Dediprog and Eltan Cooperate to Distribute Innovative Development and Production Solutions for Your Application Serial Flash

DediProg, a total tool solution provider, has designed innovative solutions and methods to develop, debug, program in production and repair code for application using the Serial Flash memories like:

Bios for Desktops, Laptops, servers - Printers - DTV - Wimax - Networking - Optical Disk drive - Set Top Box - LCD monitors - Graphic cards - HDD/SDD - FPGA based application - Wireless LAN - DSL and cable modems - POS machines..

"REDUCE YOUR TIME TO MARKET"
"REDUCE YOUR PRODUCTION COST"

SF100

Reduce Your Development Time:

SF100 Programmer: On board Serial Flash programming

Features: The SF100 programmer can directly control the application SPI bus to read or update the content of the Serial flash soldered on the board with different scenarios: Application supplied or not, chipset reset, isolation Mosfet switched OFF by SF100 for One or Two Serial Flash update..
Performances: High performance code update (8Mb programmed in 8sec)
Connections: 2.54mm, 1.27mm connectors or SO Test Clip on SO8 or SO16 package
Benefits: By implementing this method on your boards, you will benefit of a convenient update flexibility for code development, features adaptation and debugging in the shortest time.

SPI Flash	1Mb	2Mb	4Mb	8Mb	16Mb	32Mb	64Mb	128Mb
Program+Verify (second)	1s	2s	4s	7s	14s	37s	70s	108s

ICP evaluation Kit: Is your application compatible with the In Circuit Programming?

Features: The ICP Evaluation kit has been designed to test and validate the In Circuit Programming method on your current application board without any hardware change required.
Connection: the ICP evaluation board is soldered in place of the application Serial flash (SO footprint)
Benefits: You can test all the ICP methods (application OFF/ON, resistors or Mosfet SPI isolation, application reset..), measure the current injection in your chipset IO and check the SPI signals quality with oscilloscope on your current board to validate the modification before your next hardware release.

You are interested to benefit from the In Circuit Programming method in your application board to reduce your time to market, we will be pleased to support you.
Contact Dediprog Technical Engineers: support@dediprog.com

SF200 Programmer: Off line Serial Flash programming (in socket)

- USB Full speed supported
- High performance update (8Mb programmed in 8 sec)
- All packages supported with sockets adapters (SO8N, SO8W, SO16W, MLP..)

SF300 Programmer: All in one

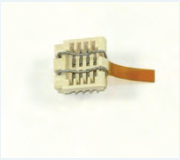
In Circuit Programming + Off line Programmer + Stand Alone mode

USB Full speed supported
High performance update (8Mb programmed in 8 sec)
All packages supported with sockets adapters (SO8N, SO8W, SO16W, MLP..)
Stand Alone mode for small volume production

SF300

Engineering sockets: SO8W and SO16W

Footprint compatible with the Serial Flash.
Can be used in combination with SF200 and SF300 to program the SPI Flash

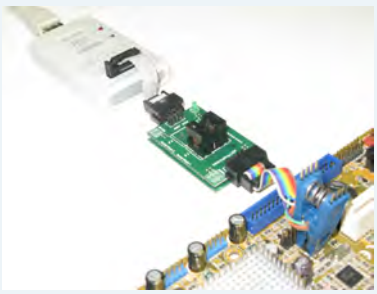


SO8W

SO16W

Backup Boot Flash SPI tool: Force your application controller to work on the backup memory

Features: The BBF tool disables automatically the Main memory soldered on the Application board and forces the controller to works on the Backup Flash inserted in the tool socket. The code of the backup memory can be easily updated at any time by connecting the SF100 programmer without possible conflict with the application controller. Memories can also be changed easily in the socket.
Connections: 2.54mm, 1.27mm connectors or SO Test Clip on package (SO8, SO16)
Benefits: Convenient code update flexibility for development and debugging.



BBF

EM100 Serial Flash Emulator

Feature: The EM100 is a DediProg Serial Flash Emulator based on RAM memory in order to offer the best update performances. User can select and emulate the standard commands of all the SPI Flash.

The EM100 will reduce your development time thanks to its RAM base memory and debugging features.

"Minutes become seconds for code update"

"Memory content evolution has no more secret for you"

Benefits:

- The shortest code update time in the market: less than 3 seconds for the 128Mb SPI Flash code update
- Display and edit the Serial Flash content

Debug Functions:

- **SPI bus analyzer:** *Record and display SPI communication*
- **Trigger on SPI events:** *define the SPI sequence on which you want to trig*
- **SPI Virtual Terminal:** *Display debugging message (check points, ASCII, Variables, values, look up table, timing..) from your application firmware to the Host PC through SPI bus. Control your application firmware from the Host PC trhough the SPI bus. No need of additionnal bus or connector to debug your application.*
- **Memory status:** *Display information on the memory status*
- **Outputs signals:** *Reset to synchronize the application and Trig for oscilloscope*
- Capable of performing emulation even with Serial Flash soldered on board.

EM100

Densities	512Kb	1Mb	2Mb	4Mb	8Mb	16Mb	32Mb	64Mb	128Mb
Real SPI Flash Erase+Program+Verify (second)	3s	4s	6s	12s	18s	25s	40s	90s	190s
EM100 Erase+Program+Verify (second)	3s	3s	3s	3s	3s	3s	3s	3s	3s

Reduce Your Serial Flash Production Time and Cost:

Using inappropriate equipment in production to program the SPI Flash may dramatically impact your throughput, response time and application cost knowing that some market programmers may need up to 9 minutes to program a single high density Serial Flash (128Mb).
DediProg is pleased to introduce you the world Fastest SPI Flash gang programmer:

Race100 Gang Programmers: The lowest programming cost for SPI Flash

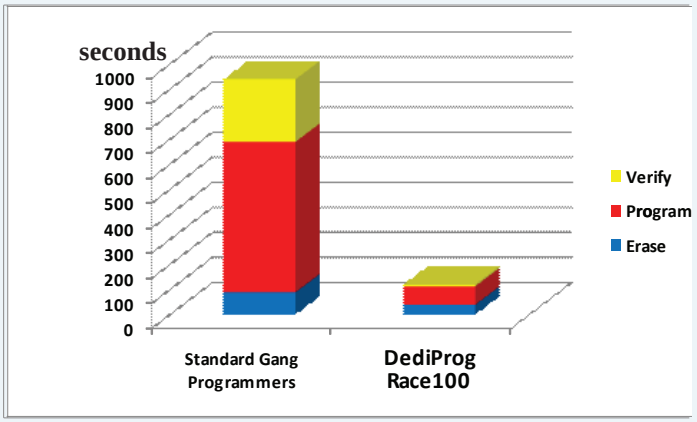
3 Gangs programmers adapted to your production needs:

- Race100-S4: 4 asynchronous sockets
- Race100-S8: 8 asynchronous sockets
- Race100-S20: 20 asynchronous sockets

Performances: 8 times faster and 5 times higher parallelism compare to Universal Programmers

=> **Throughput 40 times higher** than market solutions

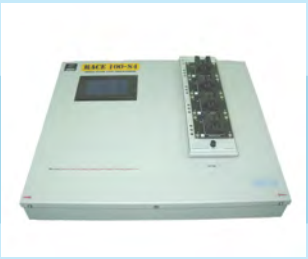
128Mb Serial Flash Update



SPI Flash	512Kb	1Mb	2Mb	4Mb	8Mb	16Mb	32Mb	64Mb	128Mb
Program+Verify (second)	0.5s	0.9s	1.55s	3.23s	3.87s	8.95s	15.5s	20.5s	80.5s

Race100 S20

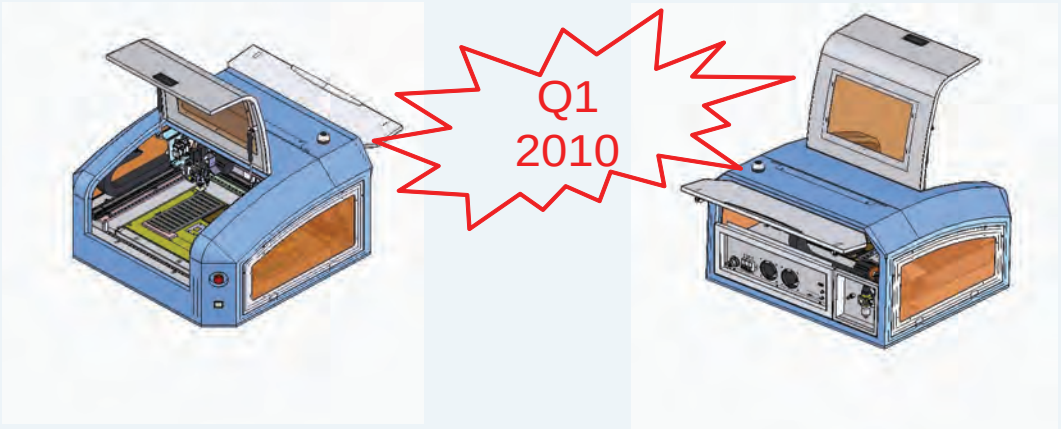
Race100 S8



Race100 S4

Auto -Handler:

- Tray
- Tape and Reel
- Tube



Please contact DediProg for futher information.