# UNIVAC 1004 II and UNIVAC 1004 III

Power You Grow With...Not Into

## Introducing

The UNIVAC 1004 II Card Processor and the UNIVAC 1004 III Magnetic Tape System, two potent additions to the UNIVAC 1004 line. Available in an 80-column model, a 90-column model, and in a single model which will handle both 80-and 90column cards, the 1004 II and III are designed specifically for the business on the move... the burgeoning business.

Featuring an unprecedented growth potential, realized step by proportioned step, the 1004 II and III keep perfect pace with the growing business. Here is power perfectly proportioned to your need; performance, virtually unlimited in its ability to cope with progressively complicated data-processing problems. yet priced to fit the most limited budget.

UNIVAC 1004 II Card Processor and UNIVAC 1004 III Magnetic Tape System Power You Grow With ... Not Into

### **UNIVAC 1004 II** CARD PROCESSOR

The UNIVAC 1004 II Card Processor retains the incomparable design of the UNIVAC 1004 Card Processor, incorporating reading, processing, and printing functions into the only self-contained data-processing system available today. But the UNIVAC 1004 II brings to the growing business immeasurably stepped-up data processing at an incredibly stepped-down cost. The UNIVAC 1004 II delivers reading, processing, and printing speeds heretofore available only in expensive computing systems.

Card reading

600 cards per minute

Printing

600 alphanumeric lines per minute; 132

characters per line

Card Punching

200 cards per minute (fully overlapped

with processing, reading and printing)

Memory Cycle Time

6.5 microseconds.

The high speeds of the UNIVAC 1004 II provide significant advantages that can be directly related to time and money. Peak-load bottlenecks can be eliminated by the ability of the 1004 II to absorb increased work loads as they arise. The increased volume of work can be handled without the usual increase in personnel, equipment, and dollars spent. Costly overtime and extra shift operations are eliminated. Work-scheduling is simplified. Briefly stated, the UNIVAC 1004 II simply does more work in less time for less money.

The UNIVAC 1004 II, like the 1004 Card Processor before it, features 961 characters of magnetic core storage combined with the simplicity of plugboard programming thoroughly familiar to anyone who has worked with conventional punched card equipment. But the 1004 II with its stepped-up speeds enables the user to keep apace with a growing business.

Here are just a few samples of the speed at which the UNIVAC 1004 II can accomplish some typical arithmetic processing:

Add: Two 8-position fields: 0.130 milliseconds

Multiply: 6-position field by a 4-position field: 3.77 milliseconds

Divide: 6-position dividend by a 4-position divisor to obtain a 3-posi-

tion quotient: 3.26 milliseconds

Compare: Two 6-position fields: 0.104 milliseconds

With such processing speeds, coupled with 1004 programming capacity, the UNIVAC 1004 II handles complex computing problems, making it the fastest, most versatile punched-card system available today. All standard 1004 programs are compatible with the 1004 II and can operate without modification. No operator retraining is required. And the 1004 II features simultaneous processing. Printing, reading and punching can occur simultaneously; punching and processing can also take place at the same time.

Punched-card accounting with the UNIVAC 1004 II is full-scale electronic data-processing, proportioned to your needs and priced to fit your data-processing budget.

UNIVAC 1004 II...just one of 2 powerful new 1004 systems featuring Power You Grow With... Not Into

# UNIVAC 1004 III MAG

Now Univac announces the UNIVAC 1004 III Magnetic Tape System.

UNIVAC 1004 III features magnetic tape in three density levels: 200 pulses per inch, 556 ppi. and 800 ppi., for perfect compatibility with the tape computers, small or large, of another manufacturer. Your UNIVAC 1004 III can be, according to your needs, a completely self-sufficient computer, equal to the most pressing data-processing problems. Or, in the bigger business, it can be a powerful adjunct to a larger computer system, handling many tape-to-card, card-to-tape, tape-to-print and updating functions off-line for your central system. In either case, UNIVAC 1004 III brings all the storage, speed, and versatility of magnetic tape processing to your installation at a price that defies competition. The choice of three different density levels—all at finger-tip control—makes the UNIVAC 1004 III far and away the most flexible small scale computer available today.

Despite the lofty capabilities made possible by magnetic tape, the UNIVAC 1004 III retains the down-to-earth simplicity of plugboard programming. A single control panel employing easy and familiar wiring techniques, controls the entire operation of the UNIVAC 1004 III. The 1004 III is a natural for the business with high—and getting higher—card volume. One 2400 ft. reel of tape will contain the equivalent of up to 175,000 90-column cards or 225,000 80-column cards. Here is enormously increased storage for the small computer user. And installation of, or conversion to UNIVAC 1004 III is simple, fast, and economical. The 1004 III is the ideal system for file-maintenance applications.

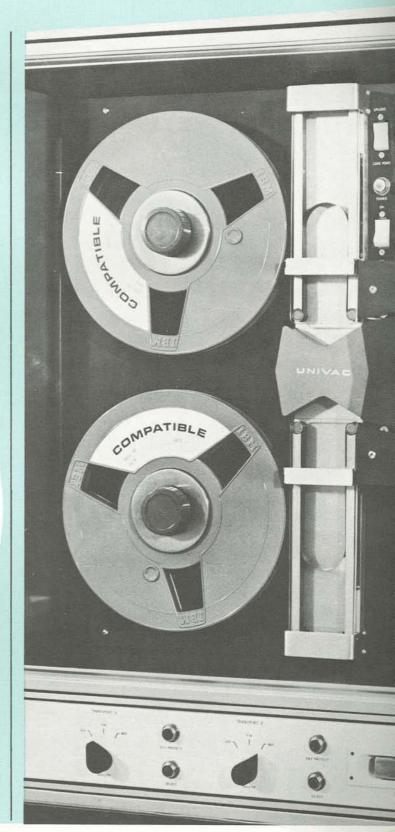
The UNIVAC 1004 III is a compact, low cost system which provides all the power needed for the problems at hand and offers the potential for more sophisticated tape processing as it is needed. Operating off-line, the remarkably adaptable 1004 III is ideally suited for use with larger systems such as the UNIVAC 1050, 490, and 1107 and the IBM 1400 and 7000 series. It provides across-the-board systems compatibility for output editing, formating, report preparation and file maintenance, freeing the larger system for large-scale processing. Most important of all, UNIVAC 1004 III features complete concurrency of magnetic tape processing. Want to update 2000 items on a 75,000 item master file? Simply feed the 2000 transaction cards to the 1004 III. The 1004 III will simultaneously and automatically read the cards, make the necessary computations, read the existing master file tape, update the appropriate items, write a new master file tape, and print an up-to-theminute report for up-to-the-minute action by a more informed management.

UNIVAC 1004 III offers a growth potential which is both practical and economical, featuring expansion in proportion to your needs, and at a cost to match.

UNIVAC 1004 III Magnetic Tape Unit

Two magnetic tape units can be installed on a UNIVAC 1004 III.

Tape Read Speed: 42.08 inches per second.



# NETIC TAPE SYSTEM

UNIVAC 1004 + 200 ppi. + 556 ppi. + 800 ppi. = 1004 III



UNIVAC 1004 III Magnetic Tape System... the second of two powerful new 1004 systems featuring...

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### **OPTIONAL EQUIPMENT**

The greatly increased input, processing, and output speeds and the dramatic speed and storage of magnetic tape provide the power to support extensive systems growth. The 1004 line of computing systems remains unique in its ability to expand by the addition of optional equipment. Listed below are the additional units currently available for inclusion in a 1004 system—additional power in proportion to your need, 1004 CARD PUNCH The UNIVAC 1004 Card Punch provides output cards at up to 200 per minute. Card punching can occur simultaneously with card reading and line printing and will fully overlap processing. Card punching accuracy is assured by an automatic hole-count checking feature. 1004 READ PUNCH The UNIVAC 1004 Read Punch enables any 1004 system to read and punch into the same card. Cards can be handled at a rate of 200 per minute. Equipped with a Read Punch, a 1004 II or 1004 III can perform two-file read, punch one file; two-file read only; read-punch one file; punch only. Here again. power as you need it. The flexible 1004 Read Punch acts effectively as an additional read or an additional punch station according to your application requirements. 1004 AUXILIARY CARD READER The UNIVAC 1004 Auxiliary Card Reader is a low-cost, 400-cards per minute input unit. Reading automatically with the standard reader in any sequence, the Auxiliary Card Reader permits multiple files to be processed simultaneously without previous merging. When less-than-full cards are read, the reading rate exceeds 400 cards per minute. The unit contains three 1000-card, program selectable output stackers. 1004 DATA LINE TERMINAL TYPE 1 The UNIVAC 1004 Data Line Terminal Type 1 is a high-speed communications terminal. It will process 2400 bits of information per second over leased lines, up to 2000 bits per second on a toll line. With a Data Line Terminal Type 1 any UNIVAC 1004 system can transmit or receive data over telephone lines. The Data Line Terminal operates with a Bell System 201A or 201B Data Phone set in half-duplex mode, that is, either send or receive at one time. A UNIVAC 1004 equipped with a DLT-1 can communicate with another UNIVAC 1004, UNIVAC 1050, UNIVAC 490, or UNIVAC 1107. 1004 DATA LINE TERMINAL TYPE 2 The UNIVAC 1004 Data Line Terminal Type 2 provides communication via telephone lines with a Dial-o-verter Type 520 Magnetic Tape Terminal. This permits high-speed UNIVAC 1004-to-magnetic tape transmission, and magnetic tape-to-UNIVAC 1004 transmission via telephone voice lines. Through the medium of the DIGITRONICS D-520 Magnetic Tape Terminal, the UNIVAC 1004 is compatible with virtually all computing systems available today. The DLT-2 also processes 2400 bits of information per second over leased lines, up to 2000 bits per second on a toll line. 1004 PAPER TAPE READER The UNIVAC 1004 Paper Tape Reader can be installed on any UNIVAC 1004 II or 1004 III. It is a powerful, flexible input unit which will read 5-, 6-, 7-, or 8-track paper tape at 400 characters per second. Paper tape reading is automatically parity checked and can occur simultaneously with printing and card punching. The 1004 Paper Tape Reader provides a highly efficient method of converting paper tape, generated by a wide variety of equipment, to cards. PAPER TAPE PUNCH The UNIVAC 1004 Paper Tape Punch brings added scope to the processing capabilities of the basic system. It can be field installed on any 1004 equipped with a Card Punch or Read Punch. This unit can punch information into 5-, 6-, 7-, or 8-track tape at 110 characters per second and tape punching can occur simultaneously with printing and card reading or processing. Besides providing an additional output medium for a 1004 system, the Paper Tape Punch can be invaluable in such data-processing functions as card to paper tape conversion, magnetic tape to paper tape conversion, paper tape to paper tape conversion, communications to paper tape conversion, and processing to paper tape conversion.

The UNIVAC 1004 Card Processor was heralded as "the first major advance in punched-card accounting in more than a decade." Now with the UNIVAC 1004 II Card Processor and UNIVAC 1004 III Magnetic Tape System, the entire series of UNIVAC 1004 equipment emerges as the finest, most complete line of small-scale data-processing equipment available today:

- Unique in design
- Unapproached in flexibility
- · Unsurpassed in performance
- · And unprecedented in its ability to provide . . .

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