

Effective January 1, 1976.



# JUPITER II SYSTEM CATALOG



# WAVE MATE



JUPITER II

SMC-125 SYSTEM MODULE CAGE A sturdy and handsome module cage that can be set on a table top, with provided feet and protective screen, or rack mounted. Unit has space for power supply plus 8 additional modules. Legended front panel included. Printed circuit backplane and connectors are included. Size is 5 1/4 x 19 x 14 inches.

- KIT SMC-125K 189.95
Manuals only SMC-125MK 2.00
ASSEMBLED SMC-125A 260.00
Manuals only SMC-125MA 2.00

EMC-125 EXPANSION MODULE CAGE Bolts onto SMC-125. Unit has space for 8 modules and one power supply (CPS-125), or 10 modules. Blank smoke plexiglass front panel included. Includes electronics to fully buffer all necessary buss signals. All hardware is included. Size is 5 1/4 x 19 x 14 inches.

- KIT EMC-125K 279.95\*
Manuals only EMC-125MK 10.00\*
ASSEMBLED EMC-125A 425.00\*
Manuals only EMC-125MA 5.00\*

CPS-125 COMPUTER SYSTEM POWER SUPPLY This modular plug-in power supply provides the JUPITER II system buss with five semi-regulated voltages. After final regulation the available outputs are +5V at 5A, +12V at 2A, +26V at 100MA, -5V at 18, -12V at 1A. In addition, any voltage in between these is available. The input and all outputs are fused separately. Input is 115/230V AC 60HZ. A RFI filter is included as standard. Unit takes space of three modules and comes with a 6 FT detachable cord.

- KIT CPS-125K 149.95
Manuals only CPS-125MK 4.00
ASSEMBLED CPS-125A 180.00
Manuals only CPS-125MA 2.00

EXC-125 EXTENSION CARD Plugs into buss in place of module. Module then plugs into EXC-125 and is extended 7 inches out of module cage for debugging purposes. This card acts as a heat shield for CPS-125 when plugged into special holding slot next to power supply.

- KIT EXC-125K 24.95
ASSEMBLED EXC-125A 35.00

CPU-125 CENTRAL PROCESSOR UNIT MODULE The CPU module contains the MC6800 microprocessor and all the support electronics to control the operation of the JUPITER II system buss. Clock speed is typically 1 microsecond but may vary depending on the particular device being addressed. Seven vectored interrupt levels and direct memory access controls are provided

standard. A 31 microsecond refresh clock is also included. Unit will automatically reset on power up. Takes one module space.

- KIT CPU-125K 179.95
Manuals only CPU-125MK 25.00
ASSEMBLED CPU-125A 280.00
Manuals only CPU-125MA 20.00

CFP-125 COMPUTER FRONT PANEL UNIT The CFP unit mounts behind a beautifully finished smoke plexiglas panel. The CFP unit contains three operation switches and a four digit (1/2") hexidecimal display of the system address buss. The functions provided for by the CFP are System Reset, Front Panel Interrupt, Run/Halt and Single Instruction Step. Two status lights are also provided; one shows the Run/Halt status of the processor and also any DMA activity on the system buss. The other shows the amount of interrupt processing within the CPU module. Plugs into back of CPU-125 through supplied flat cable.

- KIT CFP-125K 89.95
Manuals only CFP-125MK 4.00
ASSEMBLED CFP-125A 130.00
Manuals only CFP-125MA 2.00

SDM-125 SOFTWARE DEBUGGER AND MONITOR MODULE The SDM module contains the JUPITER II system Monitor and Debugger programs. These programs are located in up to three 1024 byte Eraseable and Programmable Read Only Memorys (EPROM) which are priced separately with the program that fits the I/O configuration of your system. The address of these EPROMS are factory set to locations F000 to FBFF. The SDM module includes 128 bytes of Write Protected RAM located at locations FCOO to FCFF. This module also includes a 16 line address Breakpoint Comparator and logic for execution of any single instruction at a time. All under Software Monitor control. Takes up one module space.

To order, add dash number of control program detailed below and added ROM cost.

- KIT SDM-125K 109.95
Manuals SDM-125MK 9.00
ASSEMBLED SDM-125A 205.00
Manuals SDA-125MA 4.00

SDM CONTROL EPROMS

- 2KB for serial devices (TTY) -1 200.00
Operators manual only SDM-M1 3.00
Copyrighted listings with SDM purchase 15.00

DMM-125 DYNAMIC MEMORY MODULE The dynamic memory module will hold either 4KB or 8KB of dynamic memory. The address is selectable to any 8KB boundary. This memory may be write protected. This memory is refreshed by DMA from the CPU-125 module once every 32 microseconds. Takes up one module space.

- KIT 4KB MEMORY DMM-125K-4 219.95
KIT 8KB MEMORY DMM-125K-8 329.95
Manuals only DMM-125MK 9.00
Additional 4KB RAM(for DMM-125K-4)RAM-125-4 110.00
ASSEMBLED 4KB MEMORY DMM-125A-4 325.00
ASSEMBLED 8KB MEMORY DMM-125A-8 435.00
Manuals only DMM-125MA 4.00

### SMM-125 DUAL PORT STATIC MEMORY MODULE

The static memory module will hold either 1KB or 2KB of static. Low power high speed 2102 type memory. The address is selectable to any 2KB boundary. This memory may be write protected. A second read-only port on a back connector allows this memory to be used in such applications as CRT or graphics refresh. Takes one module space.

<b>KIT 1KB SMM-125K-1</b> .....	124.95
<b>KIT 2KB SMM-125K-2</b> .....	164.95
Manuals only SMM-125MK .....	9.00
Additional 1KB RAM (for SMM-125K-1) RAM-125-1 .....	40.00
<b>ASSEMBLED 1KB SMM-125A-1</b> .....	225.00
<b>ASSEMBLED 2KB SMM-125A-2</b> .....	265.00
Manuals only SMM-125AK .....	4.00

**SDI-125 SERIAL DATA INTERFACE (RS-232-C)** The SDI module converts from parallel data to serial data for communicating with any standard RS-232-C terminal or data communications equipment. Provides functions: RD, TD, DTR, DSR, CTS. 16 selectable baud rates are provided by a crystal oscillator needing no adjustments. Device address is selectable from FFOO to FFFF. Uses only one half of module: the remaining half is available for custom interfaces.

<b>KIT SDI-125K</b> .....	99.95
Manuals only SDI-125MK .....	8.00
<b>ASSEMBLED SDI-125A</b> .....	145.00
Manuals only SDI-125MA .....	4.00
15 FT cable to female 25 pin connector for data terminals SDC-15F .....	14.95
15 FT cable to male 25 pin connector for data communications equipment SDC-15M .....	14.95

**DSD-125 DUAL SERIAL DATA INTERFACE (RS-232-C)** Same as single SDI-125 data interface but with two completely independent interfaces. Takes one module space.

<b>KIT DSD-125K</b> .....	134.95
Manuals only DSD-125MK .....	10.00
<b>ASSEMBLED DSD-125A</b> .....	225.00
Manuals only DSD-125MA .....	5.00

**TTC-125 RS-232-C TO TELETYPE CONVERSION KIT** Converts model 33ASR teletype to RS-232-C compatible voltage interface. Mounts inside teletype unit and connects to internal 48 Volt supply. Included 15 FT cable to mate with SDC-15F.

<b>KIT TTC-125K</b> .....	69.95
Manuals only TTC-125MK .....	3.00
<b>ASSEMBLED TTC-125A</b> .....	105.00
Manuals only TTC-125MA .....	2.00

**PDI-125 PARALLEL DATA INTERFACE** The PDI module consists of two independent 8 bit data channels. Each channel may be selected for either input, output, or tri-state data channel. Each channel also has one input and one output or two inputs connected for handshake control and optionally connected to the interrupt circuitry of the JUPITER II buss. Data channels are buffered to drive 20 std TTL loads. Device address is selected from FFOO to FFFF. Uses only one half of

module. The remaining half is available for custom interfaces. Includes 15 FT of 26 wire flat ribbon cable and connector.

<b>KIT PDI-125K</b> .....	84.95 *
Manuals only PDI-125MK .....	8.00 *
<b>ASSEMBLED PDI-125A</b> .....	130.00 *
Manuals only PDI-125MA .....	4.00 *

**DPD-125 DUAL PARALLEL DATA INTERFACE** Same as PDI-125 data interface but with two completely independent interfaces.

<b>KIT DPD-125K</b> .....	<del>144.95</del> <sup>175.00 with 30'</sup> *
Manuals only DPD-125MK .....	10.00 *
<b>ASSEMBLED DPD-125A</b> .....	235.00 *
Manuals only DPD-125MA .....	5.00 *

**SRM-125 STATIC EPROM MODULE** The SRM module will hold from 1KB to 8KB of 2708 type erasable and reprogrammable read only memory. The address is selectable to any 8KB boundary. The EPROMS are priced separately.

<b>KIT SRM-125K</b> .....	89.95 *
Manuals only SRM-125MK .....	8.00 *
<b>ASSEMBLED SRM-125A</b> .....	185.00 *
Manuals only SRM-125MA .....	4.00 *
EPROMS 1KB each, needs PGM-125 programmer to program and UVS-54 ultraviolet lamp to erase.	
<b>ROM-8</b> .....	88.00

**PGM-125 EPROM PROGRAMMER MODULE** The PGM module under JUPITER II software control will program 2708 type EPROMS. Device address is selectable from FFOO to FFFF. Takes one module space.

<b>KIT PGM-125K</b> .....	159.95
Manuals only PGM-125MK .....	8.00
<b>ASSEMBLED PGM-125A</b> .....	220.00
Manuals only PGM-125MA .....	4.00
Ultraviolet lamp for erasing EPROMS	
<b>UVS-54</b> .....	69.95

**BMS-125 BASIC MAINFRAME SYSTEM** Fulfills the basic requirements of a minimum system. Requires addition of memory and I/O interfaces.

Includes: <del>SMC-125</del>	
<del>CPS-125</del>	
<del>CPU-125</del>	
<del>CFP-125</del>	
<del>SDM-125-1</del>	
EXC-125	
<b>KIT BMS-125K</b> (Includes 10% Discount) .....	849.95
Manuals only BMS-125MK .....	47.00
<b>ASSEMBLED BMS-125A</b> (Includes 10% Discount) .....	1160.00
Manuals only BMS-125MA .....	33.00

**UMC-125 UNIVERSAL MODULE KIT** The universal module provides all basic hardware necessary for building custom interfaces. Sockets, I/O Connectors, Additional voltages (+5V standard) and wire must be ordered separately. Assembly manual is not included and must be ordered separately (may not be required)

<b>KIT UMC-125K</b> .....	32.00
Assembly Manual (optional) UMC-125MK .....	5.00

**ADDITIONAL VOLTAGE KITS** Provides additional voltage of either +12, -5, or -12 for one row (8 MAX) of ICS. Additional rows of the same voltage must be ordered separately.

- KIT +12 VOLTS VMP12**..... 4.50
- KIT -12 VOLTS VMN12**..... 4.50
- KIT -5 VOLTS VMN5**..... 4.50

**ADDITIONAL ROW HARDWARE FOR ADDITIONAL VOLTAGES.**

- KIT (One per row) UMV-1**..... 1.50

**I/O CONNECTORS**

Includes male card connector, female flat cable connector and 15 FT of ribbon cable.

- KIT 10 PIN 10C-10K**..... 7.50
- KIT 20 PIN 10C-20K**..... 12.50
- KIT 26 PIN 10C-26K**..... 16.00
- KIT 34 PIN 10C-34K**..... 20.00
- KIT 50 PIN 10C-50K**..... 28.00

**SOCKETS KIT**

Maximum of 32 18 pin sockets per module. Three-level gold plated, snap-in fit construction.

- KIT 14 PIN SOC-14K**..... .73
- KIT 16 PIN SOC-16K**..... .75
- KIT 18 PIN SOC-18K**..... .77
- 24 pins takes space of 3 18 pin sockets.
- KIT 24 PIN SOC-24K**..... 1.10
- 40 pins takes space of 5 18 pin sockets.
- KIT 40 PIN SOC-40K**..... 1.25

**TOOLS**

**HAND WIRE WRAPPING TOOL**

Fine hardened steel tool for wrapping all kits.

- HWW-1**..... 20.00

**ELECTRIC WIRE WRAPPING GUN**

Professional model heavy duty Wire Wrap gun. Includes bit and sleeve.

- EWG-1**..... 130.00

**HAND UNWRAPPING TOOL**

Fine hardened steel tool. Needed for all kits.

- HUW-1**..... 5.00

**GROUND CLIP INSERTION TOOL**

Makes kit building easier.

- GCI-1**..... 2.50

**WIRE WRAP WIRE** 30 gauge Kynar insulation. Color coded. Stripped 1 inch on each end.

**SOFTWARE FOR JUPITER II**

Prices shown as '\*' below require prior purchase of sufficient hardware from Wave Mate. Factory quote is required on all software or listings purchased by individuals who have not previously purchased JUPITER II systems. Paper tape binaries and manuals are included. As additional peripherals are made available by Wave Mate, binaries will be available for loading from those devices.

**TEXT EDITOR FOR JUPITER II**

Requires 8KB memory and system monitor

- EDIT-125**..... 25.00\*\*
- Manuals only EDIT-125M..... 10.00

**ASSEMBLER FOR JUPITER II [6800]**

Requires 8KB memory and system monitor.

- ASM-125**..... 45.00\*\*
- Manuals only ASM-125M..... 20.00

**BASIC FOR JUPITER II**

Requires 8KB system and system monitor.

- BSC-125**..... 55.00\*\*
- Manuals only BSC-125M..... 25.00

**Order your complete JUPITER II system NOW and SAVE 10% on total price.**

Terms are cash with order. BankAmericard or Master Charge. COD orders require 50% down.

**Exclusive KIT-A-MONTH club time payment plan**  
**Order your JUPITER II computer system NOW and SAVE 5%.**

Send payment for first module only. We will send you your first module (kit or assembled). Each month you send in your payment for the next month and we will send you the next module on your order. You pay no interest or financing charge and you do not incur any delivery delays once you start receiving your system. You subtract 5% of total system price from last module payment. Terms are cash with order, BankAmericard or Master Charge. If you send in an early payment, we will make an early shipment. A late payment will result in a late shipment. After 60 days past due on any month, the balance of the order is cancelled. All payments must be made within 12 months.

Length	Color		25 PKG	50 PKG	100 PKG	250 PKG	500 PKG	1000 PKG
3½	Black	Price	.40	.65	1.05	2.10	4.00	7.60
4	Red		.41	.67	1.09	2.20	4.20	8.00
4½	Yellow		.42	.69	1.13	2.30	4.40	8.40
5	Green		.43	.71	1.17	2.40	4.60	8.80
5½	Blue		.44	.73	1.21	2.50	4.80	9.20
6	White		.45	.75	1.25	2.60	5.00	9.60
6½	Brown		.46	.77	1.29	2.70	5.20	10.00
7	Orange		.47	.79	1.33	2.80	5.40	10.40
7½	Purple		.48	.81	1.37	2.90	5.60	10.80
8	Gray		.49	.83	1.41	3.00	5.80	11.20

\*Delivery 90 days ARO Delivery 60 days ARO Effective January 1, 1976. Subject to change without notice.



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