

# Race100 Gang Programmer

*"To Reduce significantly your Serial Flash programming cost"*



**Race100** is a professional Gang Programmer dedicated and optimized for the Serial Flash memories. With the highest market performances and highest sockets parallelism, it offers the lowest possible programming cost for serial flash memories you could find in the market. The Programming time is in average **8 times faster** than the Universal Gang Programmers, the sockets parallelism often **4 times bigger**, increasing finally your **Throughput capability by 32** with the same investment.

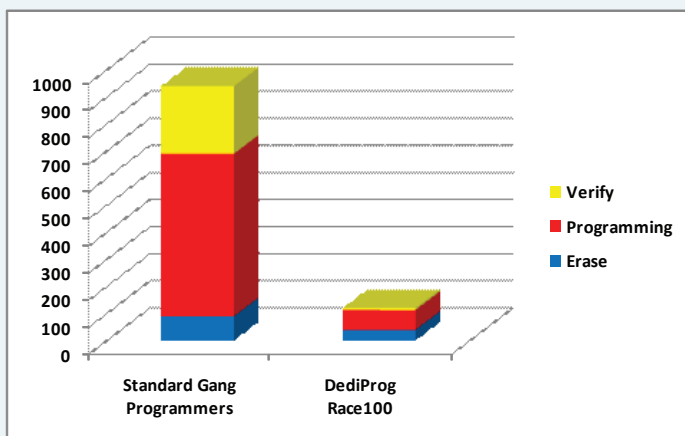
**If you have significant volume of Serial Flash to be programmed, the Race100 is your solution. The Cost saving could be up to: 20cents USD by memories programmed!**

*Tab 1: Race100 performances:*

Serial Flash densities	1Mb	2Mb	4Mb	8Mb	16Mb	32Mb	64Mb	128Mb
Program + Verify	0.6s	1s	2s	3s	8s	15s	16s	75s

*Note: The tested memories are from a single serial flash manufacturer. All measurements are performed full address programmed with random pattern.*

*Fig1: Comparison of performances with a Standard Gang Programmer*



## Features

- **Stand Alone mode** controlled by Keyboard and wide LCD display.
- **Easy to use:** Define a project (Image and operations) on the Host computer and download it to SD card or directly to Race100 through USB. Operators only have to select the project from SD card inserted in the Race100. Race100 will run the project in Stand Alone mode (no need of computer).
- **Three advanced Working modes:**
  - **“Manual Start” Mode:** Sockets of the same cartridge work as a group. Operator has to press the “Start Button” of the Cartridge to start the operations on all the sockets. This mode reduces the risk of operator manual mistake on the working sockets.
  - **“Auto Socket Start” Mode:** Each socket works independently, detects automatically the memory when inserted and start the operations instantly according to the project definition. This mode ensures the best throughput.
  - **“Auto Cartridge Start” Mode:** Auto start when the 4 sockets of a cartridge are all filled with Serial flash memories.
- **Production information in Real time:** on Gang LCD display or PC monitor
- **Best programming Quality and Reliability:** ESD and over current protection, wrong insertion detection, self diagnostic etc. ensure the best signals quality and reliability.

## Software Race100SW

**File Type supported:** binary, hex, Motorola

**Features:** data editor, revision history, device and algorithm information, project setting, review/reset socket counter history, project history display and save to a file, standalone mode project configuration :load the image file with Checksum and define the operations on memory (*all combination between: Blank Check, Erase, Program, Verify, Vpp support, protection*)

## Standalone mode

**Device Operation:** operate the pre-configured operation setting from the SD card

**Features:** *display projects list, select project, image checksum, programming configuration setting, “socket counter” history (cycling, Pass, fail), “project counter” history, reset counters history.*

## Hardware

**Number of Socket Adaptors can be plugged into a Cartridge:** 4

**Number of Cartridges per base system:**

- **Race 100-S16:** up to 4 cartridges
- **Race 100-S8:** up to 2 Cartridges
- **Race 100-S4:** up to 1 Cartridge



**User Interface:** Socket Operation Status on LED (Pass, Working, Error), Keypad control, project management and production information on Gang LCD Display or PC monitor.

**Power:** DC 15-20V, 3A

**PC Requirement:** CPU P4 and above, RAM 521MB and above, OS WinXP and above

**Dimensions:** Race100-S16 Width 50cm x height 7.2cm x depth 30.5cm.

Race100-S8 & Race100-S4 Width 34cm x height 4cm x depth 27.5cm

**Memories Supported:** all the Serial Flash and all EEPROM (packages and families)