

HP LaserJet IID Desktop Office Printer

Technical Data

Features

- High-resolution text and graphics
- Two paper input trays handle larger volumes
- Two-sided page printing for excellent paper usage
- Envelope feeder adds a third input source
- 24 fonts standard with the printer
- Extensive software support
- Expandable with more memory and fonts
- Automatic font rotation

- The HP 33447A LaserJet IID printer is designed for business

and technical professionals who require a quiet, high-resolution printer with the flexibility and paper capacity to serve one high-volume user or several users. Like the HP LaserJet Series II printer, the LaserJet IID printer is excellent for applications such as general, technical, and legal word processing, spreadsheets, reports, forms, and desktop publishing.

Printing That Looks Great

Printing at up to eight pages per minute, the LaserJet IID printer produces crisp, easy-to-

Publication-quality laser printing with advanced paper handling

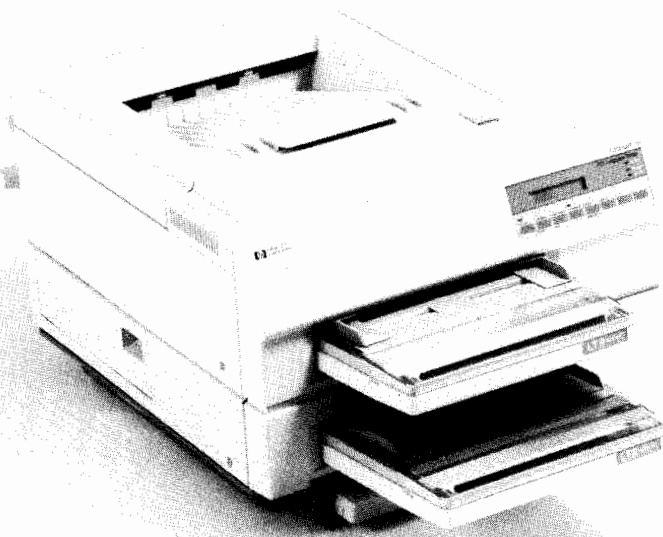
read text and graphics at 300 × 300 dots-per-inch resolution. The toner composition and printer engine design ensure dense, even print coverage throughout each page.

Professional-looking documents can be produced from a wide variety of typefaces and type sizes available in built-in, cartridge, and disk-based (soft) fonts. The LaserJet IID printer comes standard with 14 built-in fonts and a 92290S2 font cartridge containing 10 proportional fonts.

The LaserJet IID can automatically rotate cartridge and soft fonts to either a portrait (vertical) or a landscape (horizontal) orientation.

More Paper for More Users

The LaserJet IID printer holds up to 200 sheets in each of two input trays. Combined with duplex (two-sided) printing, up to 800 pages (400 sheets of paper) can be printed without reloading paper. The LaserJet IID paper trays are interchangeable with the LaserJet Series II printer trays and are offered in letter, legal, European A4, and



executive sizes. Heavier paper (up to 35 lb when printing on one side only), labels, and overhead transparencies can be used in the upper paper tray.

Two-sided Printing Offers Savings

Duplex (two-sided) printing offers significant savings in paper purchase, filing, storage, and mailing costs. The LaserJet IID printer makes duplex printing easy to use by allowing a duplex document to be opened and read either book-style or calendar-style. Designating a long-edge or short-edge page binding makes the printer automatically rotate the second page on each sheet of paper for correct reading placement.

Envelope Feeder Adds Flexibility

The envelope feeder (available as an accessory) offers a third input source for printing a batch of envelopes or envelopes alternated with letters. With the two paper input trays, it allows printing on letterhead, plain paper, and envelopes without touching the printer. The feeder holds up to 50 envelopes in Commercial #10, Monarch, or DL sizes. Manual paper feed through the lower paper tray is still available with the envelope feeder installed on the printer.

Extensive Software Support

With HP's industry-standard PCL printer language built in, the LaserJet IID printer works with software packages covering a wide range of applications. It is compatible with the same software, font cartridges, and soft fonts that work with the LaserJet, LaserJet PLUS, LaserJet 500 PLUS, LaserJet Series II, and LaserJet 2000 printers. The printer is equipped with a front panel-selectable Centronics parallel and RS-232-C/RS-422-A serial interface for connectivity with most computers.

Expandable to Serve Several Users

The LaserJet IID printer is well suited for sharing among several users. A 1, 2, or 4 megabyte memory board can be added for users needing full-page 300 × 300 dpi graphics, more downloaded fonts or macros, or memory-dependent applications. The printer's extended I/O slot allows the addition of a printer sharing or spooling device.

Easy to Use

The 16-character LCD control panel on the LaserJet IID printer provides convenient configuration and customization of the printing environment. A quick self-test printout lists the configuration and printing menu settings. A font printout will list all internal, cartridge, and soft fonts currently available in the printer, the escape sequences to access each font, and print samples of each font.

The single-component, easy-to-replace toner cartridge prints approximately 4000 pages of normal text. The print drum is part of each toner cartridge, keeping print quality high at a low printing cost (approximately three cents per single-sided page, excluding paper costs).



Feature Comparison Matrix

Feature	LaserJet Series II Printer	LaserJet IID Printer
Print speed	Up to 8 pages per min. (simplex printing on one side of 8 sheets of paper)	Up to 8 pages per min. (simplex printing on one side of 8 sheets of paper) Up to 7.4 pages per min. (duplex printing on both sides of 4 sheets of paper)
Text resolution	300 × 300 dots per in.	300 × 300 dots per in.
Graphics resolution with standard memory	Simplex printing: 75 dpi 1 page 100 dpi 1 page 150 dpi 1 page 300 dpi 0.5 page	Simplex: 1 page Duplex: 2 pages 1 page 1.5 pages 1 page 1 page 0.5 page 0.5 page
Memory required to print full-page 300 dpi graphics	Add 1, 2, or 4 Mbyte memory board	Add 1, 2, or 4 Mbyte memory board (simplex) Add 2 or 4 Mbyte memory board (duplex)
Number of input trays	One	Two
Number of sheets per input tray	200	200 each tray for a total of 400
Envelope printing capabilities	Envelope input tray Manual feed	Envelope feeder Envelope input tray Manual feed
Automatic duplex (two-sided) printing?	No	Yes
Page-binding considerations (for duplex printing)	Not applicable	Long-edge or short-edge binding in portrait or landscape orientations
Font orientations	Depends on font, not printer	Printer can rotate font to either portrait or landscape
Internal fonts	6 internal	14 internal
Internal symbol sets	24 internal	24 internal plus PC-850 and Legal (=26)
Standard font cartridges with printer	None	92290S2 cartridge provides 10 fonts (TmsRmn and Helv)
Font cartridge slots	Two	Two
Number of downloaded fonts or macros	Maximum of 32 or memory space limit, whichever is reached first	Limited only by memory space available
Number of fonts per page allowed	Maximum of 16 or memory space limit, whichever is reached first	Limited only by memory space available
Standard memory (user memory)	512 Kbytes (395 Kbytes)	640 Kbytes (395 Kbytes)
Additional memory available	1 Mbyte (33443A or B) 2 Mbytes (33444A or B) 4 Mbytes (33445A or B)	1 Mbyte (33443B) 2 Mbytes (33444B) 4 Mbytes (33445B)
Hardware interfaces	Centronics parallel RS-232-C/RS-422-A	Centronics parallel RS-232-C/RS-422-A
Video interface	Yes	No
Extended I/O slot	Yes	Yes (requires different printer sharing devices than LaserJet Series II printer)

Technical Information

Printing Process

Dry-type electrophotography

Printing Speed

First sheet less than 16 seconds after receipt of data. Subsequent sheets at 8 pages per minute simplex printing, or up to 7.4 pages per minute duplex printing (printing pages on both sides of a sheet of paper). Job throughput is application and system dependent.

Warm-up Time

Less than 30 seconds from cold turn on

Text Resolution

300 × 300 dpi

Graphics Resolution

75, 100, 150, or 300 dpi

Memory Requirements for Graphics Printing

Pages of graphics:	Graphics resolution (dpi):				Printing mode:
	300 dpi	150 dpi	100 dpi	75 dpi	
0.5 pg*	640 KB	640 KB	640 KB	640 KB	simplex or duplex
1.0 pg	1.6 MB	640 KB	640 KB	640 KB	simplex or duplex
1.5 pgs	1.6 MB	1.6 MB	640 KB	640 KB	duplex
2.0 pgs	2.6 MB	1.6 MB	1.6 MB	640 KB	duplex

* The graphics page space shown for duplex printing represents the *total* space for graphics printed on both sides of a single sheet. For instance, a ¼-page, 300 dpi graphic may be printed on the front side and a ¼-page, 300 dpi graphic on the back side, for a total of ½-page of 300 dpi duplex printing with the standard 640 Kbytes memory. This table assumes nothing else is in printer memory, such as downloaded fonts or macros.

Printing Format

Simplex (single-sided) or duplex (two-sided) printing selectable from front control panel or via supporting software

Long-edge or short-edge page binding rotation (for duplex printing) selectable from front

control panel or via supporting software

Portrait (printing across the width of the page) or landscape (printing across the length of the page) orientations selectable from front control panel or via supporting software

Duplex options:

	Long-edge binding	Short-edge binding
Portrait orientation	reads book-style	reads calendar-style
Landscape orientation	reads calendar-style	reads book-style

Internal Fonts

Typeface	Treatment	Pitch	Point	Orientation**
Courier*	Medium	10	12	Portrait and landscape
Courier	Bold	10	12	Portrait and landscape
Courier	Italic	10	12	Portrait and landscape
Courier	Medium	12	10	Portrait and landscape
Courier	Bold	12	10	Portrait and landscape
Courier	Italic	12	10	Portrait and landscape
Line Printer	Medium	16.66	8.5	Portrait and landscape

*The Courier Portrait 10-pitch (medium) font is the printer's factory default font. This font is used unless the user: selects another default using the control panel; sends a font selection command (via escape sequence or supporting software product) to request a font in place of the default; or installs a cartridge with a default font.

**The LaserJet IID printer automatically rotates fonts to the orientation specified.

Internal Symbol Sets

Roman-8, PC-8 (IBM-US), PC-DN (IBM-DN), ECMA-94, Latin-1 PC-850, Legal

These additional symbol sets can be used with internal fonts: ISO 2, 4, 6, 10, 11, 14,

15, 16, 17, 21, 25, 57, 60, 61, 69, 84, 85, HP Spanish, and HP German. ISO denotes International Standards Organization symbol sets, primarily for use in Europe or for printing non-English characters.

92290S2 Cartridge Fonts

Typeface	Treatment	Pitch	Point	Orientation*
TmsRmn	Medium	Proportional	8	Portrait and landscape
TmsRmn	Medium	Proportional	12	Portrait and landscape
TmsRmn	Bold	Proportional	12	Portrait and landscape
TmsRmn	Italic	Proportional	12	Portrait and landscape
Helv	Bold	Proportional	14	Portrait and landscape

*The LaserJet IID printer automatically rotates fonts to the orientation specified.

92290S2 Cartridge Symbol Sets

Roman-8, PC-8, PC-8 D/N, ECMA-94 Latin 1.

Paper Type

Single-sheet copier paper

Note: The LaserJet IID printer is designed for use with copier bond paper of high-quality construction. To obtain the clearest, sharpest images, paper manufactured for photocopiers such as Canon NP, Xerox 4024, Gilbert, or NuTech should be used. Most cotton bond paper also works well on the LaserJet IID printer. The printer can also accommodate a variety of special application paper, such as label stock, colored and pre-printed paper, and overhead transparency film designed for laser printers. It is strongly recommended that all media be tested before purchasing. Consult the HP LaserJet IID Paper Specifications Guide (P/N 5954-8970) for additional information.

Paper Weight

Top tray: 60 to 135 g/m² (16 to 35 lb) simplex printing

Bottom tray (or duplex printing from any source): 60 to 90 g/m² (16 to 24 lb)

Paper Size

Letter (8½ × 11 in.)
 Legal (8½ × 14 in.)
 A4 (European) (210 × 297 mm)
 Executive (7¼ × 10½ in.)

Note: Best results will be obtained if paper is stored and used within the listed ranges.

Temperature: 17 to 23 degrees C (63 to 73 degrees F)

Relative Humidity: 40 to 50%

Paper Handling

Two 200-sheet input trays

Correct-order output through top output tray (100 sheets)

Reverse-order output through rear output tray (20 sheets, simplex printing only)

Manual feed for envelopes, heavier paper stock, and odd-size paper

Envelope feeder or envelope input tray accessories also available

Printable Surface (Portrait)

	Letter	Legal	A4	Exec.
Width				
inches	8.0	8.0	7.8	6.75
mm	203	203	198	171
Length				
inches	10.6	13.6	11.3	10.1
mm	269	345	287	257

Envelope Handling

	Envelope feeder	Envelope tray	Manual Feed
Capacity	Up to 50	Up to 15	One at a time
Types	Comm. #10 Monarch DL	Comm. #10 Monarch DL C5	Comm. #10 Monarch DL C5

Envelope Weight

Envelope feeder accessory: 60 to 90 g/m² (16 to 24 lb)

Envelope tray accessory: 60 to 90 g/m² (16 to 24 lb)

Manual feed: 60 to 90 g/m² (16 to 24 lb)

Note: For additional specifications on envelopes for laser printing, consult the HP LaserJet IID Paper Specifications Guide (P/N 5954-8970). It is strongly recommended that all media be tested before purchase.

Envelope Size

Commercial #10: 4¼ × 9½ in.

Monarch: 3⅞ × 7½ in.

DL: 110 × 220 mm

C5: 162 × 129 mm

Note: Best results are obtained if envelopes are stored and used within the listed ranges.

Temperature: 17 to 23 degrees C (63 to 73 degrees F)

Relative humidity: 45 to 55%

Printable Surface (Landscape)

	Comm. #10	Monarch OL	C5	
Width				
inches	9.10	7.10	8.27	8.62
mm	231	180	210	219
Length				
inches	3.72	3.47	3.86	5.91
mm	94	88	98	150

Control Panel

Buttons: on line, continue/reset, print fonts/test, form feed, enter/reset menu, menu, +, -

Indicators: (16-segment display indicator), ready, manual, duplex, on line, form feed

Interfaces

Centronics parallel, RS-232-C/
RS-422-A (300-19.2 baud)

Buffer Size

640 Kbytes standard memory
(395 Kbytes of user-accessible
memory)

Environmental Ranges

*Temperature (Printer and
Toner Cartridge)*

Operating: 10 to 32.5 degrees C
(50 to 91 degrees F)

Storage: 0 to 35 degrees C
(32 to 95 degrees F)

Altitude

Operating: 0 to 2500 m (0 to
8200 ft)

Storage: 0 to 15000 m (0 to
49200 ft)

Humidity

Operating: 20 to 80% RH
Storage: 10 to 80% RH

*Acoustics (average sound
pressure measured at 1 m per
ISO 7779)*

Printing:

Maximum sound power level-
 L_{wAd} : 6.3 bels(A)

Maximum sound pressure level-
 L_{pAm} : 50 dB(A)

Standby:

Maximum sound power level-
 L_{wAd} : 5.3 bels(A)

Maximum sound pressure level-
 L_{pAm} : 40 dB(A)

Power Requirements

Source: 100 to 115 volts or 220
to 240 volts ($\pm 10\%$) (the print-
er's voltage range depends on
the country in which the
printer is purchased)

Frequency: 50 or 60 Hz

Consumption at 115 VAC:
Printing: 870 watts maximum
Standby: 170 watts (nominal)

Physical Specifications

Height: 31.3 cm (12.3 in.)

Width: 45.4 cm (18.0 in.)

Depth (body only): 62.5 cm
(25.0 in.)

Depth (with tray): 88.8 cm
(35.0 in. all trays but legal
37.5 in.)

Net Weight: 33.6 kg (74 lb)

Product Certifications

UL 478 listed; CSA 22.2 154
Certified; complies with IEC
380 and IEC 435; FCC level B;
VDE 0871B, VDE 0836, IEC-
TC76, and VBG 93; BRH Cer-
tified Class 1 Laser Product
(safe for office/EDP use).

Estimated Typical Usage

Up to 7500 pages per month

Note: Estimated typical usage
is offered as the recommended
monthly volume to comfortably
accommodate several users. It
is given as a guideline for selec-
ting the correct printer model.
The warranty coverage and
usage limit of the LaserJet IID
printer is 16000 pages per
month (simplex printing).

Interface and Cable Requirements

System	Interface	HP Cable	Cable Length
HP 150	Serial	13242G	5.0 m (16.7 ft)
HP 150 (45643A interface required)	Parallel	13242D	2.0 m (6.6 ft)
HP Vectra (24540A interface required)	Serial	24542G	3.0 m (9.9 ft)
HP Vectra (24540A interface required)	Parallel	24542D	2.0 m (6.6 ft)
IBM PC-AT, and most AT compatibles	Serial	24542G	3.0 m (9.9 ft)
	Parallel	24542D	2.0 m (6.6 ft)
IBM PC, PC-XT & PS/2 and most PC	Serial	17255D	1.0 m (3.0 ft)
COMPAQ Portable	Serial	17255D	1.0 m (3.0 ft)
COMPAQ Portable	Parallel	24542D	2.0 m (6.6 ft)
COMPAQ DeskPro	Serial	24542G	3.0 m (9.9 ft)
COMPAQ DeskPro	Parallel	24542D	2.0 m (6.6 ft)
AT&T PC	Serial	17255D	1.0 m (3.0 ft)

Note: Some PCs require spec-
ific interface accessory cards
installed to connect to a
printer. Consult your PC
salesperson for additional
information.

Ordering Information

Standard Unit

33447A

HP LaserJet IID printer, in-
cludes Getting Started Road
Map, User's Manual, Quick
Reference Card, Software
Applications, Paper Specifica-
tions Guide, 640 Kbyte RAM
memory (up to 395 Kbyte user
memory), Centronics parallel
and RS-232-C/RS-422-A inter-
face, EP-S toner cartridge, two
200-sheet letter size paper
input trays, an S2 font car-
tridge, and a power cord.
(Cables for computer interfaces
are not supplied.)

Supplies

Toner Cartridge

92295A Black toner cartridge (EP-S)

Overhead Transparencies

92285J 50 sheets per box

Labels (100 sheets per box)

92285K 1 × 2⁷/₈ in. (33 per page)

92157K 1 × 2⁷/₈ in. (33 per page with border)

92285L 1³/₈ × 2⁷/₈ in. (24 per page)

92157N 1¹/₂ × 2⁷/₈ in. (21 per page with border)

92157P 2 × 4¹/₄ in. (10 per page with border)

92285M 2³/₄ × 4¹/₄ in. (8 per page)

92285W 8¹/₂ × 11 in. (1 per page)

Other Supplies

92295Q Ozone filter replacement

Accessories

Memory Boards

33443B 1 Mbyte memory board

33444B 2 Mbyte memory board

33445B 4 Mbyte memory board

Note: HP 33443A, 33444A, and 33445A (old model) memory boards for the LaserJet Series II printer do not work with the LaserJet IID printer.

Envelope Feeders

33457A Envelope feeder (holds up to 50 envelopes)

92295F Envelope input tray (holds up to 15 envelopes)

Paper Trays

92295B Letter-size paper tray (8¹/₂ × 11 in.)

92295C Legal-size paper tray (8¹/₂ × 14 in.)

92295D A4-size paper tray (210 × 297 mm)

92295E Executive-size paper tray (7¹/₄ × 10¹/₂)

92295R Replacement top cover for 92295B, D, and E paper trays

92295S Replacement top cover for 92295C paper tray

92295U Top cover for all paper tray sizes to be used with envelope feeder (33457A)

Manuals

33447-90901 LaserJet IID Printer User's Manual

33447-90905 LaserJet IID Printer Technical Reference Manual

33447-90908 LaserJet IID Printer Getting Started Road Map

33447-90911 LaserJet IID Printer User's Quick Reference Card

33447-90912 LaserJet IID Printer Envelope Feeder User's Guide

33447-90914 LaserJet IID Printer Paper Specifications Guide

— LaserJet IID Printer Software Application Notes (call 208-323-2551 in the United States)

Font Cartridges

92286A Courier

92286B TmsRmn Proportional 1

92286C International 1

92286D Prestige Elite

92286E Letter Gothic

92286F TmsRmn 2

92286G Legal Elite

92286H Legal Courier

92286J Math Elite

92286K Math TmsRmn

92286L Courier P & L

92286M Prestige Elite P & L

92286N Letter Gothic P & L

92286P TmsRmn P & L

92286PC ProCollection (ASCII and Legal)

92286Q Memo 1

92286R Presentations 1

92286T Tax 1

92286U Forms Portrait

92286V Forms Landscape

92286W1 Bar Code 3-of-9/OCR-A

92286X EAN/UPC/OCR-B

92286Y Courier PC 1

92286Z Microsoft® 1A

92290S1 Courier PC 1

92290S2 TmsRmn/Helv Report 1

Soft Fonts*

33412AC Tms/Helv Base, ASCII, 5¹/₄ in. disk

33412AD Tms/Helv Base, Roman-8, 5¹/₄ in. disk

33412AE Tms/Helv Supplement, ASCII, 5¹/₄ in. disk

33412AF Tms/Helv Supplement, Roman-8, 5¹/₄ in. disk

33412DA Letter Gothic Family, 5¹/₄ in. disk

33412EA Prestige Elite Family, 5¹/₄ in. disk

33412RA ITC Garamond®, ASCII, 5¹/₄ in. disk

33412RB ITC Garamond, Roman-8, 5¹/₄ in. disk

33412SA Century Schoolbook®, ASCII, 5¹/₄ in. disk

33412SB Century Schoolbook, Roman-8, 5¹/₄ in. disk

33412TA Zapf Humanist™, ASCII, 5¹/₄ in. disk

33412TB Zapf Humanist, Roman-8, 5¹/₄ in. disk

33412UA Headline Typefaces™ 1, ASCII, 5¹/₄ in. disk

33412UB Headline Typefaces, 1, Roman-8, 5¹/₄ in. disk

33412AG Helv Headlines, 5¹/₄ in. disk

33407B FontLoad™, 5¹/₄ in. disk (utility)

33412DC Presentations/Letter Gothic, 5¹/₄ in. disk

33413DC Presentations/Letter Gothic, 3¹/₂ in. disk

Note: All the above soft fonts are available with corporate license for use with up to 100 printers (option 100). 33412AD and 33412AF also include the ASCII characters contained in 33412AC and 33412AE, respectively.

*Soft fonts are licensed for use with up to three printers.

Scalable Typeface Products

C2050A #001 CG Times typefaces, 5¹/₄ in. and 3¹/₂ in. disks

C2050A #002 Univers 1 typefaces, 5¹/₄ in. and 3¹/₂ in. disks

C2050A #003 Decorative 1 typefaces, 5¹/₄ in. and 3¹/₂ in. disks

C2051A #ABA Type Director, font and typeface management program, 5¹/₄ in. and 3¹/₂ in. disks (includes 2 typefaces)

C2502A #ABA Premier Collection, 3¹/₂ in. disk

C2054A #ABA Premier Collection, 5¹/₄ in. disk (Type Director program plus 12 typefaces)

For print samples and other font information, ask your HP Dealer or Sales Representative for the brochure, "Supplies, Accessories and Software for Your HP LaserJet Printer," Part Number 5956-4268.

Printer supplies are available at authorized HP dealers or through HP's Direct Marketing Operation in the U.S. (800-538-8787); in California, call (408) 738-4133 collect.

United States:

Hewlett-Packard Company
4 Choke Cherry Road
Rockville, MD 20850
301 670 4300

Hewlett-Packard Company
5201 Tollview Drive
Rolling Meadows, IL 60008
312 255 9800

Hewlett-Packard Company
5161 Lankershim Blvd.
No. Hollywood, CA 91601
818 505 5600

Hewlett Packard Company
2015 South Park Place
Atlanta, GA 30339
404 955 1500

Canada:

Hewlett-Packard Ltd.
6877 Goreway Drive
Mississauga, Ontario L4V1M8
416 678 9430

Australia/New Zealand:

Hewlett-Packard Australia Ltd.
31-41 Joseph Street
Blackburn, Victoria 3130
Australia
03 895 2895

Europe/Africa/Middle East:

Hewlett-Packard S.A.
Central Mailing Department
P.O. Box 529
1180 AM Amstelveen
The Netherlands
31 20/547 9999

Far East:

Hewlett-Packard Asia Ltd.
22/F Bond Centre
West Tower
89 Queensway
Central, Hong Kong
5 848 7777

Japan:

Yokogawa Hewlett-Packard Ltd.
29-21, Takaido-Higashi 3-chome
Suginami-ku, Tokyo 168
03 331 6111

Latin America:

Latin American Region Headquarters
Monte Pelvoux Nbr. 111
Lomas de Chapultepec
11000 Mexico D.F., Mexico
905 596 79 33

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