BNMarin Elektronik

"JUMPING MOUSE" SOLUTION

Introduction

This section describes procedures to eliminate situations whereby a device (navigational sensor) connected to the computer serial COM port is interpreted by the system as a "Microsoft Serial Ballpoint". As this occurs, the "jumping mouse" effect is exhibited, which consists in the arbitrary jump-like motion of the mouse cursor on the computer screen. The mouse motion is associated with the calling of functions corresponding to the pressing on mouse buttons, which may result in actions not authorised by the user.

ATTENTION!

These recommendation are only applicable is Windows 2000 or Windows XP OS is used. With the use of Windows NT 4.0 SP5 OS, this problem is eliminated through the entry of "NOSERIALMICE" parameter in boot.ini file (see. Annex E, p. 366)

Procedure 1

Here, the "jumping mouse" effect is eliminated by disabling "Microsoft Serial Ballpoint" functionality in the OS. To do this, however, the OS should first identify this device (the "jumping mouse" effect should manifest itself). Therein lies the disadvantage of this method, as this effect may not manifest itself permanently and may occur at in arbitrary moment of time in the absence of the operator.

The following procedure is recommended:

1. 1. Wait until the "jumping mouse" effect appears;

2. 2. Disconnect the device causing this effect from the computer COM port (you may have to disconnect all the navigational sensors from the computer);

3. 3. Open the computer's "Control Panel" (if Transas Integrator is installed, use "Run" function of "Task Manager" application).

4. 4. Use *System\Hardware\Device Manager\Mice and other pointing devices* path to obtain access to "Microsoft Serial Ballpoint" device;

5. 5. Use "Disable" function called via the context (right mouse button) menu, to disable the use of this device.

6. 6. Complete the work session with the OS, disconnect power from the computer.

7. 7. Connect the disconnected navigational sensors, turn on the computer power supply.

8. 8. Check that there is no "jumping mouse' effect and the data is supplied correctly to the NS from the navigational sensors.

Procedure 2

In this case, the "jumping mouse" effect is eliminated by entering a special key word to Windows system register. This key word allows elimination of Windows error causing the "jumping mouse" effect.

ATTENTION!

This procedure is only applicable with the use of Windows 2000 Service Pack 3 or Windows XP OS.

The following procedure is recommended:

1. 1.   Install the OS (Windows XP) or Service Pack 3 (Windows 2000);

2. 2.   Open "Registry Editor" (use *Start\Run* function – enter "regedit" in "Open:" line and press <Enter>);

3. 3.   Depending on the computer hardware configuration (Motherboard based COM Ports or MOXA Board), enter special keys words in the system register for the following addresses:

   – –   In case of Motherboard based COM Ports, use the following address:

     HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Enum\ACPI\
     PNP0501\Port # [1]\Device Parameters

   – –   In case of MOXA Board, use the following address:

     HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Enum\Root\
     *PNP0501\PnPBIOS_Port # [2]\Device Parameters

4. 4.   Enter the following key word for the abovementioned addresses:

   Name: SkipEnumerations

   Type: REG_DWORD

5. 5.   Use "Modify" function of the context menu (right mouse button) to edit the key parameters as follows:

   Base: Hexadecimal

   Value Data: FFFFFFFF

6. 6.   Close "Registry Editor".

7. 7.   Port # - number of the COM port which the sensor causing the "jumping mouse" effect is connected to (Motherboard based COM Port is used).

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[1] Port # - number of the COM port which the navigational sensor causing the "jumping mouse" effect is connected to (Motherboard based COM Port is used).

[2] PnPBIOS_Port # - number of the COM port which the navigational sensor causing the "jumping mouse" effect is connected to (MOXA Board is used).