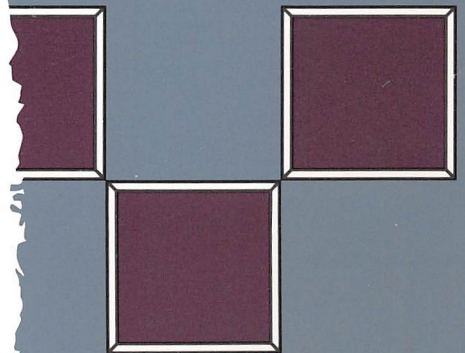
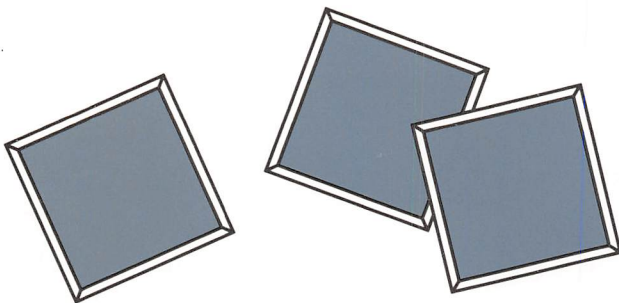


MVME710-B
8-Channel Serial I/O
Distribution Module
User's Manual



MOTOROLA

MVME710B
8-Channel Serial I/O
Distribution Module
User's Manual
(MVME710B/D1)

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Motorola, Inc.
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PREFACE

This manual provides general information, hardware preparation, installation instructions, and support information for the MVME710B 8-Channel Serial I/O Distribution Module.

This manual is intended for anyone who wants to design OEM systems, supply additional capability to an existing compatible system, or in a lab environment for experimental purposes.

A basic knowledge of computers, and digital logic is assumed.

To use this manual, you should be familiar with the publications listed in the *Related Documentation* paragraph in Chapter 1 of this manual.

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October 1992

WARNING

THIS EQUIPMENT GENERATES, USES, AND CAN RADIATE RADIO FREQUENCY ENERGY AND IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTIONS MANUAL, MAY CAUSE INTERFERENCE TO RADIO COMMUNICATIONS. IT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS A COMPUTING DEVICE PURSUANT TO SUBPART J OF PART 15 OF FCC RULES, WHICH ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST SUCH INTERFERENCE WHEN OPERATED IN A COMMERCIAL ENVIRONMENT. OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE INTERFERENCE IN WHICH CASE THE USER, AT HIS OWN EXPENSE, WILL BE REQUIRED TO TAKE WHATEVER MEASURES NECESSARY TO CORRECT THE INTERFERENCE.

SAFETY SUMMARY SAFETY DEPENDS ON YOU

The following general safety precautions must be observed during all phases of operation, service, and repair of this equipment. Failure to comply with these precautions or with specific warnings elsewhere in this manual violates safety standards of design, manufacture, and intended use of the equipment. Motorola Inc. assumes no liability for the customer's failure to comply with these requirements. The safety precautions listed below represent warnings of certain dangers of which we are aware. You, as the user of the product, should follow these warnings and all other safety precautions necessary for the safe operation of the equipment in your operating environment.

GROUND THE INSTRUMENT.

To minimize shock hazard, the equipment chassis and enclosure must be connected to an electrical ground. The equipment is supplied with a three-conductor ac power cable. The power cable must either be plugged into an approved three-contact electrical outlet or used with a three-contact to two-contact adapter, with the grounding wire (green) firmly connected to an electrical ground (safety ground) at the power outlet. The power jack and mating plug of the power cable meet International Electrotechnical Commission (IEC) safety standards.

DO NOT OPERATE IN AN EXPLOSIVE ATMOSPHERE.

Do not operate the equipment in the presence of flammable gases or fumes. Operation of any electrical equipment in such an environment constitutes a definite safety hazard.

KEEP AWAY FROM LIVE CIRCUITS.

Operating personnel must not remove equipment covers. Only Factory Authorized Service Personnel or other qualified maintenance personnel may remove equipment covers for internal subassembly or component replacement or any internal adjustment. Do not replace components with power cable connected. Under certain conditions, dangerous voltages may exist even with the power cable removed. To avoid injuries, always disconnect power and discharge circuits before touching them.

DO NOT SERVICE OR ADJUST ALONE.

Do not attempt internal service or adjustment unless another person, capable of rendering first aid and resuscitation, is present.

USE CAUTION WHEN EXPOSING OR HANDLING THE CRT.

Breakage of the Cathode-Ray Tube (CRT) causes a high-velocity scattering of glass fragments (implosion). To prevent CRT implosion, avoid rough handling or jarring of the equipment. Handling of the CRT should be done only by qualified maintenance personnel using approved safety mask and gloves.

DO NOT SUBSTITUTE PARTS OR MODIFY EQUIPMENT.

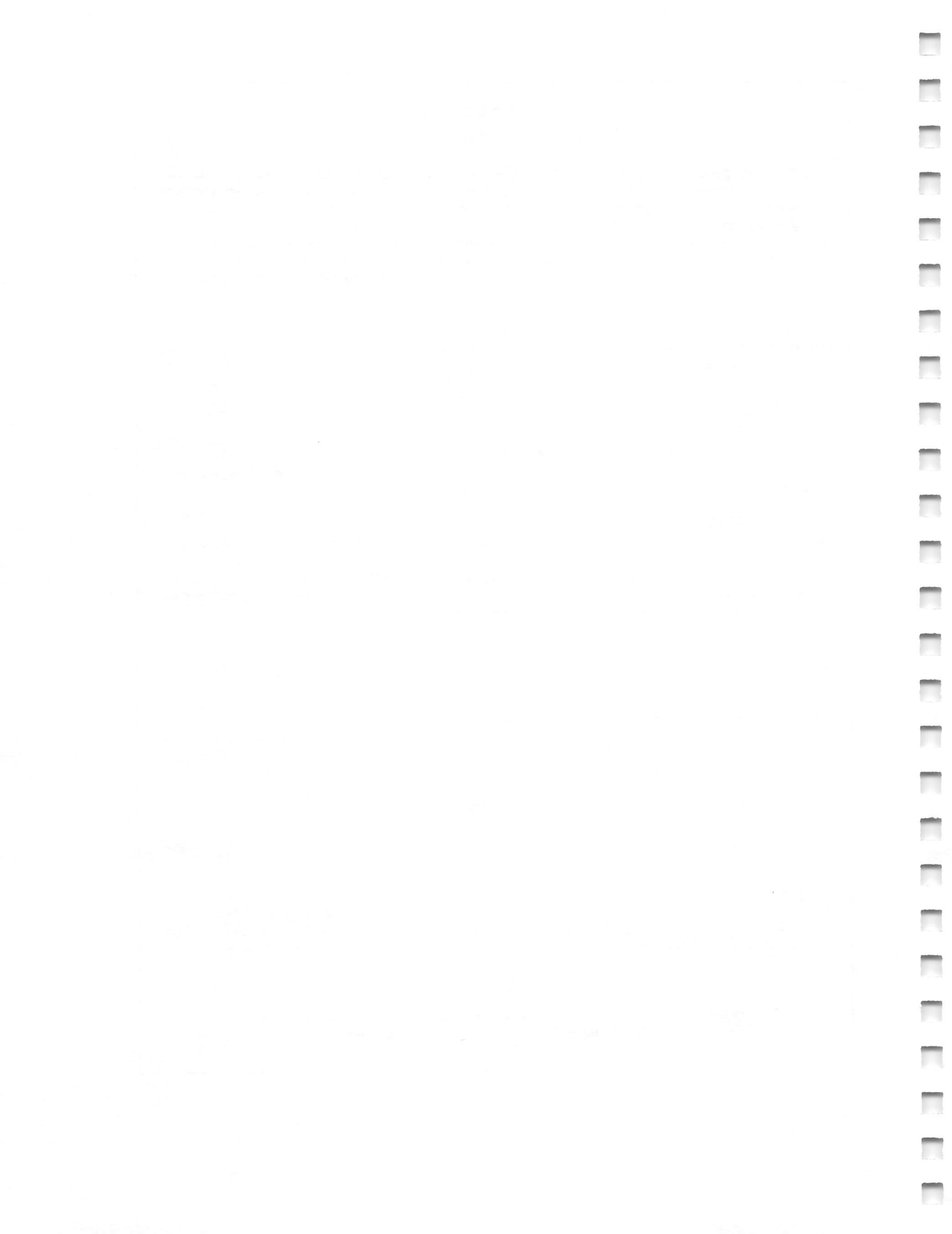
Because of the danger of introducing additional hazards, do not install substitute parts or perform any unauthorized modification of the equipment. Contact your local Motorola representative for service and repair to ensure that safety features are maintained.

DANGEROUS PROCEDURE WARNINGS.

Warnings, such as the example below, precede potentially dangerous procedures throughout this manual. Instructions contained in the warnings must be followed. You should also employ all other safety precautions which you deem necessary for the operation of the equipment in your operating environment.

WARNING

**Dangerous voltages, capable of causing death, are present in this equipment.
Use extreme caution when handling, testing, and adjusting.**



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CHAPTER 1

GENERAL INFORMATION

Introduction

This manual provides general information, preparation for use and installation instructions, and support information for the MVME710B 8-Channel Serial I/O Distribution Module.

Specifications

Specifications for the MVME710B are shown in Table 1-1.

Table 1-1. MVME710B Specifications

Characteristics	Specifications
Serial ports	Each serial port may be configured in the "Connect to Terminal" (DCE) or the "Connect to Modem" (DTE) mode via jumper placements on headers.
Supported signals	TXD Transmitted data RXD Received data RTS Request to send CTS Clear to send DSR Data set ready DTR Data terminal ready DCD Received line signal detector MC Modem control PGND Protective ground SGND Signal ground
Operating temperature	0° C to +55° C
Storage temperature	-40° C to +85° C
Operating humidity	0 to 90% non-condensing

GENERAL INFORMATION

Table 1-1. MVME710B Specifications (cont'd)

Characteristics	Specifications
Power requirements	No power consumed at +5, +12, -12 Vdc
Physical characteristics (excluding front panel)	
Height	9.187 inches (233.35 mm)
Depth	3.150 inches (80.0 mm)
Thickness	0.063 inches (1.6 mm)
Connectors	One DIN 41612 64-pin for ribbon cable interconnect with the MVME332XT. Eight sub-D 25 conductor serial I/O connectors.
Shipping configuration	All channels configured as "Connect to Modem" (DTE).

General Description

The MVME710B provides a convenient adapter between the DB25 Serial I/O cable connectors and the MVME332XT Intelligent Serial I/O module. The MVME710B connects to the MVME332XT via a 64 conductor ribbon cable. Eight standard 25 conductor subminiature D-type connectors (DB25s) are mounted on the MVME710B front panel for serial I/O equipment connection.

Each of the serial ports on the MVME710B can be configured in either the "Connect to Terminal" (as a DCE) or the "Connect to Modem" (as a DTE) configuration via the header associated with each port. Note that each MVME710B serial port is completely independent and therefore, supports many different configurations. The "Connect to Terminal" configuration supports most terminal equipment and serial printers. The "Connect to Modem" configuration is useful for interfacing modems or other computer serial ports with the MVME332XT.

Note that the MVME332XT and MVME710B support only EIA-232-D electrically compatible equipment in the aforementioned configurations. Because the MVME332XT I/O is already EIA-232-D compatible, the MVME710B merely provides a convenient EIA-232-D interconnect strategy but incorporates no active circuitry except zener diodes, capacitors, and resistors intended to protect the interface integrated circuits on the MVME332XT from ESD damage.

Related Documentation

The following publications are applicable to the MVME710B and may provide additional helpful information. If not shipped with this product, they may be purchased by contacting your local Motorola sales office. Non-Motorola documents may be purchased from the sources listed.

Document Title	Motorola Publication Number
MVME332XT Intelligent Communication Controller User's Manual	MVME332XT

NOTE: Although not shown in the above list, each Motorola Computer Group manual publication number is suffixed with characters which represent the revision level of the document, such as '/D2' (the second revision of a manual); a supplement bears the same number as a manual but has a suffix such as '/D2A1' (the first supplement to the second edition of the manual).

The following publication is available from the source indicated.

ANSI/IEEE Std 1014-1987 Versatile Backplane Bus: The Institute of Electrical and Electronics Engineers, Inc., 345 East 47th Street, New York, NY 10017, USA. (VMEbus specification)

Manual Terminology

Throughout this manual, a convention has been maintained whereby data and address parameters are preceded by a character which specifies the numeric format as follows:

\$	dollar	specifies a hexadecimal number
%	percent	specifies a binary number
&	ampersand	specifies a decimal number

Unless otherwise specified, all address references are in hexadecimal throughout this manual.

An asterisk (*) following the signal name for signals which are level significant denotes that the signal is true or valid when the signal is low.

An asterisk (*) following the signal name for signals which are edge significant denotes that the actions initiated by that signal occur on high to low transition.

In this manual, assertion and negation are used to specify forcing a signal to a particular state. In particular, assertion and assert refer to a signal that is active or true; negation and negate indicate a signal that is inactive or false. These terms are used independently of the voltage level (high or low) that they represent.

CHAPTER 2

HARDWARE PREPARATION AND INSTALLATION

Introduction

This chapter provides the unpacking, hardware preparation, and installation instructions for the MVME710B module.

Unpacking Instructions

NOTE

If the carton is damaged upon receipt, request carrier's agent be present during unpacking/inspection of equipment.

Unpack equipment from shipping carton. Refer to packing list and verify that all items are present. Save packing material for storing and reshipping of the module.

Hardware Preparation

If the MVME332XT module is version B02C or earlier, remove resistor pack (R17) from the MVME332XT module.

To select the desired configuration and ensure proper operation of the MVME710B, certain modifications may be made to the module. These modifications are made through jumper arrangements. Each of eight channels may be changed from DTE "Connect to Modem" or to DCE "Connect to Terminal" independently. The MVME710B is shipped configured as EIA-232-D Data Circuit-terminating Equipment (DCE) (modem) for connection to Data Terminal Equipment (DTE) (terminal). The six channel positions, on the module, are shown in Figure 2-1. The component layout for each channel is identical.

Table 2-1 identifies the headers associated with each serial port for both "Connect to Modem" and "Connect to Terminal". The MVME710B module is shipped with all channels configured for modem use. Table 2-2 shows the "Connect to Modem" configuration for any channel. Table 2-3 provides the "Connect to Terminal" configuration.

HARDWARE PREPARATION AND INSTALLATION

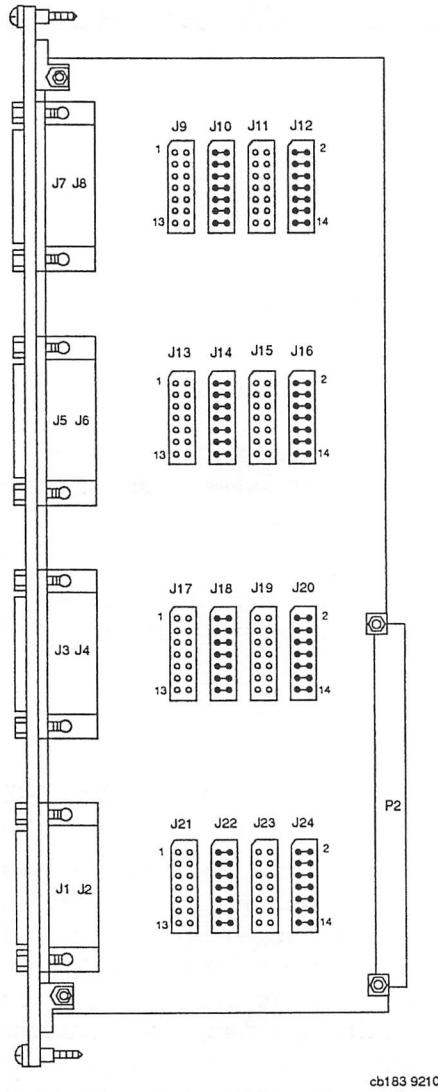


Figure 2-1. Channel Positions

HARDWARE PREPARATION AND INSTALLATION

Table 2-1. Serial Port and Associated Header Identification

Serial Port Number	Associated DCE Header	Associated DTE Header
1	J21	J22
2	J23	J24
3	J17	J18
4	J19	J20
5	J13	J14
6	J15	J16
7	J9	J10
8	J11	J12

Connect to Modem (DTE) Configuration

To configure any serial port for modem interface with a standard, full duplex cable (including all handshakes), Table 2-1 indicates which header must have jumpers positioned according to Table 2-2.

Table 2-2. Connect to Modem (DTE) Configuration

Header Pair	Functional Description When Connected
1 - 2	connects MVME332XT RxD to DB25 RxD, pin 3
3 - 4	connects MVME332XT TxD to DB25 TxD, pin 2
5 - 6	connects MVME332XT CTS to DB25 CTS, pin 5
7 - 8	connects MVME332XT RTS to DB25 RTS, pin 4
9 - 10	connects MVME332XT DTR to DB25 DTR, pin 20
11 - 12	connects MVME332XT DCD to DB25 DCD, pin 8
13 - 14	connects MVME332XT MC to DB25 DSR, pin 6

Connect to Terminal (DCE) Configuration

To configure any serial port for terminal interface with standard, full duplex cabling (including all handshakes), Table 2-1 indicates which header must have jumpers positioned according to Table 2-3.

Table 2-3. Connect to Terminal (DCE) Configuration

Header Pair	Functional Description When Connected
1 - 2	connects MVME332XT RxD to DB25 TxD, pin 2
3 - 4	connects MVME332XT TxD to DB25 RxD, pin 3
5 - 6	connects MVME332XT CTS to DB25 RTS, pin 4
7 - 8	connects MVME332XT RTS to DB25 CTS, pin 5
9 - 10	connects MVME332XT DTR to DB25 DSR, pin 6
11 - 12	connects MVME332XT DCD to DB25 DCD, pin 8
13 - 14	connects MVME332XT DCD to DB25 DTR, pin 20

Installation Instructions

When the MVME710B has been configured as desired, it can be installed in the system.

1. Turn all equipment power OFF and disconnect power cable from ac power source.

CAUTION

Connecting modules while power is applied may result in damage to components on the module.

WARNING

DANGEROUS VOLTAGES, CAPABLE OF CAUSING DEATH, ARE PRESENT IN THIS EQUIPMENT. USE EXTREME CAUTION WHEN HANDLING, TESTING, AND ADJUSTING.

2. Remove chassis cover as instructed in the equipment user's manual.
3. Remove the filler panel(s) from the appropriate card slot(s). Other modules in the unit may have to be moved to allow space for the MVME710B.
4. Attach the cable supplied with the module from MVME332XT connector P2 (on the backplane) to connector P2 on the MVME710B. Be sure to orient cable pin 1 with connector pin 1.
5. Insert the MVME710B module into the slot and tighten the attaching screws.
6. Make sure that cables are not be pinched by the cover and install cover removed in step 2.
7. Connect the power cable to the ac power source and turn the unit on.

CHAPTER 3

SUPPORT INFORMATION

Introduction

This chapter provides the interconnection signals, parts list with parts location illustration, and schematic diagram for the MVME710B.

Interconnect Signals

The MVME710B interconnects through connector P2, rows A and C, and a cable with the MVME332XT module.

Eight EIA-232-D ports interconnect with DCE/DTE devices.

Connector P2 Interconnect Signals

Connector P2 is a standard DIN 41612 double-row, 64-pin male connector. Connector P2 is pin-for-pin compatible with connector P2 on the MVME332XT module. Each pin connection, signal mnemonic, and signal characteristic for the connector is listed in Table 3-1.

Table 3-1. Connector P2 Interconnect Signals

Pin Number	Signal Mnemonic	Signal Name and Description
A1	GND	GROUND
A2	RTS8	REQUEST TO SEND, CHANNEL 8 — control signal output which requests a data transfer to the connected equipment on the TXD line. RTS can be configured either as status output under host control, or as hardware handshake output under MVME332XT control.
A3	TXD8	TRANSMITTED DATA, CHANNEL 8 — data signal output which carries transmitted data to the connected equipment.

Table 3-1. Connector P2 Interconnect Signals (cont'd)

Pin Number	Signal Mnemonic	Signal Name and Description
A4	DCD7	RECEIVED LINE SIGNAL DETECTOR, CHANNEL 7 — control signal which indicates that valid data is transferred from DCE to DTE on the RXD line. If the MVME710B is used as DTE, DCD can be configured either as status input monitored by the host, or as hardware handshake input to enable/disable the MVME332XT receiver. If the MVME710B is used as DCE, DCD is constantly activated.
A5	DTR7	DATA TERMINAL READY, CHANNEL 7 — control signal output which indicates that the MVME710B is ready for data communication. DTR can be configured either as status output under host control, or as hardware handshake output under MVME332XT receiver control.
A6	CTS7	CLEAR TO SEND, CHANNEL 7 — control signal input which enables a data transfer from the MVME332XT on the TXD line. CTS can be configured either as status input monitored by the host, or as hardware handshake input to enable/disable the MVME332XT transmitter.
A7	RXD7	RECEIVED DATA, CHANNEL 7 — data signal input which carries received data from the connected equipment.
A8	GND	GROUND
A9	RTS6	REQUEST TO SEND, CHANNEL 6 — same as RTS8 on pin A2.
A10	TXD6	TRANSMITTED DATA, CHANNEL 6 — same as TXD8 on pin A3.
A11	DCD5	RECEIVED LINE SIGNAL DETECTOR, CHANNEL 5 — same as DCD7 on pin A4.

Table 3-1. Connector P2 Interconnect Signals (cont'd)

Pin Number	Signal Mnemonic	Signal Name and Description
A12	DTR5	DATA TERMINAL READY, CHANNEL 5 — same as DTR7 on pin A5.
A13	CTS5	CLEAR TO SEND, CHANNEL 5 — same as CTS7 on pin A6.
A14	RXD5	RECEIVED DATA, CHANNEL 5 — same as RXD7 on pin A7.
A15	MC8	MODEM CONTROL, CHANNEL 8 — MC is the modem control input from the DCE, which is connected to DSR (data set ready).
A16	GND	GROUND
A17	RTS4	REQUEST TO SEND, CHANNEL 4 — same as RTS8 on pin A2.
A18	TXD4	TRANSMITTED DATA, CHANNEL 4 — same as TXD8 on pin A3.
A19	MC6	MODEM CONTROL, CHANNEL 6 — same as MC8 on pin A15.
A20	DCD3	RECEIVED LINE SIGNAL DETECTOR, CHANNEL 3 — same as DCD7 on pin A4.
A21	DTR3	DATA TERMINAL READY, CHANNEL 3 — same as DTR7 on pin A5.
A22	CTS3	CLEAR TO SEND, CHANNEL 3 — same as CTS7 on pin A6.
A23	RXD3	RECEIVED DATA, CHANNEL 3 — same as RXD7 on pin A7.
A24	MC4	MODEM CONTROL, CHANNEL 4 — same as MC8 on pin A15.
A25	GND	GROUND
A26	RTS2	REQUEST TO SEND, CHANNEL 2 — same as RTS8 on pin A2.

SUPPORT INFORMATION

Table 3-1. Connector P2 Interconnect Signals (cont'd)

Pin Number	Signal Mnemonic	Signal Name and Description
A27	TXD2	TRANSMITTED DATA, CHANNEL 2 — same as TXD8 on pin A3.
A28	MC2	MODEM CONTROL, CHANNEL 2 — same as MC8 on pin A15.
A29	DCD1	RECEIVED LINE SIGNAL DETECTOR, CHANNEL 1 — same as DCD7 on pin A4.
A30	DTR1	DATA TERMINAL READY, CHANNEL 1 — same as DTR7 on pin A5.
A31	CTS1	CLEAR TO SEND, CHANNEL 1 — same as CTS7 on pin A6.
A32	RXD1	RECEIVED DATA, CHANNEL 1 — same as RXD7 on pin A7.
B1-B32		Not used.
C1	DCD8	RECEIVED LINE SIGNAL DETECTOR, CHANNEL 8 — same as DCD7 on pin A4.
C2	DTR8	DATA TERMINAL READY, CHANNEL 8 — same as DTR7 on pin A5.
C3	CTS8	CLEAR TO SEND, CHANNEL 8 — same as CTS7 on pin A6.
C4	RXD8	RECEIVED DATA, CHANNEL 8 — same as RXD7 on pin A7.
C5	GND	GROUND
C6	RTS7	REQUEST TO SEND, CHANNEL 7 — same as RTS8 on pin A2.
C7	TXD7	TRANSMITTED DATA, CHANNEL 7 — same as TXD8 on pin A3.
C8	DCD6	RECEIVED LINE SIGNAL DETECTOR, CHANNEL 6 — same as DCD7 on pin A4.

Table 3-1. Connector P2 Interconnect Signals (cont'd)

Pin Number	Signal Mnemonic	Signal Name and Description
C9	DTR6	DATA TERMINAL READY, CHANNEL 6 — same as DTR7 on pin A5.
C10	CTS6	CLEAR TO SEND, CHANNEL 6 — same as CTS7 on pin A6.
C11	RXD6	RECEIVED DATA, CHANNEL 6 — same as RXD7 on pin A7.
C12	GND	GROUND
C13	RTS5	REQUEST TO SEND, CHANNEL 5 — same as RTS8 on pin A2.
C14	TXD5	TRANSMITTED DATA, CHANNEL 5 — same as TXD8 on pin A3.
C15	MC7	MODEM CONTROL, CHANNEL 7 — same as MC8 on pin A15.
C16	DCD4	RECEIVED LINE SIGNAL DETECTOR, CHANNEL 4 — same as DCD 7 on pin A4.
C17	DTR4	DATA TERMINAL READY, CHANNEL 4 — same as DTR7 on pin A5.
C18	CTS4	CLEAR TO SEND, CHANNEL 4 — same as CTS7 on pin A6.
C19	RXD4	RECEIVED DATA, CHANNEL 4 — same as RXD7 on pin A7.
C20	MC5	MODEM CONTROL, CHANNEL 5 — same as MC8 on pin A15.
C21	GND	GROUND
C22	RTS3	REQUEST TO SEND, CHANNEL 3 — same as RTS 8 on pin A2.
C23	TXD3	TRANSMITTED DATA, CHANNEL 3 — same as TXD8 on pin A3.

Table 3-1. Connector P2 Interconnect Signals (cont'd)

Pin Number	Signal Mnemonic	Signal Name and Description
C24	MC3	MODEM CONTROL, CHANNEL 3 — same as MC8 on pin A15.
C25	DCD2	RECEIVED LINE SIGNAL DETECTOR, CHANNEL 2 — same as DCD7 on pin A4.
C26	DTR2	DATA TERMINAL READY, CHANNEL 2 — same as DTR7 on pin A5.
C27	CTS2	CLEAR TO SEND, CHANNEL 2 — same as CTS7 on pin A6.
C28	RXD2	RECEIVED DATA, CHANNEL 2 — same as RXD7 on pin A7.
C29	MC1	MODEM CONTROL, CHANNEL 1 — same as MC8 on pin A15.
C30	GND	GROUND
C31	RTS1	REQUEST TO SEND, CHANNEL 1 — same as RTS8 on pin A2.
C32	TXD1	TRANSMITTED DATA, CHANNEL 1 — same as TXD8 on pin A3.

Connectors SP1 (J1) - SP8 (J8) Interconnect Signals

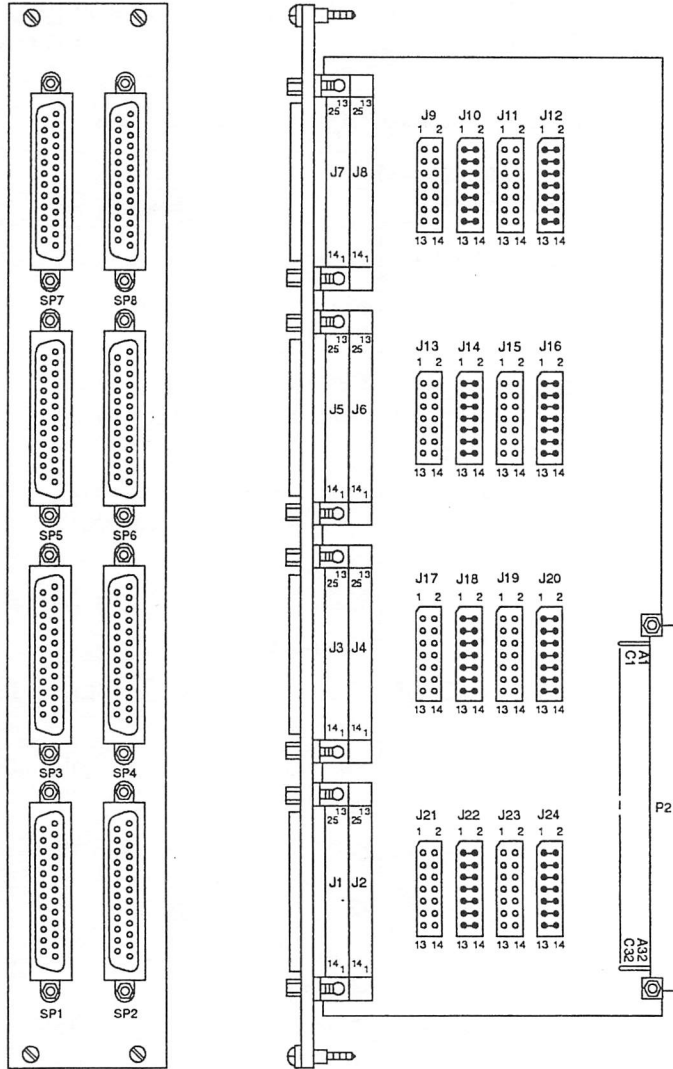
Front panel connectors interconnect signals are determined by the DTE or DCE configuration of the particular port. Refer to the *Connect to Modem (DTE) Configuration* and *Connect to Terminal (DCE) Configuration* sections in Chapter 2 of this manual.

Parts List

The components of the MVME710B are listed in Table 3-2. The parts locations are shown in Figure 3-1. These parts reflect the latest issue of hardware at the time of printing.

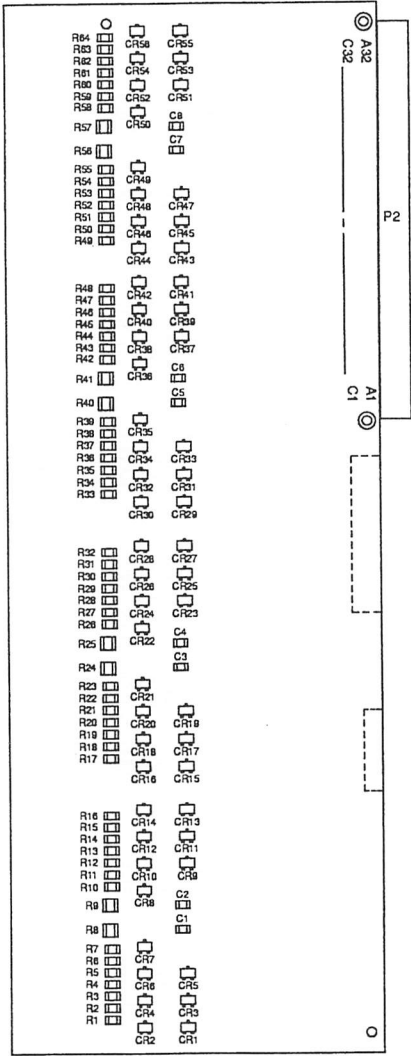
Table 3-2. MVME710B Module Parts List

Reference Designation	Motorola Part Number	Description
	03NW9004B48	Screw, VME captive (4 required)
	05NW9007A26	Rivet, 0.085-in. x 0.375-in. x 0.1-in. (use at P2). (2 required)
R1-R7, R10-R23, R26-R39, R42-R55, R58-R64	06SW-965A02	Resistor, surface mounted, 1206, 100 ohm $\pm 5\%$ at 1/8W (56 required)
R8, R9, R24, R25, R40, R41, R56, R57	06SW-967A15	Resistor, surface mounted, 1210, 39 ohm $\pm 5\%$ at 1/4W (8 required)
C1-C8	21NW9711A14	Capacitor, ceramic, surface mounted, 1206, 330 pF $\pm 5\%$ (8 required)
P2	28NW9802E05	Connector, 64-pin, plug
J1, J3, J5, J7	28NW9802G58	Connector, dual, 25-pin, right angle, S-D (4 required)
J9-J24	29NW9805C07	Pin, 0.025-in. square, gold, autoinsert (224 required)
	29NW9805C26	Jumper, shorting, insulated, double row, 14-pin (use at J10, J12, J14, J16, J18, J20, J22, J24). (8 required)
CR1-CR56	43-W6030B01	Standoff, male/female, D-subminiature (16 required)
	48NW9644A01	Diode, zener, 2 & 15V, SOT-23 (56 required)
	64-W6998B01A	Front panel, MVME710B
	84-W8830B01A	Printed wiring board, MVME710B



cb182 9210

Figure 3-1. MVME710B Module Parts Location (Sheet 1 of 2)



cb182 9210

Figure 3-1. MVME710B Module Parts Location (Sheet 2 of 2)

Schematic Diagram

Figure 3-2 illustrates the schematic diagram for the MVME710B.

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D

C

B

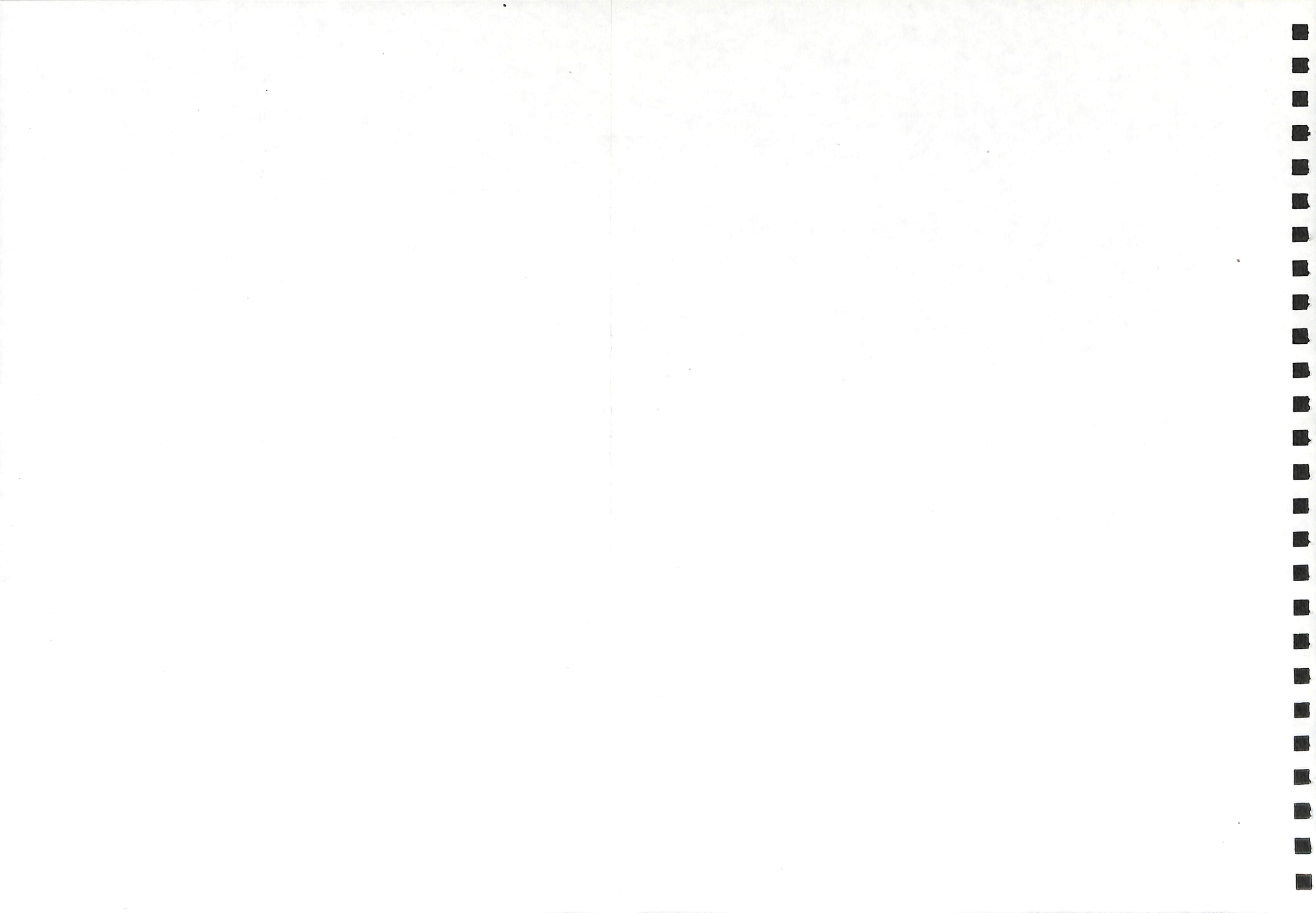
A

NOTES:

1. FOR REFERENCE DRAWINGS REFER TO BILL(S) OF MATERIAL 01-W3830B____. CURRENT REVISION/CONFIGURATION APPLIES.
2. UNLESS OTHERWISE SPECIFIED:
ALL RESISTORS ARE IN OHMS. +/- 5PCT. 1/4 WATT.
ALL CAPACITORS ARE IN UF.
ALL VOLTAGES ARE DC.
ALL DELAYS ARE IN NS.
3. INTERRUPTED LINES CODED WITH THE SAME LETTER OR LETTER COMBINATIONS ARE ELECTRICALLY CONNECTED.
△ DEVICE TYPE NUMBER IS FOR REFERENCE ONLY. THE NUMBER VARIES WITH THE MANUFACTURER.
5. SPECIAL SYMBOL USAGE:
• DENOTES - ACTIVE LOW SIGNAL.
<> DENOTES - VECTORED SIGNALS.
6. INTERPRET DIAGRAM IN ACCORDANCE WITH AMERICAN NATIONAL STANDARDS INSTITUTE SPECIFICATIONS, CURRENT REVISION, WITH THE EXCEPTION OF LOGIC BLOCK SYMBOLOLOGY.
7. CODE FOR SHEET TO SHEET REFERENCES IS AS FOLLOWS:
(SHEET) 5 C7 (ZONE)

REF DES	SH
C1	7
C2	7
C3	6
C4	6
C5	5
C6	5
C7	4
C8	4
CR1	7
THRU	7
CR14	7
CR15	6
THRU	6
CR28	6
CR29	5
THRU	5
CR42	5
CR43	4
THRU	4
CR56	4
J1	4
J2	4
J3	5
J4	5
J5	6
J6	6
J7	7
THRU	7
J12	7
J13	6
THRU	6
J16	6
J17	5
THRU	5
J20	5
J21	4
THRU	4
J24	4
P2	3
R1	7
THRU	7
R16	7
R17	5
THRU	6
R32	6
R33	5
THRU	5
R48	5
R49	4
THRU	4
R64	4

Figure 3-2. MVME710B Schematic Diagram (Sheet 1 of 7) 3-11/3-12



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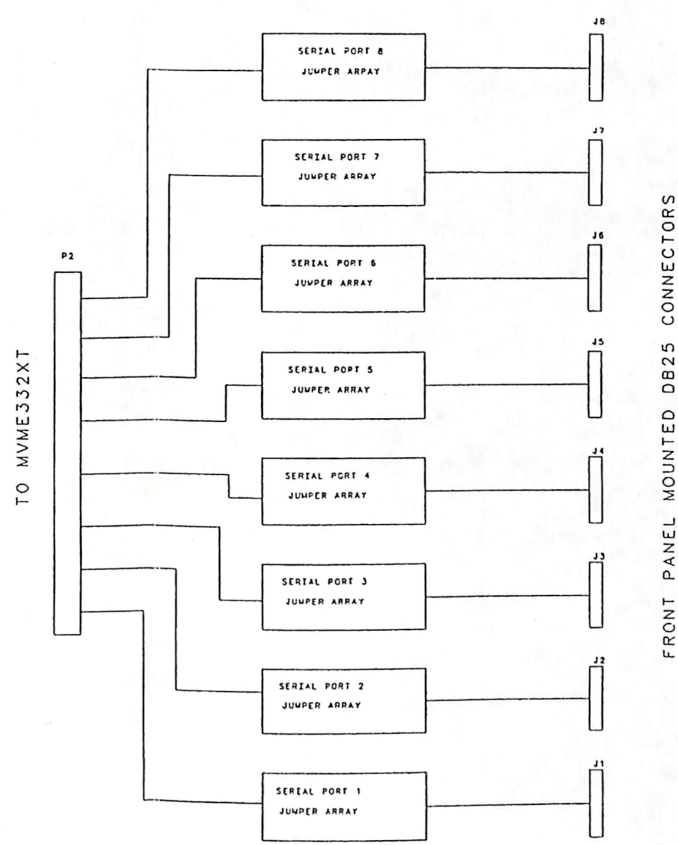
A

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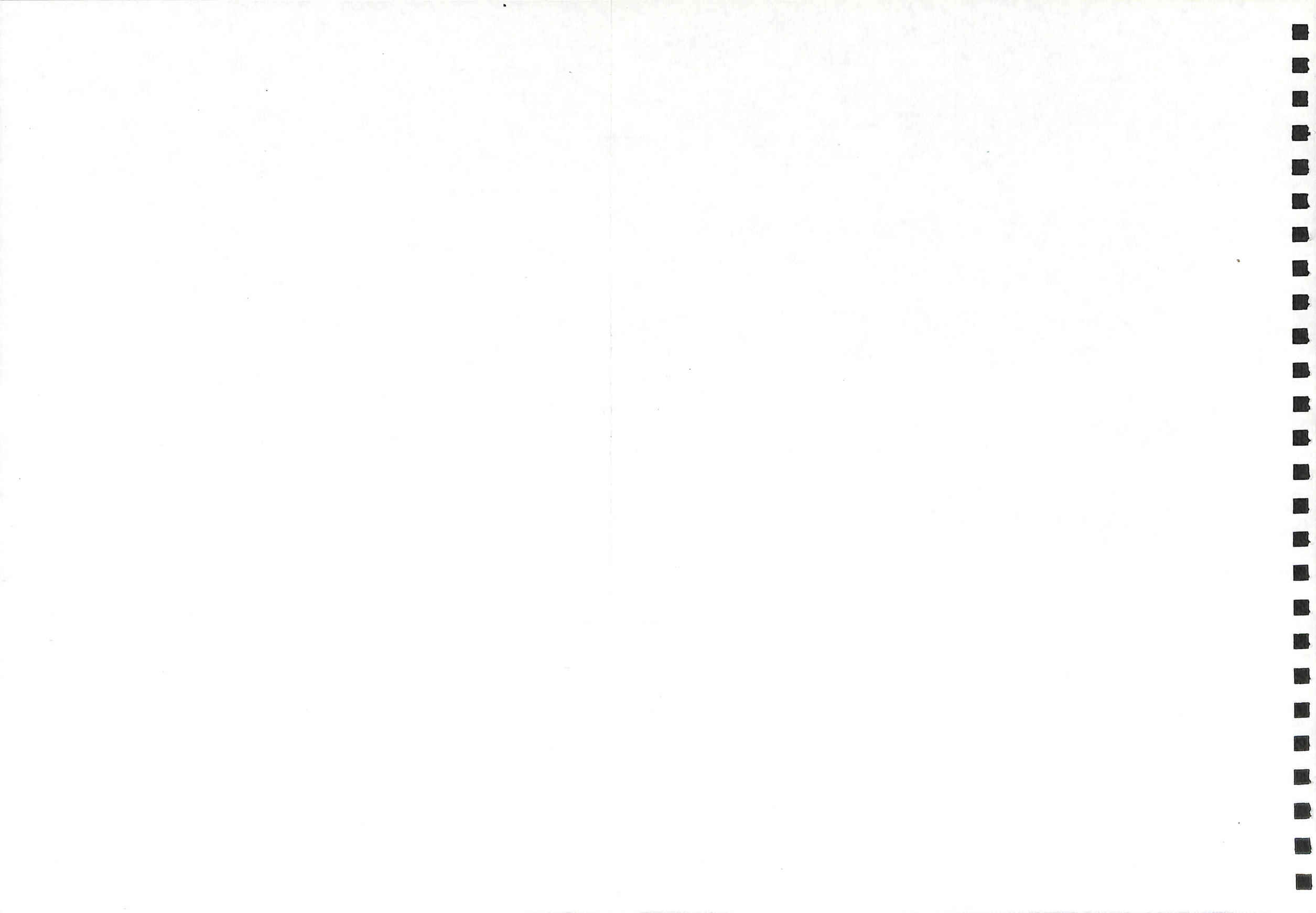
A



BLOCK DIAGRAM

63BW3830B0A REV A SH 2 OF 7

Figure 3-2. MVME710B Schematic Diagram (Sheet 2 of 7) 3-13/3-14



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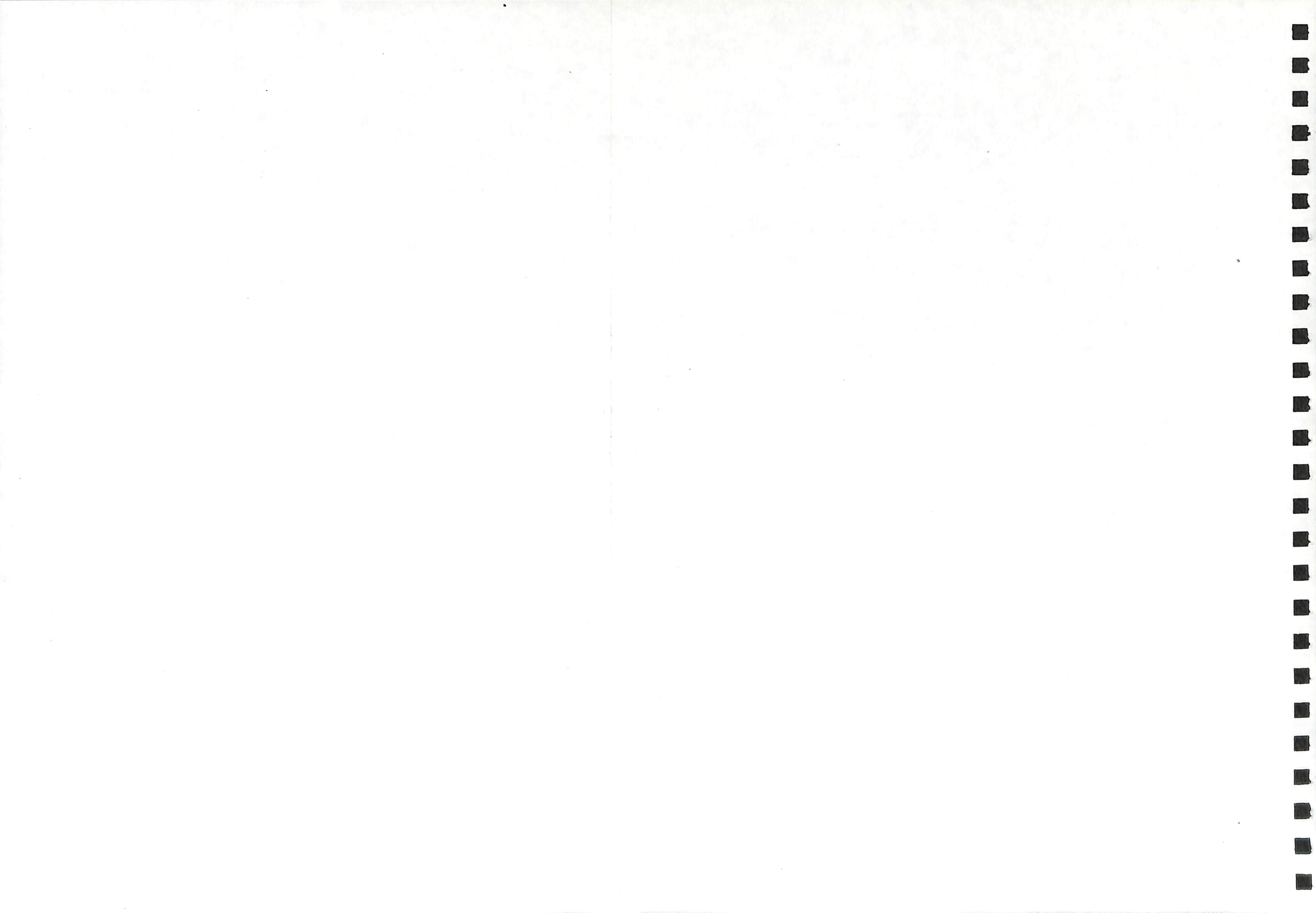
C

B

A

P2-A1	8152	707
P2-A2	1208	707
P2-A3	0507	707
P2-A4	01FF7	707
P2-A5	01FF7	707
P2-A6	0157	707
P2-A7	8X07	707
P2-A8		
P2-A9	8154	607
P2-A10	1208	607
P2-A11	0507	607
P2-A12	01FF7	607
P2-A13	0157	607
P2-A14	8X07	607
P2-A15	MC8	707
P2-A16		
P2-A17	8154	507
P2-A18	1208	507
P2-A19	MC6	607
P2-A20	0507	507
P2-A21	01FF7	507
P2-A22	0157	507
P2-A23	8X07	507
P2-A24	MC1	507
P2-A25		
P2-A26	8152	407
P2-A27	1208	407
P2-A28	MC2	407
P2-A29	0507	407
P2-A30	01FF7	407
P2-A31	0157	407
P2-A32	8X07	407
P2-C1	0507	407
P2-C2	01FF7	707
P2-C3	0157	707
P2-C4	8X07	707
P2-C5		
P2-C6	8152	707
P2-C7	1208	707
P2-C8	0507	607
P2-C9	01FF7	607
P2-C10	0157	607
P2-C11	8X07	607
P2-C12		
P2-C13	8154	607
P2-C14	1208	607
P2-C15	MC7	707
P2-C16	0507	507
P2-C17	01FF7	507
P2-C18	0157	507
P2-C19	8X07	507
P2-C20	MC4	607
P2-C21		
P2-C22	8153	507
P2-C23	1208	507
P2-C24	MC1	507
P2-C25	0507	407
P2-C26	01FF7	407
P2-C27	0157	407
P2-C28	8X07	407
P2-C29	MC1	407
P2-C30		
P2-C31	8151	407
P2-C32	1201	407

Figure 3-2. MVME710B Schematic Diagram (Sheet 3 of 7) 3-15/3-16



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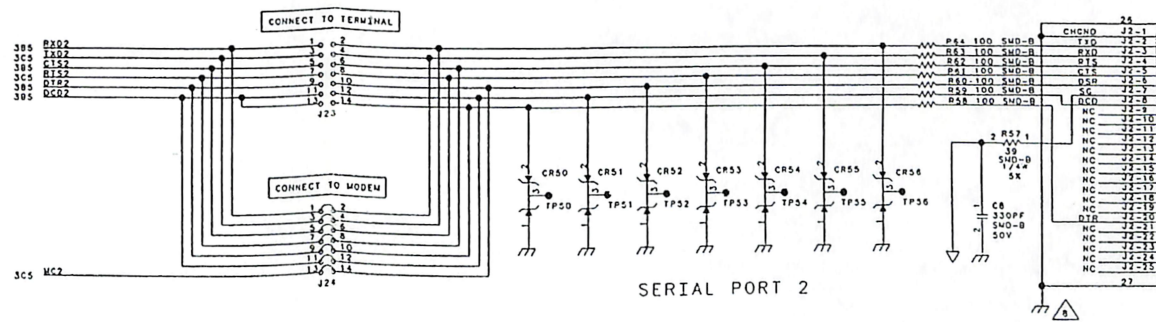
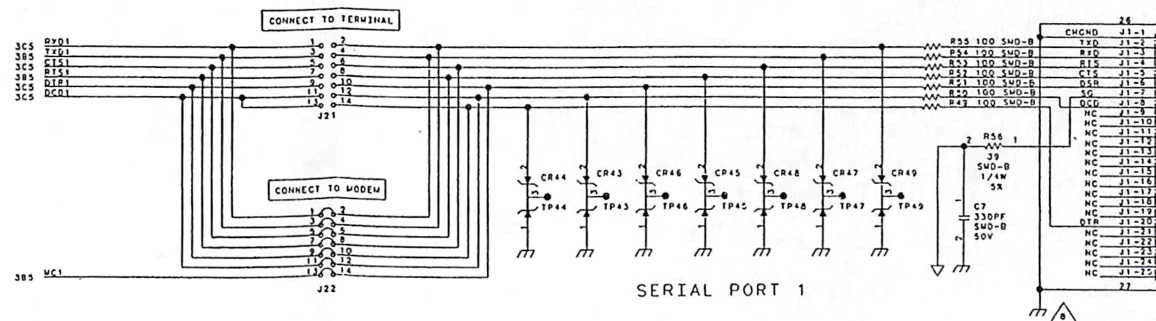
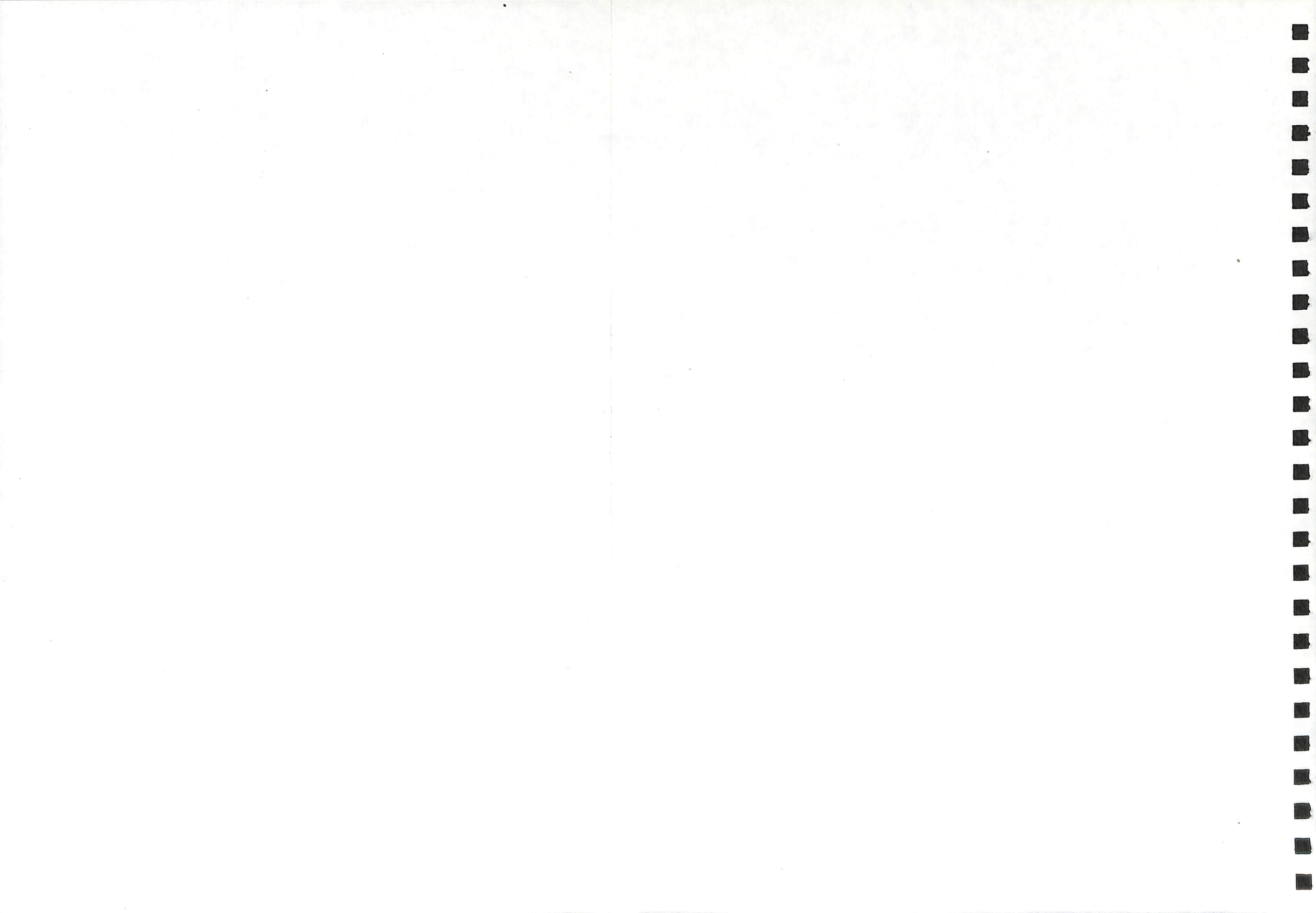


Figure 3-2. MVME710B Schematic Diagram (Sheet 4 of 7) 3-17/3-18



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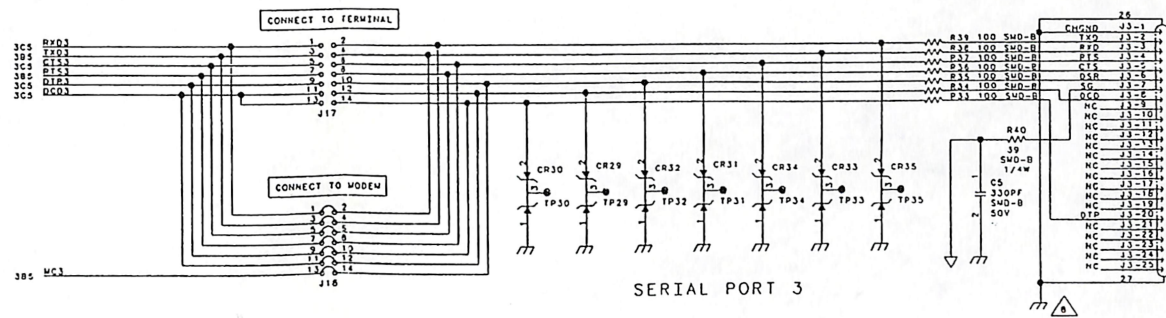
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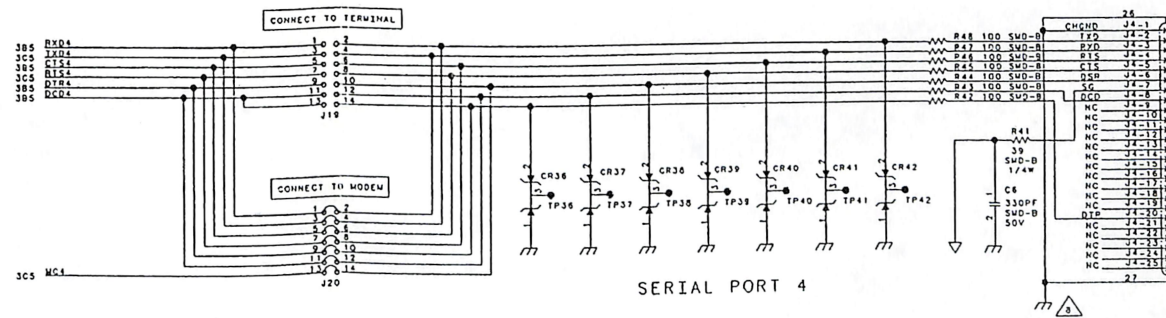
C

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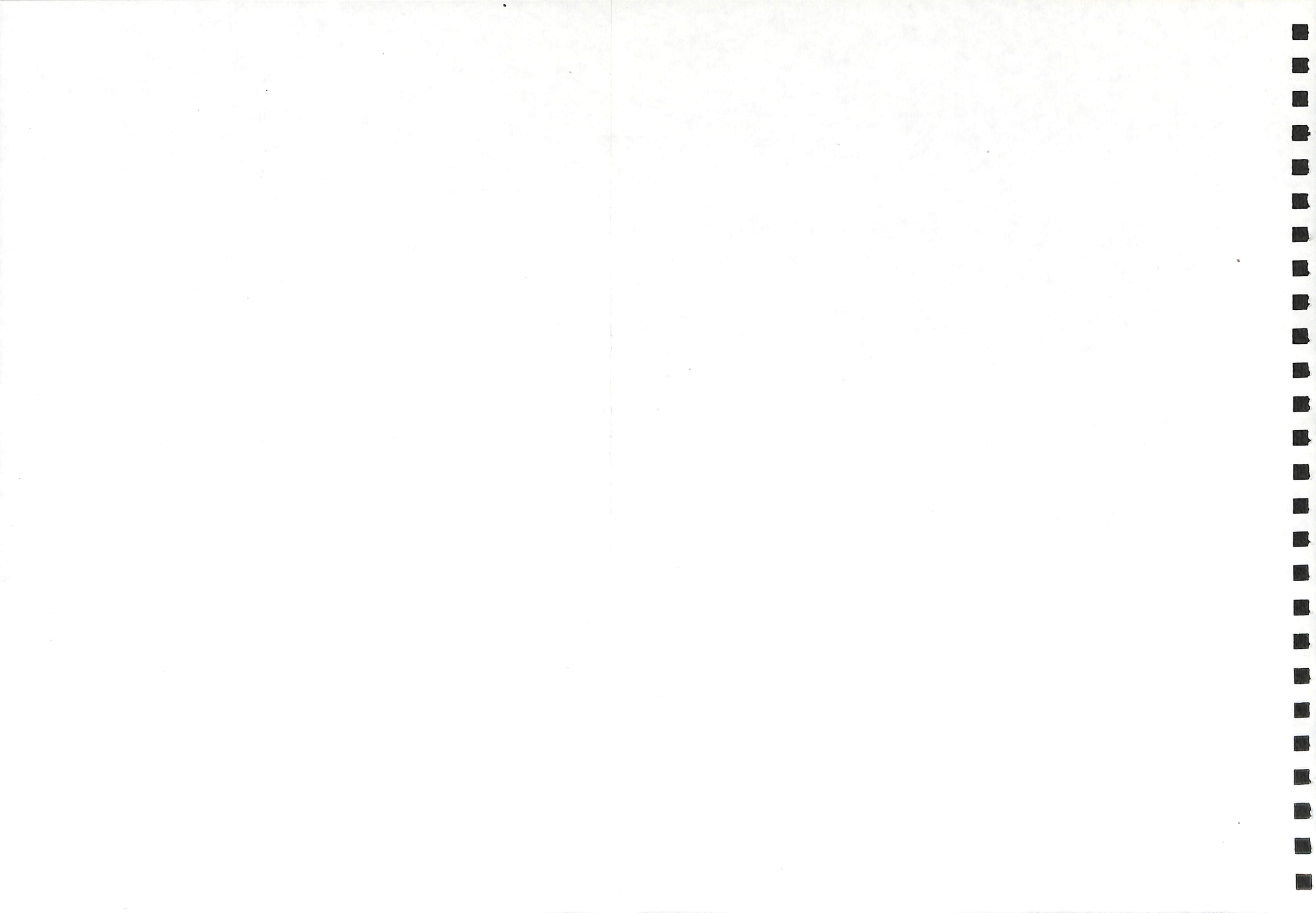


SERIAL PORT 3



SERIAL PORT 4

Figure 3-2. MVME710B Schematic Diagram (Sheet 5 of 7) 3-19/3-20



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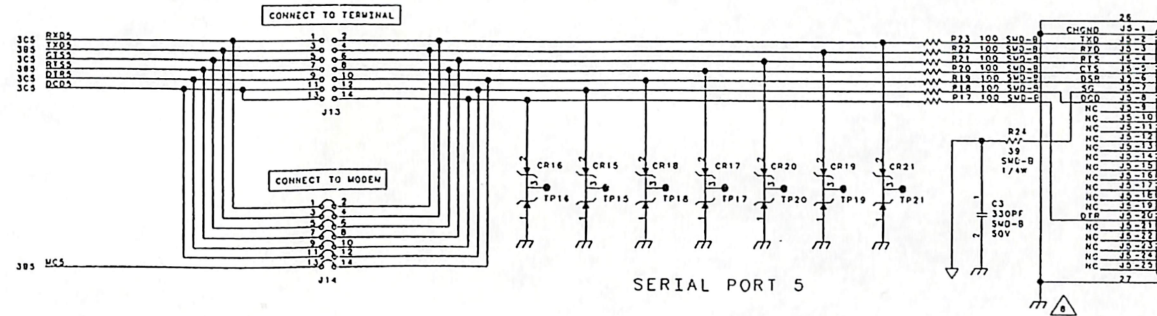
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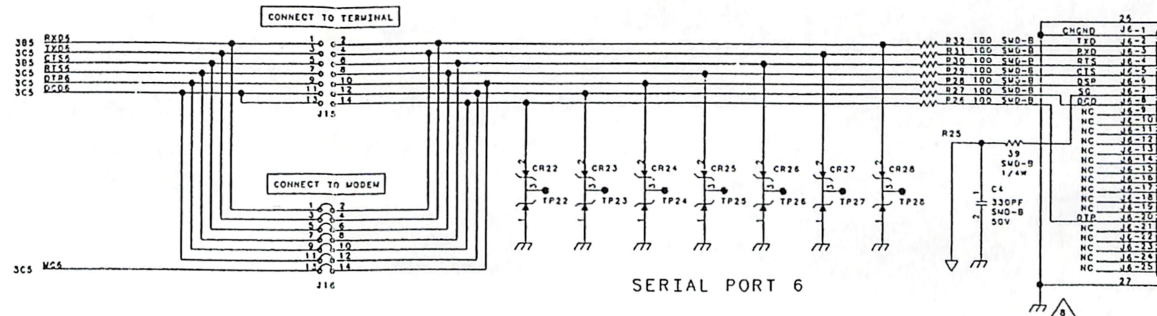


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B

B



63BW3830B0A REV A SH 6 OF 7

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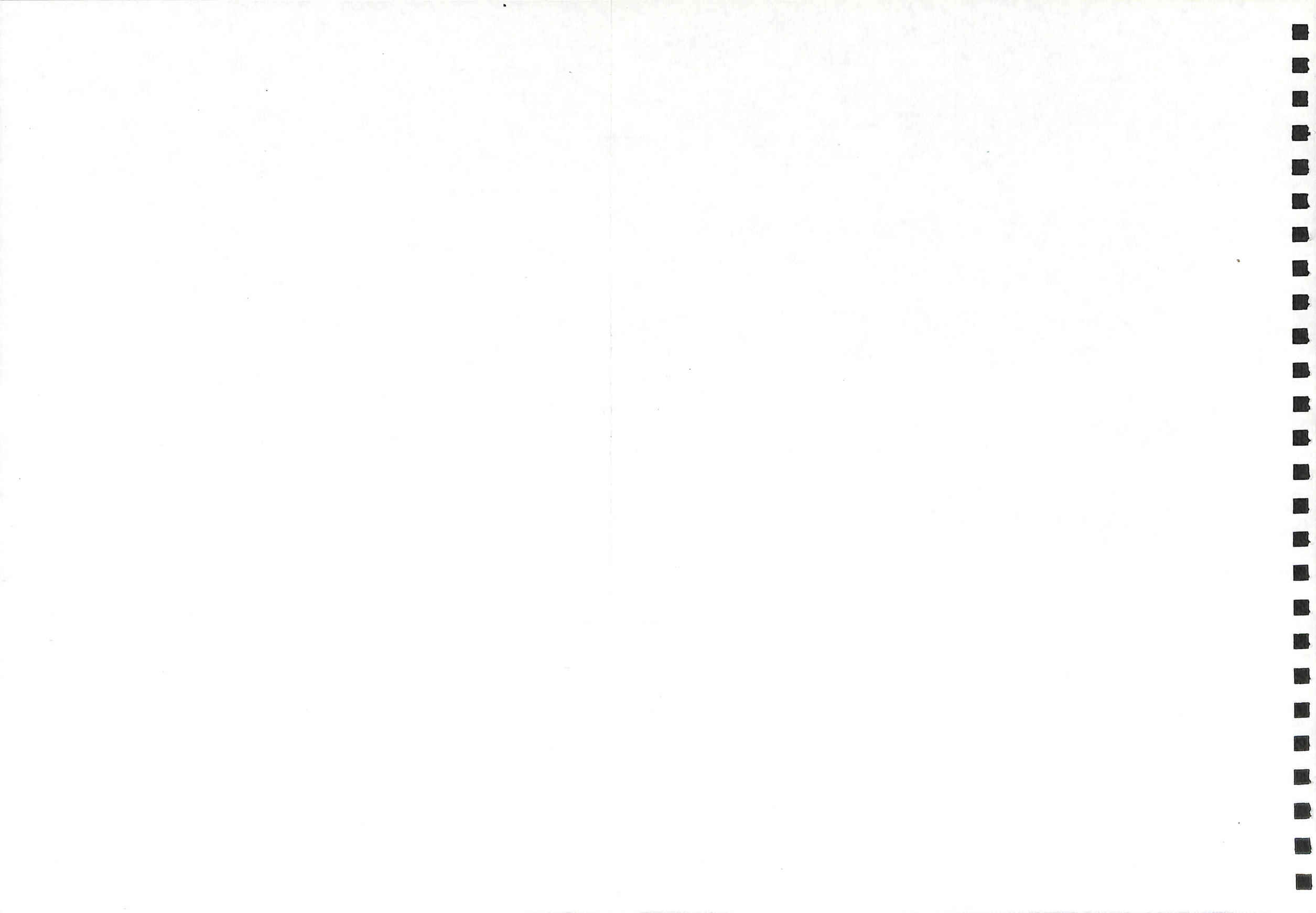
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Figure 3-2. MVME710B Schematic Diagram (Sheet 6 of 7) 3-21/3-22

A

A



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B

B

A

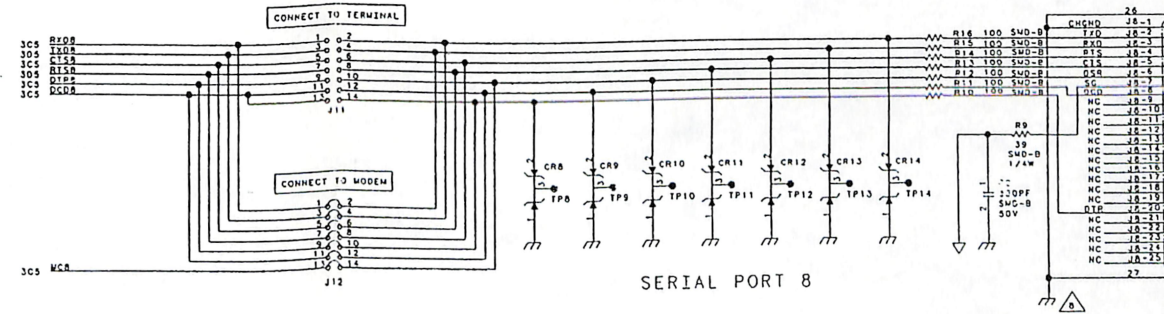
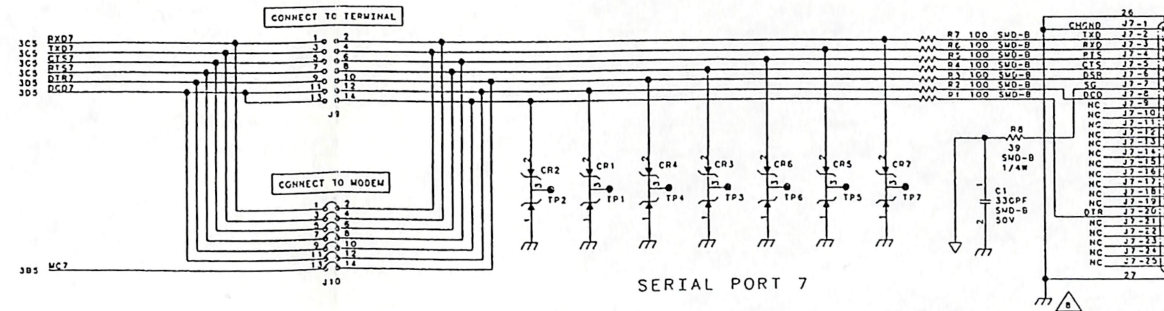
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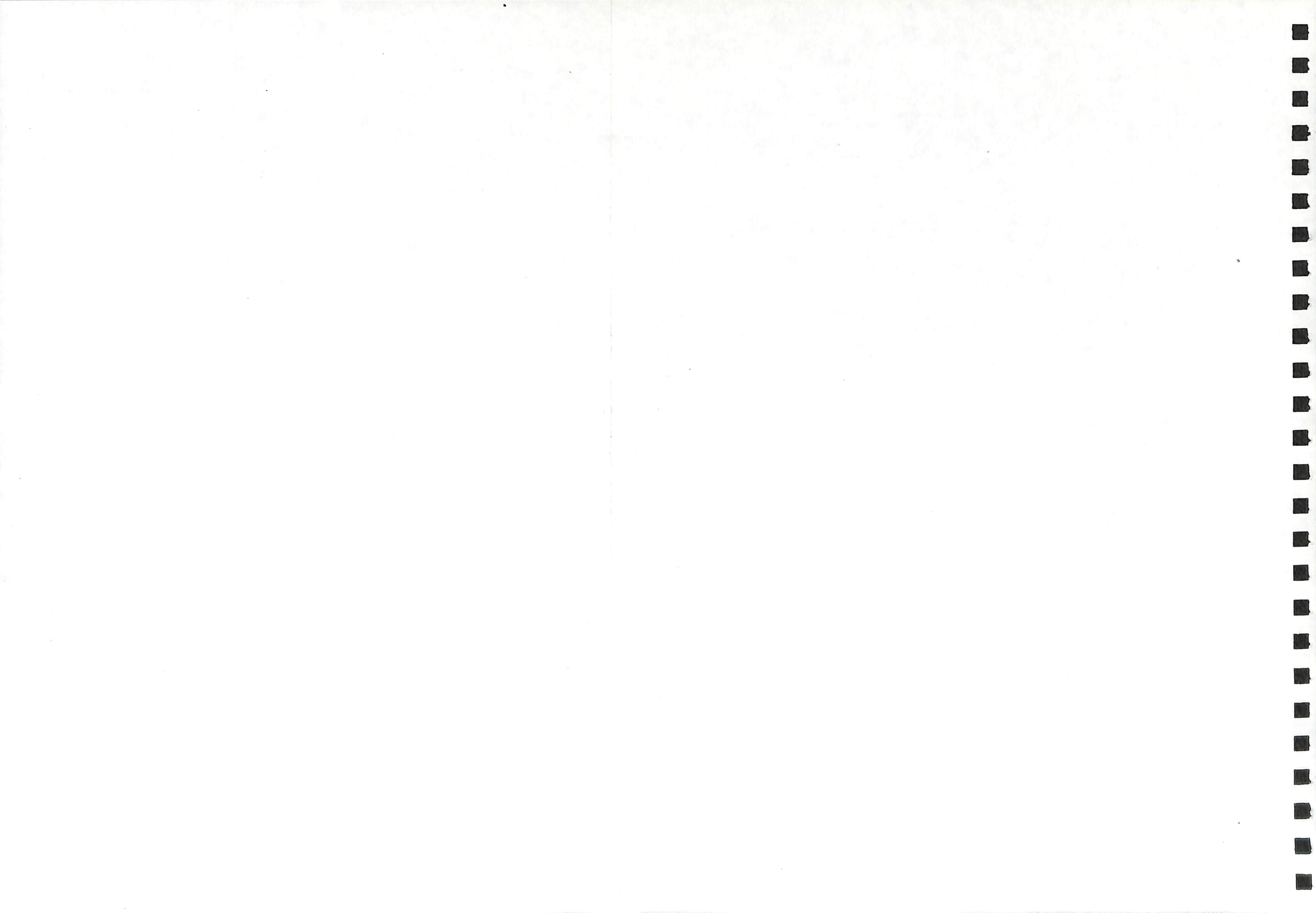
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Figure 3-2. MVME710B Schematic Diagram (Sheet 7 of 7) 3-23/3-24







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