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# AT91SAM Update for EWARM

## 1. Introduction

The **AT91SAM Update for EWARM** enables you to **keep your IDE up-to-date** by integrating all the newer Atmel devices, software projects, and additional tools such as Flash loaders and device description files.

Atmel's software offering for its AT91SAM family of ARM® Thumb® microcontrollers is growing rapidly and is now available in convenient board-specific packages known as the "AT91 Software Packages". In addition, it is now being bundled directly in new IAR EWARM releases. However, as the software package release cycle is not synchronized with that of EWARM, you may miss out on new example projects or devices. The AT91SAM update for EWARM solves this issue.

This document explains exactly what you will find in the AT91SAM Update and how to install it.

## 2. Requirements

AT91SAM Update requires an installation of IAR® Systems Embedded Workbench® for ARM version 5 or newer.



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**AT91 ARM  
Thumb  
Microcontrollers**

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**Application Note**

6416A-ATARM-09-Jun-08



### 3. Contents

The AT91SAM Update will change the following components of your existing IAR EWARM 5 installation:

- Example projects for each board
- Flash loaders
- C-SPY device description files
- Device selection files

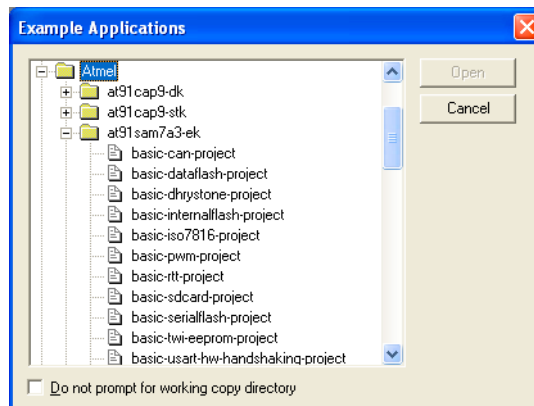
Note that this package will only alter Atmel files in your EWARM installation, other files are left unmodified.

#### 3.1 Example Projects

These are the same projects that are provided in the AT91 Software Package, with minor changes in the directory structure to better fit EWARM.

After installation, the projects will be accessible under the “Example Applications” item in the startup screen (show at EWARM startup or with “Help -> Startup screen...”). Choose “Atmel” from the manufacturer list, then choose your board. The list of supported examples will be displayed so you can easily clone the ones you are interested in.

**Figure 3-1.** Atmel Example Applications Directory Tree



In addition, the projects come with HTML documentation explaining what they do and how to use them. It will be located in the “ARM/examples/Atmel/documentation” subdirectory of your EWARM installation folder.

#### 3.2 Flash Loaders

Flash loaders are small programs that IAR EWARM uses to program the device before debugging. The AT91SAM Update includes Flash loaders (sources + binaries) to program the internal Flash for all boards. On some boards, additional Flash loaders are available to program other memories such as DataFlash®.

For more information on Flash loaders, please refer to [ARM IAR Embedded Workbench IDE User Guide](#).

### 3.3 C-SPY Device Description Files

The EWARM C-SPY debugger offers a particularly useful feature: in the Registers Window, the user can see the contents of peripheral registers in the chip. This functionality requires Device Description Files which provide the register mapping information for each board.

Installing the AT91SAM Update will add the latest .ddf files for all Atmel microcontrollers.

### 3.4 Device Selection Files

These files are used to tell EWARM which chips are available when configuring a project. As new Atmel devices get introduced regularly, the necessary files will be missing before a new EWARM version is released.

The latest device description files are included in the AT91SAM Update.

## 4. Installation

Simply launch the AT91SAM Update installer executable file. It will automatically detect if the patch is applicable to your version of IAR and if so, install it.

In addition, it will automatically backup all the files that it needs to modify. If you wish to revert to your previous configuration, simply uninstall the AT91SAM Update using the “Add/Remove Programs” tool available from the Windows® Control Panel.



## Revision History

Doc. Rev	Comments	Change Request Ref.
6416A	First issue	





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