

[USER GUIDE](#)[GETTING STARTED](#)[SOFTWARE](#)[PRODUCT](#)[ON-BOARD DEVICES](#)[BOARD DESIGN](#)[RECOVERY PROCEDURE](#)[FLASH TOOL](#)**NEW AT91SAM7X-EK Kit NEW**

The AT91SAM7X-EK evaluation kit enables evaluation capabilities and development of applications running on an AT91SAM7X256/128. This guide focuses on the AT91SAM7X-EK board as an evaluation platf

The AT91SAM7X-EK package contains the following items:

- an AT91SAM7X-EK board,
- one A/B-type USB cable,
- one crossed serial RS232 cable,
- one RJ45 crossed Ethernet cable,
- universal input AC/DC power supply with US and EU plug adapter,
- one DVD-ROM containing summary and full datasheets, datasheets with electrical and mechanical characteristics, application notes and getting started documents for all development boards and AT91 microcontrollers. An AT91 software package with assembly listings is also provided. This allows the user to begin evaluating the AT91 Thumb® 32-bit microcontroller quickly.

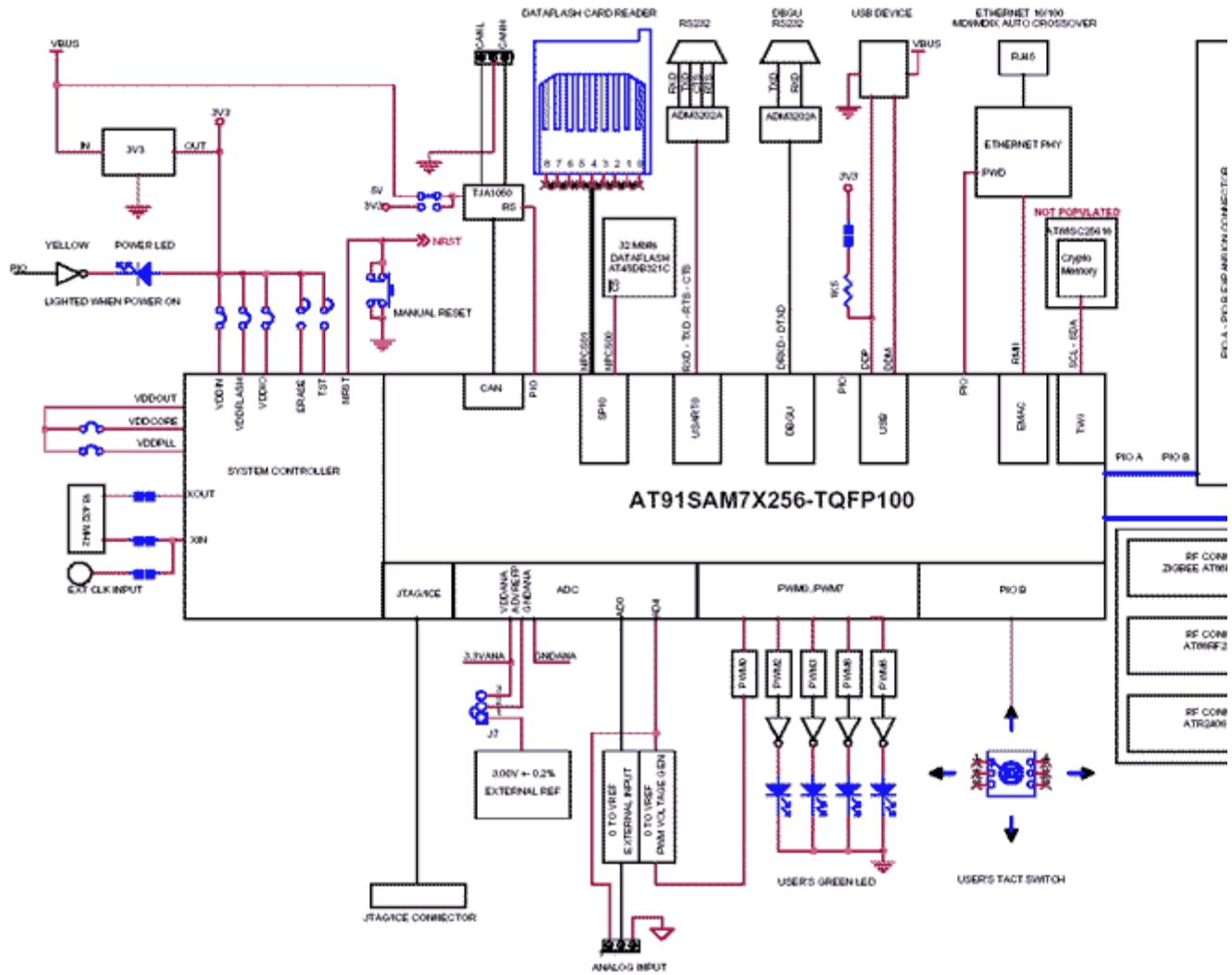
**NEW AT91SAM7XC-EK Kit NEW**

The AT91SAM7XC-EK evaluation kit enables evaluation capabilities and code development of applications running on an AT91SAM7XC256/128. This guide focuses on the AT91SAM7XC-EK board as an evaluation platform.

The AT91SAM7XC-EK package contains the following items:

- an AT91SAM7XC-EK board,
- one A/B-type USB cable,
- one crossed serial RS232 cable,
- one RJ45 crossed Ethernet cable,
- universal input AC/DC power supply with US and EU plug adapter,
- one DVD-ROM containing summary and full datasheets, datasheets with electrical and mechanical characteristics, application notes and getting started documents for all development boards and AT91 microcontrollers. An AT91 software package with assembly listings is also provided. This allows the user to begin evaluating the AT91 ARM® Thumb® 32-bit microcontroller quickly.

**Overview and Block Diagram****AT91SAM7X-EK**



**General Features:**

The board is equipped with an AT91SAM7X256 (100-pin LQFP Green package) together with the following interfaces:

- USB device port,
- DBGU serial communication port,
- RS232 serial communication port with RTS/CTS,
- JTAG/ICE debug interface connector,
- serial CAN communication ports,
- RMII Ethernet 100-base TX with auto MDIX capability,
- buffered analog input and PWM output,
- Power LED and general-purpose LEDs,
- DataFlash® card slot,
- expansion connector,
- Atmel 32 Mbit DataFlash® (AT45DB321C-CNC)

**On-board Devices - Datasheet -**

Device	Description
Memory	<ul style="list-style-type: none"> <li>● <a href="#">32-megabit Serial DataFlash®</a>.</li> </ul>

<b>Clock Circuitry</b>	<ul style="list-style-type: none"> <li>● <a href="#">Atmel Crypto Memory AT88SC25616.</a></li> </ul>
<b>Reset Circuitry</b>	<ul style="list-style-type: none"> <li>● 18.432 MHz standard crystal.</li> <li>● Reset push button.</li> </ul>
<b>Power Supply Circuitry</b>	<ul style="list-style-type: none"> <li>● <a href="#">Precision Micropower Low Dropout Voltage Reference LM4120.</a></li> <li>● <a href="#">Low-Dropout Regulator with Reverse Current Protection</a></li> </ul>
<b>User Interface</b>	<ul style="list-style-type: none"> <li>● 4 Green Leds connected to the PIO lines,??</li> <li>● One 4-direction button type joystick,</li> <li>● <a href="#">EMI FILTER AND LINE TERMINATION FOR USB UPSTREAM PORTS,</a></li> </ul>
<b>Serial Communication lines</b>	<ul style="list-style-type: none"> <li>● <a href="#">10/100 Mbps Fast Ethernet Physical Layer Single Chip Transceiver,</a></li> <li>● <a href="#">RS232 Transceiver,</a></li> <li>● <a href="#">High speed CAN transceiver</a></li> </ul>
<b>Analog</b>	<ul style="list-style-type: none"> <li>● <a href="#">Rail to rail, Low Power Operational Amplifiers</a></li> </ul>
<b>Socket</b>	<ul style="list-style-type: none"> <li>● DataFlash Card socket,</li> <li>● Male 9-point RS232 standard socket,</li> <li>● Standard Device USB connector.</li> </ul>
<b>JTAG/ICE</b>	<ul style="list-style-type: none"> <li>● 20-pin JTAG interface connector.</li> </ul>
<b>Discret devices</b>	<ul style="list-style-type: none"> <li>● <a href="#">P-Channel 2.5-V (G-S) MOSFET</a></li> </ul>

## Board Design

Description and link to File
<a href="#">PCB Design Project under Orcad (Orcad version 9.2.3)</a>
<a href="#">PCB Layout (Use free Allegro viewer)</a>
<a href="#">Bill Of Material (text format)</a>
<a href="#">Gerber Files</a>

## Software Package

Description	Package	C
<p style="text-align: center;"><b>AT91SAM7X128</b></p> <p><b>IAR Projects:</b> This zip files embeds all related AT91SAM7X128 software projects for IAR Embedded Workbench Software Development Tools.</p> <p><b>Keil Projects:</b></p>	<a href="#">Zip File</a>	-
<p style="text-align: center;"><b>AT91SAM7X256</b></p> <p><b>IAR Projects:</b> This zip files embeds all related AT91SAM7X256 software projects for IAR Embedded Workbench Software DevelopmentTools.</p> <p><b>Keil Projects:</b> This zip files embeds all related AT91SAM7X256 software projects for μVSION 3 Development Development Tools.</p>	none	-
	<a href="#">Zip File</a>	-
	<a href="#">Zip File</a>	-

## Recovery Procedure

Description	Attached Document

## Flash Tool

Utility Description	Attached Document
<p><b>Your Smart Flash solution:</b> SAM-BA™ Application is a Windows© Application Flashing through USB or serial port COM for all AT91SAM Flash Based Products. SAM-BA™ is an Atmel application and free of use. Download it and use it.</p> <p><b>A Multi Target Flash Tool:</b> SAM-PROG Application is a Windows© Application allowing Multi-Flashing solution through USB for all AT91SAM Flash Based Products. SAM-PROG is an Atmel application and free of use. Download it and use it.</p>	<p><a href="#">User Guide Getting Started</a></p> <p><a href="#">Getting Started</a></p>

## Other

Utility Description	Attached Document

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