Creating a new connection to STR7xxF
in RealView Developer Kit (RVDK)

Introduction

This document is intended for users of the **RealView Developer Kit (RVDK) for ST**. It describes how to create a new connection to a microcontroller in RVDK. This information applies to all versions of RVDK for ST.

Note: *If you are creating a connection to a newly supported microcontroller, you must first install the necessary BCD and FME files. BCD and FME files for newly supported MCUs are available for free download at **www.st.com/mcu**. Installation instructions are provided in the "Read Me" that accompanies all new BCD and FME files.*

1 Hardware and software set up

With the RVDK software running on your host PC, connect your application board to your PC via the RVICE-ME in-circuit emulator. To do this:

1. Power on your application board.
2. Connect the RVICE-ME to your application board's JTAG connector.
3. Connect the USB cable between your RVICE-ME and your host PC.

Before you create the new connection to the microcontroller, ensure that the RVDK software does not already specify a connection to a target microcontroller. To do this, select *File>Connection>Connection control window*. None of the check boxes indicating device connections should be checked (see *Figure 1*).

Figure 1.   Connection control window
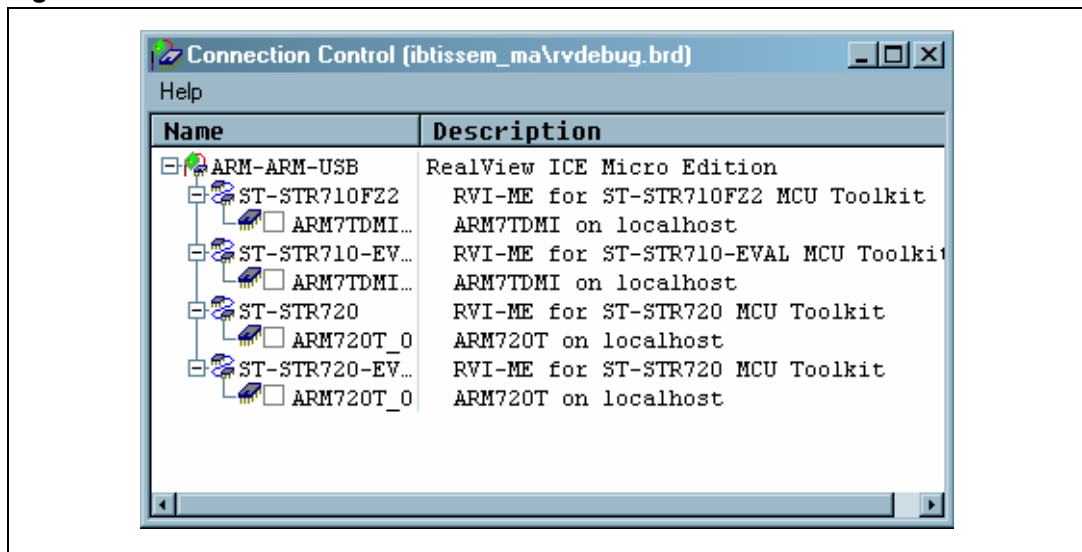
2 Creating the new connection

You will now create a new connection from one of your existing connections:

1. Select **Open file>Connection>Connection properties…** The **Connection Properties** window appears (see *Figure 2*).

2. Click on one of the available connections. For example, in *Figure 2*, the user has selected *CONNECTION=ST-STR720, which will be used to create a connection for STR730.

Figure 2.   Select an existing connection in Connection Properties
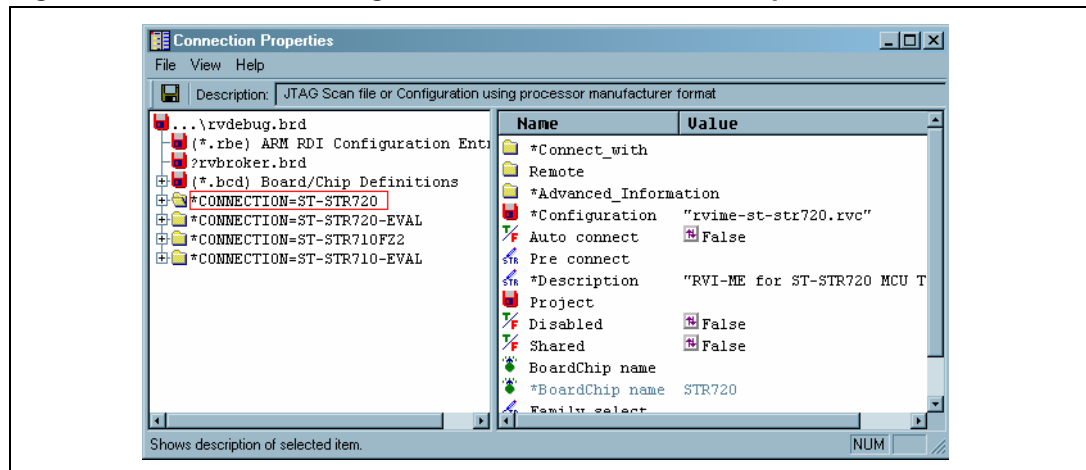
3. Right click on the connection and choose **Make new** in the contextual menu (*Figure 3*).

Figure 3.   Make a new connection
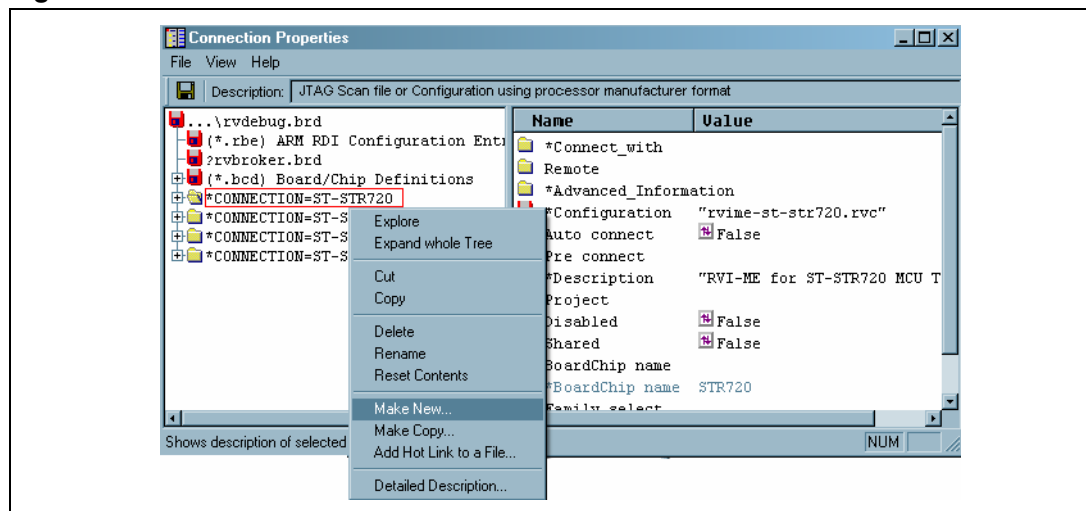
The **Group Type/Name selector** window shown in *Figure 4 on page 4* will appear.

4. Select **Connection-JTAG Scan file or Configuration using processor** (this is the default)

5. Change the name of the connection in the **Group Name** field to indicate the microcontroller that you want to connect to. In *Figure 4*, the user is renaming an ST-STR720 connection to ST-STR730.
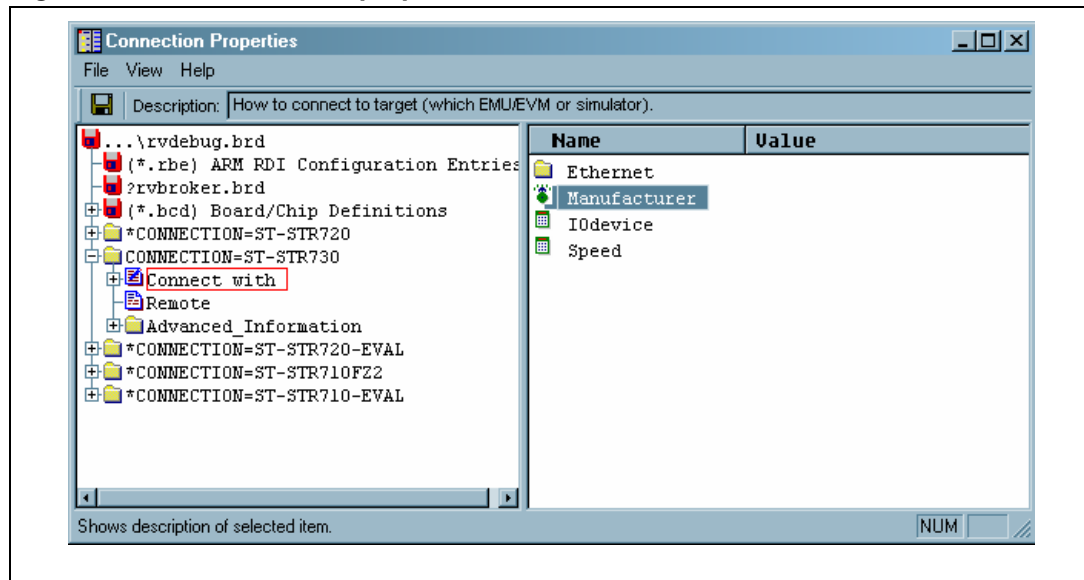
6. Click **OK**.

Figure 4.   Group Type/Name selector window
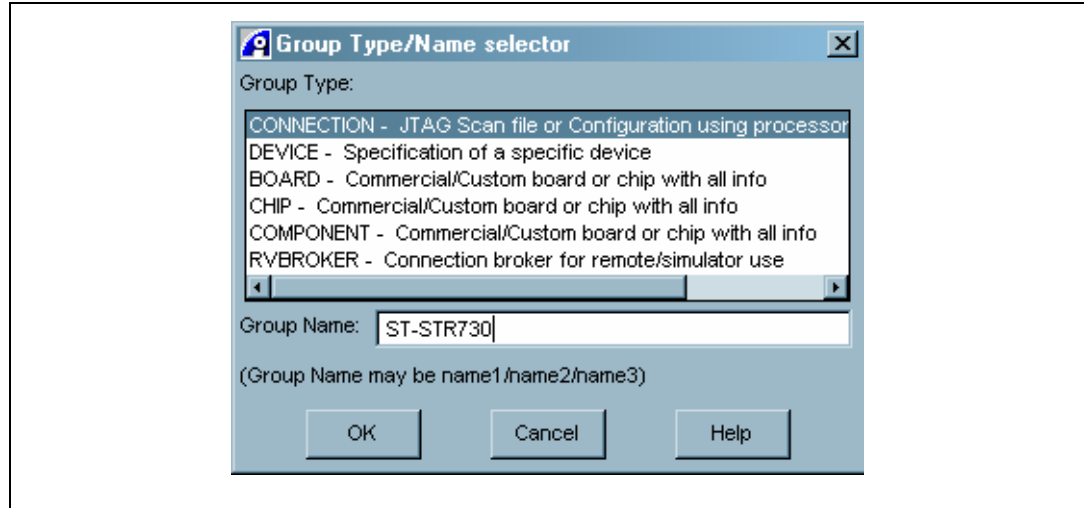
In the **Connection properties** window you will find the new connection ST-STR730.
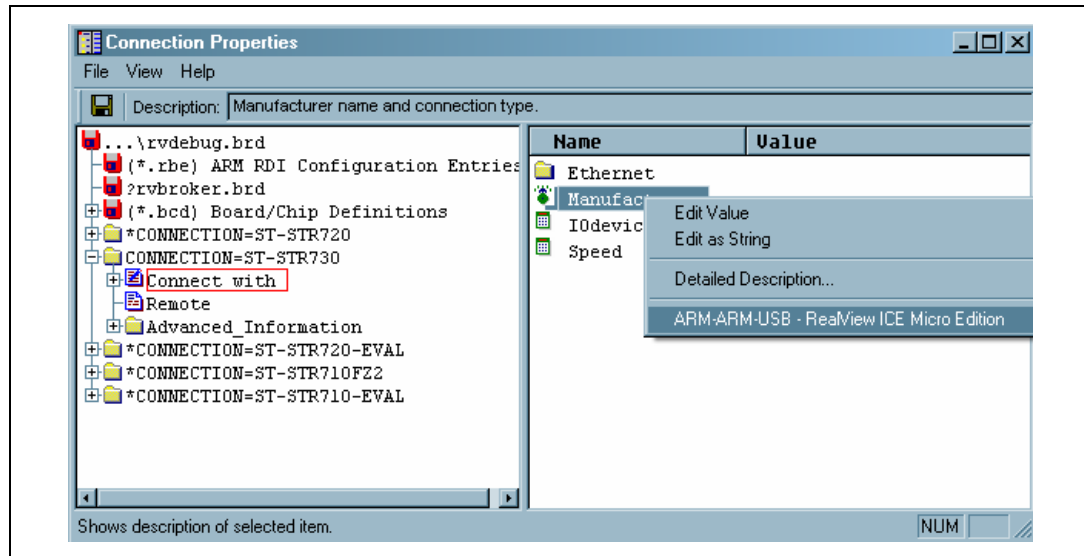
7. Click to expand the connection ST-STR730.

8. Click on **Connect with item** as shown in *Figure 5*.

Figure 5.   Set connection properties

9. In the right panel right click on the **Manufacturer** item and choose **ARM-ARM-USB-RealView ICE Micro Edition** from the contextual menu (see *Figure 6 on page 5*).

Figure 6. Specify the manufacturer

10. Expand the item **Advanced Information>Default**, as shown in *Figure 7*.

11. In the right panel change Endianess to **Little endian**. By default it is set to Big endian.

Figure 7. Set endianess
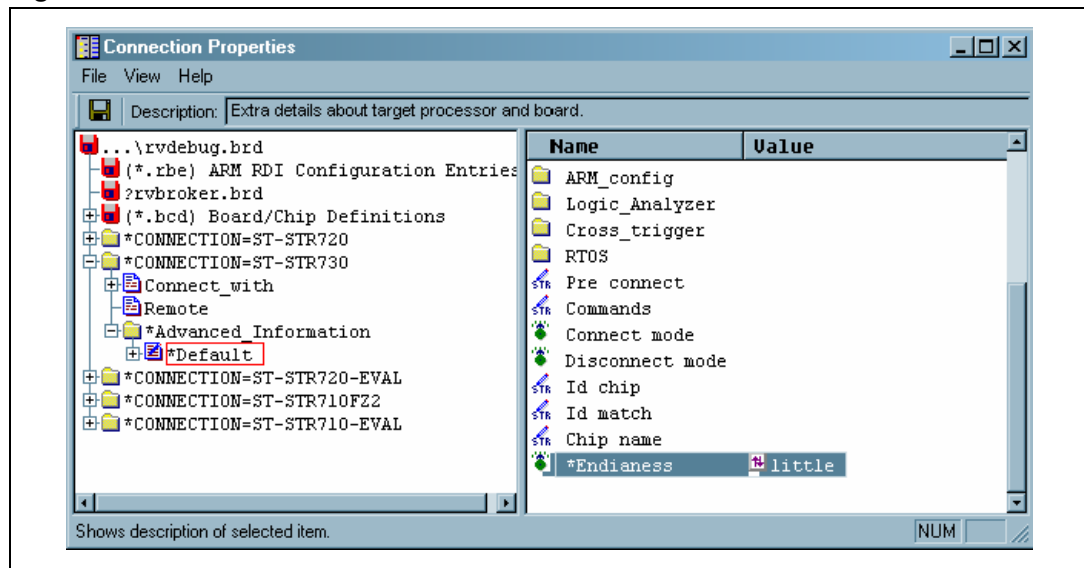
Note: *For the following steps you must already have copied the BCD files for the new microcontroller to the appropriate RVDK directory. This is described in the "Read me" document provided with all BCD file downloads from ST. BCD files should be copied to [Install directory]\ARM\ RVD\Core\1.7\380\st\win_32-pentium\etc if you are using RVDK 2.1.*

12. Click on **CONNECTION=ST-STR730**.

13. In the right panel, right click on **BoardChip name** and select the new device to connect to (in this case the STR730), as shown in *Figure 8*.

Figure 8.   Select the new device
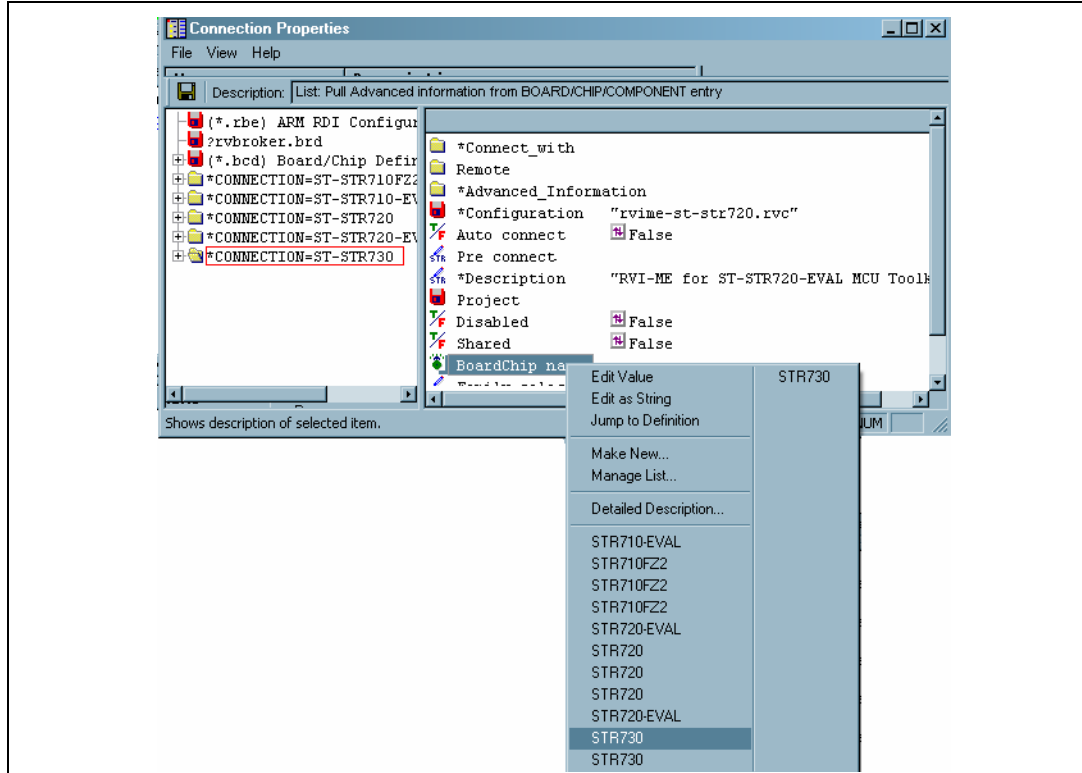
Note: *There may be multiple menu entries for a device. You should select the first occurrence of the device name in the list.*

14. Save the connection properties and then close the **Connection properties** window.

15. Select **File>Connection>Connect to the target**. The **Connection control** window will appear.

16. Click to expand the connection the new connection (in the example ST-STR730), the **List selection** window will appear (see *Figure 9*.).

Figure 9.   Specify configuration file

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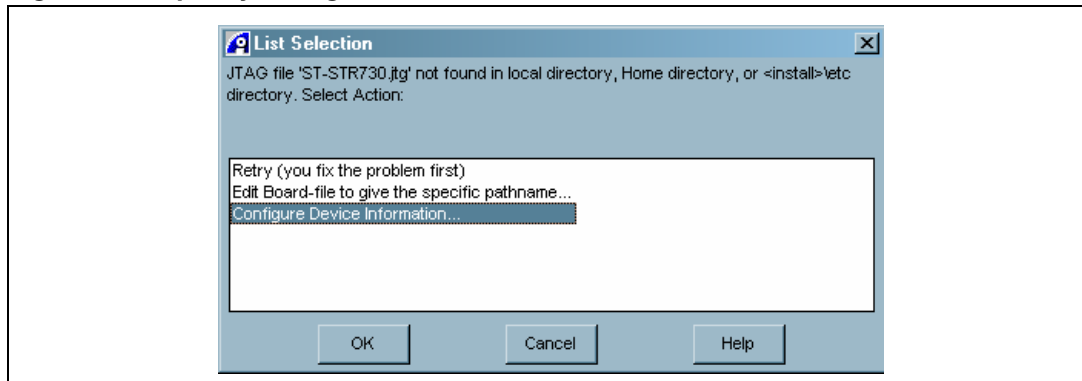
17. Select **Configure Device information** and click **OK**. The prompt that is shown in *Figure 10* will appear, notifying you that a configuration file for this connection has not been found.

18. Click on **Empty**.

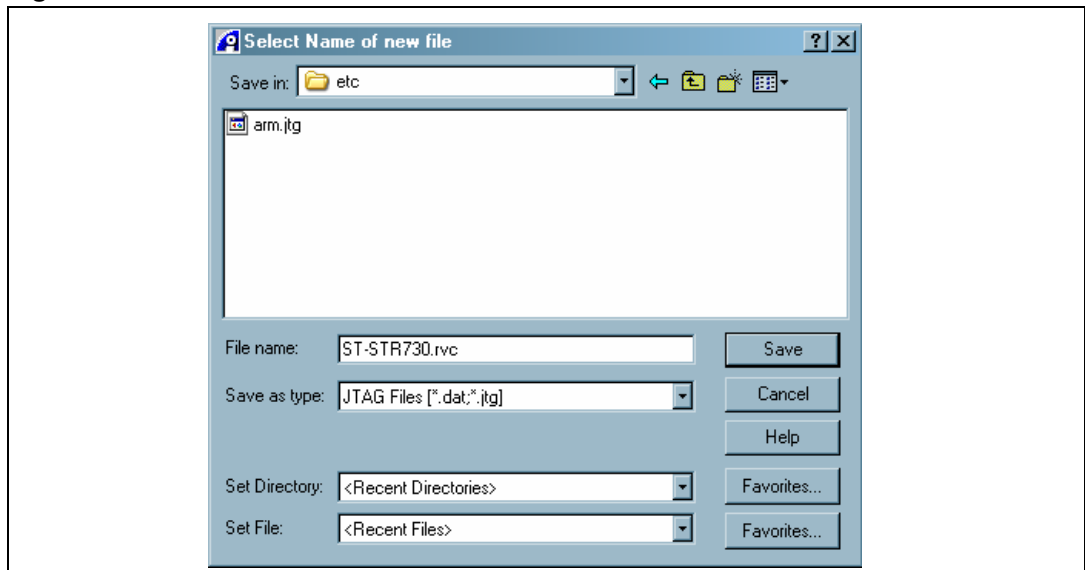**Figure 10.   Prompt: configuration file not found**
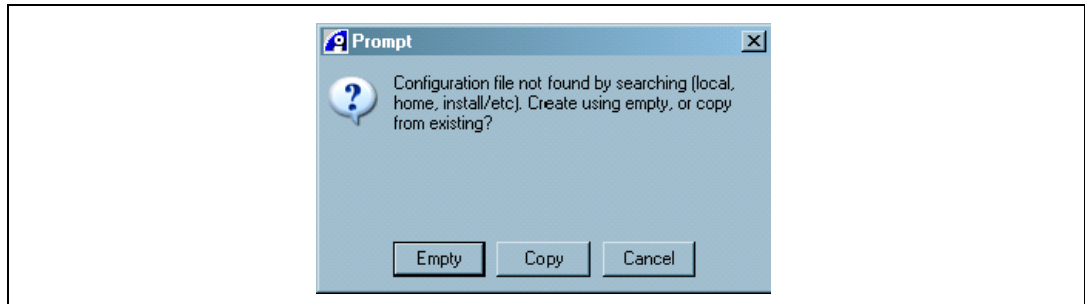
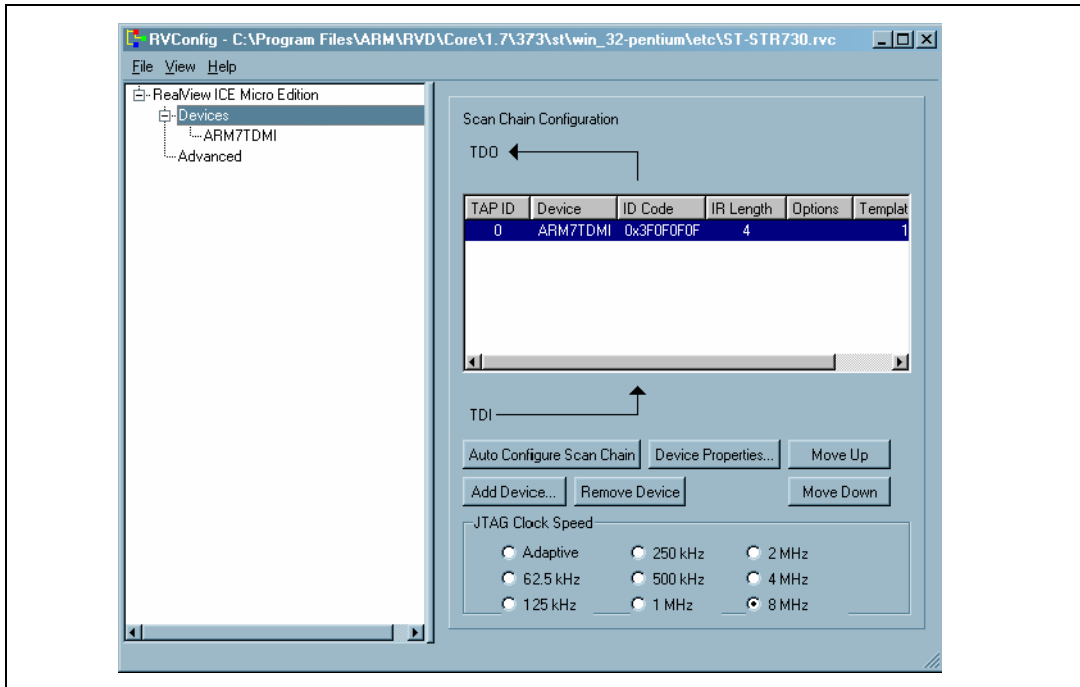The **Select Name of new file** window appears (see *Figure 11*).

19. Specify the install directory where the connection file will be saved ([Install directory]\ARM\RVD\Core\1.7\380\st\win_32-pentium\etc) and select to use of the **.rvc** extension, as shown in *Figure 11.*

Figure 11.   Create new connection file

20. The **RVConfig window** will appear (see *Figure 12*).

Figure 12. RV configuration

21. Choose **Autoconfigure Scan Chain**. and RVDK will detect the ARM7TDMI core.
22. Save and then close the **RVConfig** window.

You have created the new connection.

Now, when you open the *Connection control* window and expand the ST-STR730 item, you will find the ARM7TDMI item (see *Figure 13*). You are now able to connect to the new device (STR730 in the example) and use the supporting BCD and FME files.

Figure 13. Connection control

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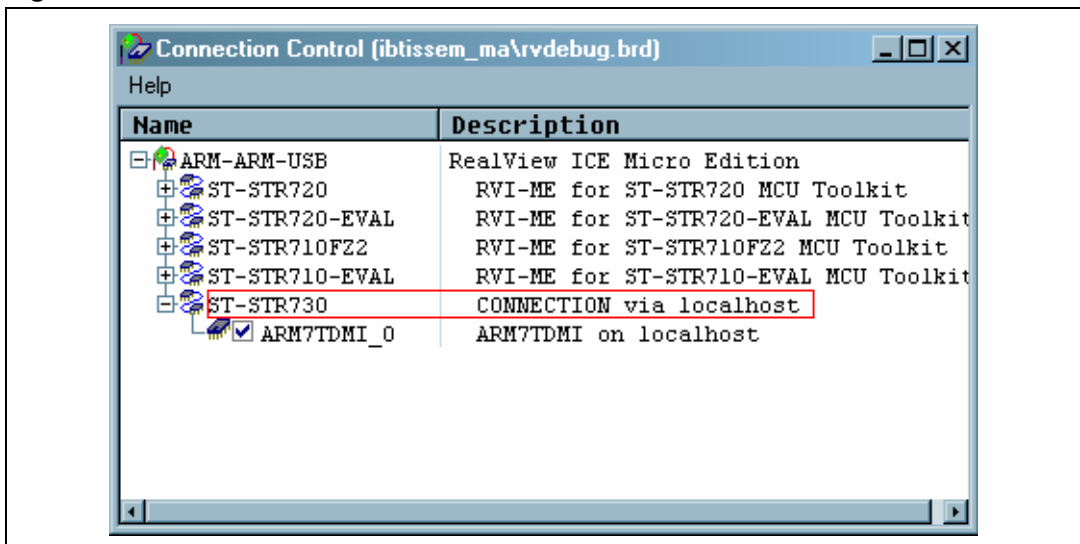
3 Revision history

Table 1. Document revision history

Date	Revision	Changes
4-Aug-2006	1	Initial release.
11-Jul-2007	2	Updated document title
28-Nov_2011	3	Corrected revision number

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