MODEL: MEPX4

EPROM PROGRAMMER

USER'S MANUAL

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CHAPTER 1
SECTION 1

INTRODUCTION

The following procedures are described for proper application of the package on your personal computer.

A. PACKAGING

This package contains the following parts:

1. User's manual.
2. UTILITY diskette.
3. SYSTEM ADAPTER CARD.
4. Connecting cable.
5. EPROM PROGRAMMER unit.

* Make a copy of the UTILITY disk and keep it at a safety place.

B. RUNNING THE PACKAGE

a. Computer system and minimum memory capacity required:
   1. IBM PC XT/AT or compatible system with 256K RAM.
   2. PC DOS V2.0 (or later) or compatible DOS.

b. Hardware installation
   1. Power off your computer.
   2. Plug the SYSTEM ADAPTER card into any SLOT.
   3. Put the PROGRAMMER unit at a convenient position.
   4. Connect the SYSTEM ADAPTER and the PROGRAMMER unit with the connecting cable.

c. Boot your computer system with the UTILITY disk.

d. Execute the "MEPX4.EXE" program. then the menu will be displayed on the screen.
   (** Note if the I/O ERROR displayed please refer to TROUBLESHOOTING section **)

e. Select the EPROM type number and VPP Voltage to match your chips.

f. Select working functions to do your job.

g. After finishing your job, press <Q> under main menu to quit from mepx8.exe and return to DOS.

CHAPTER 2 EPROM PROGRAMMER

The EPROM UTILITY disk we supplied contains the follwing files:

1. MEPX4.EXE --- the main program to be executed.
2. SETUP.EXE --- to modify the system I/O address.
2. SETUP.DAT --- to save the system I/O address data.
3. HEXOBJ.EXE -- to convert files in HEX format into BIN format.

FUNCTION DESCRIPTION

The function menu will be automaticaly displayed on the screen after executing 'MEPX4.EXE' Details are described below.

Function R:READ EPROM TO MEMORY BUFFER

To read the data on the eprom chip into the memory buffer specified by 'Eprom starting address', 'Eprom end address', and 'Buffer starting aaddress'.
Press "Y" to read all chip's data.
Press "S" to select the address.
Press "<ESC>" to return to main menu.

Function W: WRITE MEMORY BUFFER TO EPROM

To write the chip ranged from 'Eprom starting address' to 'Eprom end address' from the data in the memory buffer ,starting at 'Buffer starting address'.
It will VERIFY automatically after finishing program.

Press "A" to do blank check + write + verify.
Press "Y" to do write + verify.
Press "S" to select the address.
Press "<ESC>" to return to main menu.

Function B: BLANK CHECK EPROM

To check whether the chips are blank (i.e. no data) or not. If not blank the total error bytes will be displayed.

Press "Y" to check.
Press "S" to select the address.
Press "<ESC> to return to main menu.

Function V: VERIFY EPROM WITH MEMORY BUFFER

To verify the data in the chips ranged from 'Eprom starting address' to 'Eprom end address' with memory buffer, starting at 'Buffer starting address'.
If verify error the total error bytes will be displayed.

Press "Y" to Verify.
Press "S" to select the address.
Press "<ESC>" to return to main menu.

Function T: TYPE OF EPROM
To select the type number of the chips.

Function G: GANG SIZE
To select the number of chips in a working batch.
you can select chips number form 1 to 8.

Function L: LOAD OBJ FILE INTO MEMORY BUFFER
To load data from disk file into memory buffer. You may specify the file name and the buffer sttarting address to be loaded or press <CR> to return to main menu.

Function S: SAVE MEMORY BUFFER TO DISK
To save data from memory buffer into disk file. You may specify the file name, the buffer starting and end address to be saved or press <CR> to return to main menu.

Function P: PROGRAMMING SPEED
To change the programming speed as "NORMAL" & "FAST".

Function Q: QUIT
Under main menu selection, press <Q> to return to DOS.

Function M: Modify Memory buffer

Normally to enter a MODIFY MENU ,you must type the 'M' key.
the new menu will dispalyed as below:

```
> > > > > MODIFY MENU < < < < <
E = EDIT BUFFER
M = MOVE MEMORY DATA TO BUFFER
D = DISPLAY THE BUFFER DATA
F = FILL DATA
Q = QUIT TO MAIN MENU

COMMAND ?
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THE subfunction command description

E = EDIT BUFFER

Use to modify the contents of the buffer. When EPROM is first loaded, the buffer contains all FF'S , just like a blank EPROM. there are two ways to change this, one of which is editing the buffer on a byte to byte basis.

edit, will allow you to enter a hex byte into any location in the buffer . when start edit you must enter a buffer start address, and program will displayed as follow:

aaaaa:xx,yy

where: aaaaa is the buffer address and xx is the current value, the yy is new hex byte value.

TO change the value, type in a new hex byte, the new value will be replaced the current value, just hit the "space key " to go to the next byte. If you wish to terminate editing, type a " return key".
You can enter a string, type a single or double quote as your first character, and proceed to enter a string up to 78 (decimal) characters in length. the address (aaaaa) will increment by the number of characters you entered.

string enter example:

00000:FF,"this is the string enter test"

would enter "this is the string enter test" (excluding both double quotes) into the buffer.

M = MOVE MEMORY DATA TO BUFFER
Use to move IBM memory data into the buffer, after movement; the "BUFFER LENGTH counter " will be change .

For example now we wish move the IBM BIOS data to the buffer, we found the bios address is in the IBM memory locatios = F000:E000

The F000 is the MEMORY SEGMENT AND
The E000 IS the MEMORY ADDRESS
the bios ROM length is 1FFF (HEX) 8K BYTES

type the "M" key to enter the move command ,and answer as follow:

BUFFER ADDRESS = 00000 (start of buffer)
MEMORY SEGMENT = F000
MEMORY ADDRESS = E000
MEMORY LENGTH = 1FFF
After enter; the IBM bios data will move to buffer, you can use "D" command to view the contents,(the buffer length will be auto change as memory length = 1FFF)

D = DISPLAY THE BUFFER DATA
Use to display the contents of the buffer ,each time display 8 lines ,each line contain 16 bytes ,and the line end will convert the 16 hex bytes data to ASCII VALUE.
When start this command you must enter the buffer start address ,after the 8 line contents is displayed, you can type the "RETURN" key to displayed another 8 line contents. or type other key to terminate this command.

F = FILL BUFFER
Use to fill all region of the buffer with a pattern. From start to last of your selected buffer length is filled with the sequence of bytes entered.
for example : fill the value "FF" (hex) to buffer start from
01000(hex) to 02000(hex)
enter this command and answer as follow:

BUFFER ADDRESS = 01000 (start address)
FILL DATA = FF (FILL ALL = FF)
FILL LENGTH = 01000 (hex 1000 - 2000 length = 1000)
after enter the buffer 01000-02000 will all fill in a "FF".

Q - QUIT

Use return to MAIN MENU.

---------- END ----------