

## MPQ-AVR32

### Four Port In-System Programmer for Atmel AVR32 Microcontrollers

The MPQ-AVR32 is a member of RPM's family of dedicated in-system device programmers. Like all MPQ's, it is designed to be reliable, efficient, flexible and cost effective - all of the features you require in a manufacturing programmer.

#### Fast and Portable

Up to four different target images can be stored in the programmer's internal Flash memory, allowing faster programming times and standalone operation. In addition, our adaptive programming algorithm provides the fastest programming time for each image, while ensuring the image integrity of each device programmed.

#### Program Four Devices Simultaneously

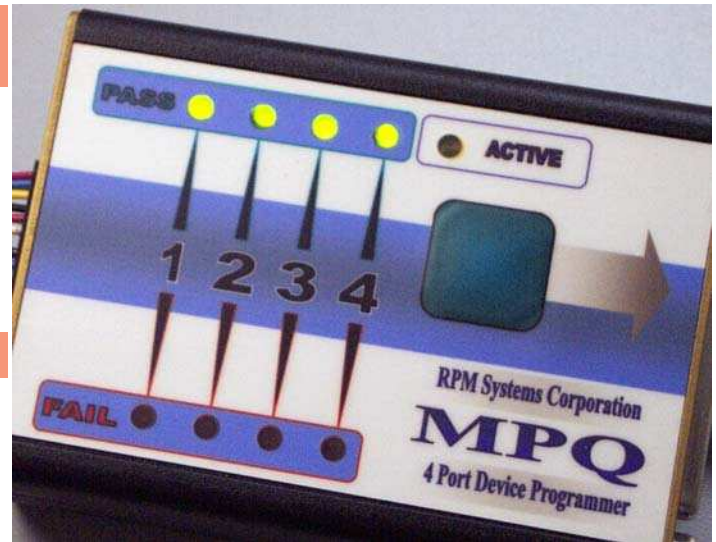
Four port programming allows each MPQ to program the same image on up to four separate target devices simultaneously, increasing manufacturing throughput fourfold. Up to 16 MPQ's can be interconnected in an array to allow programming of up to 64 devices simultaneously.

#### Stand-alone, ATE-Controlled or PC-Controlled

MPQ can be operated stand-alone (just press a button to initiate programming), directly from a host PC using MPManger software, or under the control of your Automated Test Equipment (ATE) system.

#### Supports JTAG Programming

MPQ-AVR32 provides fast, reliable JTAG programming of both microcontroller *Flash and User memories*, as well as fuse-programmable chip options. No USB boot loader is required.



#### Rugged and Ready for Manufacturing World Wide

Features like an extruded aluminum chassis, universal power supply and extensive electrical protection ensure that MPQ-AVR32 will be at home in any manufacturing environment.

#### Secure Image Management

Secure your programming images, preventing them from being read back from the programmer, and define a maximum number of parts to be programmed from each image. Send your MPQ to CM's anywhere in the world without worry.

#### Powerful Software - Field Upgradable

MPQ-AVR32 comes complete with MPManger software to provide programmer configuration and image management, PC-controlled device programming, and more. MPManger also provides the ability to upgrade your MPQ-AVR32 programmer on site as support for new devices is released by RPM.

#### Autoserialization

MPQ-AVR32 supports on-the-fly image modification, allowing each device to be programmed with a unique serial number, MAC address, IP address, etc.

# MPQ-AVR32 In-System Programmer

## Full Memory Programming Speeds for Selected Devices

Operation	AT32UC3B064 (64 Kb)	AT32UC3A0256 (256 Kb)	AT32UB3A0512 (512 Kb)
Erase / Program / Verify	5s	19s	35s

Times shown are maximum times to erase, program and verify four devices using maximum size program images for each device. Actual programming times may be longer or shorter depending upon the image content.

## Supported Devices

AT32UC3A0128, AT32UC3A1128, AT32UC3A0256, AT32UC3A1256, AT32UC3A0512, AT32UC3A1512

AT32UC3A364, AT32UC3A364S, AT32UC3A3128, AT32UC3A3128S, AT32UC3A3256, AT32UC3A3256S, AT32UC3A464, AT32UC3A464S, AT32UC3A4128, AT32UC3A4128S, AT32UC3A4256

AT32UC3B064, AT32UC3B164, AT32UC3B0128, AT32UC3B1128, AT32UC3B0256, AT32UC3B1256, AT32UC3B0512, AT32UC3B1512

AT32UC3C064C, AT32UC3C164C, AT32UC3C264C, AT32UC3C0128C, AT32UC3C1128C, AT32UC3C2128C, AT32UC3C0256C, AT32UC3C1256C, AT32UC3C2256C, AT32UC3C0512C, AT32UC3C1512C, AT32UC3C2512C

AT32UC3L016, AT32UC3L032, AT32UC3L064

## Specifications

Target Vio Voltage Range:	3.0 to 3.6VDC
Power Supply:	100 to 240VAC, 50/60Hz **
Operating Temperature Range:	0°C to +65°C

## Software Support

RPM Systems *MPManager* Software

- Programmer Image Management
- Programmer Configuration
- PC-Controlled Programming
- Windows™ 98, NT, 2000, XP, 7

**MPQ Programmers are also available for these popular microcontroller families:**

- Cypress PSoC/3/5, enCoRe II/III/V
- Silicon Labs C8051F series
- Zilog Z8 Encore, ZNeo, Crimzon
- ARM
- Atmel AVR

\*\* MPQ-PS Power Supply included with MPQ-AVR32