Navigation & Multimedia System & Architecture
XLoader for STA8088

1 Introduction

The aim of this document is to describe the usage of TeseoII XLoader. This tool is used to download a binary image into TeseoII supported memory. Depending on which board is used, this tool is able to program either SRAM, NOR and SQI memories.

2 Contents

2.1 Index

1 INTRODUCTION 1

2 CONTENTS 2

2.1 INDEX 2
2.2 LIST OF TABLES 3
2.3 LIST OF FIGURES 3

3 DOCUMENT MANAGEMENT 4

3.1 REVISION HISTORY 4
3.2 ACRONYMS 4
3.3 REFERENCE DOCUMENTS 4

4 XLOADER USAGE 5

4.1 PLATFORM BOX 5
4.2 LOADING SETTINGS BOX 5
4.3 TARGET DEVICE BOX 6
4.4 BINARY IMAGE SETTINGS 6

5 BOARDS SETTINGS 7

5.1 STA8088 EVB 7
5.2 STA8088 SDB 8

6 DISCLAIMER 10

2.2 List of Tables

Table 1: Revision history 4
Table 2. Acronyms 4
Table 3: STA8088 EVB switches configuration 8
Table 4: STA8088 SDB jumpers configuration 8

2.3 List of Figures

Figure 1: XLoader main window 5
Figure 2: STA8088 EVB layout extract 7
Figure 3: STA8088 EVB boot switches on SW1 8
Figure 4: STA8088 SDB layout extract 9

3 Document Management

3.1 Revision History

Rev	Date	Author	Notes
0.1	2011-04-21	G. De Angelis	First Draft
1.0	2011-05-11	F. Boggia	Layout revised

Table 1: Revision history

3.2 Acronyms

Keyword	Definition

Table 2. Acronyms

3.3 Reference Documents

None

4 XLoader usage

Here after you can find a brief description of every option available on TeseoII XLoader tool. Figure 1 shows the XLoader main window.

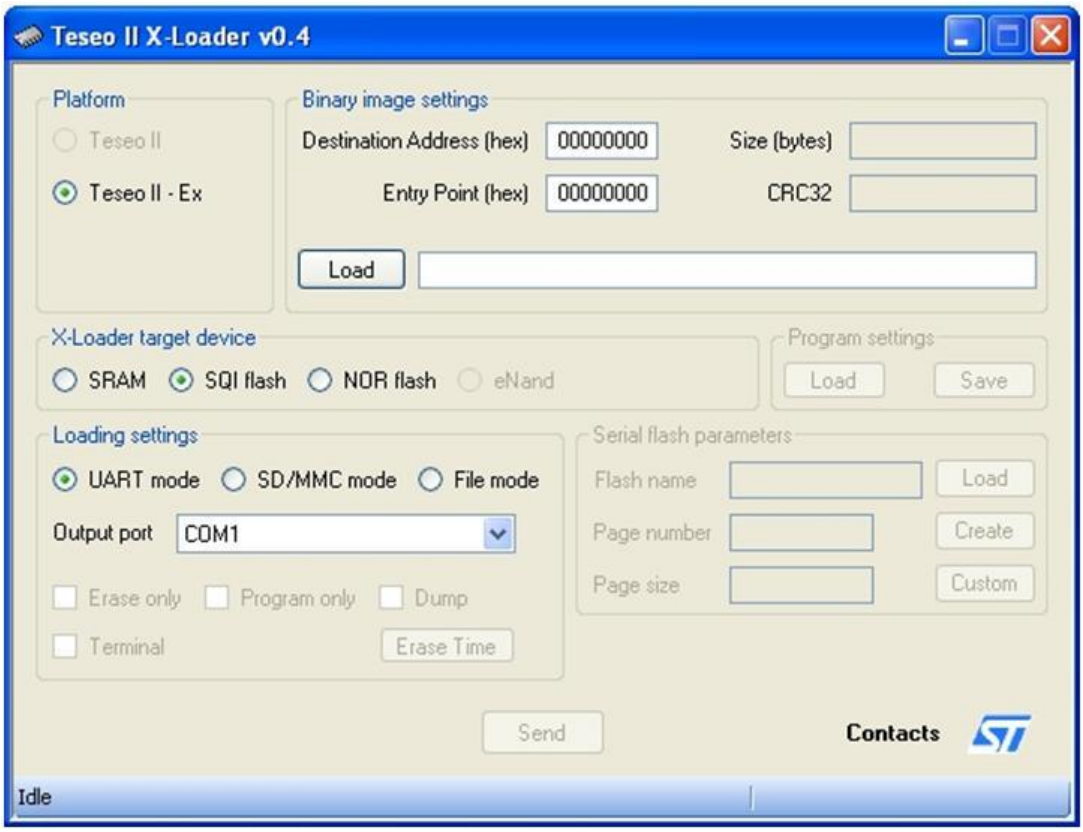

Figure 1: XLoader main window

4.1 Platform box

This box intended to support different TeseoII platforms. Up to now is unused.

4.2 Loading settings box

This box is to select the mode used to program TeseoII memory. XLoader is able to write the binary image both via serial COM port and SD/MMC card.

When UART mode is selected, tool communicates with TeseoII board using selected COM port. Before pushing Send button, TeseoII micro must be configured in SERIAL Boot mode and then switched on (or reset).

When SD/MMC mode is selected, tool writes selected binary image on the SD/MMC card connected to PC. Any SD is listed in the output port box. Press Send button to program SD card. In this mode there's no connection with TeseoII hardware. This card will be used to program TeseoII memory according with the option selected in the Target device box.

To correctly program TeseoII memory with this programmed SD card, Boot pins must be configured in SD Boot mode.

File mode option is still under testing and is used only for debugging purpose, so do not use.

Note: when SD/MMC mode is used, selected SD card is formatted, so be very careful during SD card selection.

4.3 Target device box

This box is used to select desired memory device where download binary image.

4.4 Binary image settings

Use load button to select binary image you want to download to TeseoII memory. Destination Address and Entry Point fields must be left unchanged.

5 Boards settings

This section describes how to configure ST boards for STA8088 to be used with XLoader.

5.1 STA8088 EVB

Figure 2 shows a detail of ST STA8088 EVB layout where the user can locate the boot switches, in blue box.

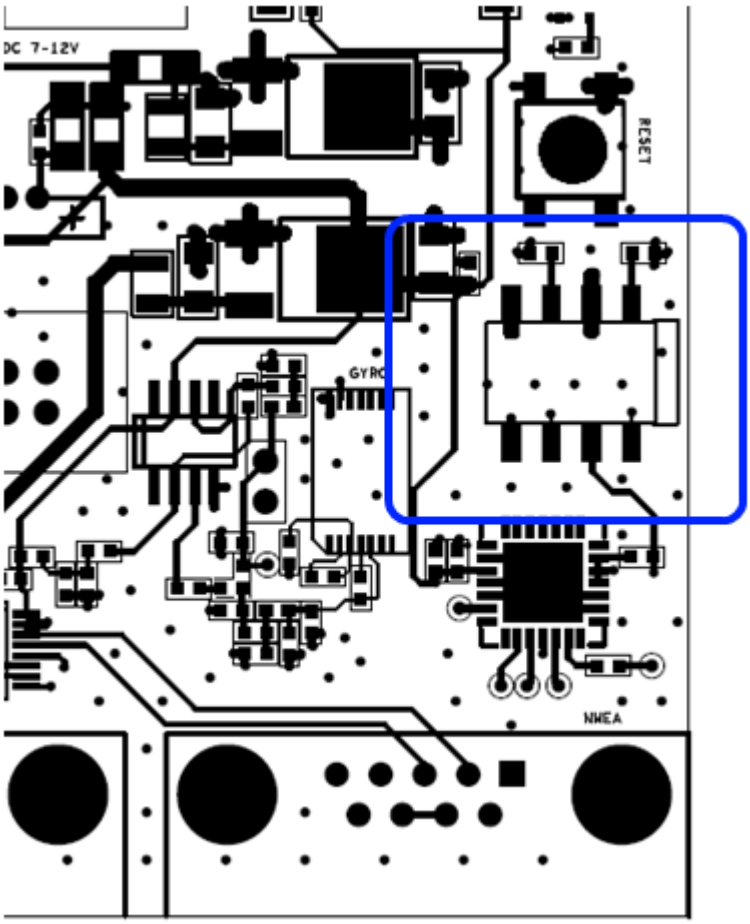

Figure 2: STA8088 EVB layout extract

Figure 3 shows which switches must be used for boot selection. Table 3 shows the possible combination of those switches.

The user must operate on these switches for the desired boot configuration. After that, RESET button must be pressed and released to activate the selection.

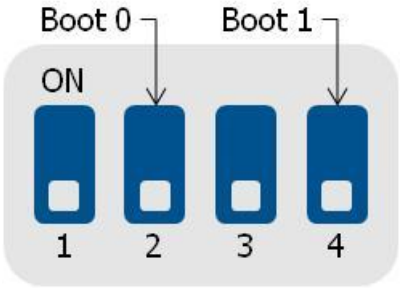

Figure 3: STA8088 EVB boot switches on SW1

Boot 0	Boot 1	Boot configuration
ON	ON	External memory
ON	OFF	UART
OFF	ON	SD card
OFF	OFF	SQI

Table 3: STA8088 EVB switches configuration

5.2 STA8088 SDB

Figure 4 shows a detail of ST STA8088 SDB layout where the user can locate the boot jumpers, in blue box. They are J15 and J16.

Table 4 shows the possible combination of these jumpers.

J15	J16	Boot configuration
2-3	2-3	External memory
1-2	2-3	UART
2-3	1-2	SD card
1-2	1-2	SQI

Table 4: STA8088 SDB jumpers configuration

The user must operate on these jumpers for the desired boot configuration. After that, RESET button must be pressed and released to activate the selection.

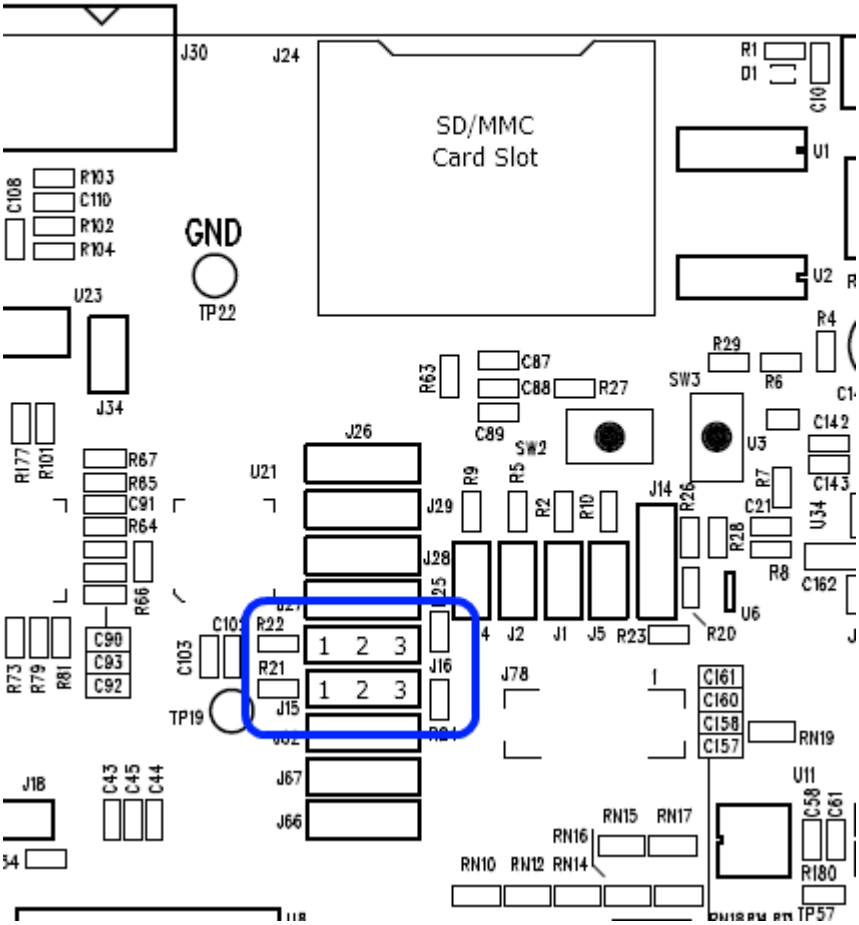

Figure 4: STA8088 SDB layout extract

6 Disclaimer

Please Read Carefully:

Information in this document is provided solely in connection with ST products. STMicroelectronics NV and its subsidiaries (“ST”) reserve the right to make changes, corrections, modifications or improvements, to this document, and the products and services described herein at any time, without notice.

All ST products are sold pursuant to ST’s terms and conditions of sale.

Purchasers are solely responsible for the choice, selection and use of the ST products and services described herein, and ST assumes no liability whatsoever relating to the choice, selection or use of the ST products and services described herein.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted under this document. If any part of this document refers to any third party products or services it shall not be deemed a license grant by ST for the use of such third party products or services, or any intellectual property contained therein or considered as a warranty covering the use in any manner whatsoever of such third party products or services or any intellectual property contained therein.

UNLESS OTHERWISE SET FORTH IN ST’S TERMS AND CONDITIONS OF SALE ST DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE USE AND/OR SALE OF ST PRODUCTS INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION), OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

UNLESS EXPRESSLY APPROVED IN WRITING BY AN AUTHORIZED ST REPRESENTATIVE, ST PRODUCTS ARE NOT RECOMMENDED, AUTHORIZED OR WARRANTED FOR USE IN MILITARY, AIR CRAFT, SPACE, LIFE SAVING, OR LIFE SUSTAINING APPLICATIONS, NOR IN PRODUCTS OR SYSTEMS WHERE FAILURE OR MALFUNCTION MAY RESULT IN PERSONAL INJURY, DEATH, OR SEVERE PROPERTY OR ENVIRONMENTAL DAMAGE. ST PRODUCTS WHICH ARE NOT SPECIFIED AS "AUTOMOTIVE GRADE" MAY ONLY BE USED IN AUTOMOTIVE APPLICATIONS AT USER’S OWN RISK.

Resale of ST products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by ST for the ST product or service described herein and shall not create or extend in any manner whatsoever, any liability of ST.

ST and the ST logo are trademarks or registered trademarks of ST in various countries.

Information in this document supersedes and replaces all information previously supplied.

The ST logo is a registered trademark of STMicroelectronics. All other names are the property of their respective owners.

STMicroelectronics group of companies

Australia - Belgium - Brazil - Canada - China - Czech Republic - Finland - France - Germany - Hong Kong - India - Israel - Italy - Japan - Malaysia - Malta - Morocco - Singapore - Spain - Sweden - Switzerland - United Kingdom - United States of America

http://www.st.com