

## Evaluation board for SPEAr310 embedded MPU

Data brief

### Features

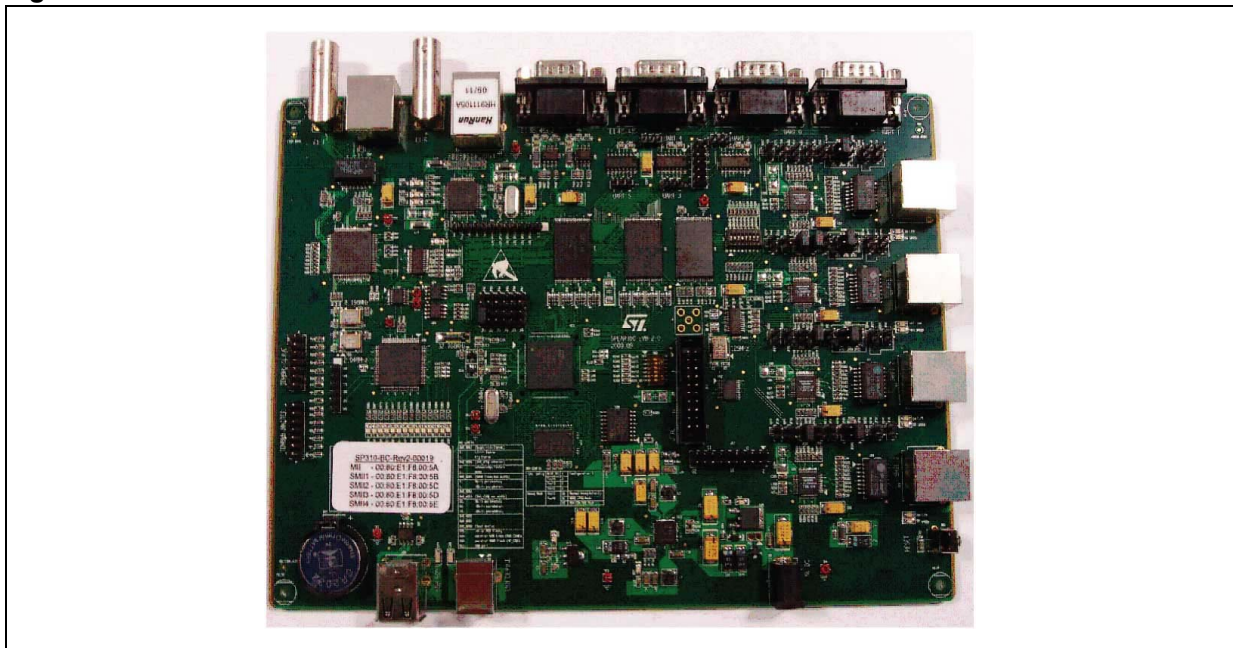
- SPEAr310 embedded MPU
- Up to 2 Gbits DDR 2333 MHz (std 128 Mbytes)
- Up to 1.5 Gbytes parallel NOR Flash (std 16 Mbytes)
- Up to 16 Mbytes serial NOR Flash memory (std 64 Mbytes)
- Up to 2 Gbits NAND Flash memory (std 64 Mbytes)
- 4 Kb Serial I<sup>2</sup>C EEPROM
- 4 Mb SPI Flash memory
- Two USB 2.0 full Host port channels
- One USB 2.0 high speed Device
- One 10/100 Ethernet port based on MII PHY
- Four 10/100 Ethernet port based on SMII PHY
- One E1, 2x BNC/RJ48(2.048 Mbits)
- Two HDLC RS485 DB9 ports (up to 4 MHz)

- One HDLC-TDM port (8 Mb, 128 TS)
- Six serial ports (up to 115 kbaud)
- 8 ADC channels (10-bit, 1 Msamples)
- 6 GPIOs
- JTAG debug port

### Description

The EVALSPEAr310 evaluation board allows you to quickly evaluate and debug software for the SPEAr310. It acts as a learning tool to rapidly get familiar with the SPEAr310 features and provides a starting point for the development of the final application board. It is equipped with most of the interfaces offered by the SPEAr310. The board is equipped with one MII Ethernet port, four SMII Ethernet ports, six RS232 ports, two HDLC based RS485 ports and one E1/TDM port. Memory devices included are NAND Flash, parallel NOR Flash, serial NOR Flash, and I<sup>2</sup>C EEPROM.

**Figure 1. EVALSPEAr310 evaluation board**



## Revision history

**Table 1. Document revision history**

Date	Revision	Changes
20-Sep-2010	1	Initial release.

**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.

© 2010 STMicroelectronics - All rights reserved

STMicroelectronics group of companies

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

[www.st.com](http://www.st.com)