

# COMPUTER AUTOMATION, INC. the NAKED MINI"'company 

## PRICE LIST

## NAKED MINI/LSI

## ALPHA/LSI



NAKED MINI LSI central processors have 162 major instructions, including hardware multiply/divide, doubleword normalize, memory scan and extensive byte capability. The five vectored priority interrupts are expandable to 256 and two direct memory channels may be increased to 64 . The MaxiBus architecture provides direct memory access as a standard feature. Integral memory is mounted on the processor board. Additional semiconductor and core memories may be added in any combination up to 262,144 words with appropriate expansion chassis. Parity systems are configured only from core memory modules which are not integral. The NAKED MINI LSI is available only in minimum quantities of ten units.

| MODEL | DESCRIPTION | PREREQ | REQ'D SLOTS | $\begin{gathered} \text { LIST } \\ \text { PRICE } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| 10110-01 | NAKED MINI LSI with 1 K 16 -bit words of integral semiconductor memory | none | 1 | \$ 990 |
| 10110-02 | 2K | none | 1 | 1,125 |
| 10110-04 | 4K | none | 1 | 1,200 |
| 10100-04 | NAKED MINI LSI with 4 K 16 -bit words of integral core memory | none | 1 | 1,650 |
| 10100-08 | 8K | none | 1 | 2,200 |
| 10100-16 | 16K | none | 2 | 4,300 |

ALPHA LSI
L
ALPHA LSI central processors have 162 major instructions, including hardware multiply/divide, doubleword normalize, memory scan and extensive byte capability. The five vectored priority interrupts are expandable to 256 and two direct memory channels may be increased to 64 . The MaxiBus architecture provides direct memory access as a standard feature. The ALPHA LSI includes a chassis with power supply and control console. Five slots are available for processor, memory and option cards. Integral memory is mounted on the processor board. Additional semiconductor and core memories may be added in any combination up to 262,144 words with appropriate expansion chassis. Parity systems are configured only from core memory modules which are not integral.

| 10210-01 | ALPHA LSI with 1 K 16 -bit words of integral semiconductor memory | none | 1 | 1,780 |
| :---: | :---: | :---: | :---: | :---: |
| 10210-02 | 2K | none | 1 | 1,915 |
| 10210-04 | 4 K | none | 1 | 1,990 |
| 10200-04 | ALPHA LSI with 4 K 16-bit words of integral core memory | none | 1 | 2,440 |
| 10200-08 | 8K | none | 1 | 2,990 |
| 10200-16 | 16K | none | 2 | 5,090 |
| 10201-04 | ALPHA LSI with 4 K 16-bit words of core memory with parity | none | 2 | 2,890 |
| 10201-08 | 8K | none | 2 | 3,590 |
| 10201-16 | 16K | none | 3 | 6,290 |

SEMICONDUCTOR MEMORIES
L
Semiconductor memories operate at 1,600 nanoseconds read or write cycle. Each memory module requires a full chassis slot. Parity is not available on semiconductor memories.

| $11530-01$ | Semiconductor Memory Module 1 K | 16 -bit words | $\mathbf{1 0 x x} 0-\mathrm{xx}$ |
| :--- | :--- | :--- | :--- |
| $11530-02$ | 2 K | 1 | 930 |
| $11530-04$ | 4 K | $10 \times x 0-\mathbf{x x}$ | 1 |

## CORE MEMORIES

L

Core memories operate at 1,600 nanoseconds full cycle time. Each memory module requires a full chassis slot. Systems with parity are configured from core memory modules which are not integral.

| 11510-04 | Core Memory Module 4 K 16 -bit words | $10 \mathrm{xx} 0-\mathrm{xx}$ | 1 | 1,750 |
| :---: | :---: | :---: | :---: | :---: |
| 11510-08 | 8K | $10 \mathrm{xx} 0-\mathrm{xx}$ | 1 | 2,300 |
| 11511-04 | Core Memory Module $4 \mathrm{~K} \mathbf{1 6 - b i t}$ words plus parity | $10 \mathrm{xx} 0-\mathrm{xx}$ | 1 | 2,200 |
| 11511-08 | 8K | 10xx0-xx | 1 | 2,900 |


|  |  | REQ'D |
| :--- | :--- | :--- |
| MODEL | DESCRIPTION |  |
| PRICE |  |  |

Power Fail Restart is mounted on the processor board and is highly recommended for all processors. Basic variables is a prerequisite for mounting all other processor options. Combinations of these may be defined by adding dash numbers. Teletype interface is a prerequisite for EIA interface. Options must be factory installed. An additional charge of $\$ 200$ is required for subsequent factory retrofit and test.

| 12500-00 | Power Fail Restart (PFR) monitors secondary voltage to provide an orderly shut-down and start-up upon detection of power fluctuations. | $10 \mathrm{xxx}-\mathrm{xx}$ | - | 250 |
| :---: | :---: | :---: | :---: | :---: |
| 12505-01 | Basic Variables (BV) permits offset of processor interrupts, separate enabling of power fail interrupt and sense register jumpering for operation without console. | 10xx 0-xx | - | 150 |
| 12505-02 | Teletype Interface (TTI) for modified ASR 33 or 35 . Includes provision for program control on/off, step read and echo. Will control teletype or CRT terminal in half duplex or full duplex mode with current loop interface and selectable baud rate. | 12505-01 | - | 100 |
| 12505-04 | Real Time Clock (RTC) provides jumper selectable frequencies of 0.1 , $1.0,10.0 \mathrm{KHz}$, twice the AC line voltage or an external source. Includes two interrupts. | 12505-01 | - | 125 |
| 12505-08 | Autoload (AL) uses bootstrap and binary loader on $256 \times 16$ bit ROM to load and execute program or first record from selected peripheral device. Programmed for teletype, paper tape reader, digital cassette, 9 -track magnetic tape and moving head disc. | 12505-01 | - | 90 |
| 12505-16 | EIA RS 232 Interface (EIA) may be added to the Teletype Interface to permit control of CRT terminal with EIA interface. | 12505-02 | - | 75 |

STANDARD PROCESSOR OPTION COMBINATIONS
L
The following standard combinations of processor options are available on short delivery.

| 12505-03 | Basic Variables and Teletype Interface (BV/TTI) | $10 \mathrm{xx0-xx}$ | - | 250 |
| :---: | :---: | :---: | :---: | :---: |
| 12505-07 | Basic Variables, Teletype Interface and Real Time Clock (BV/TTI/RTC) | $10 \mathrm{xx} 0-\mathrm{xx}$ | - | 375 |
| 12505-11 | Basic Variables, Teletype Interface and Autoload (BV/TTI/AL) | $10 \times x 0-x x$ | - | 340 |
| 12505-15 | Basic Variables, Teletype Interface, Real Time Clock and Autoload ( $\mathrm{BV} / \mathrm{TTI} / \mathrm{RTC} / \mathrm{AL}$ ) | $10 \times x 0-x x$ | - | 465 |

GENERAL PURPOSE INPUT/OUTPUT OPTIONS
A
All options include control and sense lines and generate interrupts. Each occupies $1 / 2$ slot and includes mating connector, logic drawings and specifications.

| 13213-00 | 16-bit Digital Input/Output Module. Includes sense and interrupt lines. Input and output registers may be used as 16 -bit words or 8 -bit bytes. DTL/TTL compatible. | 10xx $0-\mathrm{xx}$ | 1/2 | 500 |
| :---: | :---: | :---: | :---: | :---: |
| 13214-xx | 32-bit Relay Output Module. Operates as one 32-bit, two 16-bit or four 8 -bit outputs. Has two interrupt lines. -00 has $1 / 2 \mathrm{amp} 10$ watt relay, -10 has 1 amp 10 watt relay and -20 has 1 amp 30 watt relay. | $10 \times x 0-\mathrm{xx}$ | 1/2 | 750 |
| 13215-00 | 32-bit Relay Input Module. Operates as one 32-bit, two 16-bit or four 8-bit inputs. Has two interrupt lines. | 10xx $0-\mathrm{xx}$ | 1/2 | 750 |
| 13216-00 | 64-bit Output Module. Output used as 64-bit word or groups of 32, 16 or 8 -bits with individual strobes and senses. Has one interrupt line. | $10 \times x 0-\mathrm{xx}$ | 1/2 | 500 |


| MODEL | DESCRIPTION | PREREQ | $\begin{aligned} & \text { REQ'D } \\ & \text { SLOTS } \end{aligned}$ | $\begin{gathered} \text { LIST } \\ \text { PRICE } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | A |
| 13219-00 | 64-bit Input Module. Used as a single 64-bit input or in groups of 32,16 or 8 -bits with individual strobes and acknowledges. Has one interrupt line. | $10 \mathrm{xx} 0-\mathrm{xx}$ | 1/2 | \$ 500 |
| 13220-00 | 16 Channel Priority Interrupt. Provides 16 priority interrupts with acknowledge lines. Permits momentary signals to initiate interrupt action. | $10 \mathrm{xx} 0-\mathrm{xx}$ | 1/2 | 500 |
| 13222-00 | I/O Driver Module. Drives the computer I/O bus up to 25 feet. Buffers internal I/O bus from external noise. Allows multiple CPUs to share common I/O device. | $10 \times \times 0-\mathrm{xx}$ | 1/2 | 500 |
| 14223-00 | Utility I/O Interface. General purpose interface provides 12-bit parallel transfers of 8 data and 4 control bits. Provides word and end of record interrupts and other control features. | $10 \times x 0-\mathrm{xx}$ | 1/2 | 600 |


| TELETYPES |  | N |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $22204-00$ | Teletype, modified ASR-33 with paper tape reader/punch and 16 foot cable | $12505-02$ | 0 | 1,400 |
| $22204-10$ | Teletype, modified ASR-35 with paper tape reader/punch and 16 foot cable. | $12505-02$ | 0 | 4,800 |
| $22204-30$ | Teletype, ASR-33 modified for program controlled on/off with paper tape <br> reader/punch and 16 foot cable. | $\mathbf{1 2 5 0 5 - 0 2}$ | 0 | 1,580 |


| PAPER TA |  |  |  | A |
| :---: | :---: | :---: | :---: | :---: |
| 18223-11 | High Speed Paper Tape Reader System. Includes Remex Model 0305300 character per second reader, interface, cable, software and checkout. | 10xx 0-xx | 1/2 | 2,430* |
| $\times 14223-00$ | Interface for paper tape reader. | $10 \mathrm{xx} 0-\mathrm{xx}$ | 1/2 | 600 |
| > 15223-1x | Cable ( 6 foot) for paper tape reader . - 10 Digitronics Model 2540 reader, - 11 Remex Model 0305 reader. | 14223-00 | 0 | 150 |
| 19223-10 | Software for paper tape reader. Input driver description and diagnostic program. | 18223-11 | - | 200** |
| 26223-1x | Checkout and integration of customer-furnished paper tape reader. | 15223-1x | - | 100** |
| 18223-20 | High Speed Paper Tape Punch System. Includes Remex Model 107575 character per second punch, interface, cable, software and checkout. | 10xx0-xx | 1/2 | 3,780* |
| 14223-00 | Interface for paper tape punch. | 10xx 0-xx | 1/2 | 600 |
| 15223-2x | Cable (6-foot) for paper tape punch. - 20 Model 1075 Remex punch, -21 Facit Model 4070 punch. | 14223-00 | 0 | 150 |
| 19223-20 | Software for paper tape punch. Output driver description and diagnostic program. | 18223-20 | - | 200** |
| 26223-20 | Checkout and integration of customer-furnished Remex paper tape punch | 15223-2x | - | 150** |
| 18223-60 | High Speed Paper Tape Reader/Punch combination. Includes Remex Model 3075300 character per second reader and 75 character per second punch in a single chassis, two interfaces, cables, software and checkout. | 10xx0-xx | 1 | 5,790* |
| 14223-00 | Interface for paper tape reader. | 10xx0-xx | 1/2 | 600 |
| 14223-00 | Interface for paper tape punch. | $10 \times \mathrm{x} 0-\mathrm{xx}$ | 1/2 | 600 |
| 15223-12 | Cable ( 6 foot) for paper tape reader. | 14223-00 | 0 | 150 |
| 15223-20 | Cable (6 foot) for paper tape punch | 14223-00 | 0 | 150 |
| 19223-60 | Software for paper tape reader/punch combination. Input and Output driver descriptions and diagnostic program. | 18223-60 | - | 250** |
| 26223-60 | Checkout and integration of customer-furnished paper tape reader/punch combination | 15223-12 | - | 250** |

[^0]PREREQ REQ'D

| LINE PR | RS | A |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 18223-30 | Line Printer System. Includes Centronics Model 101, 132 column, 165 char/sec, 60-200 lines/minute, ASCII character set, interface, cable software and checkout. | 10xx0-xx | 1/2 | \$ 5,550* |
| 14223-00 | Interface for line printer | $10 \mathrm{xx} 0-\mathrm{xx}$ | 1/2 | 600 |
| 15223-3x | Cable ( 6 foot) for line printer. $\mathbf{- 3 0}$ for Centronics Model 101, $\mathbf{- 3 1}$ for Data Products Model 2310 or 2410. | 14223-00 | 0 | 150 |
| 19223-30 | Software for line printer. Includes output driver description and diagnostic program. | 18223-30 | - | $300 \times$ |
| 26223-3x | Checkout and integration of customer furnished line printer. | 15223-3x | - | 200** |


| CARD RE | RS |  |  | A |
| :---: | :---: | :---: | :---: | :---: |
| 18223-40 | Card Reader System. Includes Bridge Model 8000300 card per min reader, interface, cable, software and checkout. | $10 \mathrm{xx} 0-\mathrm{xx}$ | 1/2 | 3,850* |
| 14223-00 | Interface for card reader . | $10 \times x 0-\mathrm{xx}$ | 1/2 | 600 |
| 15223-40 | Cable for Bridge Model 8000 card reader (6 foot) | 14223-00 | 0 | 150 |
| 19223-40 | Software for card reader. Includes input driver routine and diagnostic program. | 18223-40 | - | 300** |
| 26223-4x | Checkout and integration of customer furnished card reader. | 15223-4x | - | 250** |
| DIGITAL CASSETTES |  |  |  | A |
| 18240-01 | Single Digital Cassette System. Includes controller for up to four drives, cable, one cassette drive plus software. Read/write at $12 \mathrm{ips}, 800 \mathrm{bpi}$, search/rewind at 120 ips . Each cassette has two independent tracks with maximum capacity of 260,000 bytes per track unformatted. | $10 \times \times 0-\mathrm{xx}$ | 1 | 2,850 |
| 18240-02 | Dual Digital Cassette System. Includes two drives with a maximum capacity 1.04 million bytes unformatted. | $10 \mathrm{xx} 0-\mathrm{xx}$ | 1 | 4,550 |
| 22240-01 | One additional Digital Cassette Drive. | 18240-02 | 0 | 2,275 |
| 22240-02 | Two additional Digital Cassette Drives | 18240-02 | 0 | 3,975 |
| 19240-00 | Software package for digital cassette. Includes tape formatter, I/O drivers, diagnostic and file manager. Supports versions of BETA-8 Assembler and Concordance. | 18240-0x | - | 750** |



[^1]**Software and integration are not discountable.

| MODEL | DESCRIPTION | PREREQ | REQ'D SLOTS | LIST <br> PRICE <br> A |
| :---: | :---: | :---: | :---: | :---: |
| 14224-00 | Interface for up to four Pertec Model $78 \times 0$ or $68 \times 0,9$-track transports. Specify type of transport. | 10xx0-xx | 1 | \$ 2,400 |
| 15224-x1 | Cable ( 6 foot) for single magnetic tape transport. $x$ specifies type of tape transport. | 14224-00 | 0 | 190 |
|  | $x \quad$ Model |  |  |  |
|  | 17820 |  |  |  |
|  | 27840 |  |  |  |
|  | 36860 |  |  |  |
|  | 46840 |  | . |  |
| 15224-xy | Cable ( 6 foot) for multiple magnetic tape transports. $x$ indicates model from above table. y specifies total number of transports in the system. | 15224-x1 | 0 | 175 per unit |
| 19224-00 | Software for magnetic tape system, includes $I / O$ drivers, diagnostic routine and magnetic tape file manager. Supports versions of BETA-8 Assembler and Concordance. | 18224-xx | - | 750** |
| 26224-10 | Checkout and integration of each customer furnished Pertec tape transport. | 15224-x1 | - | 700** |
| MOVING | EAD DISC SYSTEM |  |  | A |
| 18520-43 | Moving Head Disc System. Includes disc drive having one fixed and one removable disc with 200 cylinders, interface for this unit (also handles three additional 22520-43 disc drives) cable and software. Average track access 38 milliseconds, average latency 12.5 milliseconds, transfer rate 156,000 words per second. Capacity 2.46 million 16 -bit words . | 10xx $0-\mathrm{xx}$ | 2 | 13,200 |
| 22520-43 | Additional Moving Head Disc Drive. Contains one fixed and one removable disc with combined capacity of 2.46 million 16 -bit words, includes interconnecting cable. | 18520-43 | 0 | 11,085 |
| 18520-44 | Double Density Moving Head Disc System. Includes disc drive having one fixed and one removable disc with 400 cylinders, interface for this unit (and up to three additional 22520-44 disc drives) cable and software. Average track access 38 milliseconds, average latency 12.5 milliseconds, transfer rate 156,000 words per second. Capacity 4.96 million 16 -bit words. | 10xx $0-\mathrm{xx}$ | 2 | 15,800 |
| 22520-44 | Additional Double Density Moving Head Disc Drive. Contains one fixed and one removable disc with combined capacity of 4.96 million 16 -bit words . Includes interconnecting cable. | 18520-44 | 0 | 12,885 |
| 18520-31 | Moving Head Disc System. Includes disc drive having one removable disc with 200 cylinders, interface for this unit (also handles three additional 22520-31 disc drives) cable and software. Average track access 70 milliseconds, average latency 20 milliseconds, transfer rate 97,000 words per second. Capacity 1.23 million 16-bit words. | $10 \times x 0-\mathrm{xx}$ | 2 | 11,450 |
| 22520-31 | Additional Moving Head Disc Drive. Contains one removable disc with capacity of 1.23 million 16 -bit words. Includes interconnecting cable. | 18520-31 | 0 | 9,300 |
| 14520-00 | Interface for moving head disc drive. Controls up to four Diablo Model 31 or two Model 33 disc drives. | $10 \times x 0-\mathrm{xx}$ | 2 | 2,400 |
| 15520-31 | Cables ( 6 foot) for Diablo Model 31 disc drive. | 14520-00 | 0 | 150 |
| 15520-33 | Cables ( 6 foot) for Diablo Model 33 disc drive | 14520-00 | 0 | 250 |
| 19520-00 | Software for Moving Head Disc System. Includes disc formatter, I/O drivers, diagnostic routine and file manager. | 14520-00 | - | 750** |
| 26520-31 | Checkout and integration of customer furnished Diablo Model 31 disc drive. | 14520-00 | - | 1,000** |
| 26520-33 | Checkout and integration of customer furnished Diablo Model 33 disc drive. | 14520-00 | - | 1,000** |

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| MODEL | DESCRIPTION | REQ'D |
| :--- | :--- | :---: |
| PROCESSOR CHASSIS |  | PREREQ |
| SLOTS |  |  |

The Processor Chassis provides five slots, one for the processor board with integral memory and four for additional memory or options. Two fans are housed in the chassis and provision is made for optional control console and power supply.

| 12034-00 | Processor Chassis for ALPHA LSI including motherboard. Requires power supply. | none | - | \$ | 275 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12907-00 | First Expansion Chassis for ALPHA LSI. Same as $12034-00$ but includes blank panel with expansion buffer controller and interconnecting cables. Provides five full slots for memory or $1 / 0$. Requires power supply . | 12034-00 | - |  | 500 |
| 12097-01 | Additional Expansion Chassis for ALPHA LSI. Similar to 12907-00 but connects to first or additional chassis. Requires power supply. | 12097-0x | - |  | 500 |


| POWER | PLIES |  |  | L |
| :---: | :---: | :---: | :---: | :---: |
| 12044-00 | Power Supply for ALPHA LSI. Provides $+5 \mathrm{~V} 20 \mathrm{amp},+12 \mathrm{~V} 3 \mathrm{amp},-12 \mathrm{~V} 9 \mathrm{amp}$ Input 115 vac ( $98-127 \mathrm{~V}$ RMS), $47-63 \mathrm{~Hz}$ single phase. ( -01 for 196 to 254 V RMS input). | $\begin{gathered} 12034-00 \\ \text { or } 12097-0 x \end{gathered}$ | - | 325 |
| 12098-00 | Battery Pack for ALPHA LSI. Provides standby power for semiconductor memory. Automatic changeover in event of power loss, output voltage regulation and battery recharging capability are included. Mounted separate from chassis, connecting cables included, batteries supplied by user. | $10 \times x 0-\mathrm{xx}$ | - | 150 |

EXTENDERS

| $13265-00$ | Extender Card. Full Slot, two sided board, reversible for I/O slots or <br> processor slots. | $10 \times x 0-x x$ | 1 |
| :--- | :--- | :--- | :--- |


| BREADB | DS |  |  | A |
| :---: | :---: | :---: | :---: | :---: |
| 13234-00 | Wirewrap Breadboard Card. Provides 72 low profile sockets for 16 or 14 pin IC's with wirewrap posts on same side of board. Includes mating connector. | 12034-00 | 1/2 | 450 |
| 13234-10 | Blank Breadboard Card, without IC sockets or wirewrap pins. Includes mating connector. | 12034-00 | 1/2 | 100 |

A standard Hardware Documentation Manual is provided for each of the first six ALPHA LSI or NAKED MINI LSI systems delivered. In addition, for quantities larger than fifty, a set of reproducible drawings will be provided.

ALPHA LSI or NAKED MINI LSI Programming Reference Manual
Processor Module Logic Diagrams
Option Module Logic Diagrams
Power Supply Schematics
Installation Guide
ASR 33 Teletype Modification Procedure
I/O Interface Design Guide
Processor Mounted Option Interface Descriptions

| MODEL | DESCRIPTION | LIST |
| :--- | :---: | :---: |
| STANDARD SOFTWARE | PRICE |  |

A standard Software Documentation Manual and paper tape Program Library are provided free of charge for each of the first six AIPPHA LSI or NAKED MINI LSI systems delivered.

20025 Software Documentation Manual for ALPHA LSI or NAKED MINI LSI includes descriptions of:
\$
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BETA 4. Two pass assembler which will operate from paper tape in a minimal 4 K system
BETA 8. High performance assembler, supporting all peripherals used for input/output or intermediate storage. Requires 8 K memory.

OMEGA. Similar to BETA 4, but provides conversational facility for program creation and correction.
Utilities. Include Bootstrap, Binary and Object Loader, Dump, Source Tape Preparation, Concordance and Debug programs.

Subroutines. Provides subroutines for many common programming requirements. Includes Teletype Utility Package, Fixed Arithmetic, Floating Point Arithmetic and floating point Elementary Trigonometric Functions.

Programming Notes. Helpful hints and comments to assist the user in program development.
Diagnostics. Includes Quality Control Diagnostic (QCD) for central processor and memory plus teletype diagnostic.

Standard ALPHA LSI or NAKED MINI LSI Program Library. Includes the programs described in the Software Documentation Manual, in paper tape form.

| 19001-00 | Advanced BASIC. Interactive BASIC language with all Elementary and Advanced statements, operating in only 4 K of memory with dynamic storage allocation. Calculator Mode for immediate execution of statements is included. | 300** |
| :---: | :---: | :---: |
| 19001-10 | Extended BASIC. Includes all the features of Advanced BASIC above, plus Text Variables (string manipulation) and Matrix Operations. This BASIC provides the user with capabilities not usually found in a small machine environment. Runs in 8K of memory. | 300* |
| 19001-20 | Extended Multiple-User BASIC. Same powerful language as Extended BASIC above. Supports up to eight users, with dynamic core allocation for optimum memory use. Requires 8 K memory minimum, 16 K recommended. | 300** |
| 19003-00 | FORTRAN. Similar to ANSI Basic FORTRAN. Not a supported program. Documentation change. | 50 * |
| 19004-00 | XASM Cross Assembler. Permits assembly of NAKED MINI LSI/ALPHA LSI programs on a large scale IBM System/360 or 370. The cross assembler is written in FORTRAN IV level G. | 200 |
| 19005-00 | RTX Real Time Executive. A modular open-ended system consisting of RTX Nucleus multitasking executive, IOX an input-output supervisor, COMX a communications supervisor, RTDBUG real-time debugging program, plus provision for adding user defined tasks. | 300 |
| 19007-00 | DOS Disc Operating System. An operating system to facilitate batch compilation, assembly and execution of user programs. DOS provides automatic control of job sequencing, input-output, interrupt handling, system program library, file management with sequential and random access methods and on-line operator communication. Specify configuration when ordering. | 2,000 |
| 19007-10 | MTOS Magnetic Tape Operating System. Functionally equivalent to DOS, except industry compatible magnetic tape units are used instead of disc for secondary storage. | 2,000 |
| 19007-20 | COS Cassette Operating System. Functionally equivalent to DOS, except digital cassettes are used for secondary storage instead of disc. | 2,000 |

[^3]Computer Automation provides regular training courses in both programming and maintenance. A schedule of courses may be obtained from our local sales representative.

## FIELD SERVICE

Computer Automation provides a variety of service arrangements and maintenance alternatives enabling a customer to select a class of service most suitable to his requirements. Contact our local sales representative for details.

## FACTORY WARRANTY

All products manufactured by Computer Automation are covered by a one-year warranty of parts and labor, when repairs are performed at Computer Automation, Irvine, California. Customer pays freight to Computer Automation, Irvine. Return freight is paid by Computer Automation.

A thirty-day warranty, from date of shipment, covers peripheral products not manufactured by Computer Automation.


CHASSIS CONFIGURATION


[^0]:    *Interface and cable only are discountable.
    ** Software and integration are not discountable

[^1]:    *Interface and cable only are discountable.

[^2]:    **Software and integration are not discountable.

[^3]:    *Not discountable
    **BASIC prices are for a ten year lease. Customer must execute a Software Service and License Agreement, Form 98177-01.

