



# Tech Info Library

## Serial NuBus Card: Pinout Information (7/93)

Article Created: 20 November 1990

### Article Change History

07/21/93 - REVIEWED

- For technical accuracy.

### TOPIC -----

I need pin-out information for the Serial NuBus (NB) Card.

### DISCUSSION -----

Here are Apple Serial NB Card D-62 Connector Pinouts. There are two types of cables, the Hydra cable with four RS-232-C connectors, and the V.35 cable with one RS-232-C connector and one V.35 connector.

The term "RS-232" as used here refers to a signal that is single-ended and driven between +/-12V.

The terms "RS-422" and "X.21" as used here refer to a signal that is differential and driven +/-, measured differentially.

| Pin # | Signal     | Function                                                    |
|-------|------------|-------------------------------------------------------------|
| ----- | -----      | -----                                                       |
| 1     | +CA1F      | X.21 Control, +CHA1, OUTPUT                                 |
| 3     | -CA1F      | X.21 Control, -CHA1, OUTPUT                                 |
| 6     | +CB1F      | X.21 Control, +CHB1, OUTPUT                                 |
| 8     | -CB1F      | X.21 Control, -CHB1, OUTPUT                                 |
| 16    | +IA1       | X.21 INDICATION, +CHA1, INPUT                               |
| 44    | 1DCDA/-IA1 | RS-232 Data Carrier Detect/X.21<br>INDICATION, -CHA1, INPUT |
| 11    | +IB1       | X.21 INDICATION, +CHB1, INPUT                               |
| 49    | 1DCDB/-IB1 | RS-232 Data Carrier Detect/X.21<br>INDICATION, -CHB1, INPUT |
| 62    | GND_1      | CHA1 GND                                                    |
| 57    | GND_2      | CHB1 GND                                                    |

|    |           |                                           |
|----|-----------|-------------------------------------------|
| 52 | GMD_3     | CHA2 GND                                  |
| 47 | GND_4     | CHB2 GND                                  |
| 41 | GND_5     | EXTRA GND                                 |
| 37 | GND_6     | EXTRA GND                                 |
| 2  | 232TXDA1  | TX DATA, CHA1, RS-232, OUTPUT             |
| 7  | 232TXDB1  | TX DATA, CHB1, RS-232, OUTPUT             |
| 12 | 232TXDA2  | TX DATA, CHA2, RS-232, OUTPUT             |
| 17 | 232TXDB2  | TX DATA, CHB2, RS-232, OUTPUT             |
| 4  | 1RTSA     | READY TO SEND, CHA1, RS-232, OUTPUT       |
| 9  | 1RTSB     | READY TO SEND, CHB1, RS-232, OUTPUT       |
| 14 | 2RTSA     | READY TO SEND, CHA2, RS-232, OUTPUT       |
| 19 | 2RTSB     | READY TO SEND, CHB2, RS-232, OUTPUT       |
| 5  | 1CTSA     | CLEAR TO SEND, CHA1, RS-232, INPUT        |
| 10 | 1CTSB     | CLEAR TO SEND, CHB1, RS-232, INPUT        |
| 15 | 2CTSA     | CLEAR TO SEND, CHA2, RS-232, INPUT        |
| 20 | 2CTSB     | CLEAR TO SEND, CHB2, RS-232, INPUT        |
| 43 | 1DSRA     | DATA SET READY, CHA1, RS-232, INPUT       |
| 48 | 1DSRB     | DATA SET READY, CHB1, RS-232, INPUT       |
| 53 | 2DSRA     | DATA SET READY, CHA2, RS-232, INPUT       |
| 58 | 2DSRB     | DATA SET READY, CHB2, RS-232, INPUT       |
| 45 | 1DTRA     | DATA TERMINAL READY, CHA1, RS-232, OUTPUT |
| 50 | 1DTRB     | DATA TERMINAL READY, CHB1, RS-232, OUTPUT |
| 55 | 2DTRA     | DATA TERMINAL READY, CHA2, RS-232, OUTPUT |
| 60 | 2DTRB     | DATA TERMINAL READY, CHB2, RS-232, OUTPUT |
| 46 | 1RIA      | RING INDICATOR, CHA1, RS-232, INPUT       |
| 51 | 1RIB      | RING INDICATOR, CHB1, RS-232, INPUT       |
| 56 | 2RIA      | RING INDICATOR, CHA2, RS-232, INPUT       |
| 61 | 2RIB      | RING INDICATOR, CHB2, RS-232, INPUT       |
| 54 | 2DCDA     | DATA CARRIER DETECT, CHA2, RS-232, INPUT  |
| 59 | 2DCDB     | DATA CARRIER DETECT, CHB2, RS-232, INPUT  |
| 39 | 2RXCA     | RECEIVE CLOCK, CHA2, RS-232, INPUT        |
| 40 | 2RXCB     | RECEIVE CLOCK, CHB2, RS-232, INPUT        |
| 38 | 2TXCA     | TRANSMIT CLOCK, CHA2, RS-232, INPUT       |
| 42 | 2TXCB     | TRANSMIT CLOCK, CHB2, RS-232, INPUT       |
| 13 | 2TXDA     | RECEIVE DATA, CHA2, RS-232, INPUT         |
| 18 | 2TXDB     | RECEIVE DATA, CHB2, RS-232, INPUT         |
| 21 | +422TXCA1 | +TRANSMIT CLOCK, CHA1, RS-422, INPUT      |
| 22 | -422TXCA1 | -TRANSMIT CLOCK, CHA1, RS-422, INPUT      |
| 29 | +422TXCB1 | +TRANSMIT CLOCK, CHB1, RS-422, INPUT      |
| 30 | -422TXCB1 | -TRANSMIT CLOCK, CHB1, RS-422, INPUT      |
| 25 | +422RXCA1 | +RECEIVE CLOCK, CHA1, RS-422, INPUT       |

|    |           |                                      |
|----|-----------|--------------------------------------|
| 26 | -422RXCA1 | -RECEIVE CLOCK, CHA1, RS-422, INPUT  |
| 33 | +422RXCB1 | +RECEIVE CLOCK, CHB1, RS-422, INPUT  |
| 34 | -422RXCB1 | -RECEIVE CLOCK, CHB1, RS-422, INPUT  |
| 27 | +422TXDA1 | +TRANSMIT DATA, CHA1, RS-422, OUTPUT |
| 28 | -422TXDA1 | -TRANSMIT DATA, CHA1, RS-422, OUTPUT |
| 35 | +422TXDB1 | +TRANSMIT DATA, CHB1, RS-422, OUTPUT |
| 36 | -422TXDB1 | -TRANSMIT DATA, CHB1, RS-422, OUTPUT |
| 23 | +422RXDA1 | +RECEIVE DATA, CHA1, RS-422, INPUT   |
| 24 | -422RXDA1 | -RECEIVE DATA, CHA1, RS-422, INPUT   |
| 31 | +422RXDB1 | +RECEIVE DATA, CHB1, RS-422, INPUT   |
| 32 | -422RXDB1 | -RECEIVE DATA, CHB1, RS-422, INPUT   |

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Keywords: <None>

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