

Atmel SAMA5D3 Xplained For Prototyping and Evaluating MPUs



Introducing the Atmel® SAMA5D3 Xplained

This evaluation kit is a fast prototyping and low cost evaluation platform for Atmel's SAMA5D3 ARM® Cortex®-A5 processor-based microprocessor design. It comes with a free of charge Linux distribution including Linux Kernel 3.10 (LTS), Linux Mainline and Yocto 1.5.1 support. Bare metal developers benefit from a complete C software package including many examples to get started fast. The board is also a perfect development platform for headless Android.

The board comes with a rich set of ready to use connectivity and storage peripherals and expansion headers for easy customization. A USB device connector can be used to power the board as well as programming and debugging it.

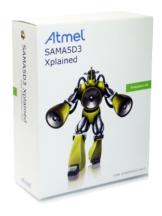


SAMA5D3 Processor

Atmel's ARM® Cortex®-A5 processor-based MPUs deliver that balance in a rich set of devices that meets your every industrial design need. The SAMA5D3 series is also ideal for wearable computing and mobile applications where low power and a small footprint are critical. By designing with the new Atmel® SAMA5D3 series, you alleviate any trade-offs in performance, power and ease of use.

www.linux4sam.org provides an easy starting point to open source Linux distributions for Atmel ARM®-based MPUs. The site contains reference sources and build instructions to set up a Linux system for Atmel's ARM926 and Cortex-A5 based MPU products including for the SAMA5D3 Xplained.

To learn more or order one, please visit: http://www.atmel.com/tools/SAMA5D3-XPLD.aspx



SAMA5D3 Xplained Key Features

- SAMA5D36 Cortex-A5 Microprocessor
- · 256MBytes DDR2
- 256MBytes NAND Flash
- LCD connectors
- Dual Ethernet (GMAC + EMAC) with PHY and connectors
- Three USB connectors (2 Host + 1 Device)
- 1x SD/eMMC and 1x MicroSD slots
- Expansions headers, Arduino R3 Shield compatible
- Power measurement straps



Atmel SAMA5D3 Xplained

For Prototyping and Evaluating MPUs

SAMA5D3 Series Key Features

| | SAMA5D31 | SAMA5D33 | SAMA5D34 | SAMA5D35 | SAMA5D36 |
|------------------|----------|--------------|------------------|----------|----------|
| | ~ | ~ | ~ | _ | ~ |
| 10/100 EMAC | ~ | _ | _ | ~ | ~ |
| 10/100/1000 EMAC | _ | ~ | ~ | ~ | ~ |
| DUAL CAN | - | - | ~ | ~ | ~ |
| ISI | ~ | ~ | ~ | ~ | ~ |
| USB | ~ | ~ | ~ | ~ | ~ |
| Secure Boot | ~ | ~ | ~ | ~ | ~ |
| Crypto | ~ | ~ | ~ | ~ | ~ |
| -40° to +105° C | - | - | - | ~ | ~ |
| 12x12 BGA | ~ | 2 — 0 | . - . | _ | _ |

Operating at 850DMIPS at under 150mW, the Atmel SAMA5D3 MPU is ideal for any high-performance, low-power and cost-sensitive industrial application. Think control panels, smart grid devices and bar code scanners—anything that needs high levels of connectivity, enhanced user interfaces, robust security or is battery powered.



High Performance

Designed to complement the power of the ARM Cortex-A5 core, the SAMA5D3 delivers 850DMIPS while consuming less than 150mW.



Low Power Consumption

The SAMA5D3 uses innovative techniques to push down power consumption in all modes.



Connectivity

The SAMA5D3 series embeds a wide range of advanced communication peripherals, making it ideal for bridges or gateways.



Enhanced User Interfaces

With the SAMA5D3, you can create the sleek and smooth user interfaces required by today's applications.



Security

The SAMA5D3 includes features to prevent cloning of your application as well as to secure communications and data storage.



Safety

The SAMA5D3 includes functions which ease the implementation of safety standards like IEC61508.



Low System Cost

With its high level of system integration, the SAMA5D3 provides maximum flexibility, while minimizing the need for expensive additional components.















Atmel Corporation

Atmel

1600 Technology Drive, San Jose, CA 95110 USA

Enabling Unlimited Possibilities®

T: (+1)(408) 441.0311

F: (+1)(408) 436. 4200

www.atmel.com

© 2014 Atmel Corporation. / Rev.: Atmel-45066A-SAM-A5D3-Xplained_E_US_022014

Atmel,® Atmel logo and combinations thereof, Enabling Unlimited Possibilities,® and others are registered trademarks or trademarks of Atmel Corporation or its subsidiaries. ARM,® ARM Connected® logo and others are the registered trademarks or trademarks of ARM Ltd. Other terms and product names may be the trademarks of others.

Disclaimer: The information in this document is provided in connection with Atmel products. No license, express or implied, by estopped or otherwise, to any intellectual property right is granted by this document or in connection with the sale of Atmel products. EXCEPT AS SET FORTH IN THE ATMEL TERMS AND CONDITIONS OF SEALES LOCATED ON THE ATMEL MEBSITE, ATMEL ASSUMES NO LIABILITY WHATSDEVER AND DISCLAMMS ANY EXPRESS, IMPLIED OR STATUTIONS WARRANTY OF MERCHANTABULITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRININGEMENT. IN NO EVENT SHALL ATMEL BE LIABLE FOR ANY DISCLAMMS ANY EXPRESS ATMEL ASSUMES NO LIABILITY FOR NON-INFRININGEMENT. IN NO EVENT SHALL ATMEL BE LIABLE FOR ANY DISCLAMMS AND STATE OF THE POSSIBILITY OF SUCH DAMAGES FOR LOSS AND PROFITS, BUSINESS INTERRUPTION, OR LOSS OF INFORMATION) ARISING OUT OF THE USE OR INABILITY TO USE THIS DOCUMENT, EVEN IF ATMEL HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, Atmel makes no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and products descriptions at any time without notice. Atmel does not make any commitment to update the information contained herein. Unless specifically provided otherwise, Atmel products are not suitable for, and shall not be used in, automotive applications. Atmel products are not intended, authorized, or warranted for use as components in applications intended to support or sustain life.

AMEYA360 Components Supply Platform

Authorized Distribution Brand:

























Website:

Welcome to visit www.ameya360.com

Contact Us:

Address:

401 Building No.5, JiuGe Business Center, Lane 2301, Yishan Rd Minhang District, Shanghai , China

> Sales:

Direct +86 (21) 6401-6692

Email amall@ameya360.com

QQ 800077892

Skype ameyasales1 ameyasales2

Customer Service :

Email service@ameya360.com

Partnership :

Tel +86 (21) 64016692-8333

Email mkt@ameya360.com