



# SuperFly<sup>®</sup> to AlphaLink<sup>™</sup> Flex Jumpers



## Recommended Connector Pairs

### SERIES 171

# AlphaLink<sup>®</sup> SL Flex Jumpers

The easiest and fastest way to incorporate flexible circuit cabling in your high-performance application

Glenair AlphaLink<sup>®</sup> SL I/O-to-board jumper assemblies are cataloged according to I/O connector type. Glenair currently offers six families of AlphaLink<sup>®</sup> jumpers for Series 801 and 804 Mighty Mouse, Series 79 Micro-Crimp, MIL-DTL-83513 Micro-D, Series 89 Nanominiature circular and rectangular, and our ultraminiature Series 88 SuperFly<sup>®</sup>. Flex-to-board solutions available in each family are designed to optimize weight and package size reduction as well as maintain electrical performance equivalent with I/O connector performance\*.



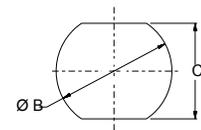
\* Contacts mapped 1-to-1 from I/O to B/L connector (unused B/L contacts not connected). For alternative wire schedules, please consult factory.

- Solderless connection allows fast yet rugged PC board mating
- Easy ordering of high-performance I/O connector-to-board flex jumpers
- Ideal for rapid prototyping
- Chemically etched, copper-clad polyimide flex circuits offer excellent temperature tolerance, dimensional stability, and reduced size and weight
- A high-availability, fast-turn catalog solution
- Designed for optimal electrical performance, including matched-impedance applications
- Superior electrical and mechanical performance compared to other cabling options

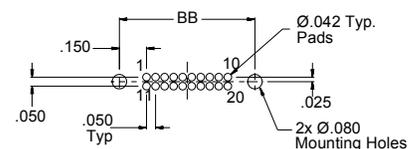
### 880-034 AND 881-021 DIMENSIONS

| Shell Size | I/O Connector Dimensions |       |       |       |         |       |
|------------|--------------------------|-------|-------|-------|---------|-------|
|            | Ø A                      |       | Ø B   |       | C Flats |       |
|            | In                       | mm    | In    | mm    | In      | mm    |
| A          | 0.372                    | 9.45  | 0.265 | 6.73  | 0.222   | 5.64  |
| B          | 0.392                    | 9.96  | 0.283 | 7.19  | 0.241   | 6.12  |
| C          | 0.412                    | 10.46 | 0.305 | 7.75  | 0.261   | 6.63  |
| D          | 0.432                    | 10.97 | 0.324 | 8.23  | 0.281   | 7.14  |
| E          | 0.451                    | 11.46 | 0.344 | 8.74  | 0.300   | 7.62  |
| F          | 0.471                    | 11.96 | 0.364 | 9.25  | 0.320   | 8.13  |
| G          | 0.490                    | 12.45 | 0.383 | 9.73  | 0.340   | 8.64  |
| H          | 0.530                    | 13.46 | 0.419 | 10.64 | 0.379   | 9.63  |
| J          | 0.569                    | 14.45 | 0.459 | 11.66 | 0.418   | 10.62 |
| K          | 0.589                    | 14.96 | 0.478 | 12.14 | 0.438   | 11.13 |
| L          | 0.628                    | 15.95 | 0.518 | 13.16 | 0.478   | 12.14 |

| Layout | B/L Connector Dimensions |       |       |       |
|--------|--------------------------|-------|-------|-------|
|        | AA                       |       | BB    |       |
|        | In                       | mm    | In    | mm    |
| 4      | 0.527                    | 13.39 | 0.350 | 8.89  |
| 8      | 0.627                    | 15.93 | 0.450 | 11.43 |
| 10     | 0.677                    | 17.20 | 0.500 | 12.7  |
| 16     | 0.827                    | 21.01 | 0.650 | 16.51 |
| 20     | 0.927                    | 23.55 | 0.750 | 19.05 |
| 28     | 1.127                    | 28.63 | 0.950 | 24.13 |
| 32     | 1.277                    | 32.44 | 1.100 | 27.94 |
| 40     | 1.427                    | 36.25 | 1.250 | 31.75 |



I/O Connector Recommended Cutout

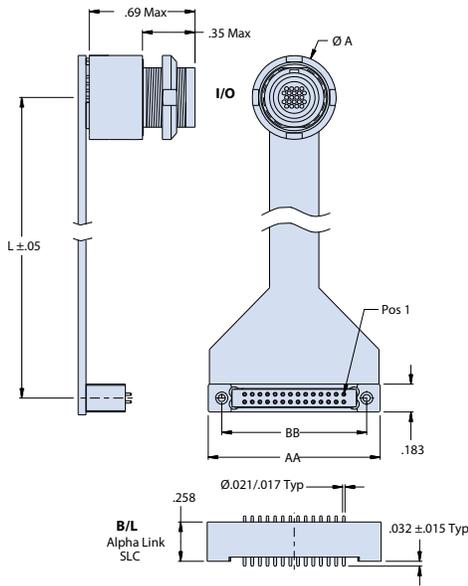


B/L Recommended PCB Layout

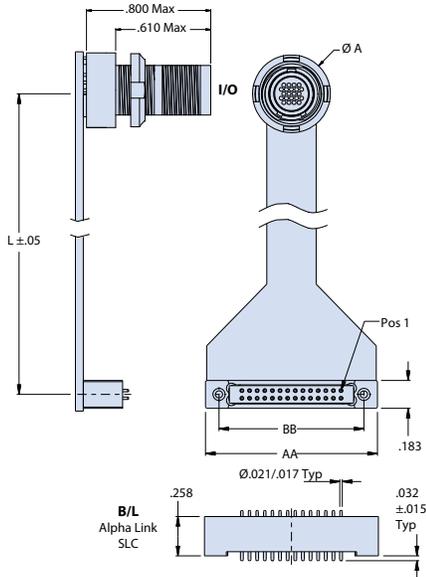


# SuperFly<sup>®</sup> to AlphaLink<sup>™</sup> Flex Jumpers

## Recommended Connector Pairs



| How To Order 880-034                              |  |   |      |    |    |   |    |   |
|---|--|---|------|----|----|---|----|---|
| Sample Part Number                                | 880-034R   | A | -B7N | -M | -2 | T | -6 | S |
| Series  | 880-034R = Series 88 SuperFly QDC I/O receptacle to Series 171 AlphaLink <sup>®</sup> SL |   |      |    |    |   |    |   |
| I/O Insert Configuration                          | A = Unshrouded contacts (e.g. Nano socket)<br>B = Shrouded contacts (e.g. Nano TwistPin) |   |      |    |    |   |    |   |
| I/O Shell Size / Insert Arrangement. <sup>1</sup> | B7N, C10N, E19N, F22N, G31N, H37N, J44N<br>See section A all insert arrangements avail.  |   |      |    |    |   |    |   |
| I/O Shell Material/Finish                         | See Table I  |   |      |    |    |   |    |   |
| AlphaLink <sup>®</sup> Finish                     | 2 = Nickel 5 = Gold  |   |      |    |    |   |    |   |
| AlphaLink <sup>®</sup> Hardware Option            | T = Threaded thru hole Omit for thru hole  |   |      |    |    |   |    |   |
| Assembly Length (L)                               | 3 = 3.00 ± .05 In 6 = 6.00 ± .05 In 12 = 12.00 ± .05 In                                  |   |      |    |    |   |    |   |
| Optional Shielding                                | S = With shielding Omit for none   |   |      |    |    |   |    |   |



| How To Order 881-021R                             |  |   |      |    |    |   |    |   |
|---|--|---|------|----|----|---|----|---|
| Sample Part Number                                | 881-021R   | A | -B7N | -M | -2 | T | -6 | S |
| Series  | 881-021R = Series 88 SuperFly QDC I/O receptacle to Series 171 AlphaLink <sup>®</sup> SL |   |      |    |    |   |    |   |
| I/O Insert Configuration                          | A = Unshrouded contacts (e.g. Nano socket)<br>B = Shrouded contacts (e.g. Nano TwistPin) |   |      |    |    |   |    |   |
| I/O Shell Size / Insert Arrangement. <sup>1</sup> | B7N, C10N, E19N, F22N, G31N, H37N, J44N<br>See section A all insert arrangements avail.  |   |      |    |    |   |    |   |
| I/O Shell Material/Finish                         | See Table I  |   |      |    |    |   |    |   |
| AlphaLink <sup>®</sup> Finish                     | 2 = Nickel 5 = Gold  |   |      |    |    |   |    |   |
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| Assembly Length (L)                               | 3 = 3.00 ± .05 In 6 = 6.00 ± .05 In 12 = 12.00 ± .05 In                                  |   |      |    |    |   |    |   |
| Optional Shielding                                | S = With shielding Omit for none   |   |      |    |    |   |    |   |

### RECOMMENDED SUPERFLY I/O TO ALPHALINK INSERT ARRANGEMENTS

To optimize the 40-contact AlphaLink board level connector, 40 contacts of a 44-contact size SuperFly connector can be used.

|            |             |             |             |             |             |      |
|------------|-------------|-------------|-------------|-------------|-------------|------|
|            |             |             |             |             |             |      |
| B7N        | C10N        | E19N        | F22N        | G31N        | H37N        | J44N |
|            |             |             |             |             |             |      |
| 8 Contacts | 10 Contacts | 20 Contacts | 28 Contacts | 32 Contacts | 40 Contacts |      |

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