
Features

- Accurate Real-time Emulation of AT91SC, AT90SC and AT05SC Secure Microcontroller Products
- Non-intrusive Emulation
- Breakpoint Capability on any Hardware Instruction or Address
- Emulation Allows Multiple Resets
- Real-time Variables
- Code Coverage
- 128-bit by 64K Deep Bus Trace
- Watch Points and Breakpoints
- Complex Triggering Capability
- External Triggering Ability
- Fast System Context Save and Retrieval
- Integrated User Help
- Hardware I/O Capability (USB, ISO, SPI & Contactless All Supported)
- Advanced Scripting Support

Note: Not all features are available on the first release of the system.

System Requirements

- A PC Running Windows® 95/98/2000 or Windows NT®
- C-Spy® Debugger from IAR Systems Installed (May be Obtained Directly from IAR Systems)

Overview

The ATV1 (Voyager), designed and manufactured by Atmel, provides a flexible emulation platform to support current and future Smart Card products. This platform has the intrinsic ability to support ARM® (AT91SC), AVR® (AT90SC) and HC05 (AT05SC) based smart card products, and has been designed to be both flexible and easy to use.

For maximum flexibility, the system has been designed to be upgraded easily. It has been engineered to support future device architectures. Switching to support other devices within a given core family is done simply by running a software utility that guides the user through the device update process – there is no need to change PCBs or jumper settings.

For maximum usability, the system provides support for the IAR Systems C-Spy front-end. It also uses a proprietary configuration control application, which allows the developer not only to configure the hardware setup, but also to perform a variety of functions such as bus state analysis and code coverage.



Secure Microcontroller for Smart Cards

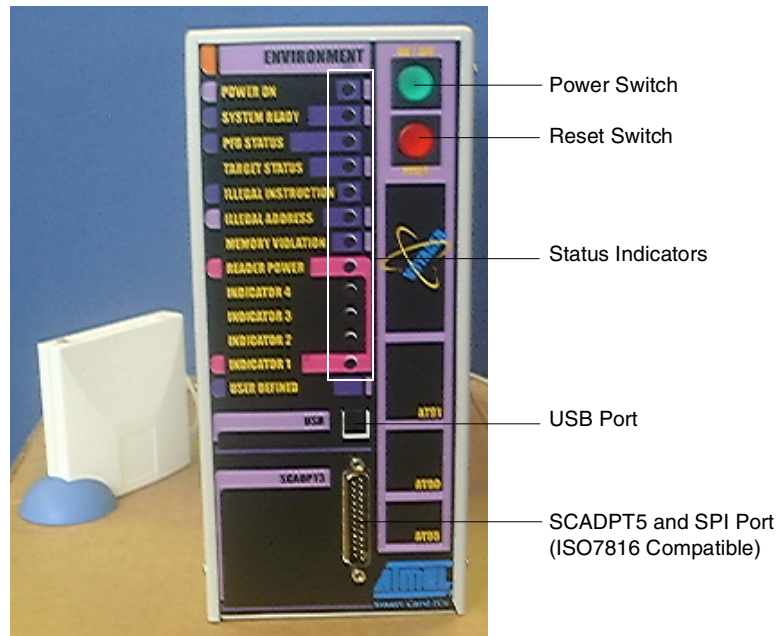
Voyager Emulation Platform (ATV1)

Rev. 1553BS-SMIC-03/02



Note: This is a summary document. A complete document is available under NDA. For more information, please contact your local Atmel sales office.

Figure 1. The ATV1 Development System



Ordering Information

Order the ATV1 using the following Atmel product name and part number.

Atmel Product Name	Atmel Product Part Number
Voyager Emulation Platform	ATV1— 90SCxxxx, where x defines the SC identity, for example, 6464C

Contact Details

Contact your local Atmel sales office to order the Voyager Emulation Platform.

Contact IAR's Regional offices and distributors at <http://www.iar.com> or email info@iar.com to order C-Spy Debugger.



© Atmel Corporation 2002.

Atmel Corporation makes no warranty for the use of its products, other than those expressly contained in the Company's standard warranty which is detailed in Atmel's Terms and Conditions located on the Company's web site. The Company assumes no responsibility for any errors which may appear in this document, reserves the right to change devices or specifications detailed herein at any time without notice, and does not make any commitment to update the information contained herein. No licenses to patents or other intellectual property of Atmel are granted by the Com-

pany in connection with the sale of Atmel products, expressly or by implication. Atmel's products are not authorized for use as critical components in life support devices or systems.

Corporate Headquarters, 2325 Orchard Parkway, San Jose, CA 95131, TEL (408) 441-0311, FAX (408) 487-2600
 Atmel Colorado Springs, 1150 E. Cheyenne Mtn. Blvd., Colorado Springs, CO 80906, TEL (719) 576-3300, FAX (719) 540-1759
 Atmel Grenoble, Avenue de Rochepleine, BP 123, 38521 Saint-Egreve Cedex, France, TEL (33) 4-7658-3000, FAX (33) 4-7658-3480
 Atmel Heilbronn, Theresienstrasse 2, POB 3535, D-74025 Heilbronn, Germany, TEL (49) 71 31 67 25 94, FAX (49) 71 31 67 24 23
 Atmel Nantes, La Chantrerie, BP 70602, 44306 Nantes Cedex 3, France, TEL (33) 0 2 40 18 18 18, FAX (33) 0 2 40 18 19 60
 Atmel Rousset, Zone Industrielle, 13106 Rousset Cedex, France, TEL (33) 4-4253-6000, FAX (33) 4-4253-6001
 Atmel Smart Card ICs, Scottish Enterprise Technology Park, East Kilbride, Scotland G75 0QR, TEL (44) 1355-803-000, FAX (44) 1355-242-743

ATMEL® and AVR® are the registered trademarks of Atmel.

ARM® is the registered trademark of ARM Ltd.; Windows® 95/98/2000 and Windows NT® are the registered trademarks of Microsoft Corporation; C-Spy® is the registered trademark of IAR Systems AB.

Other terms and product names may be the trademarks of others.



Printed on recycled paper.