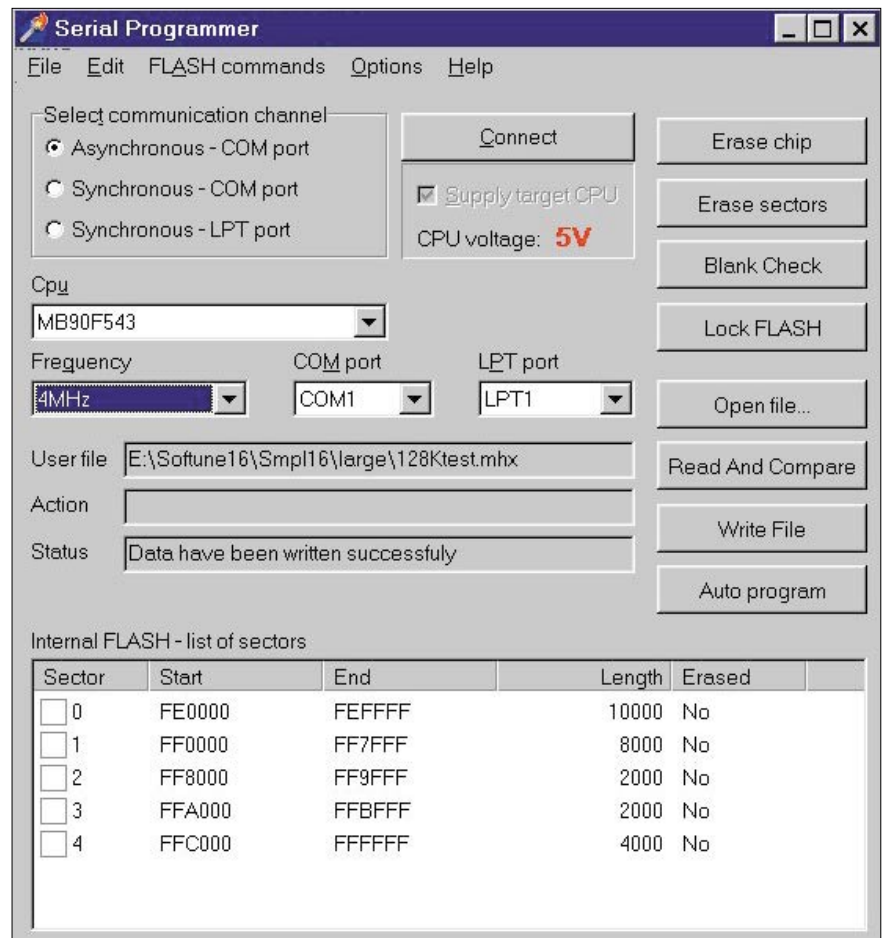
For the synchronous programming mode, the serial programming box must be used. Basically, this box converts the data from the RS232 port or parallel port to the synchronous data stream that is fed into the target system. No additional hardware is required on the user target board – the serial

programming box connects directly to the dedicated CPU pins. The biggest advantage of this mode is the high-speed communication. When using the PC parallel port, the effective communication speed is as high as 340kbits, so 128kBytes Flash could be programmed in about 15 seconds.

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General Software Features

- Supports 8L, 16LX & FR CPU families
- Support for both 5V and 3V CPUs is provided by the programmer
- Full Programmer Set is provided including CD-ROM, documentation and cables
- Windows front-end software for Windows 95/98/2000 and NT
- The serial programmer software supports both synchronous and asynchronous programming
- The synchronous programming is supported by a programmer box
- The programmer box can be connected to the PC using either the serial or parallel port
- The maximum target communication speed in synchronous mode is 500kbit/s
- Programmer firmware update is via an RS232 connection
- Programmer status LEDs
- Can be started using command lines/batch files
- Selectable source data format (binary, Motorola S-Record)
- Selectable path for user data
- Selectable path for binary files
- RS232 handshake lines can be used for auto programming mode
- Generating report files
- Full compare or CRC compare option in synchronous mode



FlashKit Software Start-screen

Supported Commands

- Blank Check
- Read memory
- Write and Verify memory
- Chip erase
- Erase specified sectors
- Lock Flash
- Automatic Programming/Run option by handling all necessary control signals
- Edit and Modify Flash memory

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