

The Embedded I/O Company



TA112

32 Pair Twinax Cable

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User Manual

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TA112-10R 32 Pair Twinax Cable

0.6 m 32 Pair Twinax Ribbon with Samtec Rugged EdgeRate® male connector

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Style Conventions

Hexadecimal characters are specified with prefix 0x, i.e. 0x029E (that means hexadecimal value 029E).

For signals on hardware products, an 'Active Low' is represented by the signal name with # following, i.e. IP_RESET#.

Access terms are described as:

| | |
|-----|------------|
| W | Write Only |
| R | Read Only |
| R/W | Read/Write |
| R/C | Read/Clear |
| R/S | Read/Set |

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1 **Product Description**

The TA112 is a 32 Pair Twinax Ribbon cable that allows easy access to TEWS modules with Samtec Rugged EdgeRate® female connector like TXMC638 or TXMC636. It provides Pin 1 to Pin N-1 connection between its connectors. Always two wires are constructed as twinax cable.

The differential impedance of the twinax cable is 100 Ohm and the operating temperature is -25 °C to +125°C.

The TA112 32 Pair Twinax cable in conjunction with a TA206 8 Port RJ45 terminal block could be used for prototyping and also for series.

The cable length is 0.6 m and the permissible maximum voltage for the TA112 is 30V DC.

2 Cable Pin Assignment

The 32 Pair Twinax cable provides a Pin 1 to Pin N-1 connection between the ERDP male connectors P1 and P2. Always two pins are connected to one Twinax cable.

| | P1 ERDP male | P2 ERDP male |
|---------------|-----------------|-----------------|
| usage | Pin No. | Pin No. |
| CASE | 1 | 97 |
| Diff. Pair 01 | 3 | 95 |
| | 5 | 93 |
| CASE | 7 | 91 |
| Diff. Pair 03 | 9 | 89 |
| | 11 | 87 |
| CASE | 13 | 85 |
| Diff. Pair 05 | 15 | 83 |
| | 17 | 81 |
| CASE | 19 | 79 |
| Diff. Pair 07 | 21 | 77 |
| | 23 | 75 |
| CASE | 25 | 73 |
| Diff. Pair 09 | 27 | 71 |
| | 29 | 69 |
| CASE | 31 | 67 |
| Diff. Pair 11 | 33 | 65 |
| | 35 | 63 |
| CASE | 37 | 61 |
| Diff. Pair 13 | 39 | 59 |
| | 41 | 57 |
| CASE | 43 | 55 |
| Diff. Pair 15 | 45 | 53 |
| | 47 | 51 |
| CASE | 49 | 49 |
| Diff. Pair 17 | 51 | 47 |
| | 53 | 45 |
| CASE | 55 | 43 |
| Diff. Pair 19 | 57 | 41 |
| | 59 | 39 |
| CASE | 61 | 37 |
| Diff. Pair 21 | 63 | 35 |
| | 65 | 33 |
| CASE | 67 | 31 |

| | P1 ERDP male | P1 ERDP male |
|---------------|-----------------|-----------------|
| usage | Pin No. | Pin No. |
| CASE | 2 | 98 |
| Diff. Pair 02 | 4 | 96 |
| | 6 | 94 |
| CASE | 8 | 92 |
| Diff. Pair 04 | 10 | 90 |
| | 12 | 88 |
| CASE | 14 | 86 |
| Diff. Pair 06 | 16 | 84 |
| | 18 | 82 |
| CASE | 20 | 80 |
| Diff. Pair 08 | 22 | 78 |
| | 24 | 76 |
| CASE | 26 | 74 |
| Diff. Pair 10 | 28 | 72 |
| | 30 | 70 |
| CASE | 32 | 68 |
| Diff. Pair 12 | 34 | 66 |
| | 36 | 64 |
| CASE | 38 | 62 |
| Diff. Pair 14 | 40 | 60 |
| | 42 | 58 |
| CASE | 44 | 56 |
| Diff. Pair 16 | 46 | 54 |
| | 48 | 52 |
| CASE | 50 | 50 |
| Diff. Pair 18 | 52 | 48 |
| | 54 | 46 |
| CASE | 56 | 44 |
| Diff. Pair 20 | 58 | 42 |
| | 60 | 40 |
| CASE | 62 | 38 |
| Diff. Pair 22 | 64 | 36 |
| | 66 | 34 |
| CASE | 68 | 32 |

| | P1 ERDP male | P2 ERDP male | | P1 ERDP male | P1 ERDP male |
|---------------|-----------------|-----------------|---------------|-----------------|-----------------|
| usage | Pin No. | Pin No. | usage | Pin No. | Pin No. |
| Diff. Pair 23 | 69 | 29 | Diff. Pair 24 | 70 | 30 |
| | 71 | 27 | | 72 | 28 |
| CASE | 73 | 25 | CASE | 74 | 26 |
| Diff. Pair 25 | 75 | 23 | Diff. Pair 26 | 76 | 24 |
| | 77 | 21 | | 78 | 22 |
| CASE | 79 | 19 | CASE | 80 | 20 |
| Diff. Pair 27 | 81 | 17 | Diff. Pair 28 | 82 | 18 |
| | 83 | 15 | | 84 | 16 |
| CASE | 85 | 13 | CASE | 86 | 14 |
| Diff. Pair 29 | 87 | 11 | Diff. Pair 30 | 88 | 12 |
| | 89 | 9 | | 90 | 10 |
| CASE | 91 | 7 | CASE | 92 | 8 |
| Diff. Pair 31 | 93 | 5 | Diff. Pair 32 | 94 | 6 |
| | 95 | 3 | | 96 | 4 |
| CASE | 97 | 1 | CASE | 98 | 2 |

Table 2-1 : TA112 Cable 1 to X2 Pin Assignment

3 Assembly Drawing

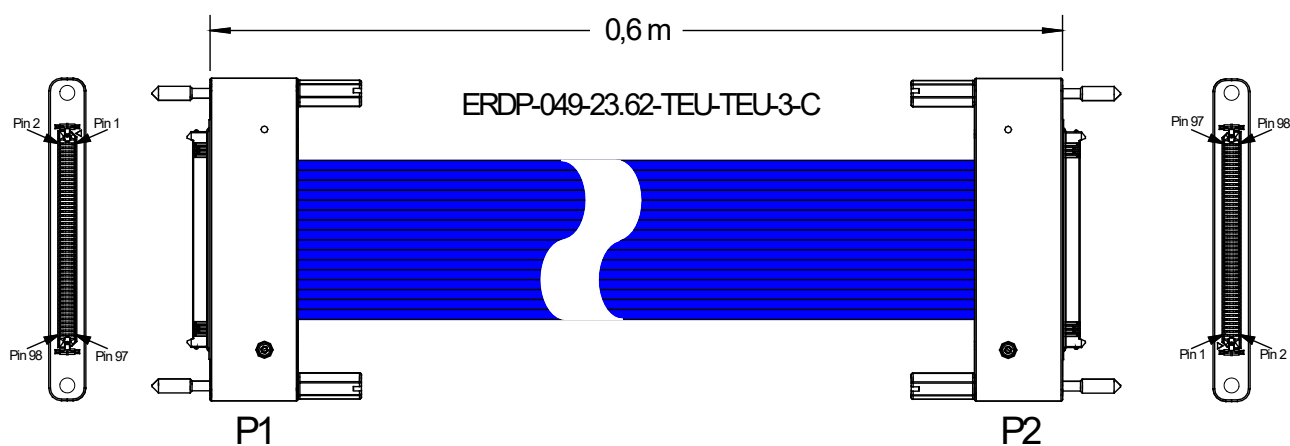


Figure 3-1 : TA112 Assembly Drawing