

MCS98xx DOS Configuration Tool User Guide

Revision 2.00
Sep. 28th, 2012

Revision History

Revision	Date	Description
1.1	2008/07/01	Initial release
2.00	2012/09/28	1. Changed to ASIX Electronics Corp. logo, strings and contact information. 2. Changed document revision number format to “x.xx”. 3. Re-arranged the whole document descriptions.

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1. Introduction

This document provides the information about how to install the serial and parallel ports for MCS98xx PCI to Serial and Parallel I/O ports on DOS 6.22 environment. Normally any serial and parallel I/O ports can be supported by BIOS call services in DOS environment. However DOS supports only 4 serial ports (3F8h, 2F8h, 3E8h, 2E8h) and 3 parallel ports (3BCh/378h/278h).

2. Files Descriptions

File Name	Description
NMDOSIN.EXE	MCS98xx DOS Configuration Tool
NMCONFIG.CFG	MCS98xx Serial/Parallel Ports Configuration Data File

3. Tool Usage

Usage : **NmDosIn** [<options>]

By default, NmDosIn displays COM/LPT ports.

Options

- a[dd] = Add NetMos Ports
- c[onfig]:<parameters> = Configure NetMos Ports
- d[ele] = Delete NetMos Ports
- r[emap] = Remap NetMos ports to legacy ports
- f[ile] = Remap NetMos ports to legacy(Custom IO-Base) ports
- s[ilent] = Silent mode
- t[est] = Test ports
- u[nused] = remap to all Unused legacy port i/o base, without consideration of COM/LPT number

Config Option Parameters

- c[onfig]:lpt[1|2|3]=[spp|bpp|ppf|ep|ecp]
e.g., -config:lpt=spp would set all LPT ports to SPP
e.g., -c:lpt1=spp would set lpt1 to SPP
e.g., -c:lpt1=spp,lpt2=bpp would set lpt1 to SPP and lpt2=BPP

4. Installation Procedures

The following procedure explains how to install MCS98xx serial and parallel I/O ports on DOS.

- Step 1: Run "**nmdosin**" to confirm Device detection. (Eg. MCS9835)
Following information is displayed For 2 Serial and 1 Parallel Port

```
MosChip Semiconductor Tech.Ltd DOS installer version 1.00.027 dated 22-JULY-2008.
```

```
Found MosChip pci device 9835 (00121000) Rev01 on Bus03 Slot00
```

```
Detected 1 pci device(s).
```

```
=====
```

```
No COM/LPT port found.
```

```
=====
```

- Step 2: Run "**nmdosin -a**" command to add MCS98xx ports on DOS platform. On Successful installation, information is displayed as below:

```
MosChip Semiconductor Tech.Ltd DOS installer version 1.00.027 dated 22-JULY-2008.
```

```
Found MosChip pci device 9835 (00121000) Rev01 on Bus03 Slot00
```

```
SerialPort1 at EC00
```

```
SerialPort2 at E880
```

```
PrinterPort1 at E800
```

```
Detected 1 pci device(s).
```

```
=====
```

```
COM1 added at EC00 (IRQ 10)
```

```
COM2 added at E880 (IRQ 10)
```

```
LPT1 added at E800 (IRQ 10)
```

```
=====
```

Step 3: Run "**nmdosin -a -r**" command to remap the MCS98xx serial/parallel ports to legacy I/O ports.

MosChip Semiconductor Tech.Ltd DOS installer version 1.00.027 dated 22-JULY-2008.

COM1 exists

COM2 exists

LPT1 exists

Found MosChip pci device 9835 (00121000) Rev01 on Bus03 Slot00

SerialPort1 at 3E8

SerialPort2 at 2E8

PrinterPort1 at 278

Detected 1 pci device(s).

=====

COM1 added at 3E8 (IRQ 10)

COM2 added at 2E8 (IRQ 10)

LPT1 added at 278 (IRQ 10)

=====

5. Remap Serial/Parallel Ports to Customized I/O Ports

Use the following steps to remap MCS98xx ports to customize I/O addresses.

Step 1: Type "**edit nmconfig.cfg**" and press enter to edit the contents of config file.

Step 2: You can view following information in the config file as shown below.

```
0x3e8 0x2e8 0xdef 0xdef 0x278 0xdef 0xdef
0xdef 0xdef 0xdef 0xdef 0xdef 0xdef 0xdef
0xdef 0xdef 0xdef 0xdef 0xdef 0xdef 0xdef
0xdef 0xdef 0xdef 0xdef 0xdef 0xdef 0xdef
```

Note:

1. The first four-column fields in "blue" color are for COM ports setting and the last three-column fields in "red" are for Parallel port setting.
2. Above 2S1P mode example, first row = First serial port 0x3E8; Second serial port 0x2E8; Parallel port 0x278.
3. Support for 485 / 422 Feature is not available in the current version of DOS configuration tool.

Step 3: Specify the required I/O address you want to change for serial / parallel ports in the config file.

Step 4: Save it and close the config file after relevant changes.

Step 5: Type "**nmdosin -a -f**" command to remap.

```
MosChip Semiconductor Tech.Ltd DOS installer version 1.00.027 dated 22-JULY-2008.
```

```
COM1 exists
```

```
COM2 exists
```

```
LPT1 exists
```

```
Found MosChip pci device 9835 (00121000) Rev01 on Bus03 Slot00
```

```
SerialPort1 at 3E8
```

```
SerialPort2 at 2E8
```

```
PrinterPort1 at 278
```

```
Detected 1 pci device(s).
```

```
=====
```

```
COM1 added at 3E8 (IRQ 10)
```

```
COM2 added at 2E8 (IRQ 10)
```

```
LPT1 added at 278 (IRQ 10)
```

```
=====
```

6. Serial/Parallel Ports Loopback Test

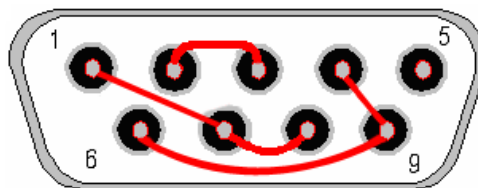
Run "**nmdosin -t**" command to test MCS98xx Serial or Parallel Ports.

Note that need to connect external loop back connectors to the serial and parallel ports before running this test.

```
Found Moschip Technology pci device 9835 (00121000) Rev01 on Bus00 Slot 0A
Serial Port1 at 3E8 : Test passed
Serial Port2 at 2E8 : Test passed
PrinterPort1 at 278 : Test passed
Detected 1 pci device(s).
```

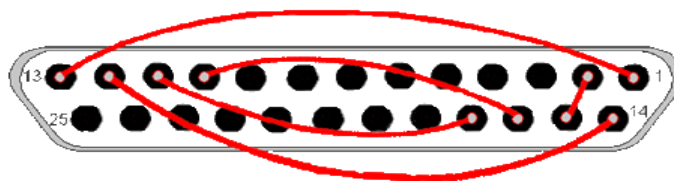
Loopback Connectors:

1. Serial Loop back connection :



Female DB-9 connector – Rear view

2. Parallel Loop back connection::



Male DB-25 connector – Rear view



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