## CGRS MICROTECH

### P.O. Box 368 SOUTHAMPTOM, PA. 18966 (215) 757-0284

#### NEW RELEASE

A LOT OF I/O - A SINGLE I/O CARD FOR THE S100 BUS CONTAINS: 4 PROGRAMMABLE PARALLEL PORTS, 2 DUPLEX SERIAL PORTS, BAUD RATE GENERATOR, 2 - 16 BIT PROGRAMMABLE INTERVAL TIMERS, ROOM FOR UP TO 16K OF EPROM (2708,2716,2732), AND A CONNECTOR TO ADAPT THE PERCI 1070 INTELLIGENT FLOPPY DISK CONTROLLER TO THE S100 BUS.

THIS SINGLE CARD CAN INTERFACE CRT TERMINALS, KEYBOARDS, PRINTERS, PAPER TAPE READERS, EPROM PROGRAMMERS, UP TO FOUR FLOPPY DISK DRIVES (WITH CONTROLLER) AND STILL PROVIDE EPROM SPACE AND  $2-16\,$  BIT TIMERS.

THE "FLOPPY I/O" CARD FROM CGRS MICROTECH IS COMPATIBLE WITH ALTAIR 8800, IMSAI 8080 AND THE CGRS 6502/S100 MPU. THE "FLOPPY I/O" IS AVAILABLE IN KIT FORM (\$169-95) AND ASSEMBLED (\$219.95).

### PETEX-PET TO S100 ADAPTOR NEW PRODUCT INFORMATION

CGRS MICROTECH, INC. ANNOUNCES THE PET/S100 ADAPTOR. CGRS, THE 6502/S100 EXPERTS, HAVE DEVELOPED AN ADAPTOR CARD THAT WILL CONVERT THE "MEMORY EXPANSION" CONNECTOR FROM THE PET COMPUTER TO THE S100 BUS. WITH THIS CARD THE OWNERS OF THE PET COMPUTER CAN EXPAND MEMORY, ADD I/O DEVICES (PRINTERS, FLOPPY DISC, ETC.) AND ENJOY THE ADVANTAGES OF THE NUMEROUS S100 PRODUCTS. THE PET/S100 IS A SINGLE BOARD THAT PLUGS INTO A CARD SLOT OF ANY S100 MOTHERBOARD AND CONNECTS TO THE PET MEMORY EXPANSION CONNECTOR VIA A FLAT RIBBON CABLE. THE PET/S100 ADAPTOR CAN BE USED TO ADAPT THE KIM, THE MOTOROLA EVII, AND OTHER6502 OR 6800 COMPUTERS TO THE S100 BUS USING THE APPROPRIATE CONNECTOR CABLE. THIS BOARD IS UNIQUE IN THAT IT GENERATES ALL OF THE REQUIRED S100 CONTROL SIGNALS SUCH AS PSYNC, I/O ADDRESS, WAIT STATES AND- MUCH MORE. THIS IS THE SAME DESIGN THAT HAS BEEN PROVEN BY CGRS OVER THE PAST SEVERAL YEARS WITH THEIR S100 6502 MPU CARD.

THE PET/S100 COMES WITH INSTRUCTIONS AND A COMPLETE S100 COMPATIBILITY LIST. IT IS AVAILABLE FULLY ASSEMBLED AND TESTED FOR \$195.95. SEND CHECK OR MONEY ORDER TO:

CGRS MICROTECH, INC. P.O. BOX 368 SOUTHAMPTON, PA. 18966

### LEVEL X: TURNKEY COMPUTER PACKAGE

WITH MINIFLOPPY DISK

- \*6502 MPU with 1024 bytes of Ram
- \*T.I.M. II I/O Board
- \*Cabinet, Power Supply 8V@10A, ±16V@1A
- \*S100 Motherboard
- \*VB1B Video Board and Keyboard
- \*"VIP" Operating System Firmware

The CGRS Turn-key Computer package is a general purpose microcomputer complete with keyboard and video output. The microcomputer features the "VIP" operating system, a special program that controls the video screen, providing a "built-in" computer terminal. The system is, of course, S100 expandable to any powerful level, making it particularly suitable for business and general computing applications.

THE SYSTEM 6000\*D CONTAINS THE POWER SUPPLY, CONTROLLER, DISC DRIVE AND SOFTWARE MOUNTED IN OUR STANDARD BOX. ASSEMBLED AND TESTED



\$1550.00

6502 DISKETTE SUPPORT SOFTWARE

VIODT - AN I/O DRIVER

VDIAGT - A SET OF DIAGNOSTIC ROUTINES

KVOS1T - AN EXTENSION TO TIM' WITH DISK FILE DIRECTORY MANIPULATION COMMANDS

KV0S2T - ALL THE FEATURES OF 'KVOS1T' PLUS
A DISASSEMBLER AND A DYNAMIC TRACER

KVOS2T' IS A MINIATURE OPERATING SYSTEM FOR USE WITH THE CGRS 6302 MPU CARD AND THE 6502 'TIM' MONITOR ROM. IT EXTENDS THE COMMANDS AVAILABLE WITH 'TIM' TO ALLOW SUCH THINGS AS

- LIST THE VOLUME TABLE OF CONTENTS OF A SPECIFIED DISK
- SAVE A PROGRAM TO DISK BY FILE NAME
- EXECUTE A PROGRAM FROM DISK BY FILE NAME
- LOAD A PROGRAM FROM DISK BY FILE NAME
- UPDATE A PROGRAM BY FILE NAME
- DELETE A PROGRAM FROM DISK
- INITIALIZE A DISK
- REMOVE DELETED SPACE FROM A DISK (PACK)
- PROGRAM DISASSEMBLY
- DYNAMIC PROGRAM TRACING

'KV0S2T' IS SUPPLIED ON 2 2708 ROM'S AND A DISKETTE PRICE - \$65.00

'KVOS1T' HAS ALL THE FEATURES OF 'KVOS2T' EXCEPT THE DISASSEMBLER AND THE TRACER. IT IS SUPPLIED ON 1 2708 ROM AND A DISKETTE. PRICE - \$40.00

'VIODT' IS THE I/O DRIVER ROM USED BY 'KVOS2T' AND 'KVOS1T' AND IS AVAILABLE SEPARATELY FOR THOSE PEOPLE WHO LIKE TO WRITE THEIR OWN OPERATING SYSTEMS PRICE - \$25.00

'VDIAGT' IS A SET OF DIAGNOSTIC ROUTINES THAT CAN BE USED TO CHECK OUT DISKETTE DRIVES. IT HAS SOME SECTOR READ AND WRITE ROUTINES THAT CAN BE USED AS A PRIMITIVE OPERATING SYSTEM. 'VDIAGT' IS SUPPLIED ON 1 2708 ROM AND REQUIRES 'VIODT'. PRICE - \$25.00

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## P.O. BOX 368 SOUTHAMPTON, PA. 18966 (215)757-0284

PRICE SHEET AUGUST 1978	ORDERING	HOURS 12:00 AM	- 8 I	<u>PM</u>
SYSTEMS		<u>KIT</u>	ASSE	MBLED
LEVEL I: TUTORIAL SYSTEM LEVEL II: INTRODUCTORY SYSTEM LEVEL III: STANDARD SYSTEM LEVEL IV: ADVANCED SYSTEM LEVEL V: PROFESSIONAL SYSTEM LEVEL VI: TURN-KEY SYSTEM WITH LEVEL X: TURN-KEY LEVEL XI: PORTABLE	FLOPPY DISK	\$199.95 \$259.95 \$369.95 \$499.95 \$795.00 \$895.00 \$745.00	\$\$\$\$\$\$\$\$\$	239.95 329.95 469.95 599.95 995.00 995.00 895.00
ACCESSORIES				
1. 16K ROM 2. 3200/1600 RAM BOARD BY TRACE WITH 16K MEMORY 3. VBl-B VIDEO BOARD	ELECTRONICS	\$ 59.95 \$129.50	\$ \$	99.95 649.00 375.00 169.50
4. PTRI - PRINTER, CABINET, POWE AND PARALLEL/SERIAL INTERFACE 5. FLI - MINI FLOPPY DISK, DUAL DRIVE, CABINET, POWER SUPPLY,	CARD SA400	\$645.00	·	795.00
CONTROLLED CARD AND SOFTWARE \$995.00 6. FL2 - DUAL PERSI 277, 8" DISK DRIVE, CABINET, POWER SUPPLY, PERSCI 1070			\$1195.00	
CONTROLLER CARD AND EXDOS/TIM		_	\$2	495.00
PRODUCTS	BARE BOARDS	-		
PET TO S100 EXPANSION CARD INCLUFILOPPY I/O CARD LEVEL I MPU BOARD(NO MEMORY) LEVEL II MPU BOARD(2K RAM) HEXADECIMAL FRONT PANEL T.I.M. I/O BOARD AUDIO INTERFACE CASSETTE S100 POWER SUPPLY, +8v@10A, +16V S100 CARD RACK S100 CABINET SYSTEM	\$49.95 \$39.95 \$39.95 \$ 9.95	\$169.95 \$149.95	\$ \$	219.95 179.95
SOFTWARE				
1. V.I.P VIDEO INTERFACE PAR 2. V.I.P. II EXPANSION SOFTWARE 3. EXOS - EXTENDED OPERATING SY 4. DATE/TIM - DISSASMBLER, ASSEMI (4K OF 2708) IN PROM 5. EXASMB/TIM - ASSEMBLER FOR T 6. EXASMP/V.I.P ASSEMBLER FOI 7. TINY BASIC/TIM (3K OF 2708) 8. TINY BASIC/VIP (3K OF 2708) 9. EXDOS/TIM - DISK OPERATING S	ILER, TRACE II.M. (2K OF R V.I.P. (2K IN PROM IN PROM	2708) C OF 2708)	***********	150.00 80.00 80.00 60.00 60.00 50.00
10. 8K BASIC - 9 DIGIT, ON PAPER	TAPE		\$	90.00

PRICE LIST SUBJECT TO CHANGE WITHOUT NOTICE PLUS 5% SHIPPING AND HANDLING PA. RESIDENTS ADD 6% SALES TAX

### THE FOLLOWING BOARDS HAVE SEEN TESTED AND FOUND COMPATIBLE:

- 1. IMSAI-RAM4, 4K RAM BOARD
- 2. IMSAI-RAM4A, 4K RAM BOARD
  - 3. SOLID STATE MUSIC MB6, 8K RAM

  - 4. ITHACA AUDIO 8K RAM 5. ITHACA AUDIO 16K ROM
  - 6. SD SALES 16K ROM
  - 7. SOLID STATE MUSIC MB7, 16K RAM
  - 8. T.D.L. Z16, 16K RAM
- 9. VANDENBURG DATA 16K ROM BOARD
  - 10. SOLID STATE MUSIC MC8, 16K ROM BOARD
  - 11. MERLIN VIDEO-I/O BOARD
  - 12. POLYMORPHIC SYSTEMS VIDEO BOARD(KEYBOARD INPUT NOT USABLE)
  - 13. SOLID STATE MUSIC VBI, VIDEO BOARD

  - 14. IMSAI 3P+S, I/O BOARD 15. TDL VDB, VIDEO I/O BOARD 16. SPEECHLAB SPEECH INPUT BOARD

#### THE FOLLOWING BOARDS HAVE BEEN SCHEMATICALLY REVIEWED AND APPEAR COMPATIBLE:

- 1. S.D. SALES 4 K RAM
- 2. PROCESSOR TECHNOLOGY 4K RAM
- 3. DUTRONICS 8K RAM
- 4. FRANKLIN ELECTRIC 8K RAM
- 5. PROBLEM SOLVER SYSTEMS 8< RAM
- 6. PROBLEM SOLVER SYSTEMS 16K RAM
- 7. DIGITAL MICRO SYSTEMS 16K RAM
- 8. DYNABYTE 16K RAM 9. DYNABYTE 32K RAM
- 10. TARBELL CASSETTE INTERFACE
- 11. PERCOM CASSETTE INTERFACE, I/O
- 12. NATIONAL MULTIPLEX 2S10
- 13. PROBLEM SOLVER SYSTEMS MM16, 16K ROM
- 14. MITS 882S10, SERIAL I/O 15. MITS 884P10, PARALLEL I/O
- 16. PICKLES & TROUT PARALLEL I/O
- 17. MULLEN COMPUTER RELAY I/O CONTROLLER
- 18. COMPUTALKER ASSOC. SPEECH OUTPUT BOARD
- 19. PERIPHERAL VISION FLOPPY DISK CONTROLLER 20. S.D. SALES 16K ROM BOARD
- 21. ALF PRODUCTS 10-5-9 PITCH GENERATOR, MUSIC
- 22. POLYMORPHICS IDEA BOARD
- 23. SZERLIP ENTER. PROM SETTER, PROM PROGRAMMER
- 24. MOUNTAIN HARDWARE INTELLIGENT CONTROLLER
- 25. CROMEMCO 4FDC, FLOPPY DISK CONTROLLER
- 26. CROMEMCO T.V. DAZZLER (MOD. REQ'D) 27. SPEECH TECHNOLOGY - M188 VOICE GENERATOR
- 28. S.D. SALES FLOPPY DISK CONTROLLER CARD
- 29. KENT-MOORE GRAPHIC VIDEO DISPLAY 60084
- 30. KENT-MOORE ALPHA VIDEO DISPLAY 60083
- 31. KENT-MOORE ALPHA VIDEO DISPLAY II 60117
- 32. KENT-MOORE 8K RAM 60085

### THE FOLLOWING BOARDS HAVE BEEN REVIEWED AND FOUND TO BE INCOMPATIBLE:

- 1. ICOM FLOPPY DISK CONTROLLER (DECODES HIGH ORDER I/O #, CAN BE MODIFIED)
- 2. PROCESSOR TECHNOLOGY VDM-1, VIDEO (DECODES HIGH ORDER I/O #)
- 3. CROMEMCO 16KZ, 16K DYNAMIC RAM
- 4. CROMEMCO BYTESAVER (CAN BE USED TO READ, BUT NOT PROGRAM EPROMS)
- \*\* 5. CROMEMCO "TU-ART", SERIAL/PARALLEL I/O
  - 6. INFO 2000 FLOPPY DISK I/O CARD (DECODES HIGH ORDER I/O, CAN BE MODIFIED)
  - 7. S.D. SALES 32K RAM

### \* NOT RECOMMENDED