

AT85RFD-07 Getting Started

User Guide





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Section 1

Introduction

The AT85RFD-07 Starter Kit is designed to give designers a quick start to develop code on the AT85C51SND3Bx as well as for prototyping and testing of new designs.

1.1 Atmel Registration

In order to keep posted on any new information concerning the AT85C51SND3Bx products (new firmware delivery, new tool version, ...) register at the following address:

<http://support.norway.atmel.com/bin/customer>

As soon as you are registered, edit your preferences and 'check' the 8051 radio button in the e-mail notification section.



Section 2

Package Download

The Nand Flash memory of the AT85RFD-07 is delivered pre-programmed with the demo firmware and AT85C51SND3B documentation. Since the board is manufactured in large quantities, the package may be out of date. It is strongly recommended to download the latest version of the AT85C51SND3B package from our web site.

The following paragraphs explain how to retrieve the package from the web site or from the Nand Flash memory.

2.1 Web Site download

1. Connect to:
<https://www.atmel-nantes.fr/.mp3/at85c51snd3b>
User Name is: **atmelmp3**
Password is: **snd3pass**
2. Copy the at85c51snd3b.zip file to your PC.
3. Unzip the package to your local hard drive.

2.2 Nand Flash Download

1. Connect the USB cable to the player and to a PC.

The demonstration firmware starts and enters the mass-storage application:



A new USB device is installed and a removable disk is mounted in the explorer:



Note: The disk letter may differ.

The AT85RFD-07 disk corresponds to the on-board Nand Flash memory.

2. Open the AT85RFD-07 disk, its content is as follows:

Name	Size	Type
Atmel		File Folder
Update		File Folder
Sample.mp3	1,252 KB	MP3 Format Sound
Sample.wma	9,501 KB	Windows Media Audio file

The Atmel directory contains the AT85C51SND3B package.
The Update directory is the location where to place the update package for the auto-
matic firmware upgrade feature (see firmware user's guide).

3. Copy the Atmel directory to your local hard drive.

2.3 Package Content The package content is the following:

Atmel	
at85c51snd3b	
at85dvk-07	 Development kit package
Doc	 Dev-kit user's guides
Firmware	 Link to dev-kit firmware
Hardware	 Hardware package
at85rfd-07	 Reference design package
Doc	 Ref-dsn user's guides
Firmware	 Link to ref-dsn firmware
Hardware	 Hardware package
Datasheet	 Link to datasheet on Atmel web site
Firmware	 Firmware packages
Doc	 Firmware user's guide & application notes
Tools	 Development tools
Font Generator	 Atmel font generator
In System Programming	 Atmel in system programming
On Chip Debug	 Atmel on-chip debug
Dongle	OCD dongle recovery tool
Flip	Flip tool for dongle upgrade
Keil	Keil debug drivers
Screen Generator	 Atmel screen generator
UMS-Drivers	 USB mass-storage drivers (Win98, Linux)
USB Bench	 Freeware USB bench32 tool
Training	 Training material
Hands-On	 Hands-on tutorial
Presentations	 Whole AT85C51SND3Bx presentations

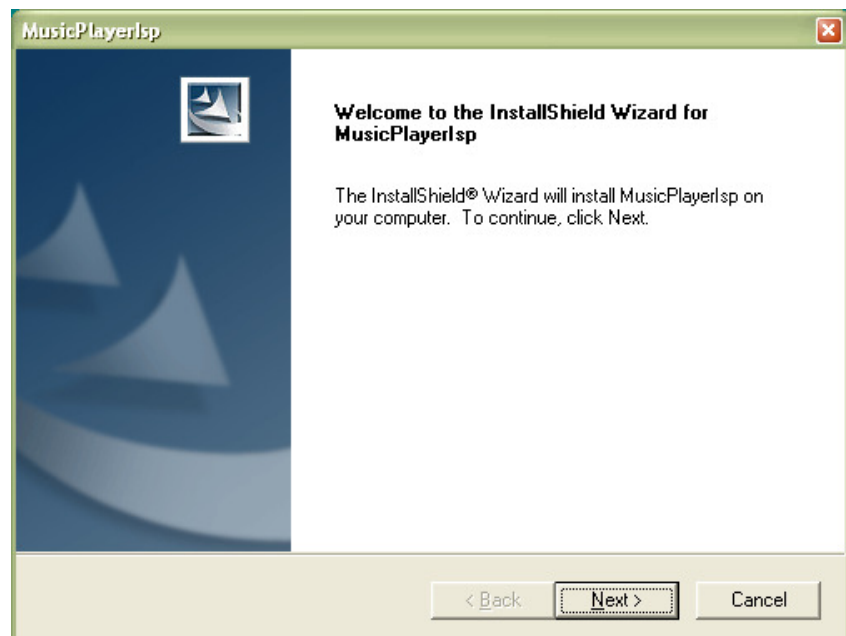




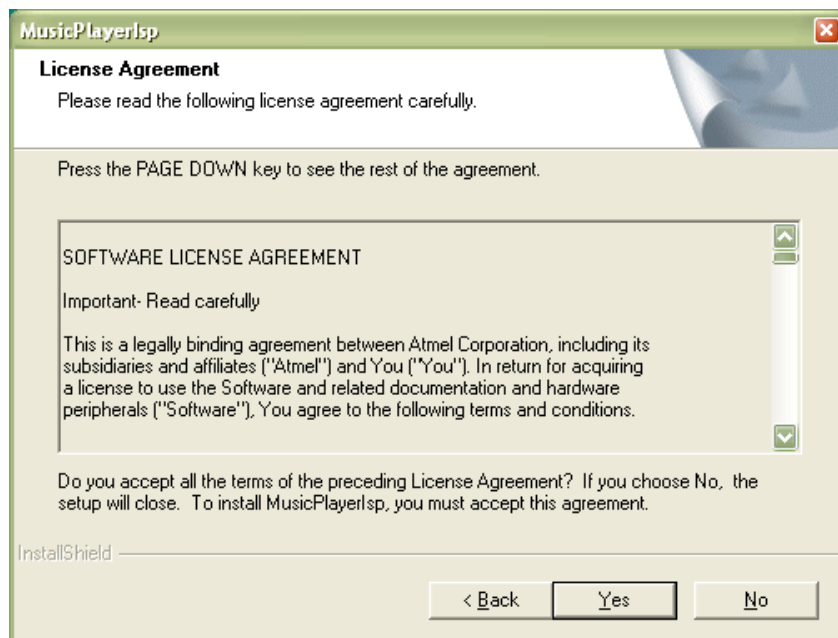
Section 3

Tools Install

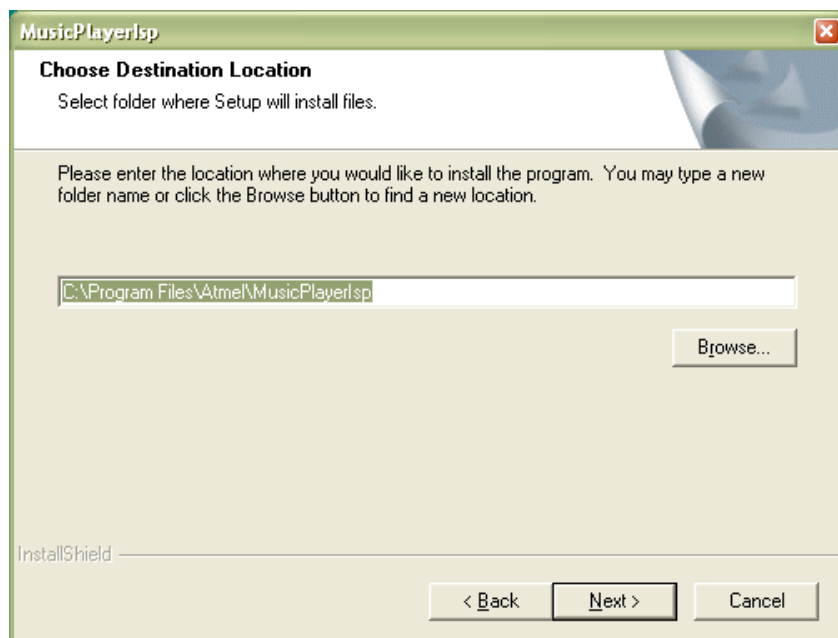
- | | | |
|--------------|------------------------------|---|
| 3.1 | Requirement | <p>Firmware has been developed and debugged using the Keil® μvision IDE. It is a project oriented fully integrated environment including debugger and advanced compiling and linking options like code banking.</p> <p>In order to start development with AT85C51SND3B, it is required that the Keil environment is installed on the PC.</p> |
| <hr/> | | |
| 3.2 | In System Programming | <p>The in system programming install consists of:</p> <ul style="list-style-type: none">■ Atmel MusicPlayerIsp Tool■ Sun™ Java Run time Environment if necessary |
| 3.2.1 | MusicPlayerIsp | <p>To install the Atmel MusicPlayerIsp, go to “Atmel\at85c51snd3b\Tools\In System Programming” directory and execute music-player-isp-X_Y_Z.exe; where X_Y_Z is the tool revision number.</p> <ul style="list-style-type: none">■ Press Next to proceed |



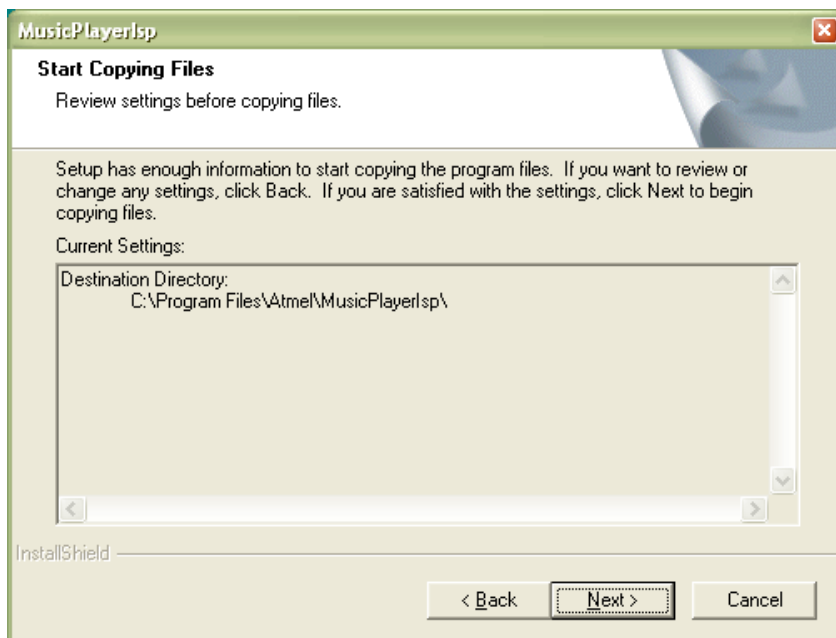
■ Read and accept the licence agreement



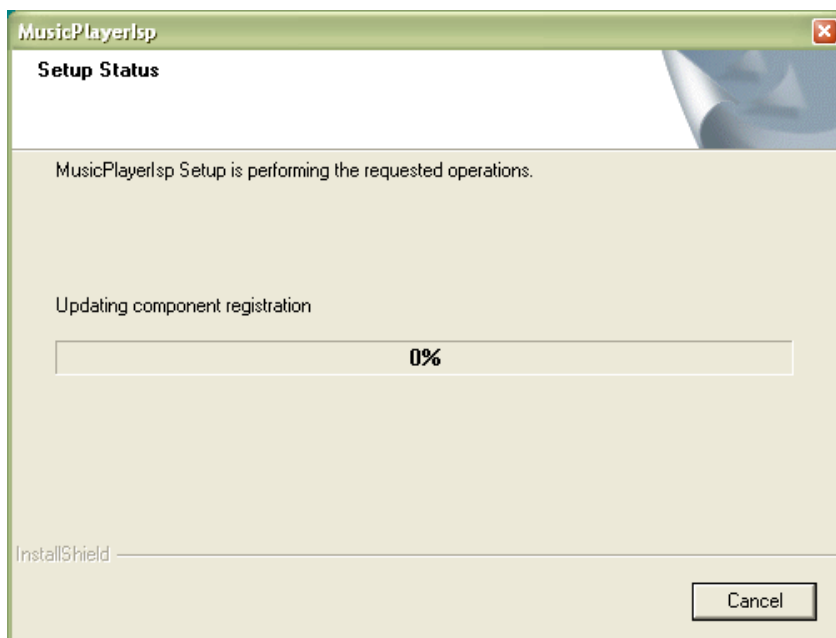
■ Select the installation directory (use the proposed default)



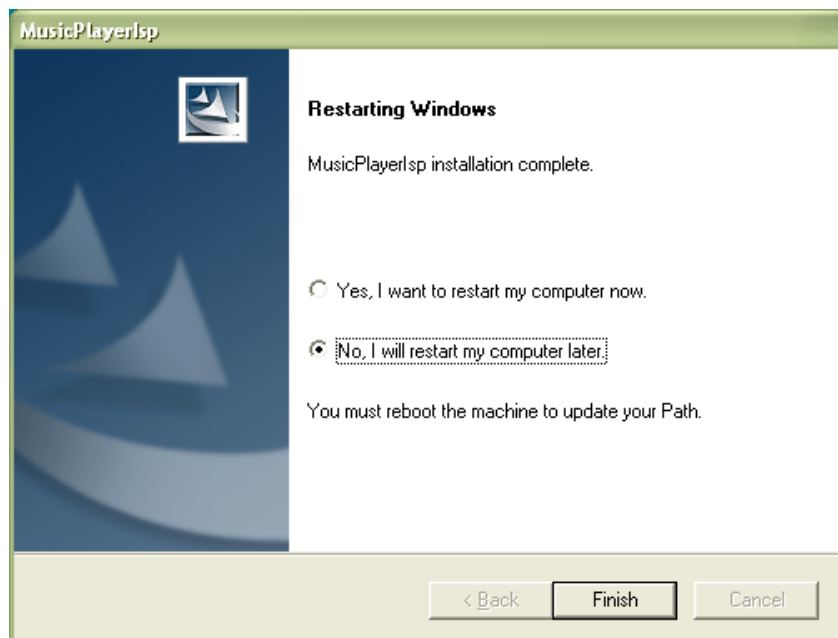
■ Validate the information



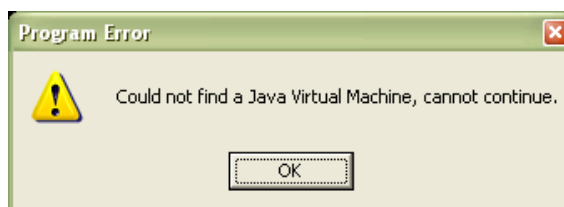
■ The installation starts...



- Do not restart your computer, exit the current session and log-in again



- Start MusicPlayerIsp to check Java runtime installation
- If the following pop-up appears, proceed with the SUN™ JRE installation



3.2.2 SUN JRE

To install the JRE, go to “Atmel\at85c51snd3b\Tools\In System Programming” directory and click on the “Sun JRE download” URL shortcut.

Follow the install procedure of the SUN JRE.

3.3 USB Devices Installation

In order to complete the installation, the AT85C51SND3B ISP USB device must be installed.

3.3.1 AT85C51SND3B ISP USB device

A USB removable mass-storage disk will be installed after plug-in.

- Press the ISP button
- Plug the board to a PC using the USB cable

A new USB device is installed and one removable disk is mounted in the explorer:

 ISP COM (J:)

Note: The disk letter may differ.



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www.atmel.com/literature

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