

Shortform Catalogue



Memory and Logic Programmer Range *Elan Digital Systems*

Elan's strengths are derived from:

* **PRODUCT RELIABILITY & INTEGRITY** - field proven programming yields in excess of 99.5% with extremely low down-time.

* **TECHNICAL SUPPORT** - whether solving an interface protocol problem or responding to the latest devices, qualified local staff are eager to assist.

* **INNOVATION** - many of the best ideas now used in this industry originated with Elan products: device algorithms easily updated by replaceable cartridge (disk or card); programmable function keys to quickly store/retrieve repeated routines; and now overall device reading and programming times CUT BY FACTORS OF 2 TO 20 TIMES - a vital consideration as device sizes multiply. Plus scores of other advanced features to simplify the programming task, either in stand-alone operation or remotely from a host computer.

● FULL DEVICE COVERAGE ● EASE OF USE ● RELIABILITY ●

elan

Elan's Universal Device Coverage

Complete programming solutions which guarantee continuing device support for all current and future devices and programming configurations (e.g. gang, set, terminal etc.).

DUAL PROGRAMMER PACKAGES (DPP)

To provide the highest quality programmers for universal device coverage, highly sophisticated state-of-the-art industrial designs are required. Your choice is between the high cost single site universal machines and Elan's more reasonably priced dedicated units. Our Dual Programmer Package gives:

- a lower overall cost.
- flexibility in operation and expansion.
- a wider range of support and options.
- unlimited application expansion (special packaging, gang etc.).
- major semi-house approvals.
- ability to start with your first requirements at minimum costs.

ASK FOR SPECIAL ELAN DPP PRICES:

DPP1 – Models 1011 & 5-145 for every PLD (Bipolar & CMOS PAL, EPLD, GAL etc.).

DPP2 – Models 1122 & 5-145 for EPROM, EEPROM, Bipolar & CMOS PROM, all PLD plus Microcontroller options.

(See below for specific model details).



DPP1
For all PLD's
(Bipolar & CMOS)

1000 Series Stand-alone Programmers (uniquely expandable)

Dedicated to specific device technologies with the highest programming yields available!

The Universe 1000 Series offer a low cost starting point, to program all EPROM's, PLD's, PROM's or EPLD's Dedicated programmers, yet expandable to full universal configuration.

Stand-alone models in the 1000 Series:

1011: Dedicated PAL/IFL programmer (L-Stack): PAL, CPAL, EPAL, IFL, FPLA, fuse edit, vector testing.

1012: Dedicated Bipolar PROM/EPROM programmer (P-Stack): Bipolar PROM, CPROM, EPROM, EEPROM, PLE from 256 bit to multi-megabit.

1013: Dedicated Set/Gang EPROM MOS Programmer (G-Stack): Set/Gang EPROM, EEPROM. Available in 8 or 16 site options.

1122: Dedicated 2-stack (L & P) EPROM/PROM/PAL Programmer: PAL, EPAL, IFL, FPLA, Bipolar PROM EPROM, EEPROM to 32 pin.

1123: Dedicated 2-stack (2 x G) 16 site Gang/Set Programmer: EPROM, EEPROM with alternate 8 or 16 sites x 32 pin.



Model
1012



Model
1013

Low Cost, High Performance EPROM/EEPROM Programmiers with EF-PER (tm) (Extra Fast Programming Enhancement Routine)

A complete range of flexible, low-cost EPROM/EEPROM Programmiers for industrial and commercial applications; PC based or Standalone; development or production. Every model consists of an MCU (Master Control Unit) and one replacable ZIFPAC module.

Future expandability is assured. ZIFPACs support many device technologies in different site configurations. They are interchangeable within the 3000, 4000 and 5000 Series ranges, subject only to certain "master socket" applications. Instant firmware updates are provided with a "micro-cartridge". Programmable-logic based design permits easy hardware reconfiguration to support future

device innovation. These features ensure that future programming needs will be met!

Programming SPEED and high programming YIELD separate Elan programmiers from the competition. Savings made by purchasing other very low-priced programmiers are quickly lost if production throughput is decreased or if costly devices are destroyed.

Multiple-site ZIFPAC's include software controlled, individually buffered sites, to allow full Set programming (softset). Optional enhancements allow extremely fast set programming with Elan's exclusive ES-PER (tm) (Extra fast Set Programming Enhancement Routine).

3000 Series PC Remote EPROM /EEPROM Programmiers

PC Remote EPROM Programmer with the fastest direct programming. Combines high speed performance and full support at a Low Price - more effective than PC cards!

- EPROM/EEPROMs (2716 to latest Megabit devices), Microcontrollers, DIL, PLCC etc.
- Operated from the PC keyboard, using clear menu driven windows, approved algorithms.
- Fully compatible with existing PC data files, including those prepared for other programmiers.
- IBM PC based. No PC expansion slot used.
- Programming times (down-load to verified device) cut by up to 95%.
- SINGLE, SET and GANG programming in 8, 16, 32 and 64 bit word sizes and Page-write.
- Auto-Configure RS232 serial port(s) up to 38,400 Baud with selectable formats.
- Never needs RAM expansion, no matter how large EPROMs become.

Models available for 3000 Series: (see ZIFPACs)

3-132	3-232	3-840	3-154
3-142	3-832	3-PLC	3-187

Ask for "SHOW 3000" demo disk .



Model
3-142



Model
3-832

4000 Series Production EPROM/EEPROM Copiers

**An eight gang 28, 32 or 40 pin Copier for the fastest gang copying available!
Easy to operate - built to last - designed with production in mind.**



Model
4-932

- EPROM/EEPROMs (2716 to Megabit devices)
- Copy from master or PC RAM, single, set or gang modes (24 pin to 40 pin multi-megabit EPROM's).
- Programming times (from Master to verified device) cut by 50% or more over the competition (throughput more than doubled).
- Direct device selection by manufacturer (family), identification or direct equivalents.
- RS 232 interface for remote operation.
- Internally identified devices are automatically selected and configured.

Models available for 4000 Series: (see ZIFPACs)

4-928	4-932	4-940
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5000 Series Editing EPROM/EEPROM & LOGIC Programmers

Extremely advanced, Incredibly fast! An intelligent range of editing EPROM and PLD Programmers, (single, gang or set). Unparalleled Integrity, Yield and Protection!

- EPROM/EEPROMs (2716 to latest Megabit devices), Microcontrollers, DIL, PLCC etc.
- EPLD, GAL, CMOS PLD in DIL, PLCC, SO etc.
- Programming (from RAM or master to verified device) up to 10 times faster (more with Page-write).
- Stand-alone or remote operation compatible with Data I/O codes, IBM PC, MDS, VAX etc.
- High speed Set programming and instant check-sum options.
- Device selection by manufacturer (family), identification or direct equivalents.
- A180 Adapter for EP1800/5C180 EPLD.
- Fastest approved algorithms including "ETOX"^(tm) flash & "Page-write" devices.
- Instant "Read" and "Verify" eliminates waiting
- Extensive keyboard editing directly in 8, 16 or 32 bit word lengths.
- 2, 5 and 8 site models (eg 5-832) are supplied with ES-PER^(tm), allowing set programming as fast as single site operations.

Models available for 5000 Series: (see ZIFPACs)

5-132	5-532	5-928	5-145	5-187
5-142	5-832	5-932	5-151	5-PLC
5-232	5-840	5-940	5-154	



Only Elan offers INSTANT device "Read", "Blank Checks" and "Verify" to speed up your programming, most noticeably with the new large EPROMs.

ZIFPAC's for the Elan Programmers



ZIFPAC Models

ZIFPAC Models	3000	4000	5000
• -132: 1 x 32	Yes	No	Yes
• -142: 32 & 40 pin	Yes	No	Yes
• -232: 2 x 32 pin	Yes	No	Yes
• -532: Master & 4 x 32 pin	No	No	Yes
• -832: 8 x 32 pin	Yes	No	Yes
• -928: Master & 8 x 28 pin	No	Yes	Yes
• -932: Master & 8 x 32 pin	No	Yes	Yes
• -840: 8 x 40 pin	Yes	No	Yes
• -940: Master & 8 x 40 pin	No	Yes	Yes
• -145: 1 x 40 pin (Logic)	No	No	Yes
• -151: 1 x 40 pin	Yes	No	Yes
• -154: 2 x 40 pin	Yes	No	Yes
• -187: 2 x 40 pin & 1 x 48 pin	Yes	No	Yes
• -PLC: 4 x PLCC/SO	Yes	No	Yes
• -ICP: Master & Connectors	Yes	No	Yes

Refer to ZIFPAC specifications (back page) for further details.

Accessories

OPTIONS:

PLCC socket converters, SO converters, EXFILE PC Driver Software (5.25" or 3.5"), EASYCOM Remote Driver (IBM or VAX), Elan LOGIC Design Compiler, E13 adapter for 3 voltage EPROMS. Customized onboard ICP (In-Circuit Programming).

EASYCOM/1, EASYCOM/2 & EXFILE

Sophisticated and easily operated remote drivers with efficient file handling capabilities suitable for operating most programmer functions from a PC keyboard. Easycom/2 includes powerful features for editing and label designing. Easycom/V (E63) is available for VAX computers, including use with a remote terminal. EXFILE is a powerful menu-driven program for the 3000 Series, but is optionally available for the 4000 and 5000 Series, with file handling and editing.

ICP & DESIGN SERVICES

In-Circuit programming at economical prices for all levels of complexity. Interface documentation and design compilers will assist the in-house project. Elan's Engineering Consultancy is available for the most sophisticated requirements. Device selection, logic design and programming service are part of Elan's complete customer support.

MICROPROCESSOR ADAPTERS

Microprocessor ZIFPACS are available for the 3000, 4000 and 5000 Series models. For the 1000 Series, three adapters (E4, E5 & E7) cover Intel, NEC, Motorola and most other equivalent manufacturers. N75P Stand-Alone Programmer for NEC, 4-bit Micros and Speech Chips.

Elan Digital Systems was formed in 1976 to offer specialized design services in microprocessor applications. From this experience was derived the original Elan proprietary EPROM programmer design. Since then Elan have rapidly developed a wide range of products in this very specialized field, from development to production applications; from dedicated device programmers to multi-function universal and "on-board" or ICP (In-Circuit Programming) programmers/testers; from support instrumentation to high level logic compilers.

Elan's world-wide reputation, as a leader in this industry, has been built on years of proven response to customers' requirements and major device manufacturers' approvals, adhering strictly to all specified algorithms.

All of Elan's latest products are designed with highly integrated surface mount components and are manufactured in-house with advanced production, assembly and test facilities.

A series of demo disks are available free of charge. They describe Elan's entire range of products with interactive examples to be run on any IBM PC with a color monitor.

SHOW ELAN: (interactive Elan product range guide)

SHOW EPPER: (interactive operation of the EPPER Series and EXFILE)

SHOW ICP: (features of In-Circuit Programming)

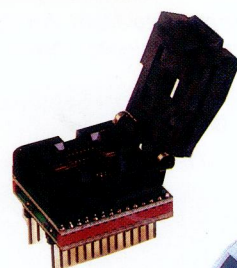
EASYCOM (covers all Easycom versions)

ELAN LOG/iC: (examples of this compiler's features)

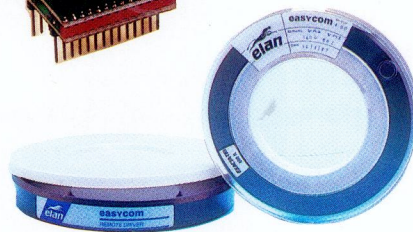
(Easycom, SHOW EPPER and LOG/iC demo disks also run on monochrome monitors).

CONTACT YOUR NEAREST SALES SUPPORT OFFICE.

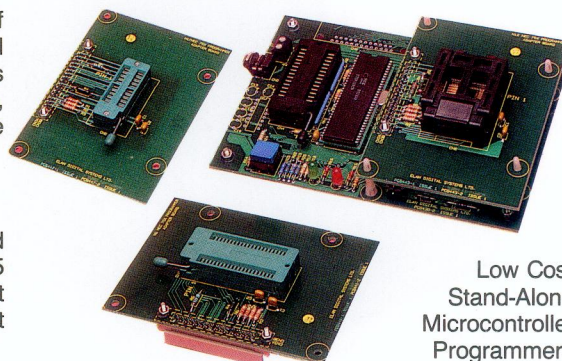
Ask for our free demo disks (IBM PC with color or mono).



Socket
Converters

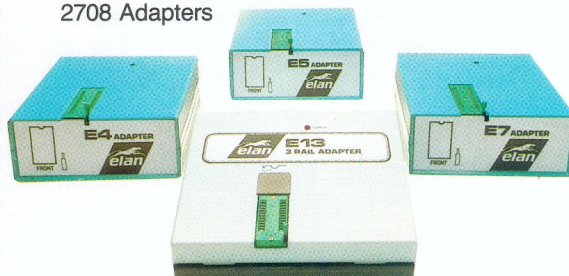


Elan
Easycom
& EXFILE



Low Cost
Stand-Alone
Microcontroller
Programmers
(NEC etc)

Microprocessor and
2708 Adapters



ICP
(In-Circuit Programming)

Specifications:

All products are manufactured to the highest quality and include diagnostics and protection for devices being programmed. The Elan range of programmers are designed to meet all European and USA electrical and interference standards. Operating voltages are selectable between 110 and 240V AC, 50-60Hz.

1000 Series Stand-alone/Remote Programmers (expandable to 2, 3, 4 or 5 Stack Universals)

- Device coverage All specific technologies and types
- Standard RAM 256K bytes expandable
- Max RAM 2Mbyte (16 Megabits)
- Update via Replaceable Cartridge
- Serial RS232 ports Two
- Max. baud Rate 38,400
- Parallel ports One
- Power consumption 40 Watts Max.
- Dimensions L. 390 x D. 325 x H. 100mm
- Weight 6Kg (13.2lb)
- Options LCC/PLCC/SO Socket Convertors, and a PC Remote Driver

3000 Series PC Remote E/EPROM Programmers (Over 11 models with ZIFPACs)

- Device coverage 2716 to multimegabit & Micro's
- Standard RAM PC's memory
- Update via Replaceable Micro-Cartridge
- Serial RS232 ports Two
- Auto baud Rate Selection (EXFILE incl.) up to 38,400
- Power consumption 45 Watts Max.
- Dimensions L. 303 x D. 255 x H. 95mm
- Weight 2.8Kg (6.2 lb)
- Options LCC/PLCC/SO Socket Convertors Includes EXFILE Remote Driver

4000 Series Production E/EPROM Copiers (3 models with ZIFPACs)

- Device coverage 2716 to multimegabit & Micro's
- RAM: (with EXFILE Option) PC's Memory
- Update via Replaceable Micro-Cartridge
- Serial RS232 ports Two
- Power consumption 45 Watts Max.
- Dimensions L. 303 x D. 255 x H. 95
- Weight 2.8Kg 6.2 lb)
- Options PC Remote Driver, LCC/PLCC/SO Convertors

5000 Series Editing E/EPROM/PLD Stand-alone/Remote Programmers (Over 16 models)

- Device coverage PLD & 2716 to multimegabit & Micro's
- Standard RAM 256K bytes (expandable)
- Max. RAM 2Mbytes (16 Megabits)
- Update via Replaceable Micro-Cartridge
- Serial RS232 ports Two
- Power consumption 45 Watts Max.
- Dimensions L. 303 x D. 255 x H. 95
- Weight 2.8Kg (6.2 lb)
- Option Individual LCC/PLCC/SO Socket Convertors and a PC Remote Driver

All Programmers come with one year warranty on hardware and software.

ZIFPACs (3000, 4000, and 5000 Series)

Single EPROM/EEPROM ZIFPAC Models:-

- -132: 1 x 32 pin ZIFPAC 24, 28 & 32 pin E/EPROMs
- -142: 1 x 32 & 1 x 40 pin ZIFPAC 24, 28, 32 & 40 pin E/EPROMs

Gang and Set EPROM/EEPROM ZIFPAC Models:

- -232: A Softset 2 x 32 pin ZIFPAC (24, 28 & 32 pin E/EPROMs)
- -532: Set/Gang master + 4 x 32 pin (24, 28 & 32 pin E/EPROMs)
- -832: A Set 8 x 32 pin ZIFPAC (24, 28 & 32 pin E/EPROMs)
- -928: Gang/Softset Master + 8 x 28 pin (24 & 28 pin E/EPROMs)
- -932: Gang/Softset Master + 8 x 32 pin (24, 28 & 32 pin E/EPROMs)
- -840: A Set 8 x 40 pin ZIFPAC (40 pin E/EPROM's)
- -940: Gang/Softset Master + 8 x 40 pin (40 pin E/EPROM's)

Micro Support ZIFPAC Models:-

- -151: 1 x 40 pin ZIFPAC (Intel/ NEC/AMD 8751 Series micros)
- -154: 2 x 40 pin ZIFPAC (8748/8751 Series micros)
- -187: 2 x 40 pin, 1 x 48 pin ZIFPAC (8748/8751/8795 Series micros)

Gang and Set Special Packages ZIFPAC Models:-

- -PLC: Set/Gang 4 x PLCC/SO ZIFPAC

Single PLD ZIFPAC Models:-

- -145: 1 x 40 pin ZIFPAC (EPLD, GAL, CMOS, PLD)

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See our other Data Sheets for details.

Elan Digital Systems reserve the right to alter specifications without notice.

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