

QUICK START Windows 2000 DRIVER and HARDWARE REFERENCE CARD

RocketPort 550 Range RocketPort 550 Universal Range BroadPort 550 Range





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A. Removal of the Windows 2000 RP550/BP550 device driver files and registry entries

1. Before you begin

Important

Prior to installing this version of the RocketPort, 550, RocketPort 550 Universal & BroadPort 550 Universal device driver, any earlier installed versions MUST BE REMOVED including all device information files and registry entries. If you have earlier RocketPort/BroadPort 550 PCi drivers installed then refer to appendix A before continuing.

If you are installing a RocketPort/BroadPort 550 driver for the first time on the target PC then continue below.

The Windows 2000 device driver for the RocketPort 550/BroadPort 550 is supplied as a single self extracting file. The driver supports the original RocketPort 550 PCi range as well as the newly introduced RocketPort 550 PCi Universal & BroadPort 550 PCi Universal ranges.

The RP550/BP 550 PCi Universal controllers can be installed in PCi slots that support either 3.3V or 5V bus signals. The original RocketPort 550 PCi range can only be installed in PCi slots that support 5V signalling.

The original RocketPort 550 PCi controller will be referred to as the RocketPort 550

The RocketPort 550 PCi Universal controller will be referred to as the RocketPort/BroadPort 550 Universal. The range consists of 4, 8 & 16 port controllers.

The BroadPort 550 PCi Universal controller will be referred to as the BroadPort 550 Universal. The range consists of 8 & 16 port controllers.

Where commonality exists between the RocketPort 550, RocketPort 550 Universal and BroadPort 550 Universal controllers, the term RocketPort/BroadPort 550 will be used. This may be shortened to RP550/BP550.

Prior to installing the RocketPort 550, RocketPort 550 Universal or BroadPort 550 Universal controllers, the device driver software files must be extracted to a folder on your PC's hard disk.

2. Extracting the driver files to the PC's hard disk

Using Windows Explorer, locate the self extract file.

If you have a Comtrol supplied CD then open the folder **\Win2000** (on the CD) then double click the file **Win2Kdrv.exe**

(If you have downloaded the driver from Comtrol's web site then you should open the folder containing the downloaded self extract file. NOTE: The filename may differ from the above.)

The self extractor dialog will appear. The default target folder (for the extracted files) is C:\Comtrol\Installations\RP550W2K and will be displayed in the 'Unzip to folder' box

You may change the target folder as you wish, but note that the remainder of this document *assumes* that the extracted driver files are located in **C:\Comtrol\Installations\RP550W2K**. If you have changed the target folder you must remember to specify this path when required during installation.

Now that the files are extracted, you should shutdown Windows 2000 in preparation for installing the RocketPort 550, RocketPort 550 Universal or BroadPort 550 Universal controller(s) into the PC.

3. Installing Your Controller hardware



Take care when you handle the RocketPort/BroadPort 550 cards, like any electronic device, they are sensitive to static electricity. Use normal static precautions such as wearing an earth ground strap. The original RocketPort 550 PCi controllers are installed in 32bit 5V PCI slots. The RocketPort 550 Universal & BroadPort 550 Universal cards can be installed in 3.3V or 5V 32 Bit PCI slots.

Hardware Installation

Power down the host PC and disconnect its mains input.

Follow the host PC manufacturer instructions describing how to access the PC in order to install additional cards.

You may install up to 4 controllers in one PC.

Ensure the controller back plate retaining screw is fitted.

Follow the host PC manufacturers instructions for the re assembly of the host PC, its cabling and re-fitting of safety covers.

Re-connect the host PC mains input and power up the PC and logon as "Administrator"

4. Installing the Windows 2000 Device Driver

1. In the previous section you installed the controller, powered up the PC and logged on as the "Administrator"

Technical Notes

RocketPort 550 PCi controller

(This note DOES NOT apply to the RocketPort 550 Universal or BroadPort 550 Universal controllers)

The chip set used on the original RocketPort 550 means that each controller has a hardware configuration which appears as two multifunction 'parent' devices to Windows 2000. Each RocketPort 550 controller has two PCI DEVICE ID's This requires that the installation process is repeated , once for the first and once for the second multifunction device.

Each multi-function device 'owns' a number of serial ports. One multi-function device on a RocketPort 550 controller owns the first 4 ports, the other multi-function device owns the remaining ports on the controller, this can be 4 *(eight port card)* or 12 *(16 port card)* depending on the board type. Also, note that a four port only controller still supports the second multifunction device. It has to be installed but owns no ports.

RocketPort 550 Universal & BroadPort 550 Universal ONLY The chipset used on the RocketPort 550 PCi Universal range leads to the controller appearing as one multi-function parent device to Windows 2000. Each RocketPort 550 Universal & BroadPort 550 Universal controller has a single PCI DEVICE ID. This is similar to other PCI multiport serial cards. The installation procedure occurs only once. The single multifunction parent device owns all the child serial (COM) ports.

 Windows will detect the new hardware during boot and display the "Found New Hardware Wizard" dialog window for the first of the multifunction devices (see previous technical note). Note: There may be a delay while Windows detects the device.

Click Next

3 The next dialog window asks :

Search for the best driver for your device. (Windows Default) or

Display a list of all the drivers in a specific location, so you can select the driver you want.

- 4 The default selection is **Search**, **ENSURE THAT SEARCH IS SELECTED** Check that Search is selected and Click **Next**
- 5 The next dialog window asks where to search for the Driver.

Select Specify a location

Enter C:\Comtrol\Installations\RP550W2K into the dialog window

If you extracted the driver files to an alternative folder then replace the above path with the alternative path for the driver files.

Click **Next** Windows will search the Win2000 folder for the Driver

6. The next dialog window displays the path C:\Comtrol\Installations\RP550W2K

If you extracted the driver files to an alternative folder then that path will be displayed instead.

Check the dialog window displays the path to the folder containing the **RCKT550.INF** file

Click Next to start the installation

Windows will briefly display the progress of the Driver installation.
 When complete, Windows will display the Finished Installing dialog window

Click Finish

If installing a RocketPort/BroadPort 550 Universal card then the installation is now complete and you should proceed to section 5.

If installing a RocketPort 550 card (i.e. the original RocketPort 550 PCi 5V card) then Windows now detects that a second installation is required for the second of the multifunction devices (see previous technical note). You must continue with step 8.

8. Windows displays the "Found New Hardware Wizard" dialog window for the second of the multifunction device

Click Next

9. The next dialog window asks :

Search for the best driver for your device. (Windows Default) or

Display a list of all the drivers in a specific location, so you can select the driver you want.

The Windows default selection is **Search**, **ENSURE THAT SEARCH IS SELECTED** and Click **Next**

10. The next dialog window asks where to search for the Driver.

Select Specify a location Enter C:\Comtrol\Installations\RP550W2K into the dialog Window

If you extracted the driver files to an alternative folder then replace the above path with the alternative path for the driver files.

Click Next

Windows will search the Win2000 folder for the Driver

11. Check that the dialog window displays the path to the folder containing the **OEMn.INF** file (where 'n' = 0,1,2 and so on, depending on your Windows 2000 installation)

Click Next to start the installation

12. Windows will briefly display the progress of the Driver installation.

When complete, Windows will display the Finished Installing dialog window

Click Finish

Windows will now locate and install the individual ports. The time required to complete this depends on the number of boards and ports to be located.

Your RocketPort 550 Windows 2000 Device Driver is now installed

5. View the allocated COM names

Windows configures the port allocation

- 1. View the Windows allocation of ports by **Right Clicking** on the My Computer icon of the desktop
- 2. Select **Properties** from the pop up menu
- 3. Click the **Device Manager** tab
- 4. Click +Ports (COM & LPT)
- 5. Click **OK** to close the window

6. Verifying operation

A test application, called WCOM32 will have been extracted to the folder **c:\Comtrol\Programs\RP550** Simply double click the WCOM32 icon to run the program.

WCOM32 is a Windows 32 MDI application and may be used as a confidence test of the COM ports.

WCOM32 allows you to open a com port, send and receive data, toggle O/P modem signals and view the status of I/P modem signals.

On line help is available.

Please note that WCOM32 was originally written for use with the original RocketPort ASIC based controllers. It can be used with the UART based RocketPort 550 range but features specific to the RocketPort ASIC based controllers are not supported.

7. Portnames Utility

If the COM ports allocated by Windows are not suitable then these can be changed by the use of the Portnames utility. Portnames is an 'AS IS' utility that is provided on request from Comtrol GmbH. See the 'Technical Support' section for contact details

8. Removal

If a controller is no longer required then perform the following procedure prior to computer shutdown, power off and controller physical removal. Note that the procedure described here does not remove the driver files or any intermediate files. These files will remain dormant until a RocketPort 550 or RocketPort/BroadPort 550 Universal controller is re-installed after when they will become active once more without user intervention.

If there is the need to remove all driver and intermediate files then proceed to Appendix A now.

Each installed **RocketPort 550** controller will have two Multifunction device entries within the 'Device Manager' Each entry will include the string **"Comtrol Europe RocketPort 550".**

Each installed **RocketPort/BroadPort 550 Universal** controller has one Multifunction device entry within the Device Manager.

- 1. From the Windows desktop, use the mouse to right click on 'My Computer'.
- 2. Using the mouse left click Properties' from the pop up menu.

3. The *System Properties*' window will appear. Click the 'Hardware tab' and then click the 'Device Manager' button.

Expand the 'Multifunction Adapters' entry. The RP550/BP550 entries will be seen.

(Ensure that View devices by type' is selected otherwise you may not see the Multifunction Adapters' entry. This should be the Windows 2000 default. If not then click the View button' and select View devices by type' from the drop down menu).

4. Highlight each RP550/BP550 entry *(for the card that you wish to remove).* Using the mouse, right click the entry and select 'Uninstall' from the resultant pop up menu. Alternately left click the 'Uninstall' icon on the toolbar.

(note that the 'Uninstall' icon will only appear when the device entry is highlighted).

5. The 'Confirm Device Removal' dialog will appear, Click *OK* to confirm removal

(IMPORTANT: It has been noted during testing, that Windows 2000 may take some time too complete this task, without displaying any progress information.)

- 6. Close 'Device Manager' and click OK to exit 'System Properties'.
- 7. Shutdown and remove power from the PC.
- 8. Remove the RP550/BP550 controller(s). Remember to follow your PC manufacturers instructions regarding the removal of PCi bus adapter cards from the PC.

There is generally no need to remove the device driver *files (.sys file)* or the device information files (.*inf files)*.

If there are no longer any installed RP550/BP550 controllers installed then Windows 2000 will not load the driver. However, the driver files will remain installed on the system's hard disk.

At a later time the RocketPort 550 or RocketPort/BroadPort 550 Universal controllers can be re-installed and the computer restarted. During boot, Windows 2000 will detect the RocketPort 550 or RocketPort/BroadPort 550 Universal controllers and load the drivers.

There is generally no need to remove the device driver from the system.

9. RocketPort 550, RocketPort 550 Universal & BroadPort 550 Universal Connector Pin-outs

RocketPort 550 4 Quad

RocketPort 550 Universal 4 Mini

RocketPort 550 4 RJ45, RocketPort 550 Universal 4 RJ45

RocketPort 550 8 OCTA, RocketPort 550 Universal 8 OCTA

RocketPort 550 8 RJ11, RocketPort Universal 8 RJ11

BroadPort 550 Universal 8 (SMPTE)

BroadPort 550 Universal 16 (SMPTE)

RocketPort 550 8 Port (with dedicated interface box)*

RocketPort 550 16 Port (with dedicated interface box)*

*Includes RocketPort 550 Universal 8 & 16 Port

DB37 pin	DB25 pin	RS232 Signal/Port	DB37 pin	DB25 pin	RS232 Signal/Port
35	2	TxD Port 0	26	2	TxD Port 2
34	3	RxD Port 0	25	3	RxD Port 2
16	4	RTS Port 0	7	4	RTS Port 2
17	5	CTS Port 0	8	5	CTS Port 2
15	6	DSR Port 0	6	6	DSR Port 2
37	7	Signal Gnd Port 0	28	7	Signal Gnd Port 2
33	8	DCD Port 0	24	8	DCD Port 2
36	20	DTR Port 0	27	20	DTR Port 2
18	22	RI Port 0	9	22	RI Port 2
12	2	TxD Port 1	3	2	TxD Port 3
11	3	RxD Port 1	2	3	RxD Port 3
30	4	RTS Port 1	21	4	RTS Port 3
31	5	CTS Port 1	22	5	CTS Port 3
29	6	DSR Port 1	20	6	DSR Port 3
14	7	Signal Gnd Port 1	5	7	Signal Gnd Port 3
10	8	DCD Port 1	1	8	DCD Port 3
13	20	DTR Port 1	4	20	DTR Port 3
32	22	RI Port 1	23	22	RI Port 3

RocketPort 550 4 Quad Cable - 37 way D type fan out to 4 DB25 Male

Pin 19 of the 37 way connector is not used

Pins 1, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 23, 24 and 25 of each 25 way connector are not used.

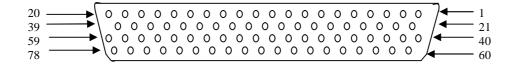
The cable shields and connector metal bodies should be connected.

RocketPort 550, RocketPort 550 Universal 8 OCTA Cable - 78 way D type fan out to 8 DB25 Male

DB78 Pin	DB25 Pin	RS232 Signal/Port	DB78 Pin	DB25 Pin	RS232 Signal/Port
30	2	TxD Port 0	40	2	TxD Port 4
55	3	RxD Port 0	28	3	RxD Port 4
51	4	RTS Port 0	21	4	RTS Port 4
16	5	CTS Port 0	25	5	CTS Port 4
54	6	DSR Port 0	5	6	DSR Port 4
71	7	Signal Gnd Port 0	75	7	Signal Gnd Port 4
35	8	DCD Port 0	43	8	DCD Port 4
49	20	DTR Port 0	22	20	DTR Port 4
36	22	RI Port 0	44	22	RI Port 4
50	2	TxD Port 1	2	2	TxD Port 5
17	3	RxD Port 1	8	3	RxD Port 5
31	4	RTS Port 1	41	4	RTS Port 5
53	5	CTS Port 1	4	5	CTS Port 5
34	6	DSR Port 1	42	6	DSR Port 5
72	7	Signal Gnd Port 1	76	7	Signal Gnd Port 5
33	8	DCD Port 1	23	8	DCD Port 5
32	20	DTR Port 1	3	20	DTR Port 5
15	22	RI Port 1	24	22	RI Port 5
11	2	TxD Port 2	63	2	TxD Port 6
37	3	RxD Port 2	46	3	RxD Port 6
12	4	RTS Port 2	62	4	RTS Port 6
59	5	CTS Port 2	9	5	CTS Port 6
58	6	DSR Port 2	29	6	DSR Port 6
73	7	Signal Gnd Port 2	77	7	Signal Gnd Port 6
39	8	DCD Port 2	48	8	DCD Port 6
13	20	DTR Port 2	61	20	DTR Port 6
20	22	RI Port 2	47	22	RI Port 6
10	2	TxD Port 3	64	2	TxD Port 7
56	3	RxD Port 3	27	3	RxD Port 7
14	4	RTS Port 3	60	4	RTS Port 7
57	5	CTS Port 3	45	5	CTS Port 7
38	6	DSR Port 3	26	6	DSR Port 7
74	7	Signal Gnd Port 3	78	7	Signal Gnd Port 7
18	8	DCD Port 3	6	8	DCD Port 7
52	20	DTR Port 3	1	20	DTR Port 7
19	22	RI Port 3	7	22	RI Port 7

Pin 67of the 78 way connector is not used. Pins 65, 66, 68, 69 and 70 are Signal Ground. Pins 1, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 23, 24 and 25 of each 25 way connector are not used.

The cable shields and connector metal bodies should be connected.

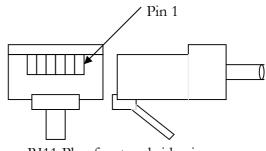


DB44 pin	DB9 pin	RS232 Signal/Port	DB44 pin	DB9 pin	RS232 Signal/Port
2	3	TxD Port 0	25	<u>3</u>	TxD Port 2
17	2	RxD Port 0	39	2	RxD Port 2
32	7	RTS Port 0	9	7	RTS Port 2
18	8	CTS Port 0	40	8	CTS Port 2
1	6	DSR Port 0	24	6	DSR Port 2
19	5	Signal Gnd Port 0	41	5	Signal Gnd Port 2
31	1	DCD Port 0	8	1	DCD Port 2
33	4	DTR Port 0	10	4	DTR Port 2
3	9	RI Port 0	26	9	RI Port 2
36	3	TxD Port 1	13	3	TxD Port 3
5	2	RxD Port 1	28	2	RxD Port 3
21	7	RTS Port 1	43	7	RTS Port 3
6	8	CTS Port 1	29	8	CTS Port 3
35	6	DSR Port 1	12	6	DSR Port 3
7	5	Signal Gnd Port 1	30	5	Signal Gnd Port 3
20	1	DCD Port 1	42	1	DCD Port 3
22	4	DTR Port 1	44	4	DTR Port 3
37	9	RI Port 1	14	9	RI Port 3

RocketPort 550 Universal 4 MINI Cable - 44 way HD type fan out to 4 DB9 Male

RocketPort 550/RocketPort/BroadPort 550 Universal 8 RJ11 Cable Pin Out

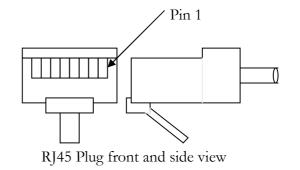
RJ11 pin	RS232 Signals
1	DTR
2	Signal Ground
3	TxD
4	RxD
5	DCD
6	CTS



RJ11 Plug front and side view

RocketPort 550/RocketPort 550 4 RJ45 Cable Pin Out

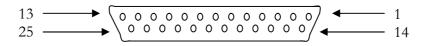
RJ45 pin	RS232 Signals
1	RTS
2	DTR
3	Signal Ground
4	TxD
5	RxD
6	DCD
7	DSR
8	CTS



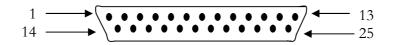
RocketPort 550, RocketPort 550 Universal 8 Port - with 8 DB25 Female RS232 dedicated interface box

and

RocketPort 550, RocketPort 550 Universal 16 Port - with 16 DB25 Female RS232 dedicated interface box



DB25 Female Interface Box Connector



DB25 Male Connector

DB25 Pin	RS232 Signal	RS422 Signal (RocketPort RS232/422 version only)	Universal Interface
2	TxD	*See note	See UI manual
3	RxD	*See note	See UI manual
4	RTS	*See note	See UI manual
5	CTS	*See note	See UI manual
6	DSR	*See note	See UI manual
7	Signal Gnd	*See note	See UI manual
8	DCD	*See note	See UI manual
20	DTR	*See note	See UI manual
15	Not used	RxD+ RxD(B)	See UI manual
17	Not used	RxD- RxD(A)	See UI manual
19	Not used	TxD+ TxD(B)	See UI manual
25	Not used	TxD- TxD(A)	See UI manual

Rocket Port Interface Box DB25 Signals

*Note : All RS232 signals are present in RS422 mode.

The RocketPort interface box can only be used with the RocketPort 550-8 and RocketPort 550-16. These controllers have a single DB25F mounted on the backplate which connects via the RocketPort cable to the interface box. Alternatively the Rocket Port 550-8 and 550-16 controllers may connect to the Comtrol Universal Interface (UI). Refer to the UI manual for connector pin-outs.

The Quad, Octa, RJ11 and RJ45 Rocket Port versions do not support RS422 mode.

BroadPort 550

Each port of the BroadPort 550 can be configurated to be BUS controller or Tributary (SMPTE STANDARD 207M-1997). The user can select for each port the configuration using 2 DIP switches.

The DIP switch S1 has 8 switches and control the ports 1-8. The DIP switch S2 has 8 switches and controls the ports 9-15. The next tables shows S1 S2

BroadPo	rt 550 DIP SWITCH SI
DIP SWITCH S1	Function
switch 1 closed (open)	Port 8 is BUS controller (Tributary)
switch 2 closed (open)	Port 7 is BUS controller (Tributary)
switch 3 closed (open)	Port 6 is BUS controller (Tributary)
switch 4 closed (open)	Port 5 is BUS controller (Tributary)
switch 5 closed (open)	Port 4 is BUS controller (Tributary)
switch 6 closed (open)	Port 3 is BUS controller (Tributary)
switch 7 closed (open)	Port 2 is BUS controller (Tributary)
switch 8 closed (open)	Port 1 is BUS controller (Tributary)

BroadPort 550 DIP SWITCH S1

DIP SWITCH S2	Function
switch 1 closed (open)	Port 16 is BUS controller (Tributary)
switch 2 closed (open)	Port 15 is BUS controller (Tributary)
switch 3 closed (open)	Port 14 is BUS controller (Tributary)
switch 4 closed (open)	Port 13 is BUS controller (Tributary)
switch 5 closed (open)	Port 12 is BUS controller (Tributary)
switch 6 closed (open)	Port 11 is BUS controller (Tributary)
switch 7 closed (open)	Port 10 is BUS controller (Tributary)
switch 8 closed (open)	Port 9 is BUS controller (Tributary)

BroadPort 550 DIP SWITCH S2

BroadPort 550 (16 ports) Interface SCSI68 Signals

SCSI68	RS422 Signals	RS422 Signals
Pin	(Tributary)	(BUS controller)
1	RxD_B Port 1	TxD_B Port 1
2	RxD_A_Port 1	TxD_A_Port 1
3	TxD_B Port 1	RxD_B Port 1
4	TxD_A Port 1	RxD_A Port 1
5	RxD_B Port 2	TxD_B Port 2
6	RxD_A_Port 2	TxD_A_Port 2
7	TxD_B Port 2	RxD_B Port 2
8	TxD_A Port 2	RxD_A Port 2
9	RxD_B Port 3	TxD_B Port 3
10	RxD_A_Port 3	TxD_A_Port 3
11	TxD_B Port 3	RxD_B Port 3
12	TxD_A Port 3	RxD_A Port 3
13	RxD_B Port 4	TxD_B Port 4
14	RxD_A_Port 4	TxD_A_Port 4
15	TxD_B Port 4	RxD_B Port 4
16	TxD_A Port 4	RxD_A Port 4
17	RxD_B Port 5	TxD_B Port 5
18	RxD_A_Port 5	TxD_A_Port 5
19	TxD_B Port 5	RxD_B Port 5
20	TxD_A Port 5	RxD_A Port 5
21	RxD_B Port 6	TxD_B Port 6
22	RxD_A_Port 6	TxD_A_Port 6
23	TxD_B Port 6	RxD_B Port 6
24	TxD_A Port 6	RxD_A Port 6
25	RxD_B Port 7	TxD_B Port 7
26	RxD_A_Port 7	TxD_A_Port 7
27	TxD_B Port 7	RxD_B Port 7
28	TxD_A Port 7	RxD_A Port 7
29	RxD_B Port 8	TxD_B Port 8
30	RxD_A_Port 8	TxD_A_Port 8
31	TxD_B Port 8	RxD_B Port 8
32	TxD_A Port 8	RxD_A Port 8

22	D-D D D- ++ 0	$T_{-}D_{-}D_{-}D_{-} = 0$
33	RxD_B Port 9	TxD_B Port 9
34	RxD_A_Port 9	TxD_A_Port 9
35	TxD_B Port 9	RxD_B Port 9
36	TxD_A Port 9	RxD_A Port 9
37	RxD_B Port 10	TxD_B Port 10
38	RxD_A Port 10	TxD_A Port 10
39	TxD_B Port 10	RxD_B Port 10
40	TxD_A Port 10	RxD_A Port 10
41	RxD_B Port 11	TxD_B Port 11
42	RxD_A Port 11	TxD_A Port 11
43	TxD_B Port 11	RxD_B Port 11
44	TxD_A Port 11	RxD_A Port 11
45	RxD_B Port 12	TxD_B Port 12
46	RxD_A Port 12	TxD_A Port 12
47	TxD_B Port 12	RxD_B Port 12
48	TxD_A Port 12	RxD_A Port 12
49	RxD_B Port 13	TxD_B Port 13
50	RxD_A Port 13	TxD_A Port 13
51	TxD_B Port 13	RxD_B Port 13
52	TxD_A Port 13	RxD_A Port 13
53	RxD_B Port 14	TxD_B Port 14
54	RxD_A_Port 14	TxD_A_Port 14
55	TxD_B Port 14	RxD B Port 14
56	TxD_A Port 14	RxD A Port 14
57	RxD B Port 15	TxD B Port 15
58	RxD A Port 15	TxD A Port 15
59	TxD B Port 15	RxD_B Port 15
60	TxD_A Port 15	RxD_A Port 15
61	 RxD_B Port 15	TxD_B Port 15
62	 RxD_A_Port 15	 TxD_A_Port 15
63	TxD_B Port 15	RxD_B Port 15
64	TxD A Port 15	 RxD_A Port 15
65	GND	GND
66		
67	GND	GND
68	0.12	
00		1

SCSI 68 connector front view



DB9 Pin	RS422 signal	RS422 signal
	(Tributary)	(BUS controller)
1	Frame Ground	Frame Ground
6	GND (TxD signal common)	GND (RxD signal common)
2	TxD_A	RxD_A
7	TxD_B	RxD_B
3	RxD_B	TxD_B
8	RxD_A	TxD_A
4	GND (RxD signal common)	GND (TxD signal common)
9	Frame ground	Frame ground
5	N/A	N/A

BroadPort 550 IF DB9 signals

10. Technical Support

Comtrol has a staff of support technicians available. Telephone support is available daily, Monday through Friday (except holidays) on the US (Central Time) or UK number listed below. Before you call please have the following information available :

Item	Your System Information
RocketPort 550	
RocketPort 550 Universal	
BroadPort 550 Universal	
Model number	
RocketPort 550	
RocketPort 550 Universal	
BroadPort 550 Universal	
Serial number	
RocketPort 550	
RocketPort 550 Universal	
BroadPort 550 Universal	
Device driver version	
Interface type	
Operating system type and release	
PC make, Model and speed	
Details of other cards configured in the PC	

Comtrol GmbH

Unit 2, Staplehurst Business Park Weston on the Green Bicester Oxfordshire OX25 3QU Great Britain Phone :+44 (0) 1869 352740 Fax : +44 (0) 1869 351858 Email : support@comtrol.co.uk Web site : http://www.comtrol.co.uk

The Comtrol Corporation Headquarters are at

6655 Wedgwood Road Suite 120 Minneapolis MN 55311-3646 USA Phone :+1 763 494 4100 Fax : +1 763 494 8992 Email : support@comtrol.com Web site : http://www.comtrol.com FTP site : ftp.comtrol.com telnet : www.comtrol.com

11. Specifications

RocketPort 550 & RocketPort 550 Universal	Specification
Baud rate :	
RP550 PCI 4 (RJ45 and QUAD)	50 to 460.8K baud
RP550 PCI 8 (RJ11 and OCTA)	50 to 115.2K baud
RP550 PCI 8 and 16 Port (uses interface box)	50 to 230.4K baud
RP550 UPCI 4 (RJ45 and QUAD)	50 to 115.2K baud
RP550 UPCI 8 (RJ11 and OCTA)	50 to 115.2K baud
RP550 UPCI 8 and 16 Port (uses I/F box)	50 to 230.4K baud
Note : Throughput (CPS) is dependant upon platform	n, operating system & application s/w
Bus interface 32 Bit PCI (5V) UPCI	
	3.3V)
Control by device driver	
Data bits	5,6, 7 or 8
Parity	Odd, Even, Mark, Space or None
Stop bits	1, 1.5, or 2
Note: Certain combinations of data bits, parity or sto	p bits may not be allowed by some
operating systems.	

BroadPort 550 Universal	Specification			
Baud rate :				
BP 550 UPCI 8 (SMPTE)	50 to 230.4K baud			
BP 550 UPCI 16 (SMPTE)	50 to 230.4K baud			
Note : Throughput (CPS) is dependant upon platform, operating system & application s/w				
Bus interface	UPCI (5V & 3.3V)			
Control by device driver				
Data bits	5,6, 7 or 8			
Parity	Odd, Even, Mark, Space or None			
Stop bits	1, 1.5, or 2			
Note: Certain combinations of data bits, parity or stop bits may not be allowed by some				
operating systems.				

Environmental Condition	Specification
Air temperature :	
System on	0 to 40°C
System off	-20 to 85°C
Humidity (non-condensing)	
System on	8 to 80%
System off	20 to 80%
Altitude	0 to 10,000 feet
MTBF	Greater than 30 years

Product	5V Current	+12V Current	-12V Current

D 1 D 550 4 O 1	24.0		20 1
RocketPort 550 4 Quad	210 mA	20 mA	20 mA
RocketPort 550 4 RJ45	190 mA	20 mA	20 mA
RocketPort 550 8 OCTA	140 mA	120 mA	120 mA
RocketPort 550 8 RJ11	250 mA	80 mA	80 mA
RocketPort 550 8 Port	215 mA	0 mA	0 mA
See note*			
RocketPort 550 16 Port	300 mA	0 mA	0 mA
See note*			
Product	5V Current	+12V Current	-12V Current
RocketPort 550 Universal 4 RJ45	260mA	200mA	200mA
RocketPort 550 Universal 4 Mini	280mA	200mA	200mA
RocketPort 550 Universal 8 OCTA	400mA	400mA	400mA
RocketPort 550 Universal 8 RJ11	315mA	260mA	260mA
RocketPort 550 Universal 8	400mA	0 mA	0 mA
Port See note*			
RocketPort 550 Universal 16	600mA	0 mA	0 mA
Port See note*			

*Note the current figures are for the card only and do not include the attached interface box. Refer to the manual for the RocketPort or Universal interface boxes for current consumption figures and addto the above.

Product	5V Current	+12V Current	-12V Current
BroadPort 550 Universal 8	250 mA	N/A	N/A
BroadPort 550 Universal 16	300 mA	N/A	N/A

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APPENDIX : A

Removal of the Windows 2000 RP550/BP550 device driver files and registry entries

Background

Windows 2000 (W2K) is a plug and play (PnP) operating system and plays an important role in installing kernel device drivers.

During installation, W2K detects new hardware and starts it's *own* installation program *(there is no NT style setup program)* which installs the device driver, including updating the registry, processing user's response to dialog box questions and entries in device information files (.INF files).

The .INF files are supplied with the driver. They are ASCII text files and can be viewed with Notepad. *(it's worth remembering this – you will need it later)*.

When it comes to un-installation, the PnP philosophy means that the hardware is simply removed. On restart W2K will not load the drivers and the device manager entries will not be created. It's as if the H/W and driver were never installed.

Later, if the hardware is re-installed, then on restart, the PnP system will reload the driver, update the device manager and re-create any dynamic registry entries.

However under certain circumstances it may be necessary to 100% remove the driver and all supporting files from the W2K system. Here's how:-

Procedure

Section 1 assume that the H/W and driver are installed and working. Proceed to direct section 2, if you desire to remove files and registry entries following an installation problem.

1. Removal of device manager entry

1.1 Start the 'Device Manager'. The quickest way is to right click on my computer and select 'Properties' from the pop-up menu. When the 'System Properties' dialog appears, left click the 'Device Manager' button.

The device manager displays device information as a 'tree structure'. To expand the entries, click the '+' icon.

1.2 Locate the 'Multifunction adapters' entry and expand.

1.3 Right click each 'Comtrol Europe RocketPort 550.....' entry in turn and select

'Uninstall' from the pop-up menu (or click the toolbar uninstall icon). When the confirmation dialog appears, click OK.

The device manager RocketPort 550 parent device entry will be removed along with attached COM ports. NOTE that this operation may take some time to complete. You must be patient as the dialog may appear to freeze.

When finished, close the device manager.

2. Removal of driver setup information files

These files must be removed to allow a subsequent *'from the beginning'* installation.

2.1 Start W2K explorer. Open the **WINNT\inf folder**. Locate and remove the following two files:-

Rckt550b.inf Rckt550b.PNF

2.2 W2K creates copies of the above and *renames* them. These copies must also be removed.

The filenames are of the form

oem(n).inf oem(n).PNF

where (n) is a W2K assigned number. Depending on the system configuration you may have several of these oem(n) files. You will need to locate which one is for the RocketPort 550.

Note that explorer may not display the .inf extension.

The .inf files are ASCII file and so you can open them under notepad (note the .PNF is NOT an ASCII file).

To find the oem file assigned to the RocketPort 550 you can open each oem(n).file as required and look for the 'Rckt550.inf' string in the comment field.

Once you know which oem(n).inf file is the copy, then delete it and the corresponding .PNF file.

Note: You could use the explorer 'search' feature to find the file.

- i) Left click toolbar 'search' icon
- ii) Enter 'oem*.inf' (without the quotes) into the *search for...* edit box
- iii) Enter 'Rckt550.in' (without the quotes) into the *Containing text* edit box
- iv) Enter '\WINNT\inf' (without the quotes) into the *Look in* edit box
- v) Left click the *Search Now* button

The name will appear in the search results. Note that the extension may not be displayed but the type field should display 'setup information'.

If we assume that the filename is oem0 then the files to delete would be

oem0.inf oem0.PNF

Note that explorer may not display the .inf extension.

3. Removal of driver and supporting files

You do not necessarily need to remove these files. If left alone then they just take up a small amount of disk space. The files will simply be overwritten by later installations. However, if you wish to remove them then:-

3.1 Using W2K explorer open the folder **WINNT\system32\drivers** 3.2 remove the following files

RcktMf.sys RcktMfuf.sys RcktSer.sys 3.3. Locate the folder containing the driver installation files. This is the folder to which the files were extracted to from the distribution file Win2Kdrv.exe

It makes sense to leave this folder intact unless the R550 driver is never going to be reinstalled in which case delete the contents and the folder.

4. Removal of Registry Entries

I have found that it is not absolutely necessary to remove the registry entries for the R550 driver as I have found that they do not affect subsequent because they are merely overwritten.

However if you really must then:-

4.1 Run regedit4.2 expand the registry tree

HKEY_LOCAL_MACHINE/SYSTEM/CurrentControlSet/Services

4.3 Remove the following subkeys

Rckt550 RcktMf Rcktmfuf

The driver files *(.sys)* and setup information files *(.inf and .PNF)* are now removed. After restart, assuming that RocketPort 550 or RocketPort/BroadPort 550 Universal cards are physically installed then Windows 2000 will detect these cards as new hardware and initiate the 'Add New Hardware' wizard.