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Spec No: 002-05215

Spec Title: AN205215 - FLASHING MB91F109 WITH FLASH PROGRAMMING TOOL

Replaced by: None

AN205215

Flashing MB91F109 With Flash Programming Tool

This application note explains how to flash the MB91F109 with Flash-programming tool. The Tool runs under Windows 95/98 and NT. The Flashing is achieved serial asynchronous with the Uart0 of the MCU. With an oscillation frequency of 12.5MHz the baud rate of Uart0 is 9600.

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1 Introduction

This application note explains how to flash the MB91F109 with Flash-programming tool. The Tool runs under Windows™ 95/98 and NT. The Flashing is achieved serial asynchronous with the Uart0 of the MCU. With an oscillation frequency of 12.5MHz the baud rate of Uart0 is 9600.

2 Settings for Flash-programming

First the Mode pins have to be set to the required operation. The Table 2.0 shows the settings for the Mode pins. Uart0 of the MCU is used to enable the device to read the user application into Flash.

Table 2-0. Operation modes for MB91F109

MD0	MD1	MD2	P20	P21	Description
1	1	0	X	X	Run mode “Single Chip”
1	0	0	X	X	Run mode “External-ROM, External-BUS” 16 BIT
0	0	0	X	X	Run mode “External-ROM, External-BUS” 8 BIT
0	1	1	0	0	Flashing mode

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The figure 2.1 shows a screen shot of the Flash tool with the necessary settings to download the user application into Flash. There are two possibilities to use the Flash tool.

1. Use Download button:

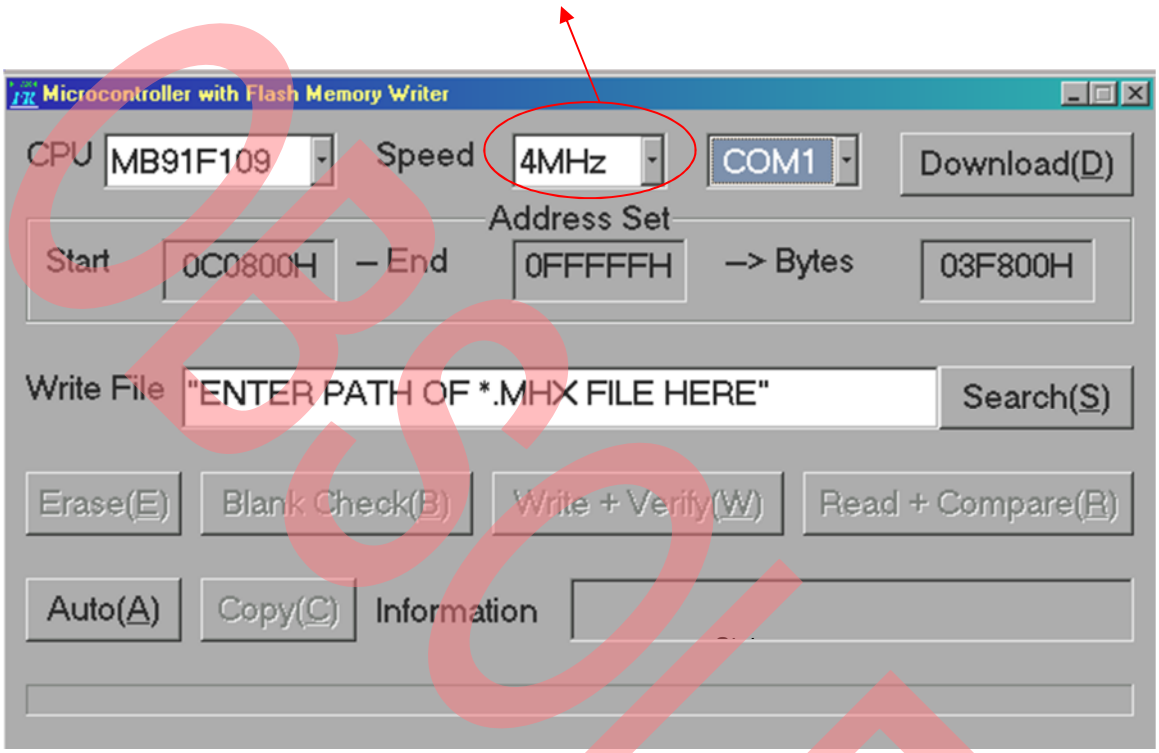
When using the Download button, a small program is downloaded to the MCU. This program initialises the Uart0 and starts the communication with the Flash tool. After successful download the buttons below (Erase, Blank Check, Write + Verify and Read + Compare) are active. Now this buttons have to be clicked on one after the other.

2. Use Auto button:

When using the Auto button everything described above is done automatically.

Figure 2-1. Screen shot of the Flash-programming tool

For 12.5MHz oscillation frequency



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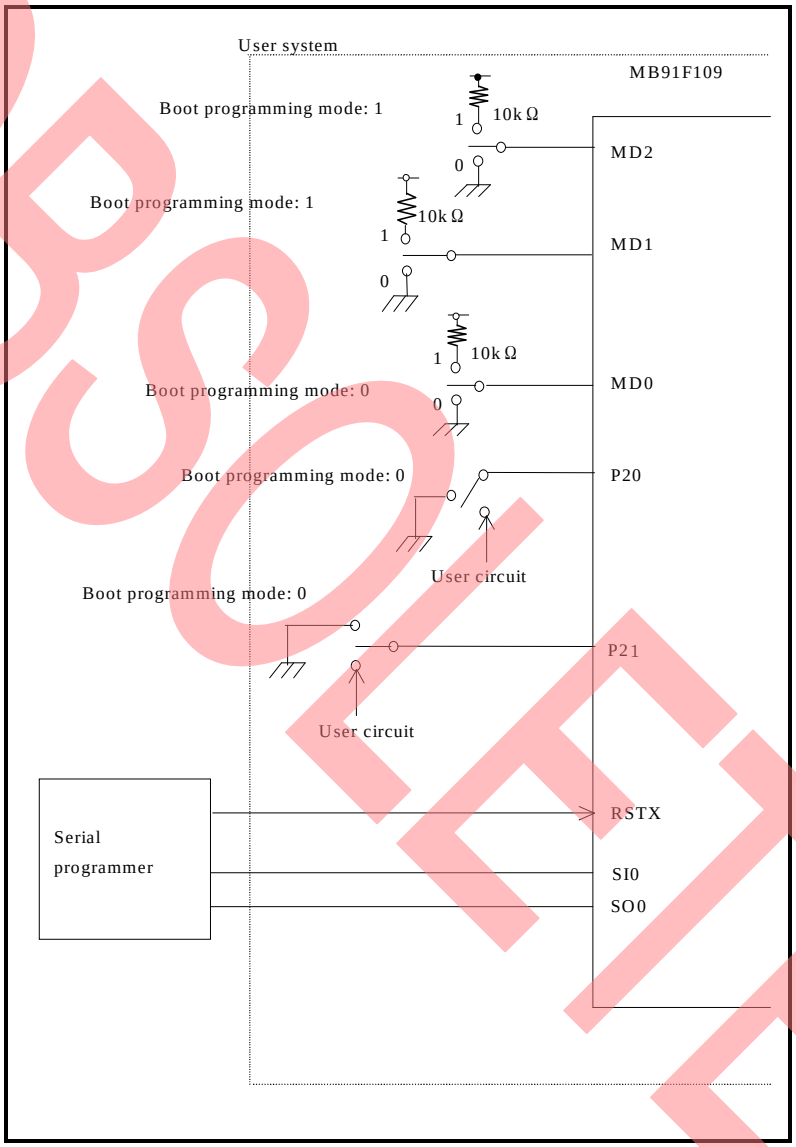
After successful Flashing the MCU switch the Mode Pins back to the required setting. The figure 2.2 shows the connection to the MCU via RS232.

Figure 2-2. Connection to the MCU (MB91F109)



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Document History

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Revision	ECN	Orig. of Change	Submission Date	Description of Change
**	-	Men	07/04/2000	V1.0, New Format, new updated version
*A	5082333	WOFR	01/12/2016	Converted Spansion Application Note “MCU-AN-391018-E-V10” to Cypress format
*B	5573001	WOFR	01/03/2017	Spec obsoleted, no further updates planned

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