

# DESK RAM™ Cartridge

## 128K Expansion Memory Cartridge for HP DeskJet Printer

- 128K Expansion RAM
- Required with soft fonts!
- Fully compatible with hard font cartridges.

### Easy to use!

- Slides into cartridge slot on the top of the printer.

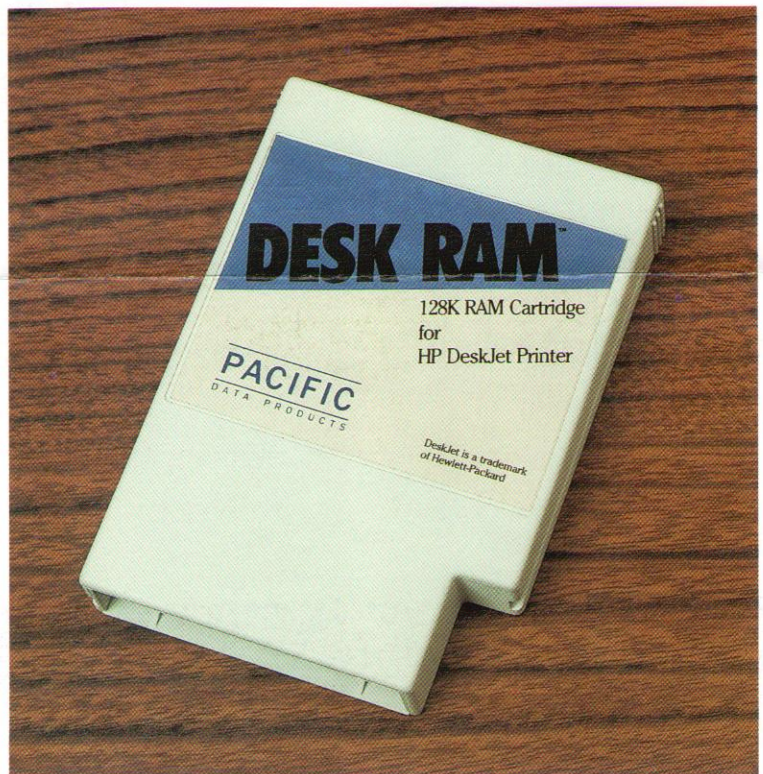
### Expand Memory to 256K

- Use one cartridge for 128K of expansion memory.
- Use two cartridges for full 256K capacity.
- Expansion Memory of 256K required for popular fonts such as Helvetica.

### Full One Year Warranty

The DESK RAM Cartridge is backed by a full one year warranty. All parts and workmanship are guaranteed to be free from defects. Pacific Data stands by its reputation for first rate service.

**Specialists in Enhancement Products for Printers**



**Capacity:** 128K Memory Cartridge. Four 32K x 8 SRAMS are used in the cartridge.

**Compatibility:** Pacific Data's DESK RAM 128K Memory cartridge is fully compatible with Hewlett-Packard's DeskJet printer. No additional memory is needed. Two cartridges can be used simultaneously for 256K.

**Installation:** No special tools are required, the cartridges slide into the option slot on the top of the printer.

**Operating Temperature:** 50 to 90 degrees

**Size:** 4.5" x 3"

**Weight:** 3.5 oz.

**PACIFIC**  
DATA PRODUCTS

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DESK RAM is a trademark of Pacific Data Products, Inc. DeskJet is a trademark of Hewlett-Packard





# UPGRADEABLE MEMORY BOARD

# 1-2-4<sup>®</sup> Memory Board For Laser Printers

## Expansion Memory Board for:

- HP LaserJet Series II
- Canon LBP-811
- Olivetti PG-108

and other popular laser printers.

### Fully Upgradeable

- Buy only the memory you need!  
Upgrade as your applications change.
- The only socketed, upgradeable  
memory board on the market!

## The 1-2-4<sup>™</sup> Memory Board

### Available in 0 MB

- You plug in the chips for 1, 2 or 4 megabytes of memory.

### or 1 Megabyte

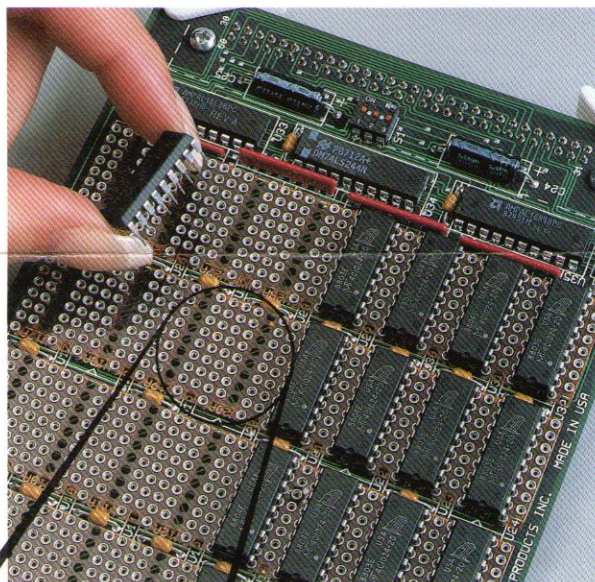
- Assembled with 32 - 256k DRAMS.
- You can add more chips for 2 or 4 Megabytes.
- Use to download fonts & forms; and to print full page 300 dpi graphics.

### or 2 Megabytes

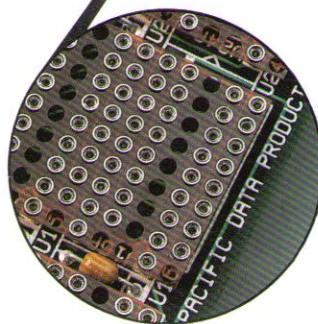
- Assembled with 16 - 1 megabit DRAMS.
- You can add more chips for 4 Megabytes.
- Use for most desktop publishing programs, and graphics including scanned images.

### or 4 Megabytes

- Assembled with 32 - 1 megabit DRAMS.
- For the maximum in expansion memory.
- Download numerous fonts and forms.
- Use for extensive graphics, scanned images, or CAD/CAM applications.
- A must for shared printer environments.



Shown here at 2 Megabytes.



Pacific Data Products' unique socket arrangement makes the 1-2-4<sup>™</sup> board FULLY UPGRADEABLE!

- Custom socket array\* accepts 256k or 1 megabit memory chips.
- Populate the 1-2-4 Board at 1, 2 or 4 Mb of expansion memory!
- Start at 0 Mb and simply plug in memory chips.

**Easy to Install** - Slips easily into the printer's RAM expansion slot.

### Full One Year Warranty

The 1-2-4 board is backed by a full one year warranty. All parts and workmanship are guaranteed to be free from defects. Pacific Data stands by its reputation for first rate service.

\*Patent applied for

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The 1-2-4<sup>™</sup> board is a registered trademark of Pacific Data Products, Inc.. LaserJet and Series II are trademarks of Hewlett-Packard. LBP-811 is a trademark of Canon USA. PG-108 is a trademark of Olivetti.



# Specifications

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## Capacity

1 Mg: 1048576 bytes 32-256K  
2 MB: 2097152 bytes 16-1 MBIT 1000 x 1  
4 MB: 4194304 bytes 32-1 MBIT 1000 x 1

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## Compatibility

Memory boards from Pacific Data Products, Inc. are fully compatible with the Hewlett Packard Series II LaserJet, the Olivetti PG-108, as well as the Canon LBP-8II and their memory boards. 256K and 1 MBIT memory chips may not be mixed on one board. Eight 1 MBIT chips will not function as a 1 MBYTE board. Some suggested memory chips are:

	256K Part #	1 MBIT Part #
Toshiba	TMM41256C	TC511000
NEC	uPD41256	uPD411000
Hitachi	HM50256	HM511000P
Fujitsu	MB81256	MB811000
T.I.	TMS4256	TMX4C1024
Micron	MT1256	MT4C1024
Okidata	MSM41256	MSM411000

Note: All memory chips must be 150 NS or faster.

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## Installation

No special tools are required to install your memory board. Remove the cover with a Phillips screwdriver and simply set the switches on the memory board. Insert the board into the memory slot of the Printer.

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## Operating Temperature

50 to 91 degrees F. (32 to 95 degrees F. non-operating)

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## Operating Humidity

20% to 80% Relative Humidity (10% to 80% non-operating)

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## Size

Length: 5.45"  
Width: 4.3"

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## Weight

5.5 ounces

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## Ordering Information

All other specifications are consistent with HP, Canon and Olivetti guidelines. The part numbers for these items are as follows:

Item	HP or Olivetti Part #	Canon Part #
0 MB Memory Board	P0A	C0A
1 MB Memory Board	P1A	C1A
2 MB Memory Board	P2A	C2A
4 MB Memory Board	P4A	C4A

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