



QUICK START WinNT4 DRIVER and HARDWARE REFERENCE CARD

RocketPort 550 Range RocketPort 550 Universal Range



This Guide.

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- 1. Before you begin**
- 2. Installing Your controller hardware**
- 3. Extracting the driver files to the PC's hard disk**
- 4. Installing the WinNT4 Device Driver**
- 5. Un-installing the WinNT4 Device river**
- 6. Cable Types**
- 7. Technical Support**
- 8. Specifications**
- 9. Copyright and Trademarks**

1. Before you begin

The Windows NT 4 device driver for the RocketPort 550 is supplied as a single self extracting file. The driver supports the original RocketPort 550 range as well as the recently introduced RocketPort 550 PCI Universal range.

The original RocketPort 550 PCI controller will be referred to as RocketPort 550

The RP550 PCI Universal controllers (*referred to as Universal 550 within the setup program*) 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 RocketPort 550 PCI Universal controller will be referred to as RocketPort 550 Universal

Prior to installing the Windows NT4 device driver, the driver files must be extracted to a folder on your PC's hard disk.. See section 3.

2. Installing Your controller hardware



Take care when you handle the RocketPort 550 PCI 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 Universal 550 cards can be installed in 3.3V or 5V 32 Bit PCI slots.

Hardware Installation Procedure

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's 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.

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

Using Windows Explorer locate the self extract file which contains the driver.

If you have a Control supplied CD then open the folder **\WinNT4** (on the CD) then double click the file **WinNT4drv.exe**

(If you have downloaded the driver from Control'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:\Control\Installations\Rp550nt4** 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:\Control\Installations\Rp550nt4** If you have changed the target folder you must remember to specify this path when required during installation.

4. Installing the WinNT4 Device Driver

This SETUP program allows you to INSTALL or DE-INSTALL a Windows NT4 device driver for the RocketPort 550 and/or RocketPort 550 Universal controllers.

1. From the start menu select **Run**
2. Enter **c:\Control\Installations\Rp550nt4\Setup**

then Click **OK**

Note

If you extracted the driver files to a different folder then enter the path to that folder

Alternatively, click the Run dialog's browse button and find the RocketPort 550 /RocketPort 550 Universal Windows NT 4 setup file using the browse dialog.

3. The welcome dialog will appear.
Click **Next**
4. The Install/Uninstall dialog will be displayed.
Select **INSTALL**
Click **Next**
5. The license agreement dialog box will appear
Click **Yes** to accept the license and continue
Or
Click **No** to decline and abort the installation
6. The select starting COM port dialog box will appear.

Enter the starting COM port NUMBER or use the drop down list
(click the 'down' arrow) to select a starting com port number.

Note: The starting COM port number specifies the first RocketPort 550/RocketPort 550 Universal COM port and the beginning of the range of COM ports allocated to the installed RocketPort 550/RocketPort 550 Universal These COM ports must be free for use by the Controller before installation.

Wait On Tx should normally be left un-checked unless the application requires the option. See the following note:-

Note: The 'Wait On Tx' option is unchecked by default. For each port, an application 'write' will complete when the last data fragment is written to the TX FIFO but before all the data has been physically transmitted. Each port has a 128 byte deep TX FIFO and leaving 'Wait On Tx' un-checked may improve throughput.

However some applications implicitly assume that a 'write' will complete when all data is physically transmitted. If such an application is to be used then check the 'Wait On Tx' option.

Then Click **Next**

The device driver and application files will be installed and the message 'The operation was completed successfully' will be displayed.

7. When complete the Install/Uninstall dialog will be displayed with the 'Finish Button' displayed.

Click **Finish**

8. The system settings change dialog will appear. You **must** restart your computer so that the driver will be started

Click **YES** to invoke the restart.

Your RocketPort 550/ RocketPort 550 Universal WinNT4 Driver is now installation is complete.

The driver and application files have been copied to the relevant folders. You may delete the installation folder C:\Control\Installations\Rp550nt4 and its contents should you wish to do so

Viewing the COM ports

1. From the start menu, select settings, click **Control Panel**
2. Double-click **Ports**

You will see the new COM Ports listed they are numbered, starting from COM port that you specified during the installation .

For example, the installation of a single 4 port RocketPort 550 card, starting at COM 5 will show the new ports as COM5, COM6, COM7 and COM8

Verifying operation

A test application, called WCOM32 will have been extracted to the folder
c:\Control\Programs\Rp550nt4

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/ RocketPort 550 Universal range but features specific to the RocketPort ASIC based controllers are not supported.

5. Un-installing the WinNT4 Device Driver

If you wish to un-install the WinNT4 device Driver, do the following

1. From the start menu select **Run**
2. Enter **c:\Control\programs\Rp550nt4\Setup**

then Click **OK**

Note

If you extracted the driver files to a different drive: folder then enter the path to that folder

Alternatively, click the Run dialog's browse button and find the RocketPort 550 /RocketPort 550 Universal Windows NT 4 setup file using the browse dialog.

3. The welcome dialog will appear.
Click **Next**
4. The Install/Uninstall dialog will be displayed.
Select **UNINSTALL**
Click **Next**
5. When complete the Install/Uninstall dialog will be displayed with the 'Finish button'
Click **Finish**

6. The Systems settings change dialog will appear.

You must restart your computer before the new settings will take effect

Click **Yes** to invoke the restart.

7. As the SETUP.EXE program is running the de-installation function it cannot be automatically removed and must be manually deleted.

Your WinNT4 Driver Uninstall is complete.

6. Cable Types

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 550 Universal 8 RJ11

RocketPort 550 8 Port (with dedicated interface box)*

RocketPort 550 16 Port (with dedicated interface box)*

***Includes RocketPort 550 Universal 4, 8 & 16 Port**

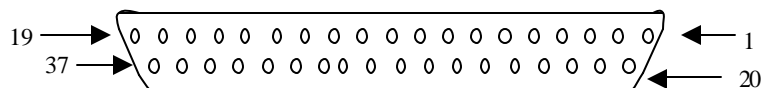
RocketPort 550 4 Quad Cable - 37 way D type fan out to 4 DB25 Male

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

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.

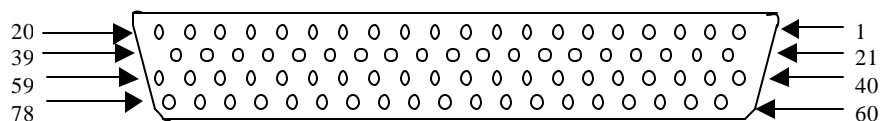


RocketPort 550/RocketPort 550 Universal 8 OCTA Cable - 78 way D type fan out to 8 DB25 Male

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 67 of 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.

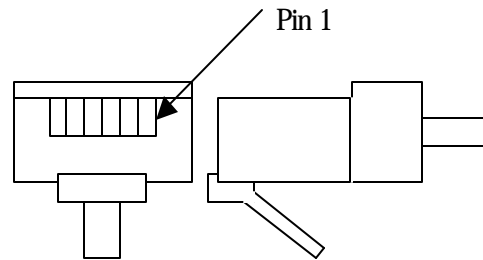


RocketPort 550 Universal 4 MINI Cable - 44 way HD type fan out to 4 DB9 Male

DB44 pin	DB9 pin	RS232 Signal/Port	DB44 pin	DB9 pin	RS232 Signal/Port
2	3	TxD Port 0	25	3	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/RocketPort 550 Universal 8 RJ11 Cable Pin Out

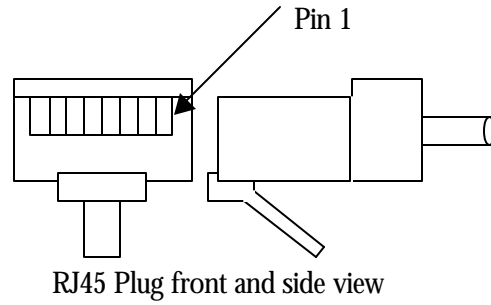
RJ11 pin	RS232 Signals
1	DTR
2	Signal Ground
3	TxD
4	RxD
5	DCD
6	CTS



RJ11 Plug front and side view

RocketPort 550/RocketPort 550 Universal 4 RJ45 Cable Pin Out

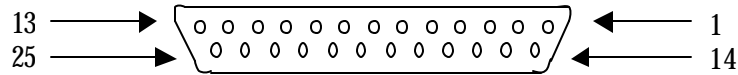
RJ45 pin	RS232 Signals
1	RTS
2	DTR
3	Signal Ground
4	TxD
5	RxD
6	DCD
7	DSR
8	CTS



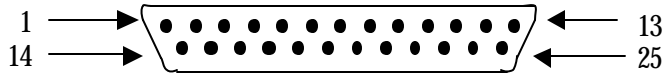
RocketPort 550/RocketPort 550 Universal 8 Port - with 8 DB25 Female RS232 dedicated interface box

and

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



DB25 Female Interface Box Connector



DB25 Male Connector

Rocket Port Interface Box DB25 Signals

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

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

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

The Quad, Octa, RJ11 and RJ45 RocketPort 550 versions do not support RS422 mode.

7. 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 model number	
RocketPort 550 serial number	
RocketPort 550 device driver version	
Interface type	
Operating system type and release	
PC make, Model and speed	
Details of other cards configured in the PC	

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8. Specifications

RocketPort 550 & RocketPort 550 Universal	Specification
Baud rate :	
RS 232 (4 RJ45 and Quad)	50 to 460.8K baud
RS 232 (8 RJ11 and Octa)	50 to 115.2K baud
RS 232/422 (8 and 16 Port with interface box)	50 to 230.4K baud
RS232 (UNIVERSAL RJ45/RJ11/OCTA/MINI)	50 to 115.2K baud
RS232 /422 (UNIVERSAL 8 & 16 Port with I/F box)	50 to 230.4K baud
Note : Baud rate is dependant upon hardware and operating system configuration	
Bus interface	PCI
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
RocketPort 550 4 Quad	210 mA	20 mA	20 mA
RocketPort 550 4 RJ45	190 mA	20 mA	20 mA
Universal 550 4 Port	190mA	N/A	N/A
RocketPort 550 8 OCTA	140 mA	120 mA	120 mA
RocketPort 550 8 RJ11	250 mA	80 mA	80 mA
RocketPort 550 8 Port See note*	215 mA	0 mA	0 mA
RocketPort 550 16 Port See note*	300 mA	0 mA	0 mA

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 Port See note*	400mA	0 mA	0 mA
RocketPort 550 Universal 16 Port See note*	600mA	0 mA	0 mA

***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 add to the above.**

9. Copyright and Trademarks.

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