# AVR090: Migrating between ATmega64 and ATmega128



# 8-bit **AVR**® Microcontrollers

## **Application Note**

## 1 Introduction

This application note is a guide to help current ATmega64 users convert existing designs to ATmega128. The information given will also help users migrating from ATmega128 to ATmega64. ATmega103 users should also read the application note "AVR080: Replacing ATmega103 by ATmega128".

In addition to the differences described in this document, the electrical characteristics of the two devices are different. Check the Data Sheet for detailed information.

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## 2 Memory sizes

Some memories are bigger in the ATmega128. Table 1 is a comparison between the individual memories

Table 2-1. Memory Sizes

	ATmega64	Atmega128
Flash	64k bytes	128k bytes
RAM	4k bytes	4k bytes
EEPROM	2k bytes	2k bytes

The Boot Loader area is also changed. The following must be considered:

- The No-Read-While-Write section starts at word address 0xF000 instead of 0x7000.
- The available Boot Loader sizes are still 512, 1024, 2048, and 4096 words.

### 3 ADC converter

The start of an ADC conversion in Atmega64 can auto trigger on interrupt sources. This ADC auto triggering is not implemented in Atmega128.



#### **Atmel Corporation**

2325 Orchard Parkway San Jose, CA 95131, USA Tel: 1(408) 441-0311 Fax: 1(408) 487-2600

### **Regional Headquarters**

#### Europe

Atmel Sarl Route des Arsenaux 41 Case Postale 80 CH-1705 Fribourg Switzerland

Tel: (41) 26-426-5555 Fax: (41) 26-426-5500

#### Asia

Room 1219 Chinachem Golden Plaza 77 Mody Road Tsimshatsui East Kowloon Hong Kong

Tel: (852) 2721-9778 Fax: (852) 2722-1369

#### Japan

9F, Tonetsu Shinkawa Bldg. 1-24-8 Shinkawa Chuo-ku, Tokyo 104-0033 Japan

Tel: (81) 3-3523-3551 Fax: (81) 3-3523-7581

#### **Atmel Operations**

#### Memory

2325 Orchard Parkway San Jose, CA 95131, USA Tel: 1(408) 441-0311 Fax: 1(408) 436-4314

#### **Microcontrollers**

2325 Orchard Parkway San Jose, CA 95131, USA Tel: 1(408) 441-0311 Fax: 1(408) 436-4314

La Chantrerie BP 70602 44306 Nantes Cedex 3, France Tel: (33) 2-40-18-18-18 Fax: (33) 2-40-18-19-60

#### ASIC/ASSP/Smart Cards

Zone Industrielle 13106 Rousset Cedex, France Tel: (33) 4-42-53-60-00 Fax: (33) 4-42-53-60-01

1150 East Cheyenne Mtn. Blvd. Colorado Springs, CO 80906, USA Tel: 1(719) 576-3300

Fax: 1(719) 540-1759

Scottish Enterprise Technology Park Maxwell Building East Kilbride G75 0QR, Scotland

Tel: (44) 1355-803-000 Fax: (44) 1355-242-743

#### RF/Automotive

Theresienstrasse 2 Postfach 3535 74025 Heilbronn, Germany Tel: (49) 71-31-67-0

Fax: (49) 71-31-67-2340 1150 East Cheyenne Mtn. Blvd.

Colorado Springs, CO 80906, USA Tel: 1(719) 576-3300

Fax: 1(719) 540-1759

Biometrics/Imaging/Hi-Rel MPU/ High Speed Converters/RF Datacom

Avenue de Rochepleine BP 123

38521 Saint-Egreve Cedex, France

Tel: (33) 4-76-58-30-00 Fax: (33) 4-76-58-34-80

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