FlashPRO: Flash Memory Engineering Programmer

Intel's FlashPRO base and socket module upgrades provide system designers with an efficient and cost-effective prototyping tool for programming and erasing 5V-tolerant Intel Flash Memories. New devices are supported upon their introduction via software upgrades. Updates are posted on Intel's World Wide Web site and Application Support BBS. With separately-available socket modules, you purchase only what you need. This keeps costs down while providing quick-turn support for future packages and pinouts. This tool is a significant enhancement to its predecessor, the D,FLASHEVAL kits, as it adds support for many new devices, is lower cost and higher performance.

PRODUCT DESCRIPTION

FlashPRO is a PC-driven (parallel port attachment) programmer. It enables system designers to program and erase all 5V-tolerant Intel DIP Flash Memory components directly. (Block locking support is available on required products.) Non-DIP packages require that one of the separately-available socket modules be used (please see ordering information on reverse).

Three family module boards come with the base tool and are another integral part of the system. They keep costs down by routing power and ground for device families via inexpensive circuit boards with SIMM-like connector edges. For example, the 56-lead TSOP module supports all current devices in that package type: 2/4-Mbit Boot Block devices, 16/32-Mbit FlashFile™ memories and the 28F016XS and 28F016XD Fast Flash devices—even though their pinouts are drastically different.

The user's manual provides information on supported file formats, system requirements, menu commands, status and setting displays, buffer editor usage, use of the macro file iFLASH3.INI, troubleshooting tips and technical support contacts.

The iFLASH3 graphical interface is very user friendly. Current D,FLASHEVAL users will enjoy its similarity, providing a near-zero learning curve. On-line help guides users through the extensive tool capabilities without their having to access instruction manuals. Because of its intuitive menu structure and on-line help, even new users will be programming quickly.

PRODUCT HIGHLIGHTS

- Low-cost engineering programming solution
- Cost-effective modular support
  - Buy only what you need
  - Each socket module supports all devices in that package via use of the family module boards
- Intuitive, easy-to-use menus
  - Easy transition for existing D,FLASHEVAL users

- Socket modules for all packages
  - 56/48/40/32-lead TSOP
  - 44-lead PSOP
  - 72-lead SIMM
  - 60-pin Miniature Card[1]
  - 56/40-ball µBGA*
  - 32-lead PLCC
  - 68-pin PC Card
- iFLASH3 software updates are maintained on Intel's World Wide Web site and Application Support BBS

[1] Requires FlashPROMEMCRD module and industry-standard Miniature Card-to-PC Card adapter (see reference on reverse side, under Support Tools heading, for availability of this adapter).

intel ®

FlashPRO: Flash Memory Engineering Programmer

FEATURES	BENEFITS
▪ Parallel-port attachment	▪ Uses PC's resources—lowers base unit's cost
▪ Family module boards	▪ Socket modules support all device families in a given package—reduces number of upgrade pieces
▪ iFLASH3 programming software	▪ Similar to D,FLASHEVAL iFLASH2 software—near-zero learning curve
▪ Intuitive user interface and on-line help	▪ Ease of use—quicker time to programming

SUPPORT TOOLS

The latest version of iFLASH3 software will be maintained on Intel's World Wide Web site under the developers area and on Intel's Application Support BBS under the Flash/Tools area.

Note: See "Miniature Card-to-PC Card Adapter Reference" via "By Device" or "By Tool Type" selection for Series 100 Miniature Cards at http://developer.intel.com/design/flcard/devtools/ for a list of available suppliers.

Other Intel Flash Memory documents include:
- ▪ Flash Memory Tools and Software Quick Reference Guide (Lit. Order #297610)
- ▪ Small Outline Package Guide (Lit. Order #296514)

TOOL CONTENTS

Base Tool
- ▪ One (1) FlashPRO programmer
- ▪ Three (3) Power/GND Routing Boards
- ▪ One (1) User's Manual
- ▪ One (1) Quick Installation Guide
- ▪ One (1) 3.5″ Floppy Disk with iFLASH3 Software
- ▪ One (1) Intel World Wide Web Brochure
- ▪ One (1) FlashPRO Product Brief
- ▪ One (1) Registration Card

Socket Modules
- ▪ One (1) Socket Adapter of type selected

TOOL ORDERING INFORMATION

ORDER CODE	DESCRIPTION
FlashPRO	Base Programmer with 48-pin DIP ZIF socket
FlashPROMBGA40	Socket Module for 40-ball µBGA devices
FlashPROMBGA56	Socket Module for 56-ball µBGA devices
FlashPROTSOP32	Socket Module for 32-lead TSOP devices
FlashPROTSOP40	Socket Module for 40-lead TSOP devices
FlashPROTSOP48	Socket Module for 48-lead TSOP devices
FlashPROTSOP56	Socket Module for 56-lead TSOP devices
FlashPROPSOP44	Socket Module for 44-lead PSOP devices
FlashPROSSOP56	Socket Module for 56-lead SSOP devices
FlashPROPLCC32	Socket Module for 32-lead PLCC devices
FlashPROSIMM72	Socket Module for 72-lead SIMMs
FlashPROMEMCRD	Socket Module for 68-pin PC Card

INTEL ACCESS

World Wide Web Home Page	**http://www.intel.com/**
Application Bulletin Board System	**(916) 356-3600**
Other Intel Support:	
Intel Literature Center	**(800) 548-4725 7 a.m. to 7 p.m. CST (U.S. and Canada)** International locations please contact your local sales office.
Retail PC and Network Products	**(800) 538-3373 or (503) 629-7000 7 a.m. to 7 p.m. PST**
General Information Hotline	**(800) 628-8686 or (916) 356-3104 5 a.m. to 5 p.m. PST**

UNITED STATES
Intel Corporation
2200 Mission College Blvd.
P.O. Box 58119
Santa Clara, CA 95052-8119

JAPAN
Intel Japan, K.K.
5-6 Todokai,
Tsukuba-shi
Ibakari
300-26

FRANCE
Intel Corporation
S.A.R.L.
1, Rue Edison, BP 303
78054, Saint Quentinen-
Yvelines Cedex

UNITED KINGDOM
Intel Corporation
(U.K.) Ltd.
Pipers Way, Swindon
Wiltshire, England
SN3 1RJ

GERMANY
Intel GmbH
Dornacher Strasse 1
85622
Feldkirchen/Muenchen

HONG KONG
Intel
Semiconductor Ltd.
32/F Two Pacific Place
88 Queensway
Central

CANADA
Intel Semiconductor
of Canada, Ltd.
190 Attwell Drive,
Suite 500
Rexdale, Ontario
M9W 6H8