IONPORT.INI

Introduction

IonPort.ini is an optional text file used to configure EdgePort variables before installation. It must be placed in the Windows System32 folder. IONPORT.INI settings are ignored after an EdgePort is installed. Use the EdgePort Configuration Utility to change settings after EdgePort has been installed.

IONPORT.INI consists of sections. In each section various configuration parameters may be set. A section begins with a section header and extends to the next section header or the end of the file.

This is the format of a section header:

[*sectionname*]

This is the format of a configuration parameter:

Parameter = value

where *Parameter* is a name that pertains to a specific section. *Value* can be a string or a decimal number. Each parameter must be defined on a separate line.

Comments are also allowed. The first non-space character of a comment line must be a semicolon (“;”).

There are two section types: a “General” section and one or more serial port sections. These two types of sections are defined below.

General Section

The first section “General” defines parameters that apply to all EdgePorts.
The following is a list of parameters that can be set in this section:

The value for the following parameter is:

0 = Disable
1 = Enable

ComMappingBasedOnUsbPort	= 0	The COM port configuration follow the device based on its serial number. No matter which USB port the device is connected it will retain the same configuration.
	= 1	The COM port configuration will be based on the physical USB port where the device is connected. Any device connected to that physical USB port will get the configuration.
ComMappingSingleDevice	= 1	Any device will get the same COM port configuration no matter which physical USB port it is connected.
MSHighSpeedHubFix	= 1	(XP/2k only) This is the default setting if the parameter is not supplied. The Microsoft workaround is enabled.
	= 0	Disable the Microsoft high speed hub fix.

This section is optional.

Example to enable Communication port mapping based on USB physical port:

```
[General]
ComMappingBasedOnUsbPort = 1
```

Serial Port Section

The serial port section defines parameters that apply to a specific EdgePort serial port. The format of the serial port section is:

[*InstanceID:x*]
or
[default]

where *InstanceID* represents the Edgeport identifier and *x* is the serial port number starting with the number 1.

There are three different ways to identify an Edgeport:

1. Using the serial number found on the label on bottom of the unit or on the information page of the Edgeport utility – Serial Number field. For example [V22541667:1] (omit leading S)
2. Using the USB path ("ComMappingBasedOnUsbPort" is enabled) found on the information page of the Edgeport utility – Identifier field, For example [Port-11:1]
3. Using the Vendor ID and Product ID found on the information page of the Edgeport utility – Vendor ID and Product ID fields. For example [1608-0205:1]

The variables defined in the optional **[default]** section apply to any serial port without a matching specific section.

Note: Do not use the "PortName" parameter in **[default]** or **[Vendor-Product]** sections.

IONPORT.INI errors

The EdgePort coinstaller ignores ionport.ini if there are any errors and will log a message to ionport.log which will be located in the system32 subdirectory.

Serial Port Section Parameters

A table that describes the serial port parameters is shown below. These parameters are all optional. Users will typically only define "PortName" or "IndustrialSettings"

Serial Port Parameters

Serial Port Variable	Type	Description	Example
PortName	String	PortName defines the serial port name in COMx format.	PortName = COM4
LowLatency	Flag	Rarely used. Contact tech support for details.	LowLatency = 0
RemapBaud	Flag	Rarely used. Contact tech support for details.	RemapBaud = 1
IgnoreFlush	Flag	Rarely used. Contact tech support for details.	IgnoreFlush = 1
FastWrites	Flag	Rarely used. Contact tech support for details.	FastWrites = 0
FastReads	Flag	Rarely used. Contact tech support for details.	FastReads = 1
IgnoreTxPurge	Flag	Rarely used. Contact tech support for details.	IgnoreTxPurge = 1
DelayConfig	Flag	Rarely used. Contact tech support for details.	DelayConfig = 0
IndustrialSettings	Number	Used for "S" type units	See table below

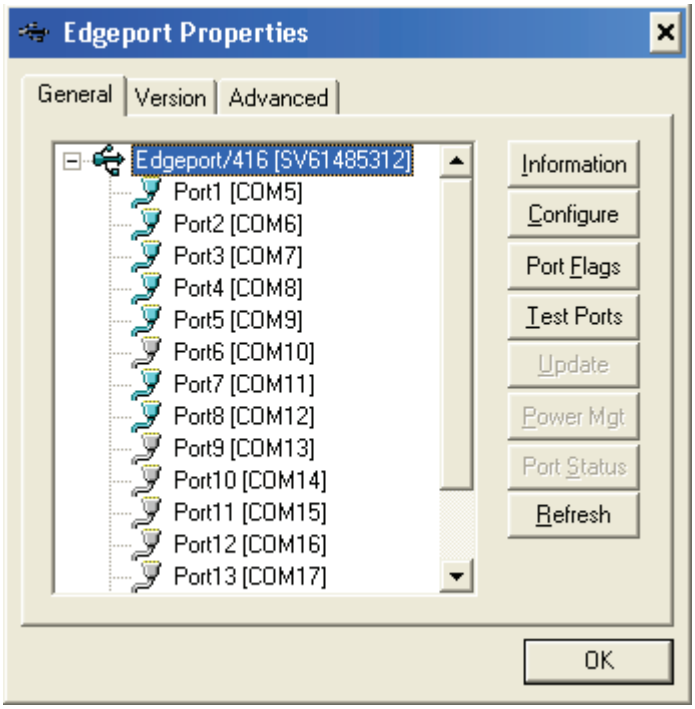
Industrial Setting

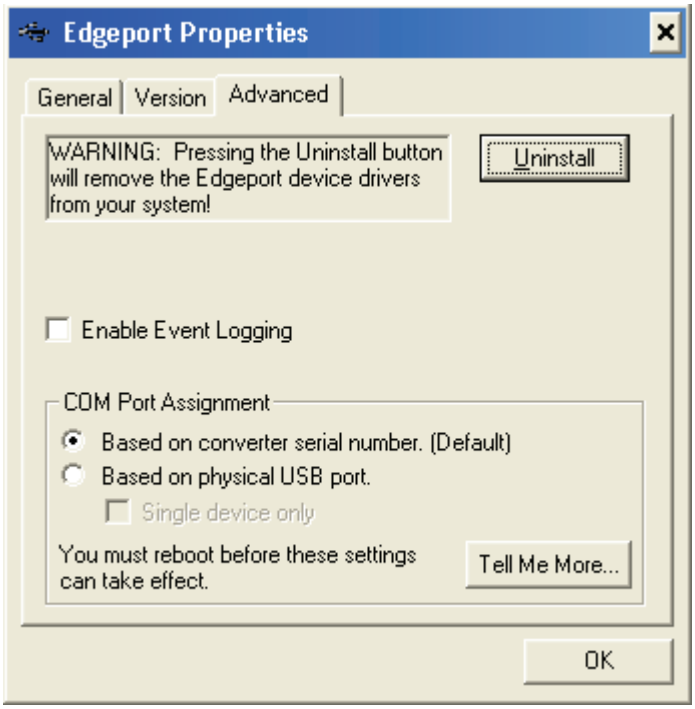
Value	RS	Termination	Duplex	Echo	Type	Unit
0	232					
1	422	Off				
2	422	On				
3	485		Half	On		End
4	485		Half	Off		End
5	485		Half	On		Middle
6	485		Half	Off		Middle
7	485		Full		Master	End
8	485		Full		Slave	End
9	485		Full		Master	Middle
10	485		Full		Slave	Middle

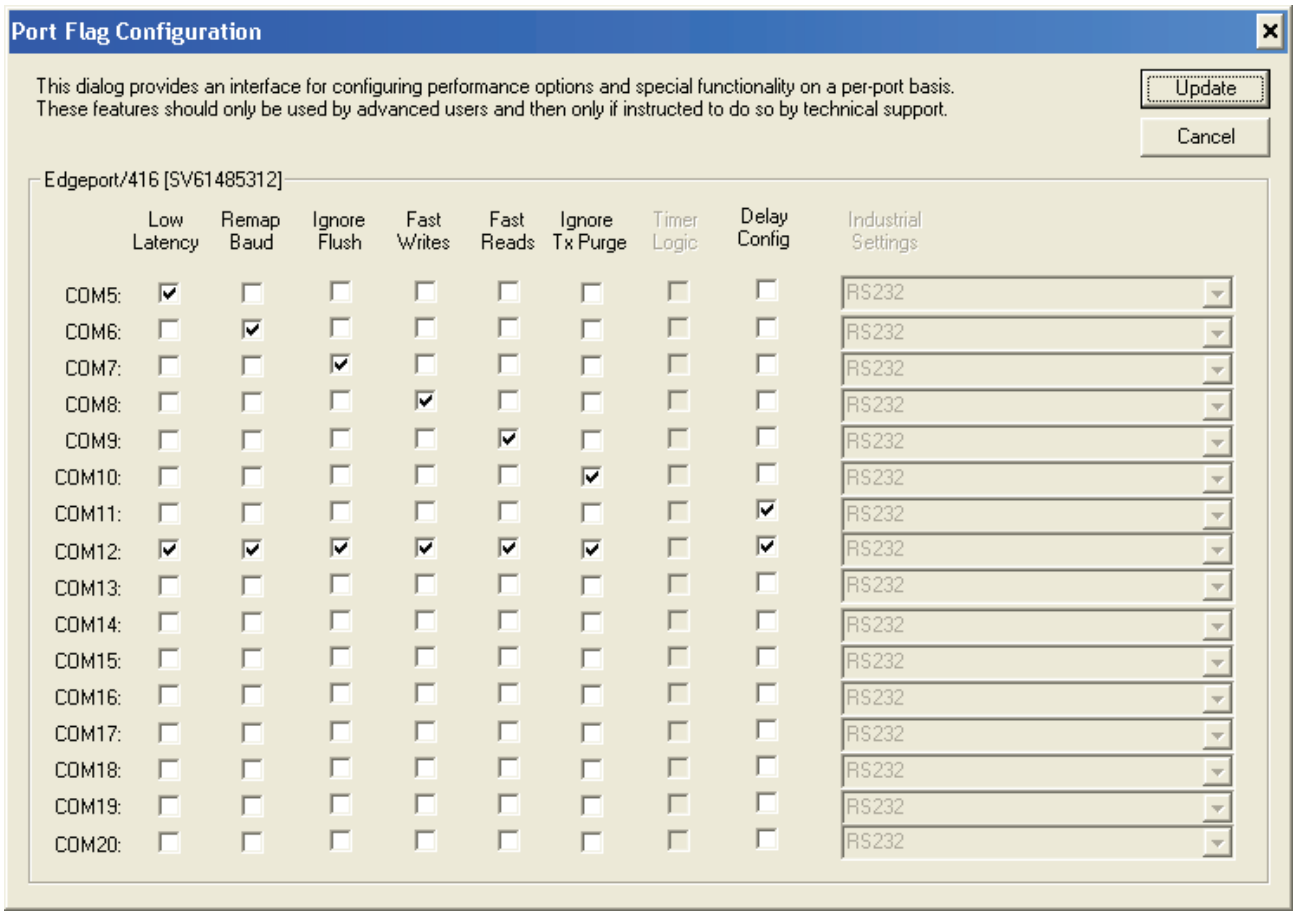
IONPORT.ini examples

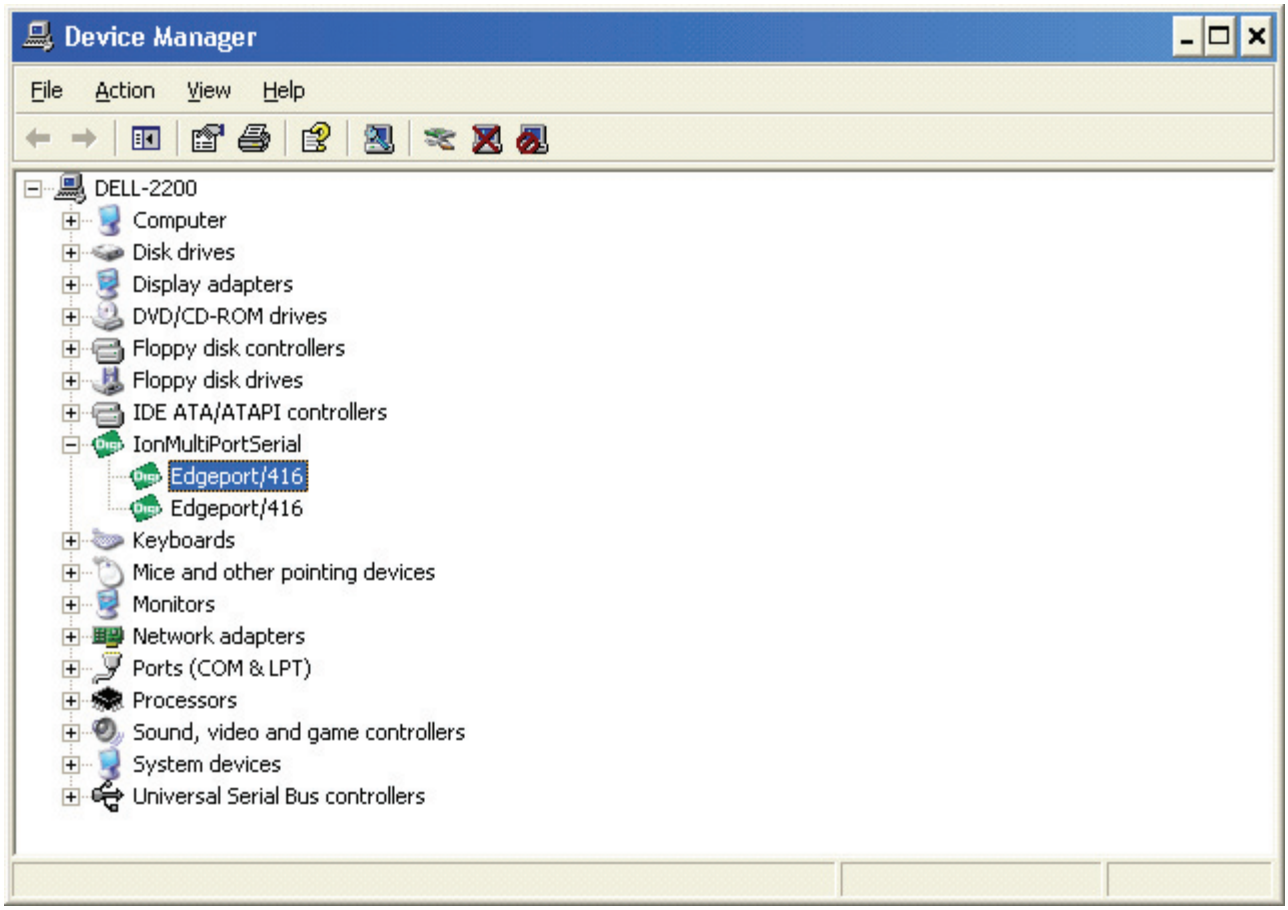
Example 1: Configuring an EP/416 with specific Com Port assignments and Port flags with the enumeration based on the Serial Number of the EP/416.

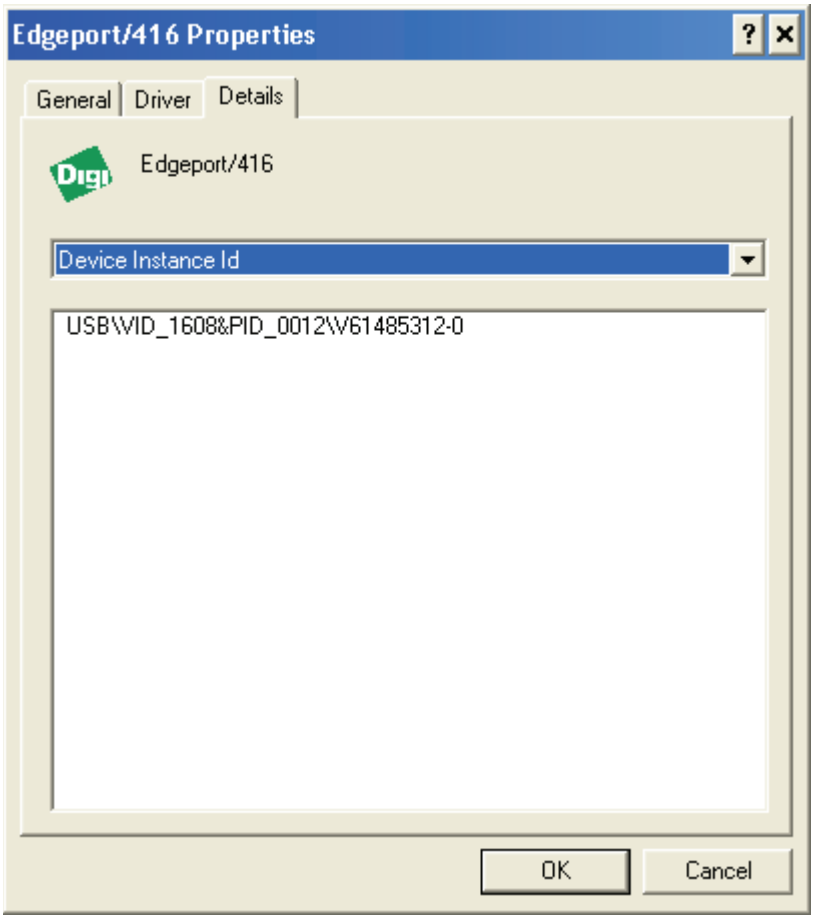
Note: Prior to being used, the IONPORT.ini file will be checked for syntax errors.
The results of the parsing will be saved in the C:\Windows\System32\IONPORT.log file.
If syntax errors are present, the IONPORT.ini settings will not be used.






Port Flag Configuration
This dialog provides an interface for configuring performance options and special functionality on a per-port basis.
These features should only be used by advanced users and then only if instructed to do so by technical support.
Update
Cancel
Edgeport/416 [SV61485312]
Low Latency
Remap Baud
Ignore Flush
Fast Writes
Fast Reads
Ignore Tx Purge
Timer Logic
Delay Config
Industrial Settings
COM5:
COM6:
COM7:
COM8:
COM9:
COM10:
COM11:
COM12:
COM13:
COM14:
COM15:
COM16:
COM17:
COM18:
COM19:
COM20:
RS232

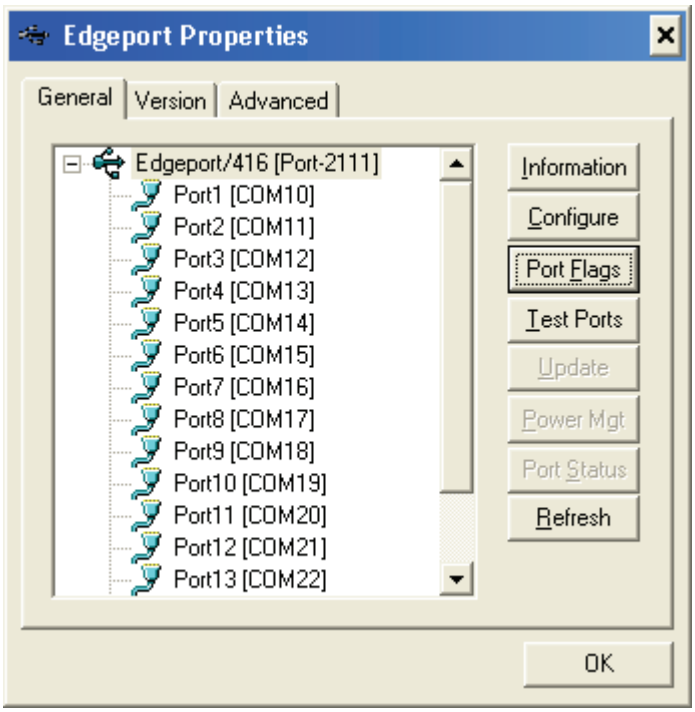

Device Manager
File
Action
View
Help
DELL-2200
Computer
Disk drives
Display adapters
DVD/CD-ROM drives
Floppy disk controllers
Floppy disk drives
IDE ATA/ATAPI controllers
IonMultiPortSerial
Edgeport/416
Edgeport/416
Keyboards
Mice and other pointing devices
Monitors
Network adapters
Ports (COM & LPT)
Processors
Sound, video and game controllers
System devices
Universal Serial Bus controllers

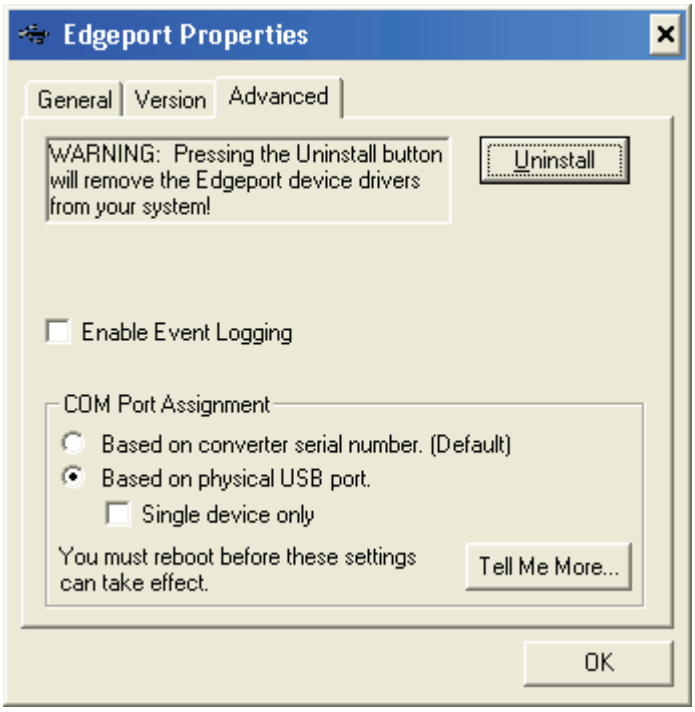

Edgeport/416 Properties
General
Driver
Details
Edgeport/416
Device Instance Id
USB\VID_1608&PID_0012\V61485312-0
OK
Cancel

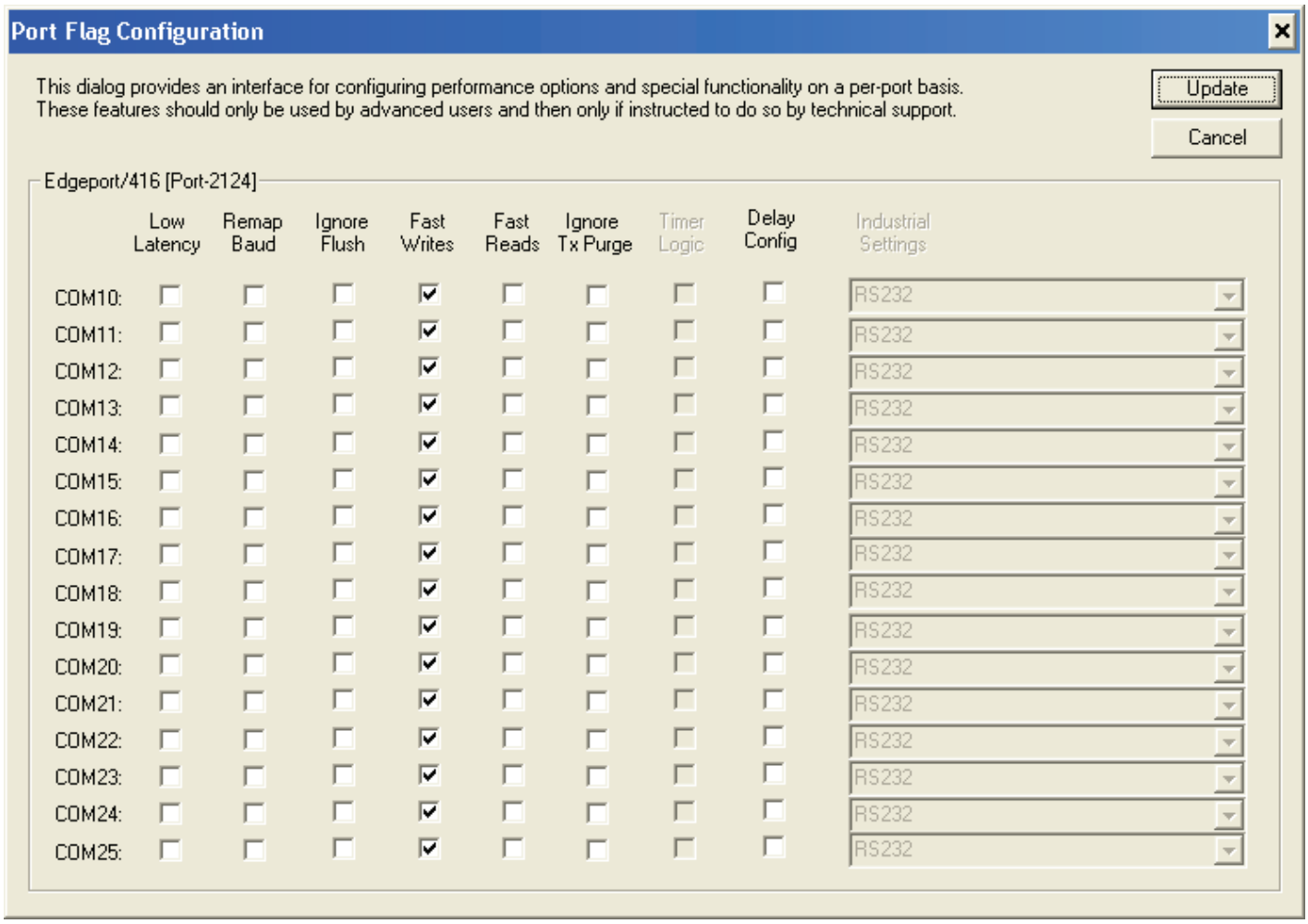
IONPORT.ini file used to configure the above:

```
[General]
ComMappingBasedOnUSBPort =0
;
; This section defines configuration for an EP/416 using the two internal 930 processors
; with the format of: [InstanceID#:Port#]
;
[V61485312-0:1]
PortName =COM5
LowLatency =1
;
[V61485312-0:2]
PortName =COM6
RemapBaud =1
;
[V61485312-0:3]
PortName =COM7
IgnoreFlush =1
;
[V61485312-0:4]
PortName =COM8
FastWrites =1
;
[V61485312-0:5]
PortName =COM9
FastReads =1
;
[V61485312-0:6]
PortName =COM10
IgnoreTxPurge =1
;
[V61485312-0:7]
PortName =COM11
DelayConfig =1
;
[V61485312-0:8]
PortName =COM12
LowLatency =1
RemapBaud =1
IgnoreFlush =1
FastWrites =1
FastReads =1
IgnoreTxPurge =1
DelayConfig =1
;
[V61485312-1:1]
PortName =COM13
;
[V61485312-1:2]
PortName =COM14
;
[V61485312-1:3]
PortName =COM15
;
[V61485312-1:4]
PortName =COM16
;
[V61485312-1:5]
PortName =COM17
;
[V61485312-1:6]
PortName =COM18
;
[V61485312-1:7]
PortName =COM19
;
[V61485312-1:8]
PortName =COM20
```

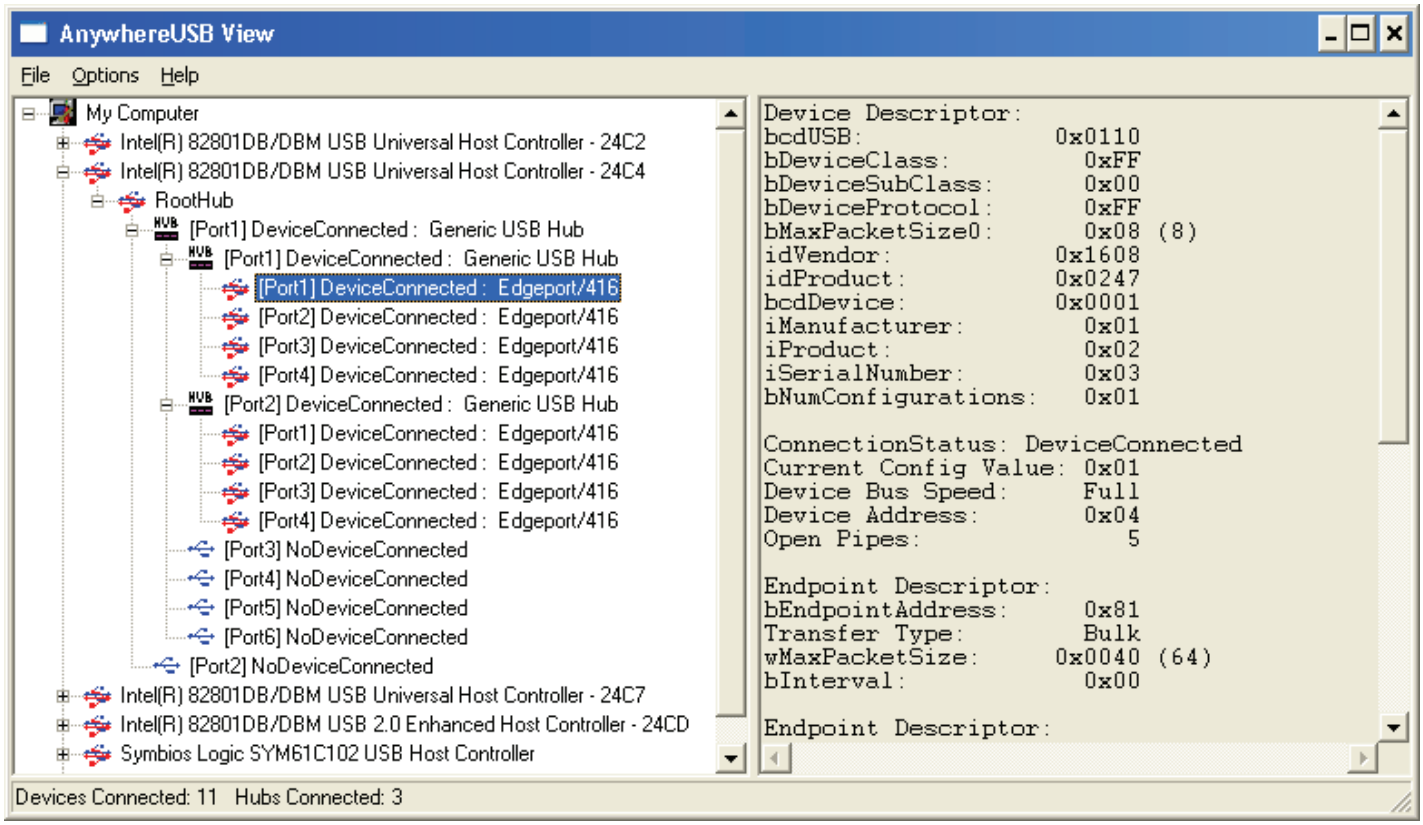
Example 2: Configuring an EP/416 with specific Com Port assignments and Port flags with the enumeration based on the physical USB port. This configuration allows the EP/416 to be replaced with another EP/416 on the same USB port, and the replacement EP/416 will assume the same Com Ports assignments and Port configurations settings as the initial EP/416.







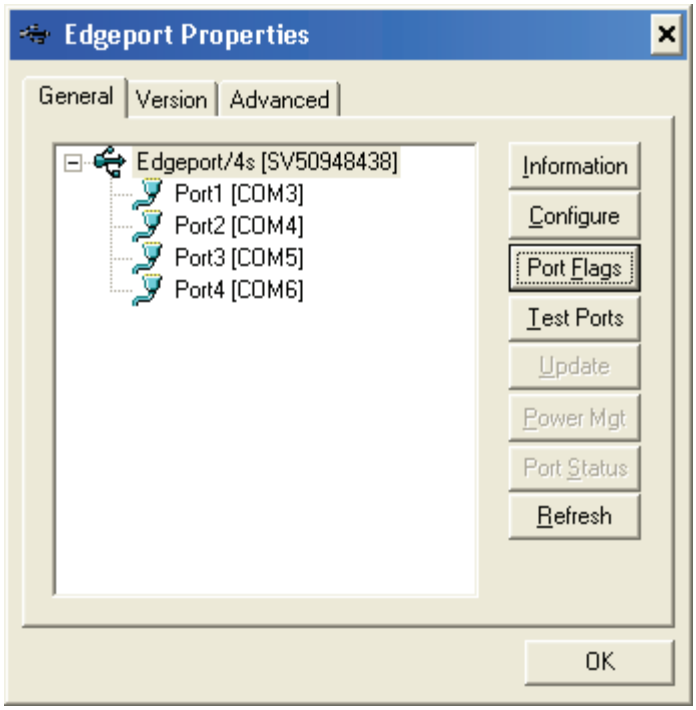
Note: The USB Port in this example for the EP/416 is 2111.

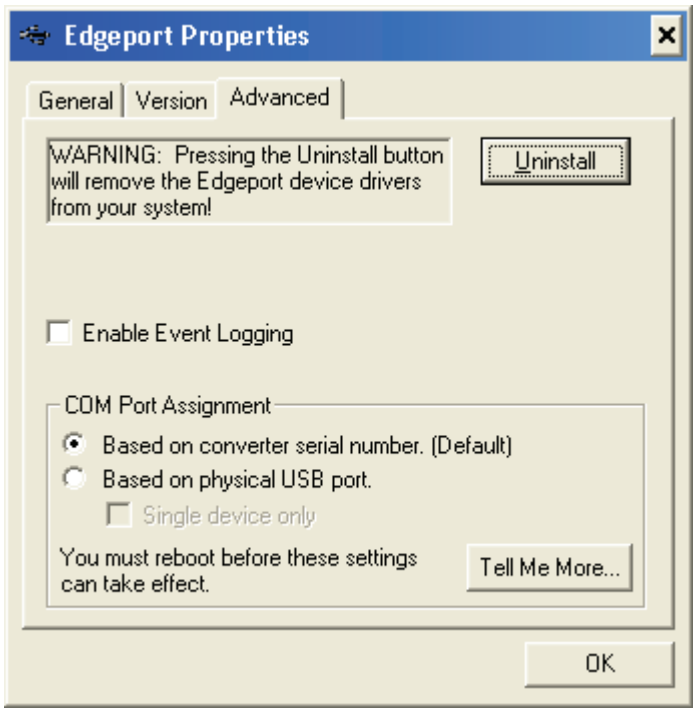


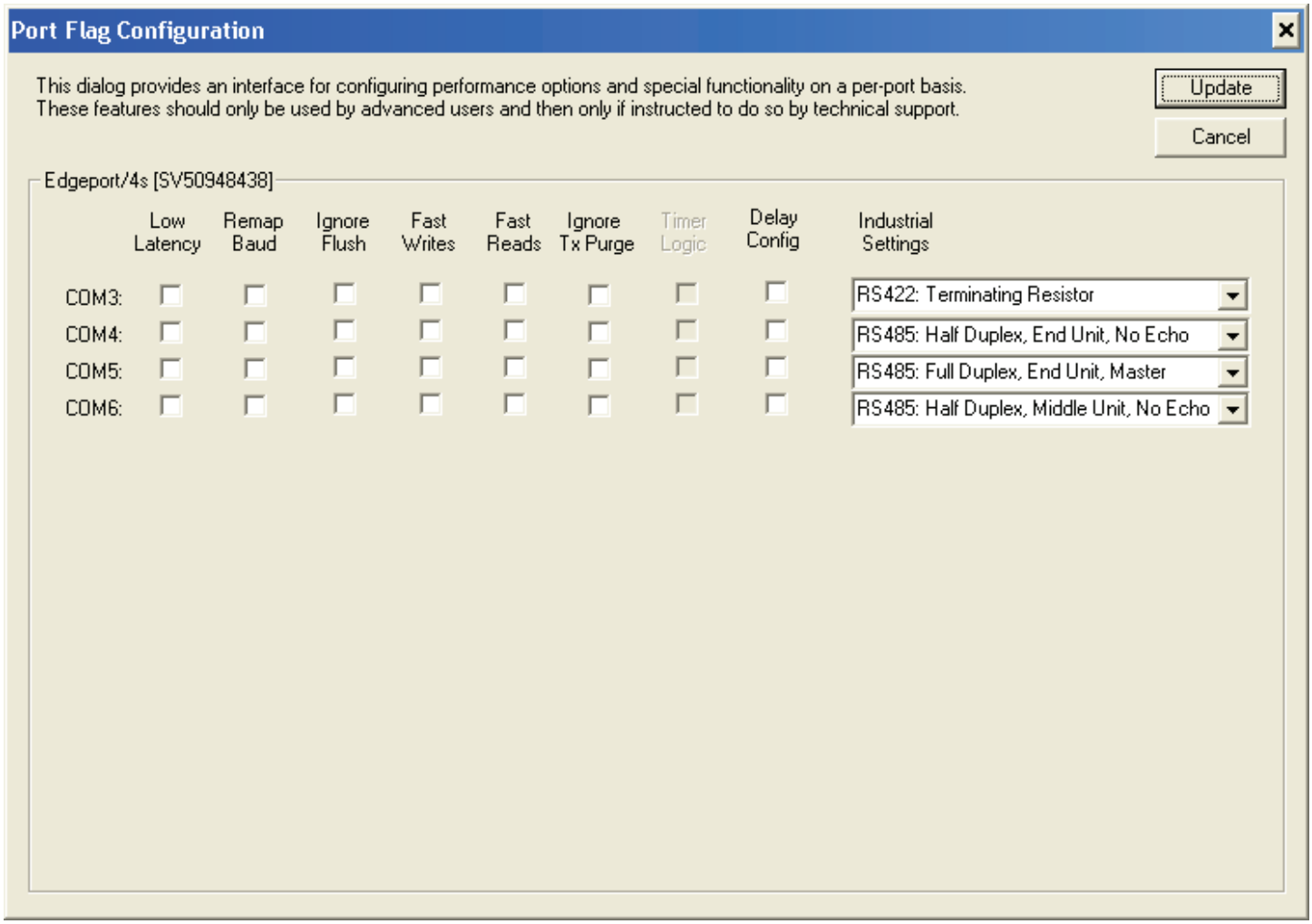
The IONPORT.ini for Example 2 is as follows:

```
[General]
ComMappingBasedOnUSBPort =1
;
; This section defines configuration for an EP/416 using the internal Ti UMP's
; with the format of: [PORT-USBPort#UMP#:UMPPort#]
;
; The USB Port numbers for the EP/416 in this example are  211 and 212
; The UMP numbers range from 1 to 4
; The UMP Port numbers range from 1 to 2
;
[PORT-2111:1]
PortName =COM10
FastWrites =1
;
[PORT-2111:2]
PortName =COM11
FastWrites =1
;
[PORT-2112:1]
PortName =COM12
FastWrites =1
;
[PORT-2112:2]
PortName =COM13
FastWrites =1
;
[PORT-2113:1]
PortName =COM14
FastWrites =1
;
[PORT-2113:2]
PortName =COM15
FastWrites =1
;
[PORT-2114:1]
PortName =COM16
FastWrites =1
;
[PORT-2114:2]
PortName =COM17
FastWrites =1
;
[PORT-2121:1]
PortName =COM18
FastWrites =1
;
[PORT-2121:2]
PortName =COM19
FastWrites =1
;
[PORT-2122:1]
PortName =COM20
FastWrites =1
;
[PORT-2122:2]
PortName =COM21
FastWrites =1
;
[PORT-2123:1]
PortName =COM22
FastWrites =1
;
[PORT-2123:2]
PortName =COM23
FastWrites =1
;
[PORT-2124:1]
PortName =COM24
FastWrites =1
;
[PORT-2124:2]
PortName =COM25
FastWrites =1
```

Example 3: Configuring an EP/4s with specific Com Port assignments and Port flags with the enumeration based on the serial number of the EP/4s.



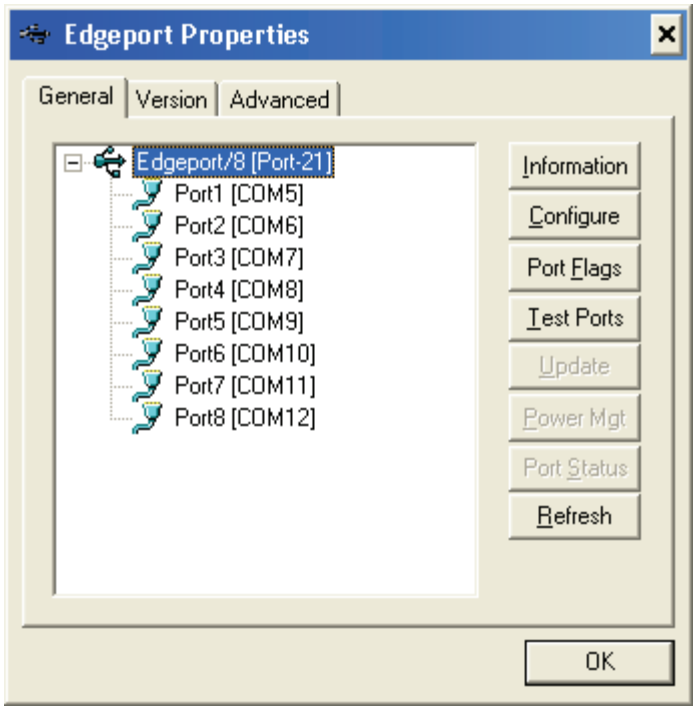


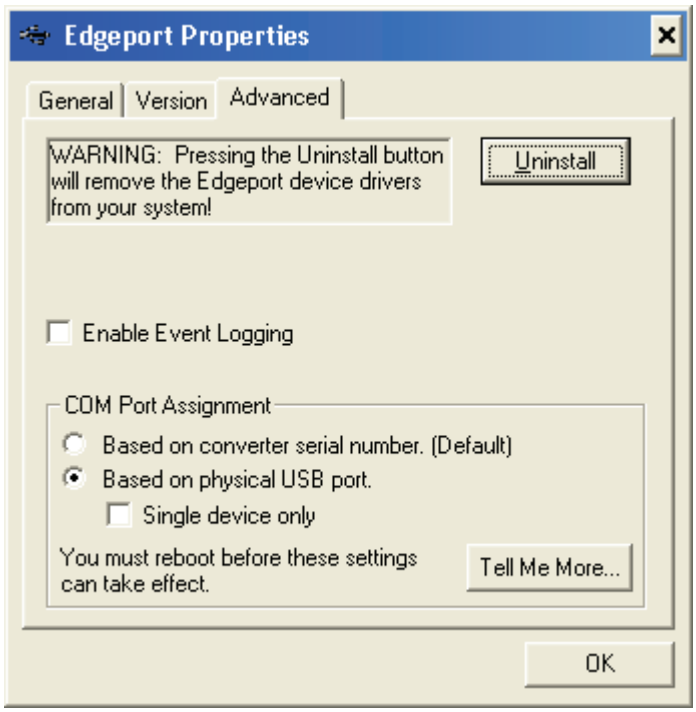


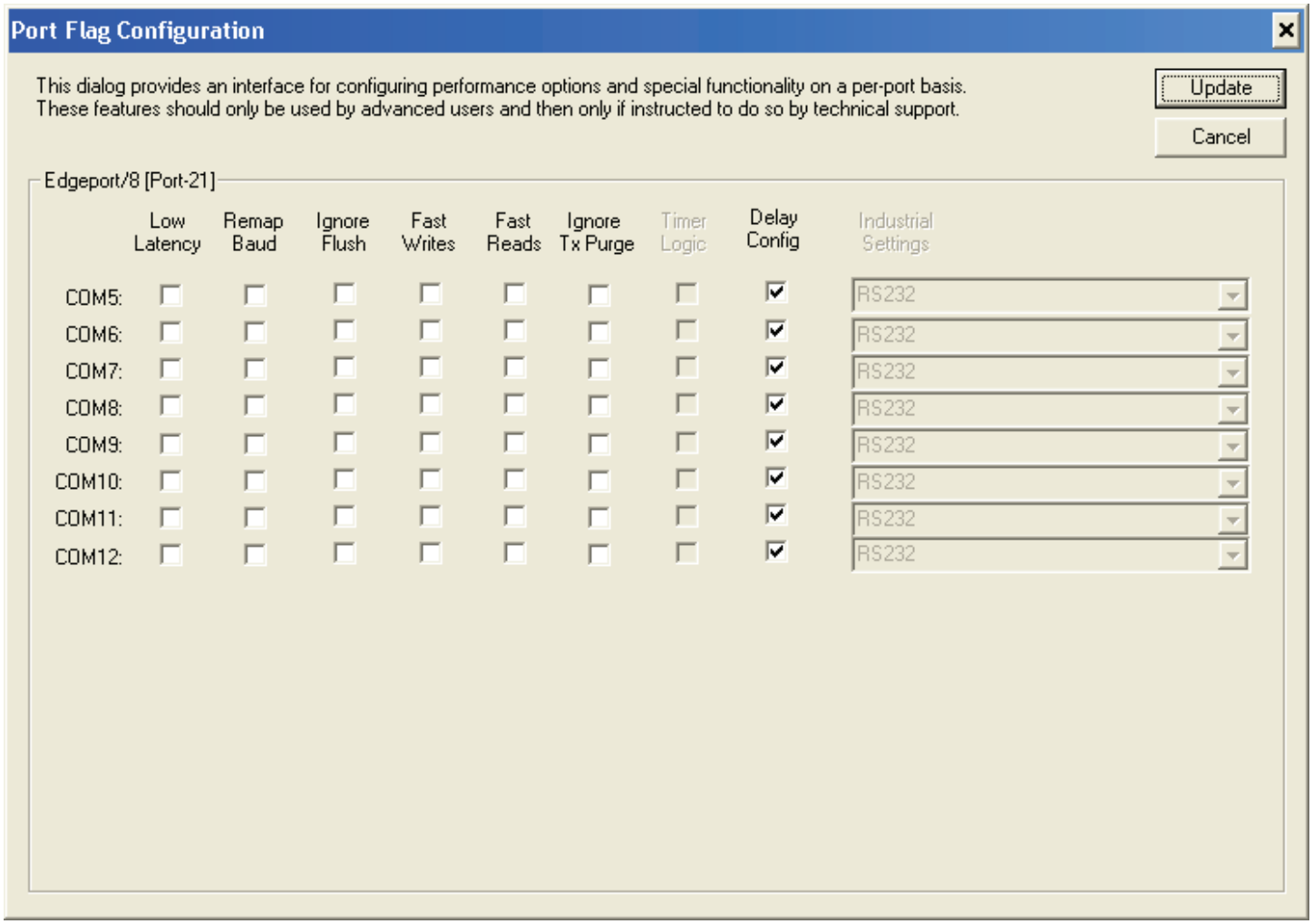
The IONPORT.ini for Example 3 is as follows:

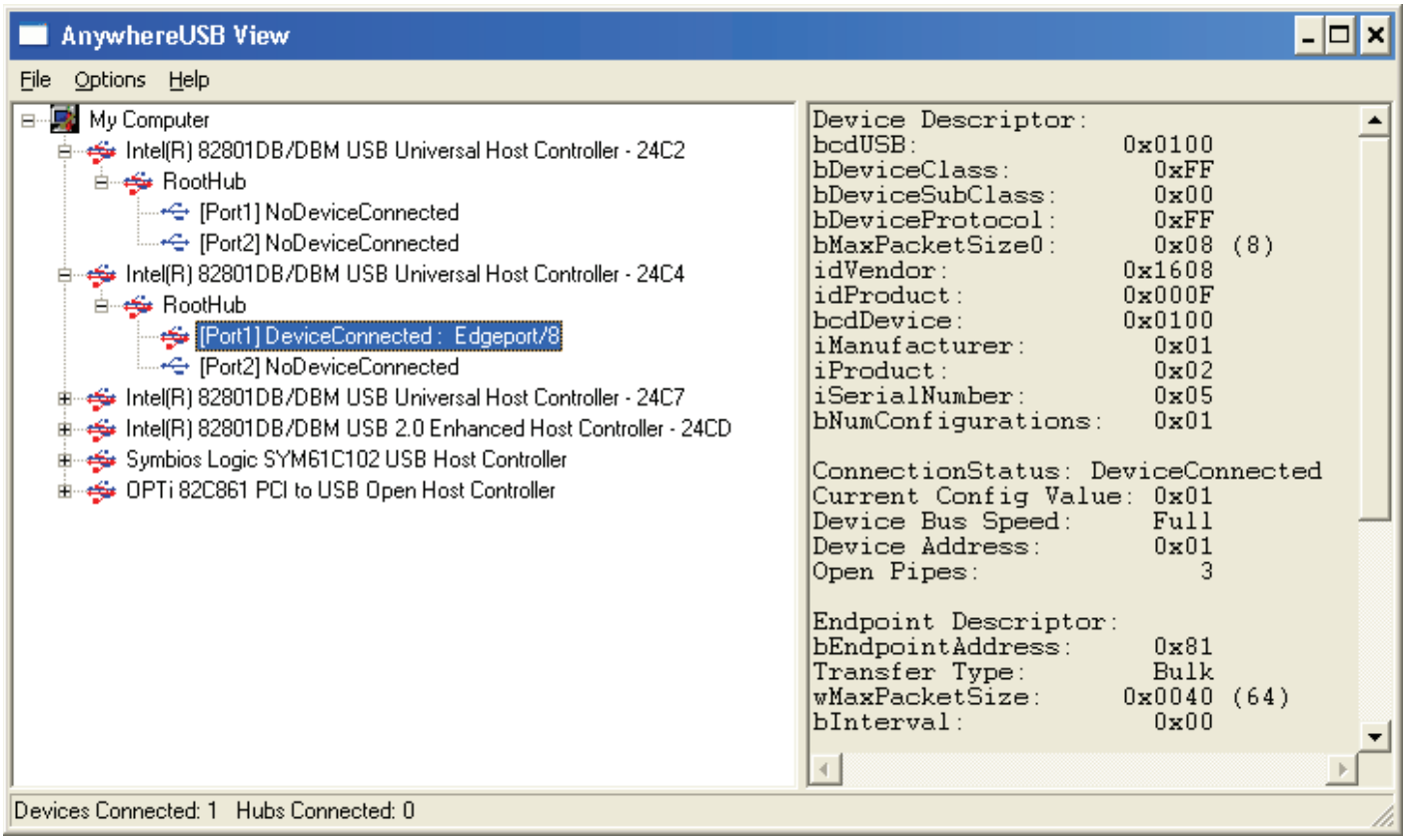
```
[General]
ComMappingBasedOnUSBPort =0
;
; This section defines configuration for an EP/4S using the internal Ti UMP's
; with the format of: [Serial#:Port#]
;
[V50948438:1]
PortName =COM3
IndustrialSettings =2
;
[V50948438:2]
PortName =COM4
IndustrialSettings =4
;
[V50948438:3]
PortName =COM5
IndustrialSettings =7
;
[V50948438:4]
PortName =COM6
IndustrialSettings =6
```

Example 4: Configuring an EP/8 with specific Com Port assignments and Port flags with the enumeration based on the USB Port.





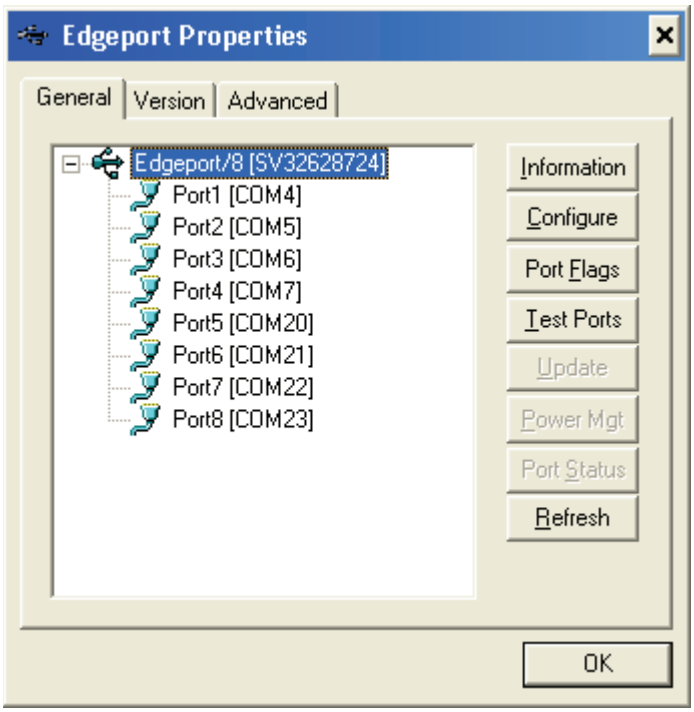

Port Flag Configuration
This dialog provides an interface for configuring performance options and special functionality on a per-port basis.
These features should only be used by advanced users and then only if instructed to do so by technical support.
Update
Cancel
Edgeport/8 [Port-21]
Low Latency
Remap Baud
Ignore Flush
Fast Writes
Fast Reads
Ignore Tx Purge
Timer Logic
Delay Config
Industrial Settings
COM5:
COM6:
COM7:
COM8:
COM9:
COM10:
COM11:
COM12:
RS232

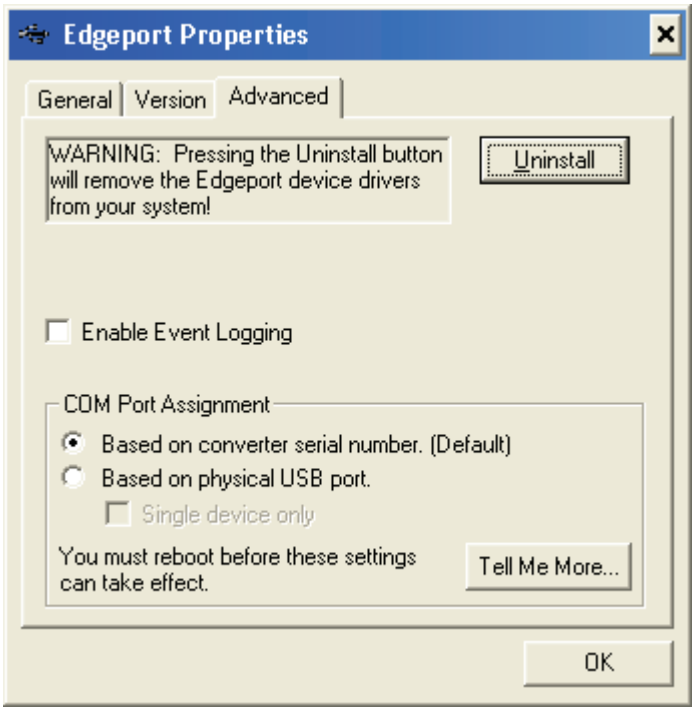

AnywhereUSB View
File
Options
Help
My Computer
Intel(R) 82801DB/DBM USB Universal Host Controller - 24C2
RootHub
[Port1] NoDeviceConnected
[Port2] NoDeviceConnected
Intel(R) 82801DB/DBM USB Universal Host Controller - 24C4
RootHub
[Port1] DeviceConnected : Edgeport/8
[Port2] NoDeviceConnected
Intel(R) 82801DB/DBM USB Universal Host Controller - 24C7
Intel(R) 82801DB/DBM USB 2.0 Enhanced Host Controller - 24CD
Symbios Logic SYM61C102 USB Host Controller
OPTi 82C861 PCI to USB Open Host Controller
Device Descriptor:
bcdUSB: 0x0100
bDeviceClass: 0xFF
bDeviceSubClass: 0x00
bDeviceProtocol: 0xFF
bMaxPacketSize0: 0x08 (8)
idVendor: 0x1608
idProduct: 0x000F
bcdDevice: 0x0100
iManufacturer: 0x01
iProduct: 0x02
iSerialNumber: 0x05
bNumConfigurations: 0x01
ConnectionStatus: DeviceConnected
Current Config Value: 0x01
Device Bus Speed: Full
Device Address: 0x01
Open Pipes: 3
Endpoint Descriptor:
bEndpointAddress: 0x81
Transfer Type: Bulk
wMaxPacketSize: 0x0040 (64)
bInterval: 0x00
Devices Connected: 1 Hubs Connected: 0

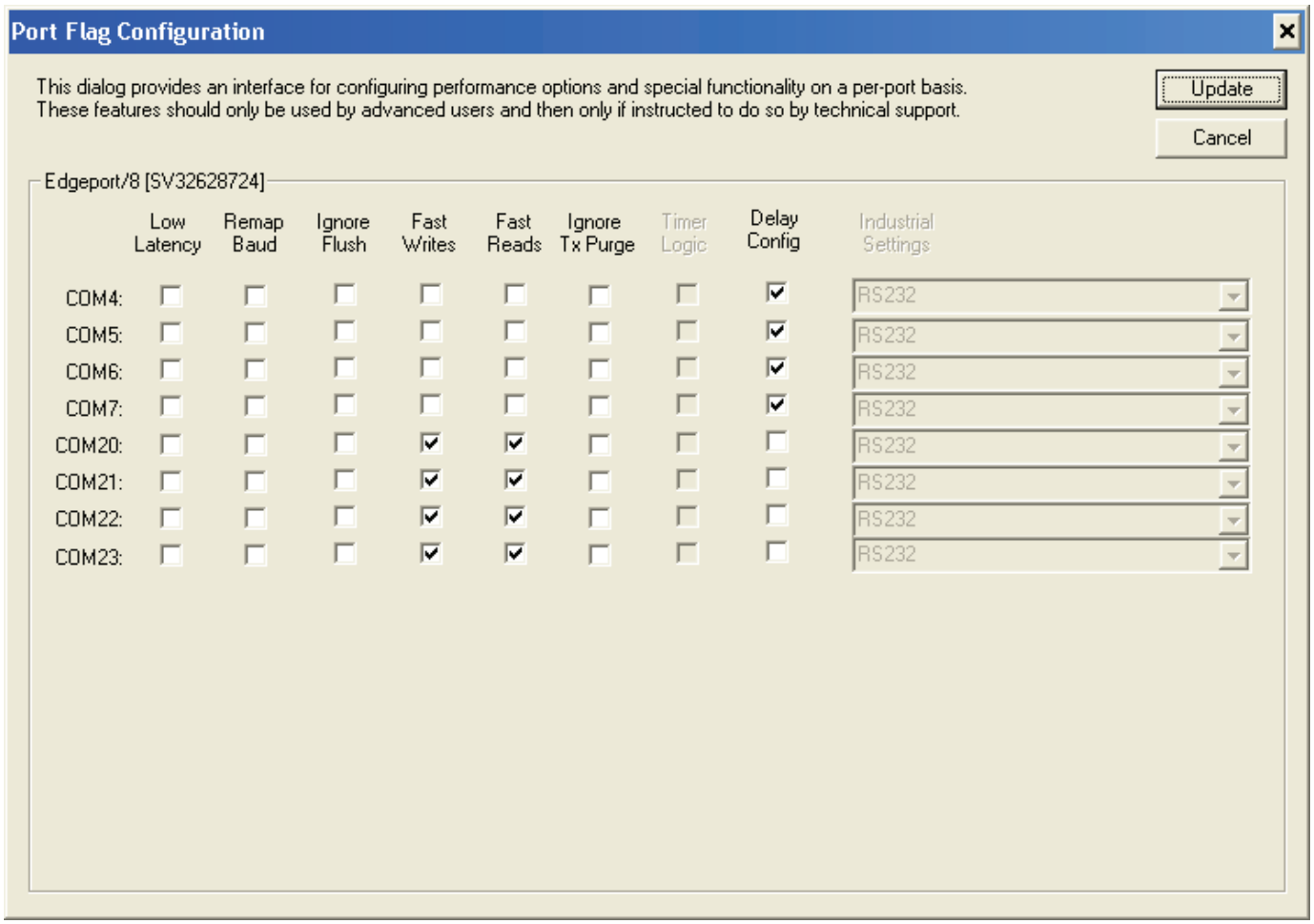
The IONPORT.ini for Example 4 is as follows:

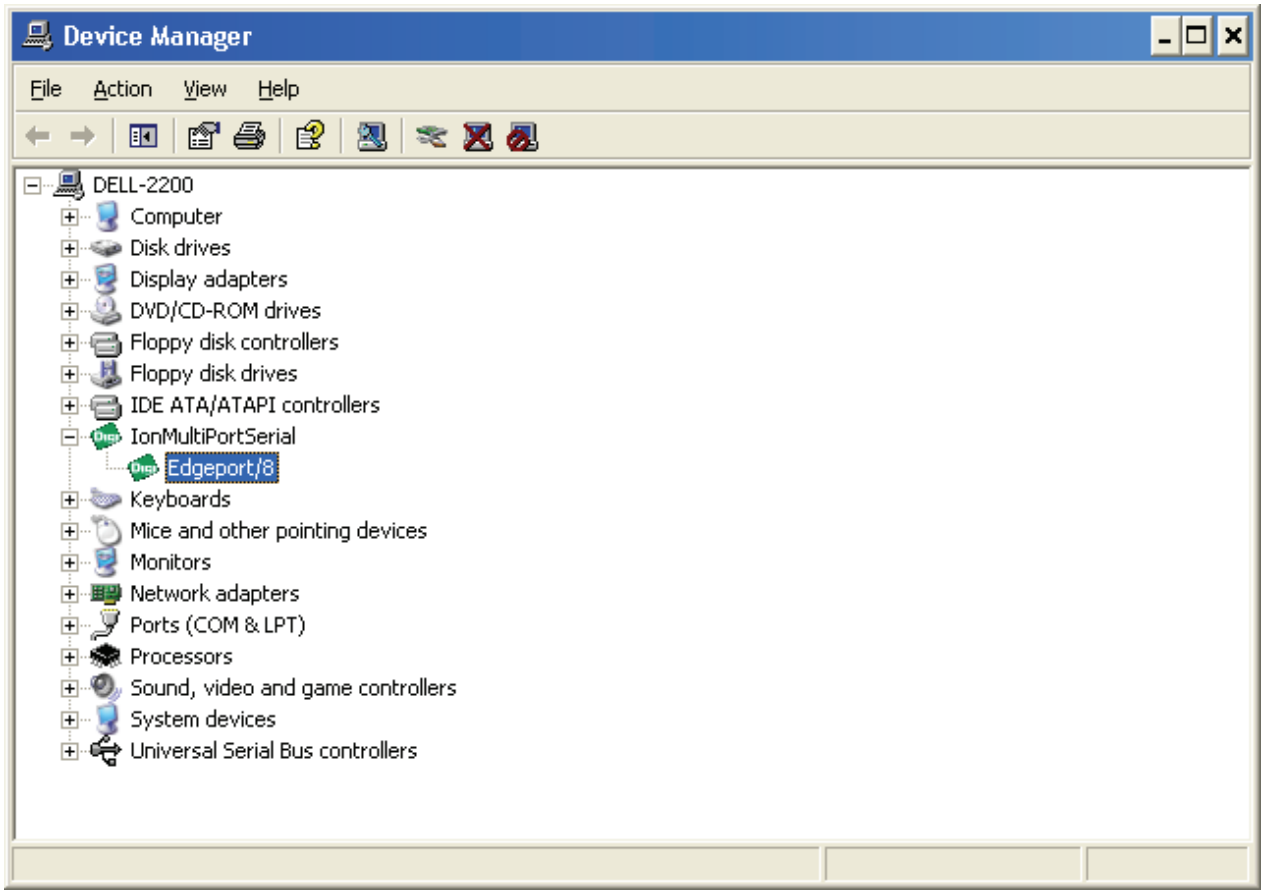
```
[General]
ComMappingBasedOnUSBPort =1
;
; This section defines configuration for an EP/8 using the internal 930 processor
; with the format of: [InstanceID:Port#]
;
[PORT-21:1]
DelayConfig =1
PortName =Com5
[PORT-21:2]
DelayConfig =1
PortName =Com6
[PORT-21:3]
DelayConfig =1
PortName =Com7
[PORT-21:4]
DelayConfig =1
PortName =Com8
[PORT-21:5]
DelayConfig =1
PortName =Com9
[PORT-21:6]
DelayConfig =1
PortName =Com10
[PORT-21:7]
DelayConfig =1
PortName =Com11
[PORT-21:8]
DelayConfig =1
PortName =Com12
```

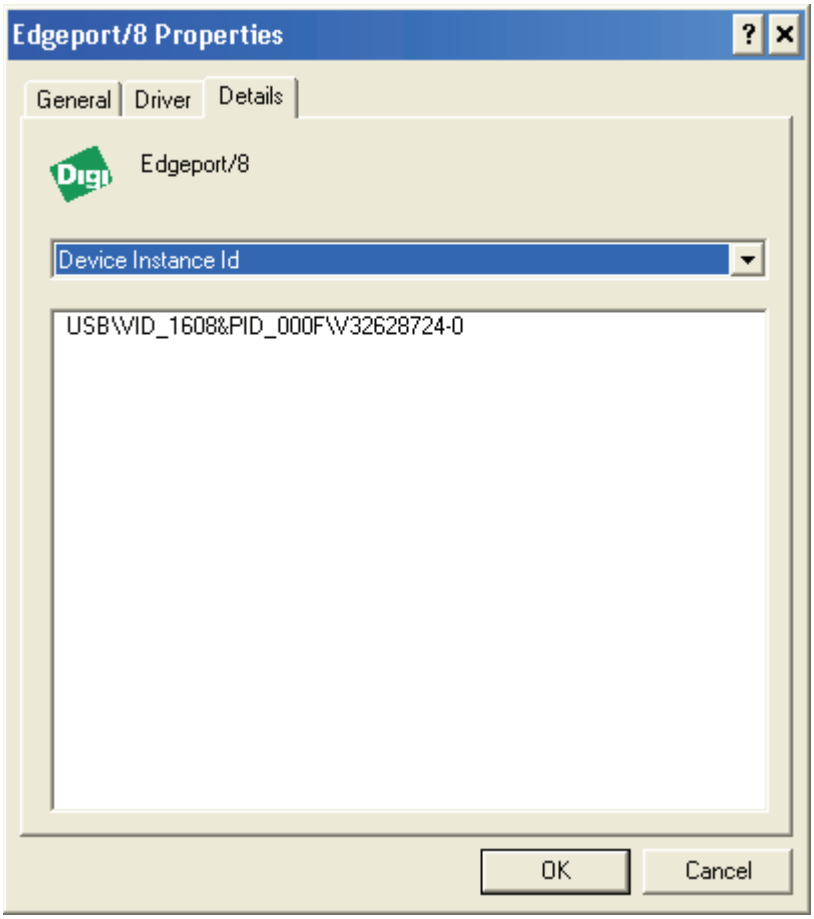
Example 5: Configuring an EP/8 with specific Com Port assignments and Port flags with the enumeration based on Serial Number.






Port Flag Configuration
This dialog provides an interface for configuring performance options and special functionality on a per-port basis.
These features should only be used by advanced users and then only if instructed to do so by technical support.
Update
Cancel
Edgeport/8 [SV32628724]
Low Latency
Remap Baud
Ignore Flush
Fast Writes
Fast Reads
Ignore Tx Purge
Timer Logic
Delay Config
Industrial Settings
COM4:
COM5:
COM6:
COM7:
COM20:
COM21:
COM22:
COM23:
RS232


Device Manager
File
Action
View
Help
DELL-2200
Computer
Disk drives
Display adapters
DVD/CD-ROM drives
Floppy disk controllers
Floppy disk drives
IDE ATA/ATAPI controllers
IonMultiPortSerial
Edgeport/8
Keyboards
Mice and other pointing devices
Monitors
Network adapters
Ports (COM & LPT)
Processors
Sound, video and game controllers
System devices
Universal Serial Bus controllers

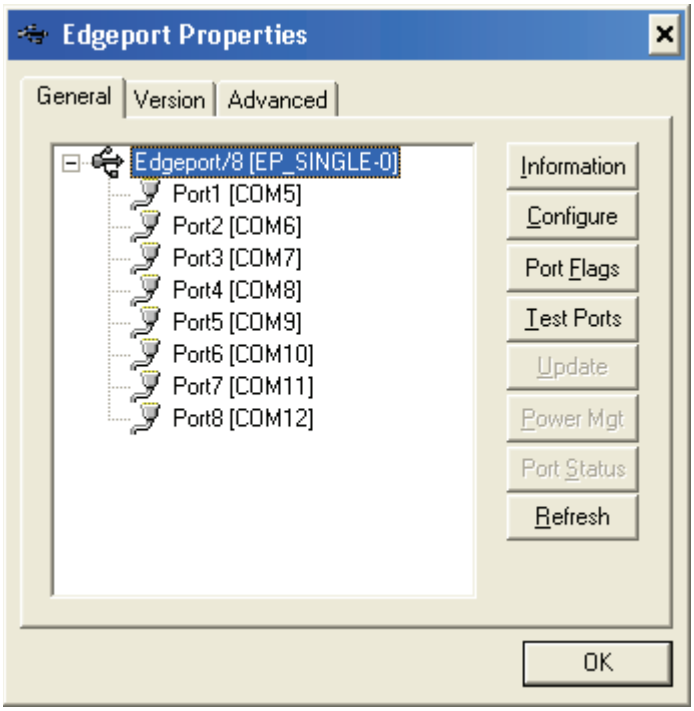


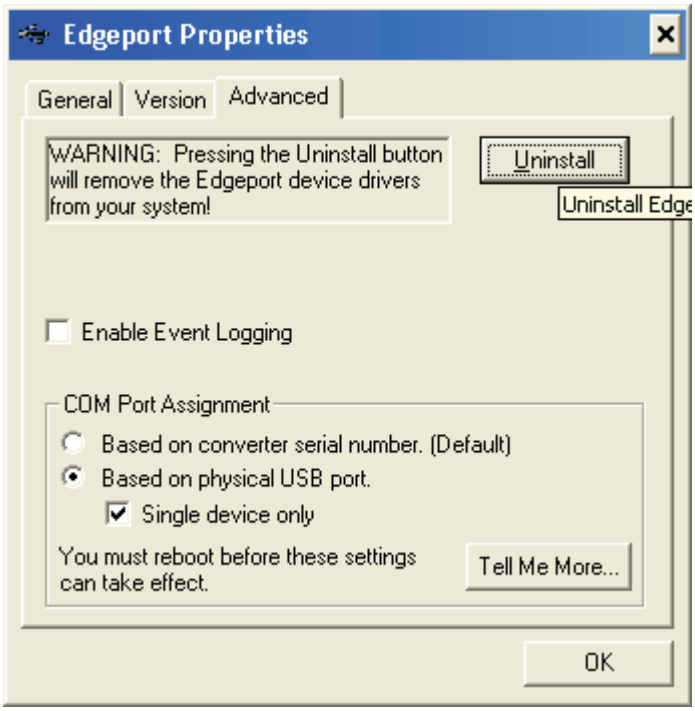
The IONPORT.ini for Example 5 is as follows:

```
[General]
ComMappingBasedOnUSBPort =0
;
; This section defines configuration for an EP/8 using the internal 930 processor
; with the format of: [InstanceID#:Port#]
;
[V32628724-0:1]
DelayConfig  =1
PortName     =Com4
[V32628724-0:2]
DelayConfig  =1
PortName     =Com5
[V32628724-0:3]
DelayConfig  =1
PortName     =Com6
[V32628724-0:4]
DelayConfig  =1
PortName     =Com7
[V32628724-0:5]
FastWrites =1
FastReads  =1
PortName   =Com20
[V32628724-0:6]
FastWrites =1
FastReads  =1
PortName   =Com21
[V32628724-0:7]
FastWrites =1
FastReads  =1
PortName   =Com22
[V32628724-0:8]
FastWrites =1
FastReads  =1
PortName   =Com23
```

Example 6: Configuring an EP/8 with specific Com Port assignments and with the enumeration based on a Single Edgeport Device only.

The Single Device only configuration allows the EP/8 to be moved to any USB Port on the system, and it will retain its configuration. This configuration also supports replacing this EP/8 (with another EP/8 of like processor) and the new EP/8 will retain the configuration settings of the first EP/8.



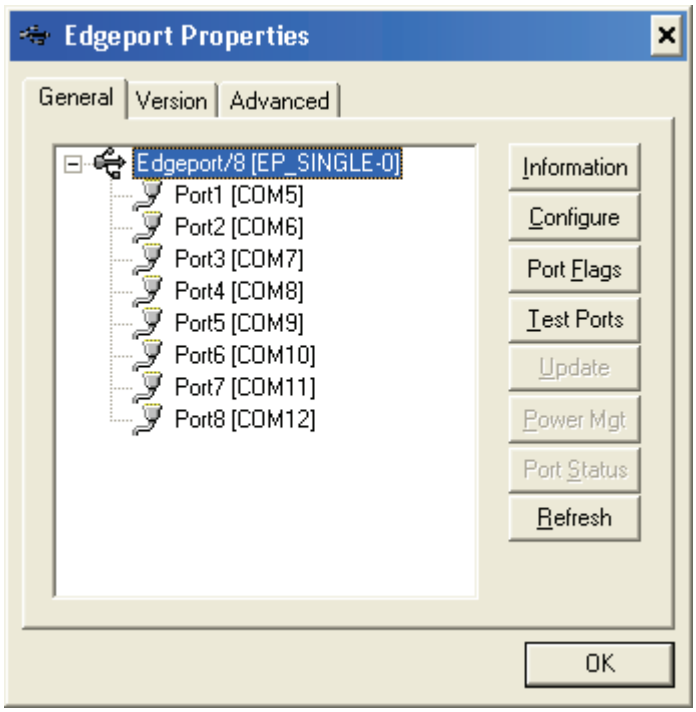


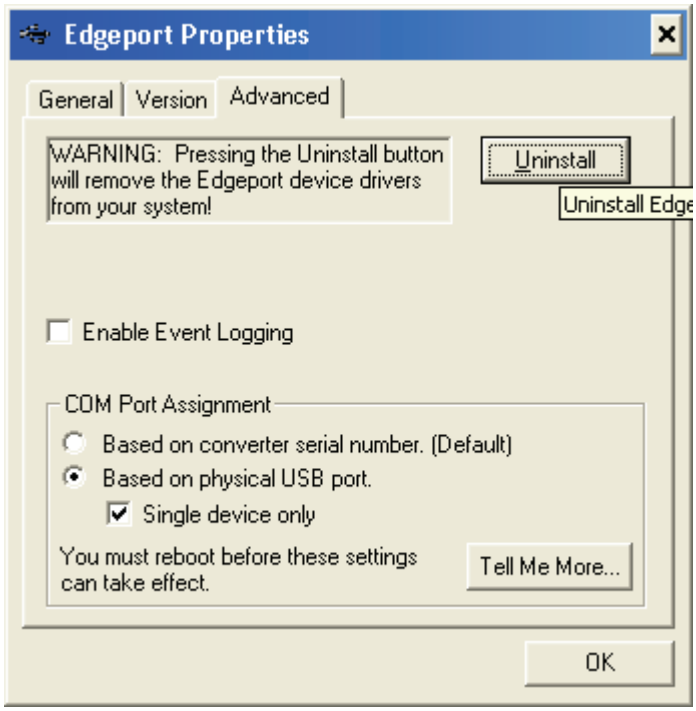
The IONPORT.ini for Example 6 is as follows:

```
[General]
ComMappingSingleDevice =1
; Set the Serial Ports to Com5 -> Com12
```

```
; Using an EP/8 with the internal 930 processor
;
[EP_SINGLE-0:1]
PortName =Com5
[EP_SINGLE-0:2]
PortName =Com6
[EP_SINGLE-0:3]
PortName =Com7
[EP_SINGLE-0:4]
PortName =Com8
[EP_SINGLE-0:5]
PortName =Com9
[EP_SINGLE-0:6]
PortName =Com10
[EP_SINGLE-0:7]
PortName =Com11
[EP_SINGLE-0:8]
PortName =Com12
```

Example 6a: This configuration is similar to Example 6, but in this example the ionport.ini file is built to support an EP/8 using the internal Ti UMP instead of the internal 930 processor.





The IONPORT.ini for Example 6a is as follows:

```
[General]
ComMappingSingleDevice =1
; Set the Serial Ports to Com5 -> Com12
; Using an EP/8 with the internal UMP
;
[EP_SINGLE-0:1]
PortName =Com5
[EP_SINGLE-0:2]
```

PortName =Com6
[EP_SINGLE-1:1]
PortName =Com7
[EP_SINGLE-1:2]
PortName =Com8
[EP_SINGLE-2:1]
PortName =Com9
[EP_SINGLE-2:2]
PortName =Com10
[EP_SINGLE-3:1]
PortName =Com11
[EP_SINGLE-3:2]
PortName =Com12