DESIGN NOTE #019

Upgrading the Firmware on STK500

Introduction

This document descibes how to upgrade the firmware of the STK500 development board to the latest version. The upgrade is downloaded to the AT90S8535 device located between the card's two UART ports.

Requirements

The following is required in order to make the upgrade:

- AVR Studio® version 3.5x or later.
- The latest firmware upgrade available at the official Atmel website http://www.atmel.com or through other official channels (and distributed with AVR Studio®).
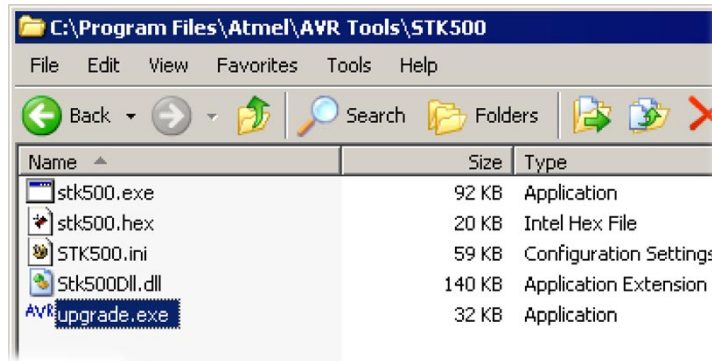- The STK500 kit with power supply and serial connections to the PC.

Procedure

The following procedure will carry out the firmware upgrade, assuming functioning connections with the development board and the AVR Studio software installed.

Please refer to Figure 3-1 in the STK500 manual to find the AT90S8535 master MCU, the STATUS LED, the PROGRAM button and the RS-232 CTRL port for programming.

1. Connect the RS232 CTRL port to the PC
2. Turn on the STK500 while holding down the PROGRAM button. The STATUS LED will be off to indicate firmware-programming mode.
3. Start the software upgrade found in the "..\STK500" folder.

Figure 1. Upgrade Application

4. Press the "Start Upgrade" button.

Figure 2. ATK500 Upgrade

5. Watch AVRprog successfully program the on-board AT90S8535.
6. Shut the STK500 off and then on.
7. Press "OK".

Figure 3. Confirm Upgrade