BOCA.MCA™
PARALLEL

PRODUCT CODE: BMCP01
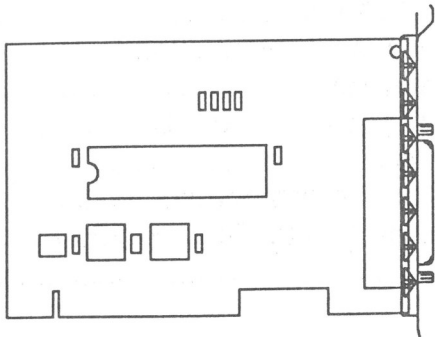
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Introduction

Congratulations on purchasing the BOCA.MCA Parallel board for your IBM PS/2 Microchannel or compatible computer. This owner's manual explains how to configure and install the board for use with your system. You should also check for a text file called MCA.DOC which may contain information made available after the printing of this manual. To display this file, place the utility diskette in your drive A: and type the following at the A:\> prompt: TYPE MCA.DOC To stop the screen from scrolling, either press the PAUSE key or the CTRL (control key) and S keys simultaneously. Then press any key to continue scrolling.

Section One: Getting Started

The BOCA.MCA package is the solution to the growing demand for an additional parallel port without having to spend money for unnecessary or unwanted features. The board provides one parallel port. Before proceeding any further, please insure that, in addition to this manual, the following items have been included in your BOCA.MCA package and appear to be in good working order.

• The BOCA.MCA Parallel board
• The BOCA.MCA utility diskette (3 1/2 inch diskette)

Inspect the board and diskette for any obvious damage which may have occurred in transit. If any damage exists or if anything appears to be missing, please contact the retailer from whom the board was purchased to see that the package is complete before continuing. Included in the BOCA.MCA package is a utility diskette that contains the following software:

@60C9.ADF - Adapter Description File required by a PS/2 to initialize the BOCA.MCA.

MCA.DOC - An informational text file as described previously.

Section Two: Features and Capabilities

The BOCA.MCA Parallel board provides an additional parallel port for IBM PS/2 Microchannel and compatible computers.

Parallel Printer Interface (Bidirectional)

The parallel printer interface has a 25-pin female D-shell connector, and is designed to connect to IBM and IBM compatible printers via an IBM printer cable as well as other parallel port applications. This parallel port can be configured through software to any one of the three standard PS/2 base I/O addresses.

Parallel Connector: Parallel 1 - 3.

Assignment	Base I/O Address	Interrupt Level	Function
Parallel_1	03BCh	INT 7	Parallel Port
⁓ Parallel_2	0378h	INT 7	Parallel Port
Parallel_3	0278h	INT 7	Parallel Port

Section Three: Installation

3.1 Installing the BOCA.MCA in Your Computer

The BOCA.MCA Parallel board is easy to install—even for the novice PS/2 user. If you are a novice PS/2 user, it's a good idea to familiarize yourself with the PS/2 manual prior to installing the board.

3.1.1 Removing the PS/2 Cover

1. Set the power switch on the computer down to the "O" (OFF) position. Also, turn off all peripherals such as the printer and display adapter.

2. Unplug all computer system power cords from the electrical receptacles.

3. Verify that the cover is unlocked; if not, unlock the cover at this time.

4. Loosen the two large retaining screws that secure the system cover. If the screws are too tight, use a coin.

5. Remove the system cover. Take care not to let the cover catch on any internal wiring or cables.

3. A screen displaying the IBM logo should appear. Press ENTER to continue.

4. An explanation of the 165 configuration error should appear in a window. Press the PAGE DOWN key.

5. At the bottom of the configuration error message window the system will ask you if wish to run the automatic installation. **DO NOT RUN AUTOMATIC INSTALLATION. INDICATE NO BY PRESSING N.** The reference diskette Main Menu should replace the configuration message.

6. Use the arrow keys to move to the "Copy an Option Diskette" option and press ENTER. Insert the BOCA.MCA utility diskette and press ENTER. The system will search for the appropriate board configuration files and then prompt you to insert the backup of your Reference Diskette. Do so, and press ENTER. You will be prompted to re-insert the backup copy of your reference diskette. The proper files will be copied to the backup of your reference Diskette. The system will inform you that the update is complete. Press ENTER to return to the main menu.

7. Use the arrow keys to move to the "Set Configuration" option and press ENTER. This will bring up the Set Configuration sub-menu.

8. Use the arrow keys to move to the "Change Configuration" option and press ENTER. This will bring up the current configuration of the system.

9. Use the arrow keys to move to the option line for the slot which contains the BOCA.MCA Parallel board which you have just installed.

10. Using the F5 and F6, keys toggle through the port options until you have the configuration that you wish displayed. **If parallel 1 is already in the system, set the BOCA MCA. PARALLEL board for parallel 2.** After selecting base Address and Interrupt Level, press the F10 key to save the new configuration. Press ENTER to continue.

11. Follow on-screen instructions to return to the Set Configuration sub-menu.

NOTE: The Set Configuration program will inform you of any board conflicts by placing an asterisk beside the conflicting board.

12. Follow on-screen instructions to return to the Main Menu. When you see a small warning window, remove the backup Reference Diskette from the disk drive and press ENTER to activate the changes that you have made. The system will then reboot.

Appendix B: Servicing Your Boca Product

If you are experiencing difficulty with the board, first consult the appropriate sections of this manual. If you require further assistance contact the authorized dealer from whom you purchased the board. If the dealer cannot provide a solution or if the board requires service you may contact Boca Research directly. Please follow the instructions below. Our electronic BBS is available is available 24 hours a day at (407) 241-1601 and will support data transmission speeds up to 14.4K bps with settings of N, 8, 1. If you have a modem, you may find the BBS helpful (especially during off hours) if you have a question about product settings, or if you wish to download special software or utilities. You may also fax us at (407) 997-0918. If section 3.3 (Possible Conflicts) has not isolated your problem, you may call our technical support staff for assistance. If you haven't referred to that section, do so now.

NOTE: CALLING TECHNICAL SUPPORT WITHOUT COMPLETE AND ACCURATE INFORMATION CONCERNING YOUR PROBLEM MAY BE BOTH TIME-CONSUMING AND FRUSTRATING FOR YOU.

1. When calling Boca Research Technical Support, have the following information available and be at the computer with ready access to the board and its accompanying software:

- **computer model and manufacturer**
- **type, manufacturer and model of each peripheral in your system**

- **part number of the board (found on the back)**
- **version number of the BOCA.MCA software (on diskette label)**
- **operating system and version**

IMPORTANT: make note of any error messages.

If you suspect a problem with a specific program or software package, make note of the name, version or release number, and manufacturer of the software.

2. Call Boca Research Technical Support Department between the hours of 8:00 a.m. and 6:00 p.m. Eastern time, Monday through Friday at (407) 241-8088. A technical support specialist will be available to discuss the problem(s) you are experiencing. If it is determined that factory service is required, you will be given a Return Merchandise Authorization (RMA) number. **Please place this number on the outside of the package** when you return the item(s) for service and reference it on any correspondence included in the package. Boca Research, Inc. will return any product that is not accompanied by an RMA number.

3. If the product is covered under the five-year Boca Research, Inc. Limited Warranty, there will be no charge for parts or labor required to make the repair. Be sure to include your receipt as proof of purchase for all warranty repairs.

4. If the product is not covered under the five-year Boca Research, Inc. Limited Warranty, there will be a fixed charge of $75 for each item returned.

5. Certain parts will not be covered under the Boca Research, Inc. Limited Warranty. Dealer installed parts are warranted by the dealer. Parts that you have installed

yourself are covered only by supplier's warranties. In these cases, Boca Research, Inc. can identify which parts are defective, but will not replace such parts until specific written authorization is received from you. The cost of parts and labor involved in making such repairs will be billed to you C.O.D.

6. When sending a board to Boca Research, Inc. for repairs, please be sure to include a brief but inclusive description of the problem, the board, the utility diskette, the manual, your return street address (for UPS purposes), telephone number, and the RMA number mentioned in Step 2. Products returned without diskettes or manuals will be replaced without diskettes and manuals. Package the product securely in a container equivalent to the original packaging, and insure the package against loss or damage during transit. Shipping charges must be prepaid; C.O.D. shipments will not be accepted. Please use the address below for all correspondence:

Boca Research, Inc.
RMA Department— RMA #_____
6413 Congress Avenue / Suite 130
Boca Raton, FL 33487

7. If the repairs done on your board were covered by the warranty, Boca Research, Inc. will return it prepaid via UPS ground. If you prefer Federal Express delivery, please provide your Federal Express account number. Shipping costs for items not covered by the warranty will be billed C.O.D.

FCC Compliance

This equipment has been tested and found to comply with the limits for a **Class B** digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and the receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help."

CHANGES OR MODIFICATIONS TO THIS EQUIPMENT NOT EXPRESSLY APPROVED BY THE MANUFACTURER COULD VOID YOUR AUTHORITY TO OPERATE THE EQUIPMENT.

Limited Warranty

Boca Research, Inc. (BRI) warrants to the original buyer of this BRI product that the hardware is free of defects in materials and workmanship for a period of five years from the date of purchase from BRI or an authorized dealer. Should the BOCAMCA Parallel board fail to be in good working order at any time during the five-year period, BRI, will at its option, repair or replace this product at no additional charge, provided the part or product has not been abused, misused, repaired, or modified.

BOCA MCA Parallel boards which require the Limited Warranty service during the warranty period should be delivered to the nearest authorized dealer or sent to BRI at the address in Appendix C with proof of purchase the Return Merchandise Authorization (RMA) number provided by BRI Technical Support. Refer to Appendix B: Servicing Your Boca Product. Replacement parts or complete BOCAMCA Parallel boards will be furnished on an exchange basis only. Replaced parts and/or BOCA MCA Parallel boards become the property of BRI.

If the returned MCA Parallel board is sent by mail, the purchaser agrees to prepay shipping charges, insure the MCA Parallel board or assume the risk of loss or damage which may occur in transit, and to use a shipping container equivalent to the original packaging. ALL EXPRESS AND IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS OF PURPOSE FOR THE BOCAMCA Parallel ARE LIMITED IN DURATION TO THE ABOVE FIVE-YEAR PERIOD. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

UNDER NO CIRCUMSTANCES WILL BOCA RESEARCH, INC. BE LIABLE IN ANY WAY TO ANY PURCHASER FOR DAMAGES, LOST REVENUE, LOST WAGES, OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE BOCAMCA Parallel BOARD.

Some states do not allow the exclusion or limitation of incidental or consequential damages for consumer products, so the above limitations may not apply to you. Boca Research, Inc. reserves the right to make modifications in both hardware and software without prior notification. This warranty gives you specific legal rights, and you have other rights which may vary from state to state.

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