

# MCS9901

## DOS Driver Installation User Manual

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### 1. Description:

This document provides the information about how to install the serial and parallel drivers for MosChip MCS9901 PCIe 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.

### 2. Contents available with Moschip DOS Driver Disk:

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

### 3. Options:

The following options are available with the MCS9901 DOS Utility “**SXDOSIN.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]te]              | = To delete Moschip Serial or Parallel I/O Ports                                   |
| -s[il]ent]              | = Silent mode  |
| -t[est]                 | = To Test the Moschip Serial or Parallel ports (requires external Loop-Back plugs) |

#### 4. Installation Procedure:

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

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

Step 2: Type "**sxdosin**" to confirm Device detection. (Eg. MCS9901)

##### Following information is displayed For 4 Serial Port

```
COM1 exists.
COM2 exists
LPT1 exists.
PCI Device configurations.
Found Moschip Semiconductor pci device 9901 (1000A000) Rev00 on Bus01 Slot 00
Found Moschip Semiconductor pci device 9901 (1000A000) Rev00 on Bus01 Slot 00
Found Moschip Semiconductor pci device 9901 (1000A000) Rev00 on Bus01 Slot 00
Found Moschip Semiconductor pci device 9901 (1000A000) Rev00 on Bus01 Slot 00
Detected 4 pci device(s)

=====

    COM1 exist at 3F8.
    COM2 exist at 2F8.
    LPT1 exist at 378

=====
```

##### 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 9901 (1000A000) Rev00 on Bus01 Slot 00
Found Moschip Semiconductor pci device 9901 (1000A000) Rev00 on Bus01 Slot 00
Found Moschip Semiconductor pci device 9901 (2000A000) Rev00 on Bus01 Slot 00
Detected 3 pci device(s)

=====

    COM1 exist at 3F8.
    COM2 exist at 2F8.
    LPT1 exist at 378

=====
```

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

**Following information is displayed For 4 Serial Ports**

```
PCI Device configurations....
Found Moschip Semiconductor pci devices 9901(1000A000) Rev00 on Bus01 Slot00
  Serial port at 9000
Found Moschip Semiconductor pci devices 9901(1000A000) Rev00 on Bus01 Slot00
  Serial port at 9400
Found Moschip Semiconductor pci devices 9901(1000A000) Rev00 on Bus01 Slot00
  Serial port at 9800
Found Moschip Semiconductor pci devices 9901(1000A000) Rev00 on Bus01 Slot00
  Serial port at 9C00
  Detected 4 pci device(s)
  =====
  COM1 exists at 3F8
  COM2 exists at 2F8
  COM3 added at 9000 (IRQ 5)
  COM4 added at 9400 (IRQ 6)
  COM5 added at 9800 (IRQ 9)
  COM6 added at 9C00 (IRQ 11)
  LPT1 exists at 378
  =====
```

**Following information is displayed For 2 Serial and 1 Parallel Port**

```
COM1 exists
COM2 exists
LPT1 exists
PCI Device configurations...
Found Moschip Semiconductor pci devices 9901(1000A000) Rev00 on Bus01 Slot00
  Serial port at 9000
Found Moschip Semiconductor pci devices 9901(1000A000) Rev00 on Bus01 Slot00
  Serial port at 9400
Found Moschip Semiconductor pci devices 9901(2000A000) Rev00 on Bus01 Slot00
  Printer port at 9800
    Detected 3 pci device(s)
    =====
    COM1 exists at 3F8
    COM2 exists at 2F8
    COM3 added at 9000 (IRQ 5)
    COM4 added at 9400 (IRQ 9)
    LPT1 exists at 378
    LPT2  added at 9800 (IRQ 6)
    =====
```

- Moschip ports are installed successfully.

Step 4 : Just type "**sxdosin -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 4 Serial ports**

COM1 exists  
COM2 exists  
COM3 exists  
COM4 exists  
LPT1 exists  
PCI device configurations....  
Found Moschip Semiconductor pci devices 9901(1000A000) Rev00 on Bus01 Slot00  
Serial port at 9000 : Test pass.  
Found Moschip Semiconductor pci devices 9901(1000A000) Rev00 on Bus01 Slot00  
Serial port at 9400 : Test pass.  
Found Moschip Semiconductor pci devices 9901(1000A000) Rev00 on Bus01 Slot00  
Serial port at 9800 : Test pass.  
Found Moschip Semiconductor pci devices 9901(1000A000) Rev00 on Bus01 Slot00  
Serial port at 9C00 : Test pass.  
Detected 4 pci device(s).

**Following information is displayed For 2 Serial and 1 Parallel Port**

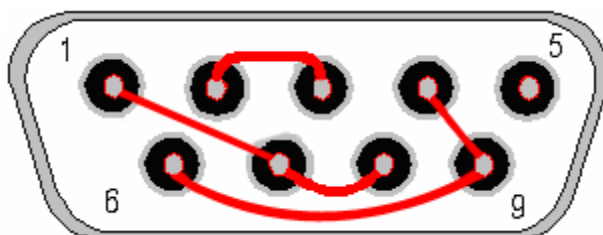
COM1 exists  
COM2 exists  
COM3 exists  
COM4 exists  
LPT1 exists  
LPT2 exists  
PCI device configurations....  
Found Moschip Semiconductor pci devices 9901(1000A000) Rev00 on Bus01 Slot00  
Serial port at 9000 : Test pass.  
Found Moschip Semiconductor pci devices 9901(1000A000) Rev00 on Bus01 Slot00  
Serial port at 9400 : Test pass  
Found Moschip Semiconductor pci devices 9901(2000A000) Rev00 on Bus01 Slot00  
Printer port at 9800 : Test pass.  
Detected 3 pci device(s)

**Note:**

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

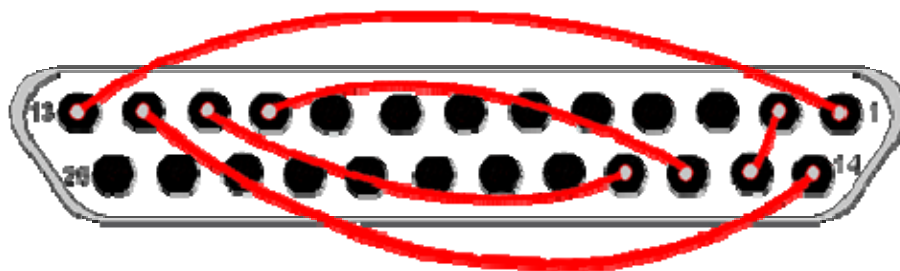
## 5. Loop back connections:

### 1. Serial Loop back connection :



Female DB-9 connector - Rear view

### 2. Parallel Loop back connection:



Male DB-25 connector - Rear view

## Revision history

Date	Reason for change	Version
07 <sup>th</sup> Jan 2008	First cut document	0.1
24 <sup>th</sup> Jan 2008	Aesthetic changes made for first release	0.2
31 <sup>st</sup> Jan 2008	Added supported configuration details	0.3
21 <sup>st</sup> Feb 2008	Added support for ISA and Function 2 Support	0.4
18 <sup>th</sup> Mar 2009	Serial Loop Back Connector modified to enable detection of break in serial signals.	1.0

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