

Radical System Solutions

NeXT Serial & Modem Cables



Radical Solution (TM) #6 - November 1996

[NeXT MiniDin-8 Serial I/O Socket Pinouts](#)

[NeXT MiniDin-8 Socket Compatibility](#)

[NeXT 68040 MiniDin-8 Serial I/O Sockets](#)

[NeXT 68030 MiniDin-8 Serial I/O Sockets](#)

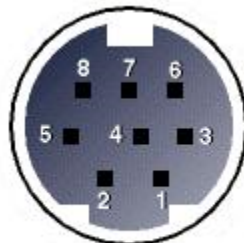
[NeXT 68040 Modem Cable](#)

[NeXT 68030 Modem Cable](#)

[NeXT 68040 NULL Modem Cable](#)

[NeXT to NeXT MC68040-based Cable](#)

NeXT MiniDin-8 Serial I/O Socket Pinouts



NeXT MiniDIN-8 Socket

NeXT MiniDin-8 Socket Compatibility

Serial ports A and B are 8-pin miniature DIN (miniDIN-8) sockets. Both ports on a 68040-based NeXT computer are RS-423 compatible; the ports are RS-422 compatible (though different) on 68030-based machines.

Although the 68040-based NeXT serial ports are RS-423 compatible, it is possible to use the same cables and modem settings as used with the 68030-based RS-422 serial ports, though hardware flow control is not supported in such configurations. To use port/modem hardware flow control, you must have cables configured as described in this document.

To be certain that a cable works with a given modem, check the modem's manual to see whether the DSR (Data Signal Ready) modem signal can be controlled so that it is asserted only when a remote carrier is detected, and remains asserted until the modem carrier drops.

RS-423 Compatible: NeXTstation, NeXTstation Color, NeXTcube 68040

NeXT MC68040-based MiniDin-8 Serial I/O Sockets

What follows is the pinout description for NeXT MC68040-based MiniDin-8 Serial I/O Sockets.

You cannot use an unmodified Macintosh modem cable on a 68040 NeXT!

68040 Ports A and B (RS-423, RS-232)

<i>68040 Socket Pin</i>	<i>Socket Pin Assignment</i>	<i>Pin / Signal Description</i>
1	DTR	Data Terminal Ready
2	DCD	Data Carrier Detect
3	TXD	Transmit Data
4	GND	Signal Ground
5	RXD	Receive Data
6	RTS	Request To Send
7	RTXC	Receive / Transmit Clock
8	CTS	Clear To Send

NeXT MC68030-based MiniDin-8 Serial I/O Sockets

The following table is for 68030 Port A (RS-422)

The NeXT 68030 serial port A has the same pinout configuration as that of the A serial port of the Macintosh Plus and SE. So, on 68030 port A, Macintosh modem cables can be used with most, but not all, Macintosh modems.

<i>68030-A Socket Pin</i>	<i>Socket Pin Assignment</i>	<i>Pin / Signal Description</i>
1	DTR	Data Terminal Ready
2	CTS	Clear To Send
3	TXD-	Transmit Data Negative
4	GND	Signal Ground
5	RXD-	Receive Data Negative
6	TXD+	Transmit Data Positive
7	DCD ...	Data Carrier Detect
	... or RTXC	Receive / Transmit Clock
8	RXD+	Receive Data Positive

The following table is for 68030 Port B (RS-422)

The NeXT 68030 serial port B has a pinout configuration which is incompatible with that of the B serial port on the Macintosh Plus (whose pin 7 is NC), and on the Macintosh SE (whose pin 7 is GPIa).

<i>68030-B Socket Pin</i>	<i>Socket Pin Assignment</i>	<i>Pin / Signal Description</i>
1	DTR	Data Terminal Ready
2	CTS	Clear To Send
3	TXD-	Transmit Data Negative
4	GND	Signal Ground
5	RXD-	Receive Data Negative
6	TXD+	Transmit Data Positive
7	+5 VDC	Power For Device
8	RXD+	Receive Data Positive

NeXT MC68040-to-Modem Cable (miniDIN-8M to DB-25M)

This is a MALE PLUG to MALE PLUG Cable!

This is a NeXT 68040 port A or B modem cable specification. Note modem lines 2 and 3 are crossed.

<i>68040 Socket Pin</i>	<i>68040 Pin Assignment</i>	<i>Pin / Signal Description</i>	<i>Modem Pin Assignment</i>	<i>Modem Socket Pin</i>
1	DTR	Data Terminal Ready	DTR	20
2	DCD	Data Carrier Detect	DCD	8
3	TXD	Transmit Data	TXD	2
4	GND	Signal Ground	GND	7
5	RXD	Receive Data	RXD	3
6	RTS	Request To Send	RTS	4
7	RTXC	Receive/Transmit Clock	n/c	-
8	CTS	Clear To Send	CTS	5

NeXT MC68030 Port A-to-Modem Cable (miniDIN-8M to DB-25M)

This is a MALE PLUG to MALE PLUG Cable!

This is a NeXT 68030 port A ONLY modem cable specification.

<i>68030-A Socket Pin</i>	<i>68030-A Pin Assignment</i>	<i>Pin / Signal Description</i>	<i>Modem Pin Assignment</i>	<i>Modem Socket Pin</i>
1	DTR	Data Terminal Ready	DTR	20
2	CTS	Clear To Send	CTS	5
3	TXD-	Transmit Data -	n/c	-

4	GND	Signal Ground	GND	7
5	RXD-	Receive Data -	n/c	-
6	TXD+	Transmit Data +	TXD	2
7	DCD/RTXC	Data Carrier Detect	DCD	8
8	RXD+	Receive Data	RXD	3

NeXT MC68040 NULL Modem Cable (miniDIN-8M to DB-25M)

This is a MALE PLUG to MALE PLUG Cable!

This is a NeXT MC68040 port A or B NULL Modem cable specification.

<i>68040 Socket Pin</i>	<i>68040 Pin Assignment</i>	<i>Pin / Signal Description</i>	<i>Modem Pin Assignment</i>	<i>Modem Socket Pin</i>
1	DTR	DTR --> DCD	DCD	8
2	DCD	DCD <-- DTR	DTR	20
3	TXD	Transmit->Receive	RXD	3
4	GND	Signal Ground	GND	7
5	RXD	Receive<-transmit	TXD	2
6	RTS	RTS --> CTS	CTS	5
7	RTXC	Receive/Transmit Clock	n/c	-
8	CTS	CTS <-- RTS	RTS	4

NeXT to NeXT MC68040 Cable (miniDIN-8M to miniDIN-8M)

This is a MALE PLUG to MALE PLUG Cable!

NeXT MC68040 port A or B to NeXT 68040 port A or B cable specification.

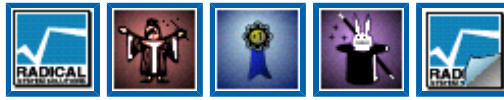
<i>68040 Socket Pin</i>	<i>68040 Pin Assignment</i>	<i>Pin / Signal Description</i>	<i>68040 Pin Assignment</i>	<i>68040 Socket Pin</i>
1	DTR	DTR --> DCD	DCD	2
2	DCD	DCD <-- DTR	DTR	1
3	TXD	Transmit->Receive	RXD	5
4	GND	Signal Ground	GND	4
5	RXD	Receive<-transmit	TXD	3
6	RTS	RTS --> CTS	CTS	8
7	RTXC	Receive/Transmit Clock	n/c	-
8	CTS	CTS <-- RTS	RTS	6

* A special "Thanks!" to Paul McCabe Kampu for his corrections!

RADICAL SOLUTION (TM) #6 - NeXT Serial / Modem Cables

COPYRIGHT: Radical System Solutions, Inc.
Anaheim Hills, California
Phone: (714) 280-1619
E-mail: solutions@radical.com
Permission granted to distribute unmodified with
copyright and disclaimer intact.

DISCLAIMER: This Radical Solution (TM) is distributed on an
"as is" basis with no warranty expressed or implied.
Use at your own risk. Your mileage may vary.



[[Company](#) | [People](#) | [Products](#) | [Solutions](#) | [ToHome](#)]

Please refer all comments and inquiries to Info@Radical.Com

Copyright © 1992-1998 Radical System Solutions, Inc. All rights reserved.

