



# ICM Ethernet Product Selection Guide

## for BROADCOM – Mass Market PHYs



Disclaimer: Broadcom Limited owns the trademarked logo.

The MagJack® ICM brand encompasses a comprehensive portfolio of integrated devices that combine connectors and magnetics to provide the signal conditioning, EMI suppression and signal isolation previously performed by multiple (7+), discrete components. Each MagJack® ICM employed reduces PCB real estate use by more than 50% per RJ port.



## 10/100 SINGLE PORT PHYs

| IC Part No.                   | Bel Stewart / TRP Part No. | No. Port | Port Config | LEDs | Port Orientation | Profile  | Application    | Operating Temp |
|-------------------------------|----------------------------|----------|-------------|------|------------------|----------|----------------|----------------|
| BCM5201<br>BCM5241<br>BCM5221 | 08C2-1X1T-36               | 1        | 1x1         | Yes  | Tab Up           | Standard | 10/100 + 2USBA | -40 to 85°C    |
|                               | 08B0-1X1T-36-F             | 1        | 1x1         | Yes  | Tab Up           | Standard | 10/100         | -40 to 85°C    |
|                               | 0826-1X1T-GJ-F             | 1        | 1x1         | Yes  | Tab Up           | Standard | 10/100 PoE+    | -40 to 85°C    |
|                               | SI-60001-F                 | 1        | 1x1         | Yes  | Tab Down         | Standard | 10/100         | 0 to 70°C      |
|                               | SI-60116-F                 | 1        | 1x1         | Yes  | Tab Down         | Standard | 10/100         | 0 to 70°C      |
|                               | SI-50170-F                 | 1        | 1x1         | Yes  | Tab Up           | Standard | 10/100         | 0 to 70°C      |
|                               | SI-46001-F                 | 1        | 1x1         | Yes  | Vertical         | Standard | 10/100         | 0 to 70°C      |
|                               | SI-16001-F                 | 1        | 1x1         | No   | Vertical         | Standard | 10/100         | 0 to 70°C      |
|                               | 1840419-1                  | 1        | 1x1         | Yes  | Vertical         | Standard | 10/100         | 0 to 70°C      |
|                               | 2250067-1                  | 1        | 1x1         | Yes  | Tab Up           | Standard | 10/100         | 0 to 70°C      |

## 10/100 MULTI PORT PHYs

| IC Part No. | Bel Stewart / TRP Part No. | No. Port | Port Config | LEDs | Port Orientation | Profile  | Application | Operating Temp |
|-------------|----------------------------|----------|-------------|------|------------------|----------|-------------|----------------|
| BCM5222     | 0826-1X2T-GJ-F             | 2        | 1x2         | Yes  | Tab Up           | Standard | 10/100 PoE+ | -40 to 85°C    |
| BCM5220     | 0845-2D1T-H5               | 2        | 2x1         | Yes  | Stacked          | Standard | 10/100      | 0 to 70°C      |
| BCM5208R    | SI-60082-F                 | 2        | 1x2         | Yes  | Tab Down         | Standard | 10/100      | 0 to 70°C      |
| BCM5225     | 5-6610000-1                | 2        | 1x2         | Yes  | Tab Down         | Standard | 10/100      | 0 to 70°C      |
| BCM5227     | SI-60065-F                 | 4        | 1x4         | Yes  | Tab Down         | Standard | 10/100      | 0 to 70°C      |
| BCM5228     | SI-60128-F                 | 4        | 1x4         | No   | Tab Down         | Standard | 10/100      | 0 to 70°C      |
| BCM5238     | 1-1840865-4                | 4        | 2x2         | Yes  | Stacked          | Standard | 10/100      | 0 to 70°C      |
| BCM5248     | 1840049-5                  | 8        | 2x4         | Yes  | Stacked          | Standard | 10/100      | 0 to 70°C      |

## 10/100/1000 SINGLE PORT PHYs

| IC Part No. | Bel Stewart / TRP Part No. | No. Port | Port Config | LEDs | Port Orientation | Profile     | Application         | Operating Temp |
|-------------|----------------------------|----------|-------------|------|------------------|-------------|---------------------|----------------|
| BCM5400     | 0826-1X1T-43-F             | 1        | 1x1         | Yes  | Tab Up           | Standard    | 10/100/1000         | 0 to 70°C      |
| BCM5401     | 0826-1X1T-32-F             | 1        | 1x1         | Yes  | Tab Up           | Standard    | 10/100/1000         | -40 to 85°C    |
| BCM5411     | 0826-1X1T-GH-F             | 1        | 1x1         | Yes  | Tab Up           | Standard    | 10/100/1000 PoE+    | -40 to 85°C    |
| BCM5421     | V890-1AX1-A1               | 1        | 1x1         | Yes  | Vertical         | Standard    | 10/100/1000         | 0 to 70°C      |
| BCM5421S    | V891-1XX1-A1               | 1        | 1x1         | No   | Vertical         | Standard    | 10/100/1000         | 0 to 70°C      |
| BCM5461     | L829-1J1T-43               | 1        | 1x1         | Yes  | Tab Up           | Low Profile | 10/100/1000         | 0 to 70°C      |
| BCM54610S   | L834-1C1T-S7               | 1        | 1x1         | Yes  | Tab Down         | Low Profile | 10/100/1000         | 0 to 70°C      |
| BCM5461S    | L835-1X1T-43               | 1        | 1x1         | No   | Tab Down         | Low Profile | 10/100/1000         | 0 to 70°C      |
| BCM5481     | L830-1J1T-43               | 1        | 1x1         | Yes  | Tab Down         | Low Profile | 10/100/1000         | 0 to 70°C      |
| BCM5700     | SI-61001-F                 | 1        | 1x1         | Yes  | Tab Down         | Standard    | 10/100/1000         | 0 to 70°C      |
| BCM5701     | SI-61025-F                 | 1        | 1x1         | Yes  | Tab Down         | Standard    | 10/100/1000         | -40 to 85°C    |
| BCM5702     | 1840417-1                  | 1        | 1x1         | Yes  | Vertical         | Standard    | 10/100/1000         | 0 to 70°C      |
| BCM5703     | 2250015-1                  | 1        | 1x1         | Yes  | Tab Up           | Standard    | 10/100/1000         | -40 to 85°C    |
| BCM5703S    | 2250022-1                  | 1        | 1x1         | Yes  | Tab Down         | Standard    | 10/100/1000         | 0 to 70°C      |
| BCM5704     | 1840425-2                  | 1        | 1x1         | Yes  | Tab Down         | Standard    | 10/100/1000 PoE     | -40 to 85°C    |
| BCM5705     | 1840718-1                  | 1        | 1x1         | Yes  | Tab Up           | Low Profile | 10/100/1000         | 0 to 70°C      |
| BCM5705M    | 0821-1X1T-43-F             | 1        | 1x1         | Yes  | Tab Up           | Standard    | 10/100/1000 + 1USBA | 0 to 70°C      |
| BCM570X     | 1840029-1                  | 1        | 1x1         | Yes  | Tab Up           | Standard    | 10/100/1000 + 2USBA | 0 to 70°C      |
| BCM5721     |                            |          |             |      |                  |             |                     |                |
| BCM5751     |                            |          |             |      |                  |             |                     |                |
| BCM5751M    |                            |          |             |      |                  |             |                     |                |

## 10/100/1000 MULTI PORT PHYs

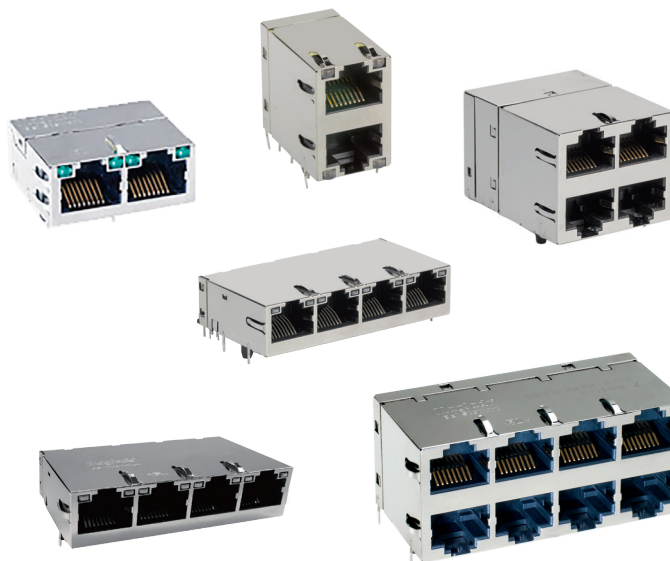
| IC Part No. | Bel Stewart / TRP Part No. | No. Port | Port Config | LEDs | Port Orientation | Profile     | Application      | Operating Temp |
|-------------|----------------------------|----------|-------------|------|------------------|-------------|------------------|----------------|
| BCM54685    | 0826-1X2T-43-F             | 2        | 1x2         | Yes  | Tab Up           | Standard    | 10/100/1000      | 0 to 70°C      |
| BCM546880   | 0826-1X2T-32-F             | 2        | 1x2         | Yes  | Tab Up           | Standard    | 10/100/1000      | -40 to 85°C    |
| BCM54680    | 0826-1X2T-GH-F             | 2        | 1x2         | Yes  | Tab Up           | Standard    | 10/100/1000 PoE+ | -40 to 85°C    |
| BCM54684    | L886-1G2T-BF               | 2        | 1x2         | Yes  | Tab Up           | Low Profile | 10/100/1000      | 0 to 70°C      |
| BCM5482     | 1840638-1                  | 2        | 1x2         | Yes  | Tab Up           | Low Profile | 10/100/1000      | -40 to 85°C    |
| BCM5482S    | 1840855-4                  | 2        | 2x1         | Yes  | Stacked          | Standard    | 10/100/1000      | 0 to 70°C      |
| BCM5404     | 0879-2C1R-V4               | 2        | 2x1         | Yes  | Stacked          | Standard    | 10/100/1000      | 0 to 70°C      |
| BCM5411     | 0845-2R1T-E4               | 2        | 2x1         | Yes  | Stacked          | Standard    | 10/100/1000      | 0 to 70°C      |
| BCM5421     | 0826-1X4T-43-F             | 4        | 1x4         | Yes  | Tab Up           | Standard    | 10/100/1000      | 0 to 70°C      |
| BCM5421S    | 0826-1X4T-GH-F             | 4        | 1x4         | Yes  | Tab Up           | Standard    | 10/100/1000 PoE+ | -40 to 85°C    |
| BCM5464     | 1840576-1                  | 4        | 1x4         | Yes  | Tab Down         | Standard    | 10/100/1000 PoE+ | 0 to 70°C      |
| BCM5700     | 0879-2C2R-54               | 4        | 2x2         | Yes  | Stacked          | Standard    | 10/100/1000      | 0 to 70°C      |
| BCM5701     | 1840868-1                  | 4        | 2x2         | Yes  | Stacked          | Standard    | 10/100/1000      | 0 to 70°C      |
| BCM5702     | 0879-2C4R-54               | 8        | 2x4         | Yes  | Stacked          | Standard    | 10/100/1000      | 0 to 70°C      |
| BCM5703S    | 0895-2C4R-GK               | 8        | 2x4         | Yes  | Stacked          | Standard    | 10/100/1000 PoE+ | -40 to 85°C    |
| BCM5704     | 1840660-1                  | 8        | 2x4         | Yes  | Stacked          | Standard    | 10/100/1000 PoE+ | 0 to 70°C      |
| BCM5705     | 0879-2C6R-54               | 12       | 2x6         | Yes  | Stacked          | Standard    | 10/100/1000      | 0 to 70°C      |
| BCM5705M    | 0895-2C6R-GK               | 12       | 2x6         | Yes  | Stacked          | Standard    | 10/100/1000 PoE+ | -40 to 85°C    |
| BCM570X     | 1-1840055-4                | 12       | 2x6         | Yes  | Stacked          | Standard    | 10/100/1000      | 0 to 70°C      |
| BCM5721     | 1840949-1                  | 12       | 2x6         | Yes  | Stacked          | Standard    | 10/100/1000 PoE+ | 0 to 70°C      |
| BCM 54981   | 0879-2C8R-54               | 16       | 2x8         | Yes  | Stacked          | Standard    | 10/100/1000      | 0 to 70°C      |
| BCM54980    | 0895-2C8R-GK               | 16       | 2x8         | Yes  | Stacked          | Standard    | 10/100/1000 PoE+ | -40 to 85°C    |
| BCM5488S    |                            |          |             |      |                  |             |                  |                |
| BCM5751     |                            |          |             |      |                  |             |                  |                |
| BCM5751M    |                            |          |             |      |                  |             |                  |                |

## 2.5G PHYs

| IC Part No. | Bel Stewart / TRP Part No. | No. Port | Port Config | LEDs | Port Orientation | Profile     | Application | Operating Temp |
|-------------|----------------------------|----------|-------------|------|------------------|-------------|-------------|----------------|
|             | 0826-1X1T-HT-F             | 1        | 1x1         | Yes  | Tab Up           | Standard    | 2.5G PoE+   | -40 to 85°C    |
|             | 0826-1X4T-HT-F             | 4        | 1x4         | Yes  | Tab Up           | Standard    | 2.5G PoE+   | -40 to 85°C    |
|             | L836-121T-KD               | 1        | 1x1         | Yes  | Tab Down         | Low Profile | 2.5G        | -40 to 85°C    |
|             | 2250150-1                  | 1        | 1x1         | Yes  | Tab Up           | Standard    | 2.5G PoE+   | -40 to 85°C    |
|             | 0895-2B4J-JD               | 8        | 2x4         | Yes  | Stacked          | Standard    | 2.5G PoE+   | -40 to 85°C    |
|             | 2250345-1                  | 8        | 2x4         | Yes  | Stacked          | Standard    | 2.5G PoE+   | -40 to 85°C    |

## Applications

- 10/100 AutoMDIX
- 10/100/1000 Gigabit
- Power over Ethernet (PoE) options
- Extended temperature range of -40°C to +85°C



## Mechanical Options

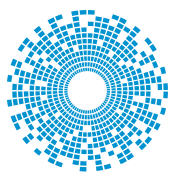
- Plug tab down or plug tab up
- With or without LEDs ( and bi-color)
- Multi-port configurations: 2x1 / 2x4 / 2x6 / 2x8
- RJ45 and USB port combinations
- Low profile versions under 0.5" height
- Micro height versions under 0.45" height
- Mid-plane mount versions under 0.40" height
- Vertical mount packaging



### About Bel

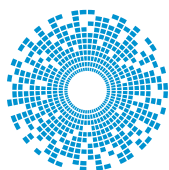
Bel ([www.belfuse.com](http://www.belfuse.com)) designs, manufactures and markets a broad array of products that power, protect and connect electronic circuits. These products are primarily used in the networking, telecommunications, computing, military and aerospace, transportation and broadcasting industries.

Bel's product groups include Magnetic Solutions (integrated connector modules, power transformers, power inductors and discrete components), Power Solutions and Protection (front-end, board-mount and industrial power products, module products and circuit protection), and Connectivity Solutions (expanded beam fiber optic, copper-based, RF and RJ connectors and cable assemblies). The Company operates facilities around the world.



**bel** MAGNETIC  
SOLUTIONS

a bel group



**trp** CONNECTOR

a bel group

#### Bel Fuse Inc.

206 Van Vorst Street  
Jersey City, NJ 07302  
United States

+1 201-432-0463  
[TechHelp@belf.com](mailto:TechHelp@belf.com)

[belfuse.com](http://belfuse.com)