Put your business forms on an Apple II™

VersaForm

Business Form Processor

General Description

Using the familiarity and structure of business forms, VersaForm quickly automates the handling of transaction information typical of most business and professional environments. VersaForm allows users to emulate existing paper flows and procedures, further extending the utility of personal computers to everyday application.

A True Business Forms Processor

Unlike data base management systems, VersaForm requires little understanding of data processing, its concepts, procedures or data storage technology.

VersaForm incorporates both the higher level data structures *and* the procedural familiarity of current business and professional forms. The result is a powerful, easy to use system that allows users to focus on getting specific paper handling jobs done, without being involved with the technical problems of traditional data processing.

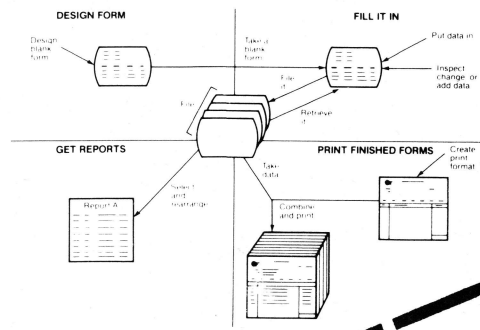
As a true BUSINESS FORMS PROCESSOR, VersaForm allows you to concentrate on streamlining your paper operation while increasing operator accuracy. The key to VersaForms's power lies in its inherent simplicity both in system set-up and in daily operation.

A Friendly, Easy to Use System

VersaForm was designed with a graduated-function approach that allows users of all skill levels to use the system. A key innovation, however, is the capacity for a knowledgeable manager or administrator to design a near-foolproof system that less skilled staff can use. Such a system can incorporate the insight of skilled administrators while allowing those less skilled to take advantage of the designer's knowledge. Even sophisticated business forms applications like multi-vendor bids and multi-item purchase orders can be quickly designed with features that check for operator input errors and perform required calculations automatically. VersaForm is among the very few application systems that is designed with a completely non-technical user in mind. Yet it does not compromise the flexibility, power or utility needed for real-world business tasks.

Software Simplicity

With simplicity and processing power as a prime objective, Applied Software Technology employed the latest, most sophisticated programming and system analysis technologies available. This is reflected in the choice of Pascal as a programming language. Pascal provides the technical ability to write very powerful programs, such as VersaForm, that appear to the user to be very simple. And because Pascal is one of the newer 'structured' languages, modifications and enhancements to the basic program can easily be developed and tested. This ensures that future enhancements can be easily implemented, and future hardware supported. VersaForm will be a product of enduring and growing value.



Apple III VERSIONS NOW AVAILABLE

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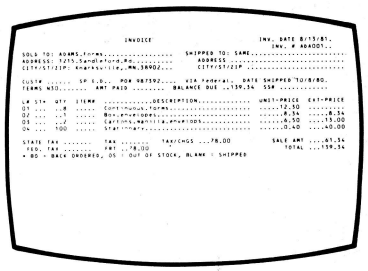
BARCLAYCARD VISA

APPLICATIONS

Wherever there is a merging of customer information, transaction data, costed items and their extensions, VersaForm simplifies the error-free processing of business information.

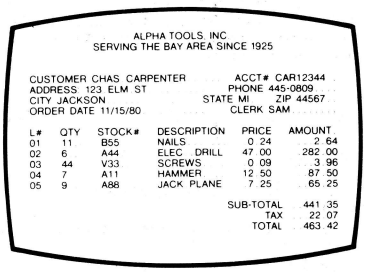
RETAIL/WHOLESALE

- Estimates/quotations
- Bills of sale
- Invoices
- Service department records
- Inventory control
- Purchase order management
- Daily sales summaries
- Commissions including variable rates
- Sales analysis by:
  - product/service
  - sales person
  - cash register or area
  - customer



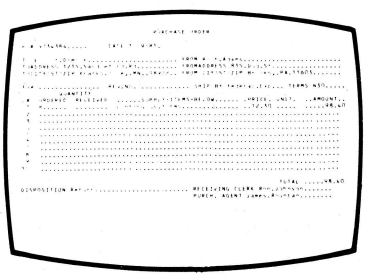
MARKETING

- Order processing and tracking
- Advertising insertion orders
- Expense analysis
- Territory/sales person summaries by:
  - period
  - product class
  - commissions
  - profit margin
  - customer



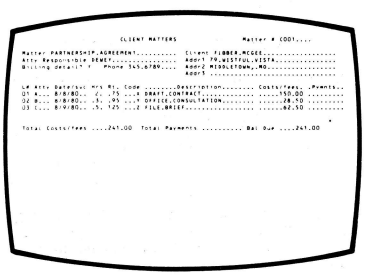
PURCHASING

- Purchase order:
  - initiation
  - tracking
  - expediting
  - fulfillment summaries
- Cumulative backlogs by product
- Vendor dollar volumes
- Inventory and reconciliation reports
- Return materials authorizations control
- Accounts payable by:
  - product
  - vendor
  - requisitioner
  - department
  - date



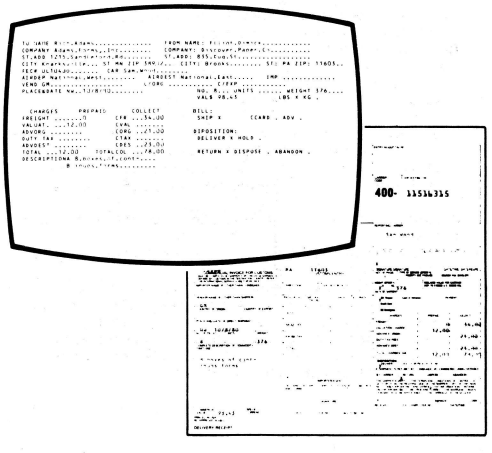
PROFESSIONAL SERVICES

- Time and billing records by:
  - case or docket #
  - Client/patient
  - service class
  - sub-contractor
  - job#
  - commissionable/non-commissionable items
- Expenses on behalf of client
- Job cost analysis and tracking
- Invoicing with receivables summaries
- Critical event scheduling



MANUFACTURING

- Estimating production capacity
- Work flow scheduling/accounting
- Bottleneck analysis
- Labor accounting
- Inventory control
- Shipping documents



MISCELLANEOUS

- Personnel records
- Time cards
- Service records
- Membership records
- Government agency client records
- Contractors' estimates and time accounting
- Insurance client records

FUNCTIONAL ANALY

Function

Management Anal

Report Generator

- lists customers, transaction dates, prices and line items
- prints page titles
- automatically provides date and page numbers
- performs automatic column layout and spacing

Record Selection

- user may specify time period, dollar value, or quantity, for example, for the selection of a form
- system tests for string inclusion, equality and range; — selection may extract specific transactions on a line item basis

Sorting, Tabulation, Totalling

- rearrange any collection of data without permanently altering it
- order selected data according to the value of any field, alphabetically, numerically, or chronologically
- lists a given form by descending dollar amounts, zip codes, sales clerks, line items or item codes
- sorting controlled by up to three items
- totals up to 8 columns
- subtotals may be controlled by any sorted item

Multiple Files

- sort and summarize data from multiple files that contain the same type of forms
- summarize data from disks that were prepared at various sites
- transmit via telephone and/or send back-up disks by mail or courier for batched summaries
- report instructions can be saved for repeated use

Production Pr

Design Printer Formats

- exact placement of form's items on page
- internally calibrated for printer variations
- comments and notes can be placed anywhere on the printed form
- print formats are saved for future use

Formatted Printing

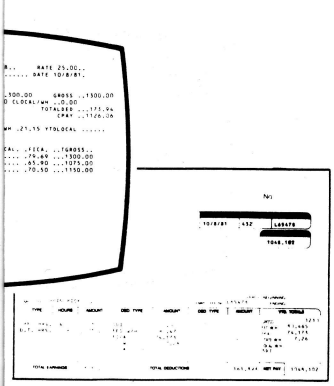
- prints on pre-printed forms, or emulates structure of pre-printed forms
- forms can be automatically selected for printing according to pre-established criteria
- use sheet feed or continuous forms

Copy Utility

- Copies forms from one file to another
- copy all the forms in a file or select automatically according to pre-established criteria

Self-Contained Files

- form and data disks may be exchanged between any number of systems, and will behave identically



'SIS

User Benefits

lysis and Reporting

Report Generator

- provides activity snapshots without disrupting paper flows or accounting cycles
- gives management awareness and control over business activity as it happens
- clear, concise reports of any data within a form can be quickly generated
- does not require user to develop complex formats to specify a report

Record Selection

- quickly identifies transactions with exceptional conditions, such as discounts, prices, etc.
- can select overdue or soon-to-be overdue accounts
- focused information on a single time period, customer, salesperson or region
- can find all forms involved with a particular item or person

Sorting, Tabulation, Totalling

- data presentation is tailored to present needs:
- sales data by region, customer, product, or respresentative;
- planned vs actual expenditures;
- money committed vs money spent;
- payments vs billings;
- production time by station

Multiple Files

- allows inexpensive entry to distributed data processing
- data from several offices or departments can be centrally consolidated, for example, field office sales activity, branch plant activity, or retail chain store results

inting of Forms

Design Printer Formats

- allows the use of existing forms or stock pre-printed forms without the necessity for custom printing
- print invoices, purchase orders, statement, checks, shipping documents
- allows the use of almost any printer, regardless of pitch or lines per inch
- allows payment urgency messages, notifications of upcoming events, new telephone numbers, addresses, etc.

Formatted Printing

- groups printing by form and by category: overdue accounts, invoices over specified amounts, etc.
- prints singly or in batch
- implement cycle billing by printing only selected number of forms on each day of the billing month

Copy Utility

- allows managers to archive inactive accounts
- regroup files for more effective use

Self-Contained Files

- files can follow work flow:

  purchasing — receiving — accounting —
  order — shipping — billing — client acquisition —
  processing

Validation and Processing of Data

- checks data entries against pre-established criteria
- enforces consistent format
- verifies line item entries against list of legal values
- restricts entries to numeric values within specific ranges at user's request
- accepts alphabetic, numeric, or alphanumeric combinations
- requires operator to fill vital input fields, such as account number or bill-to address, before proceeding
- calculates line item values such as extended price and tax/discount
- provides running totals by line, computes taxes, including local taxes or tariffs, and calculates grand total
- provides table for quick look-up of up to 99 items; automatically fills in prices, item descriptions, commission rates, etc.

Forms Retrieval and Browsing

- manual input can overwrite data entries at any time, and the form can be instantly updated
- retrieves by user's designated key item, such as account number or customer name
- retrieves by partial or "near miss" key
- inspects completed forms in forward or reverse order
- lists entire index of completed forms
- catches operator errors and typos
- allows inexperienced users to learn how to process specific forms correctly
- allows skilled administrator to make his or her expertise available to inexperienced people
- ensures that only completed forms are processed; preserves accounting system integrity
- eliminates the need to calculate by hand, thus reducing arithmetic errors
- allows operator to work within credit limit; computes whether limits are exceeded
- reduces the need to manually look up prices, descriptions and tax rates
- reduces typing redundancies
- assures quick reference for common "hot items"
- allows operator to manually type line items, bypassing the look-up table or automatic computations
- eliminates paper shuffling
- allows online access to entire file
- provides quick access and review of any form

Printing Forms

- uses either pre-printed or plain forms and labels
- existing forms may be used without modification
- can select portions of completed form for printing (e.g. suppresses internal codes, profit margins and product costs from final customer form)
- allows operator to print form on blank paper, providing quick office copy or transmittal document
- enables immediate printing on pre-printed receipts, invoices, shipping documents, or labels as soon as data entry is complete

The Calculator

- gives users a 4-place scratch pad calculator within forms screen
- uses numerical data from the form without disrupting any transaction
- calculated value can be transmitted directly to the form on the screen
- all "re-calculated" figures are processed as one-time exceptions (they do not disrupt pre-established criteria or look up tables)
- all "re-calculated" figures are captured in period summaries and management reports
- eliminates need for additional hand-held calculator
- does not interrupt work flow
- eliminates errors in transferring results of calculations
- on-the-spot discounts and mark-ups can be quickly calculated and processed (especially useful for processing telephone orders)
- provides advanced users with "what if" transaction samples without disturbing the final form data (and therefore, the accounting system)
- extremely easy to use, even for multiple variable calculations

SPECIFICATIONS

Major Functions

- **COMPUTER VALIDATION** of data you enter, to help catch typing and recording errors.
- **FAST RETRIEVAL** and modification of data you entered previously.
- **AUTOMATIC CALCULATION** of extensions, total, etc. on your form.
- **DETAIL OR SUMMARY REPORTS** from your business form files, with the items sorted in the order you designate. Reports may be adhoc or prearranged.
- **PRINTOUTS ON PREPRINTED PAPER FORMS** — with the ability to re-arrange the data to fit an already existing form.

Functional Highlights

- **Pascal Implementation** provides compatibility with new computers and peripherals, ease of interfacing, quality construction in a sophisticated operating environment.
- **Extensive data entry checking:**

mandatory entry	list of legal values
numbers	format (phone#, SSN, zip, part#)
range	self-checking numbers
dates	. . . and more

- **No data types** — data entry is always freeform, but always handled correctly, whether numbers, dates, or just words. Upper and lower case are usable; words are recognized whether capitalized or not.
- **Prints forms** on either blank or pre-printed stock. Mailing labels are simply a particular type of form.
- **Files never need reorganization.** B-tree index structure allows access to any record within seconds.
- **Designed for data integrity** — file and index changes occur immediately and are organized to avoid loss of data due to power outage or hardware malfunction.
- **Automatically formatted reports,** with sorting, totalling, and subtotalling.
- **Supports 80 column video boards** and external CRT terminals as well as the standard Apple 40-column display.
- **Customizable for keyboards** with cursor direction keys and user-definable function keys. Any command may be function-key activated.
- **Supports "hard" disks** — up to 4 million characters of file space per file.
- **Interface with other Pascal programs.** Word processors may be used to produce form letters.
- **Built-in calculator** that operates directly on your forms.
- **Calculation — any items on a form** can be calculated from any others, in any order. Operations are +, −, *, /, maximum, minimum, and column total. Specification is nonprocedural.
- **Table Lookup** — up to 99 codes can be used to look up data which is automatically placed on the form.

Capacities and Specifications

	Maximum	Avg.
File capacity (hard disk)		4 MB
File capacity (floppy disk)		size of disk
File capacity (forms)		
Diskette	1,000	333
Rigid Disk	30,000	10,000
Concurrently open files		1

Form Capacity
number of items — 50 (column of 99 counts as 1)
total data bytes — 4000
numbers of column lines — 50-99 (depending on width)

Table Lookup . . . . . 99 entries per item
List Checks . . . . . 99 list entries per item
Range Checks . . . . . 99 ranges per item
Calculations . . . . . 6 arguments per item calculated
Data item capacity — to 78 characters
Numeric Precision — to 13 integer digits, 8 decimal places (9,999,999,999,999.99999999)
Declared Data Types — none
Dynamic Data Types — numeric, alphanumeric, data
Keys — unique primary key; composed of one or two data items
Reporting

- Number of files: no limit
- Total Report size: 135, 000 characters
- Line width: to 200 characters
- Output records: 240 characters; may be folded to 3 lines on paper
- Item selection: up to 9 conditions may be OR'ed, up to 3 tests (AND'ed) in each.
- Sorting: 3 nested levels of ascending and/or descending sort. 3 levels of control breaks with or without subtotals
- Totals: up to 8 columns
- Number of report specifications — no limit
- Printers: maximum width 200 characters, any spacing
  Number of output formats — no limit

System Requirements

- Apple II or Apple II Plus
- Two disk drives
- 64 K RAM (language card may be used but Pascal Language is not required).

Optionally

- Corvus or other mass-storage system (only one floppy disk drive required)
- 80-column video board (must be compatible with Pascal System)
- Third disk drive
- Printer

All system components must be compatible with the Apple Pascal System without special initialization.

VersaForm

PASCAL INTERFACE

PROGRAMMER'S ACCESS METHOD

HIGHLIGHTS

The VersaForm Pascal Interface is a set of procedures and functions packaged as an Apple Pascal UNIT. It allows the programmer to access VersaForm files, move data between VersaForm and Pascal files, and create custom applications through Pascal programs. Using Interface routines, the programmer may open a VersaForm file, locate forms in a file through the use of full or partial keys, and transfer data between a form and string variables within a Pascal program.

The Interface also provides a way for the designer to extend the capabilities of VersaForm to multi-file applications. As many as three VersaForm files may be accessed concurrently on the Apple II computer. Multi-file access makes it possible to load data from other files into a VersaForm file; to use an item in one form as the key to another form within the same or another VersaForm file; and to generate a report based on the user's specifications.

The VersaForm Pascal Interface is capable of supporting a logically complex system involving multi-way tree data organization, such as a product structure file in a manufacturing application. The implementation of such a system is made possible by VersaForm's ability to store a repeating group of column items.

The programmer does not need to be concerned with data validation, space allocation, or normal report generation, since VersaForm provides all of these capabilities. Together, VersaForm and its Pascal Interface provide a degree of function on the Apple II usually found on a mainframe computer.

APPLICATIONS

VersaForm Pascal Interface applications include:

- Loading a VersaForm file from a Pascal text or data file
- Interfacing to external systems and programs
- Producing sophisticated reports or forms comprising data from one or more VersaForm files
- Transferring data from one VersaForm file to another
- Converting a file that contains multiple line items to output forms, each consisting of a single line item
- Interfacing VersaForm files to bar code readers or other input sources

FUNCTIONS

Twenty procedures and functions, plus data types, are defined in the VersaForm Pascal Interface, and include the following:

ACCESSING A FILE

- Get buffer for file format
- Get buffer for data area
- Open a specified VersaForm file
- Close the file
- Indicate space available

LOCATING FORMS USING THE INDEX

- Find form using exact key
- Find next form based on next lower full or partial key
- Find first form in file
- Find last form in file

STORING AND REMOVING FORMS

- Read form into memory
- Write form to disk
- Delete form from disk
- Clear current form memory

TRANSFERRING DATA

- Move value of a form item to a string variable
- Move value of string variable into an item on the form
- Compare two strings or numbers using VersaForm rules
- Indicate number of column lines in current form
- Assign new value to number of column lines
- Provide name, location, and characteristics of each item on a form

SYSTEM REQUIREMENTS

- VersaForm
- Apple II or Apple II Plus System with Pascal Language System

OPTIONAL:

- 80 column video board
- Hard disk drive

Applied Software Technology

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