

MCS9865

DOS Driver Installation User Manual

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Description

This document provides the information about how to install the serial and parallel drivers for MosChip MCS9865 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 and 3 parallel ports.

Contents available with Moschip DOS Driver Disk

- GEMDOSIN.EXE --- DOS Utility to install ports.
- DOS Driver Installation Guide. PDF --- PDF Document of Installation Guide.

Options

The following options are available with the MCS9865 DOS Utility "**GEMDOSIN.EXE**".

- a[dd] = To add Moschip Serial or Parallel I/O Ports
- c[onfig]: <parameters> = To configure Moschip Serial or Parallel I/O Ports
- d[ele] = To delete Moschip Serial or Parallel I/O Ports
- s[ilent] = Silent mode
- t[est] = To Test the Moschip Serial or Parallel ports (requires external Loop-Back plugs)
- r[emap] = Remap MCS9865 Ports to Legacy Ports.
- f[ile] = Remap MCS9865 Ports to legacy(Custom IO-Base) Ports.

Installation Procedure

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

Step 1: Copy "**GEMDOSIN.exe**" to 'C:\' Drive from Floppy. The command is "**copy a:\ GEMDOSIN.exe c:**"

Step 2: Type "**gemdosin**" to confirm Device detection. (Eg. MCS9865)

Following information is displayed For 2 Serial and 1 Parallel Port

Step 3: type "**gemdosin -a**" and press **Enter**. (-a is used for adding Moschip ports). On Successful installation, information is displayed as below:

Following information is displayed For 2 Serial and 1 Parallel Port

```

COM1 exists
COM2 exists
LPT1 exists
PCI Device configurations...
Found Moschip Semiconductor pci device 9865(1000A000) Rev00 on Bus01 Slot00
  SerialPort1 at B800
Found Moschip Semiconductor pci device 9865(1000A000) Rev00 on Bus01 Slot00
  SerialPort1 at B400
Found Moschip Semiconductor pci device 9865(2000A000) Rev00 on Bus01 Slot00
  PrinterPort1 at B000
  Detected 3 pci device(s) :
  =====
  COM1 exists at 3F8
  COM2 exists at 2F8
  COM3 added at B800 (IRQ 9)
  COM4 added at B400 (IRQ 11)
  LPT1 exists at 378
  LPT2 added at B000 (IRQ 6)
  =====

```

- Moschip ports are installed successfully.

Step 4 : Just type "**gemdosin -t**" to test Moschip Serial or Parallel Ports. Need to connect external loop back connectors to the serial and parallel ports.

Following information is displayed For 2 Serial and 1 Parallel Port

```

COM1 exists
COM2 exists
COM3 exists
COM4 exists
LPT1 exists
LPT2 exists
PCI device configurations....
Found Moschip Semiconductor pci devices 9865(1000A000) Rev00 on Bus01 Slot00
  SerialPort1 at B800 : TEST RESULTS PASSED.
Found Moschip Semiconductor pci devices 9865(1000A000) Rev00 on Bus01 Slot00
  SerialPort1 at B400 : TEST RESULTS PASSED.
Found Moschip Semiconductor pci devices 9865(2000A000) Rev00 on Bus01 Slot00
  PrinterPort1 at B000 : TEST RESULTS PASSED.

Detected 3 pci device(s)

```

Step 5 : Use this command "**gemdosin -a -r**" to Remap the Moschip ports to legacy ports.

```
COM1 exists
COM2 exists
LPT1 exists
PCI Device configurations...
Found Moschip Semiconductor pci device 9865(1000A000) Rev00 on Bus01 Slot00
  SerialPort1 at 3E8
Found Moschip Semiconductor pci device 9865(1000A000) Rev00 on Bus01 Slot00
  SerialPort1 at 2E8
Found Moschip Semiconductor pci device 9865(2000A000) Rev00 on Bus01 Slot00
  PrinterPort1 at 278

Detected 3 pci device(s) :

=====
COM1 exists at 3F8
COM2 exists at 2F8
COM3 added at 3E8 (IRQ 11)
COM4 added at 2E8(IRQ 11)
LPT1 exists at 378
LPT2 added at 278 (IRQ 11)
=====
```

Remap Moschip ports to customize I/O addresses:

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

Step 1 : Type "**edit gmconfig.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.

```
" 0xdef 0xdef 0xdef 0xdef 0xdef 0xdef "
```

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 "**gemdosin -a -f**" command to remap.

Note :

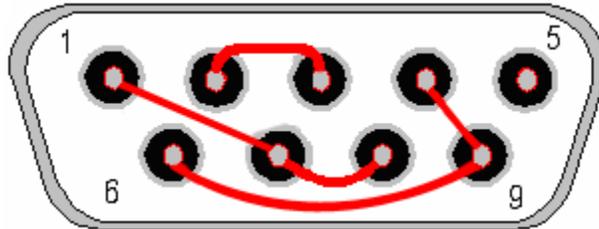
1. Use only the first line in "**gmconfig.cfg**" file. Do not modify anything in rest of the lines.
2. The first four I/O addresses (**Blue color**) are meant for com ports and next Two (**Red color**) for Parallel ports.

Note:

1. **485 / 422 Features are not supported in the current version of DOS Drivers.**

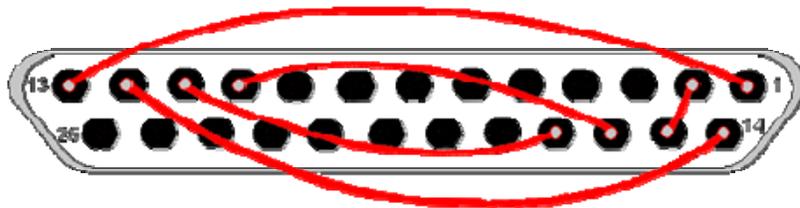
Loop back connections

1. Serial Loop back connection :



Female DB-9 connector – Rear view

2. Parallel Loop back connection::



Male DB-25 connector – Rear view

Contact information

Contact sales@moschip.com for commercial details

Write to techsupport@moschip.com for technical queries

Revision history

Date	Reason for change	Version
15 th May 2008	Initial Release	0.1
06 th Feb2009	Serial loop back connector modified to detect break in serial port signals.	1.0
25 th Mar 2009	Added support options for remapping –a –r and -a –f	1.1



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