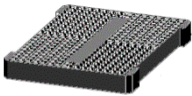
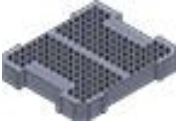


Memory Test Solutions – Grypper

BGA Snaps into Socket – Zero Footprint – No Lid Required – S21 Electrical Performance >40 GHz

Standard ONFi NAND Grypper and G80 Sockets

| Typical Applications | Ball Count - Socket size - Pitch- Product | Device Ball Diameter +/- 0.05 mm | Option with SAC 305 Solder Balls | Option with Eutectic Solder Balls | Standard- No Solder Balls |
|---|--|----------------------------------|----------------------------------|-----------------------------------|---------------------------|
|  | 24 - 6.0 x 8.0 – 1.0 – Grypper/G80 | 0.40 | 107282-0011 | 107282-0012 | 107282-0010 |
| | Device Press – 6.0 x 8.0 | | 103864-0107 | | |
| | Stencil – 24 – 6.0 x 8.0 | | N/R | N/R | 104553-0334 |
|  | 63 - 9.0 x 11.0 - 0.8 - Grypper | 0.45 | 105526-0097 | 105526-0090 | 105526-0082 |
| | Device Press – 9.0 x 11.0 | | 103864-0048 | | |
| | Stencil MOQ (10) | | N/R | N/R | 104553-0083 |
|  | 100 - 12.0 x 18.0 - 1.0 - Grypper | 0.45 | 105526-0089 | 105526-0088 | 105526-0057 |
| | Device Press - 12.0 x 18.0 | | 103864-0083 | | |
| | Stencil – 100 – 12.0 x 18.0 | | N/R | N/R | 104553-0133 |
|  | 100 - 14.0 x 18.0 - 1.0 - Grypper | 0.50 | 111050-0002 | 111050-0001 | 111050-0003 |
| | Device Press- 14.0 x 18.0 | | 103864-0116 | | |
| | Stencil - 100 - 14.0 x 18.0 | | N/R | N/R | 104553-0533 |
|  | 132 - 12.0 x 18.0 - 1.0 - Grypper | 0.50 | 104670-0040 | 104670-0043 | 104670-0032 |
| | Device Press- 12.0 x 18.0 | | 103864-0083 | | |
| | Stencil - 132 - 12.0 x 18.0 | | N/R | N/R | 104553-0217 |
|  | 152 - 14.0 x 18.0 - 1.0 - Grypper | 0.50 | 104670-0041 | 108656-0036 | 104670-0036 |
| | Device Press - 14.0 x 18.0 | | 103864-0116 | | |
| | Stencil - 152 - 14.0 x 18.0 | | N/R | N/R | 104553-0248 |
|  | 252 - 12.0 x 18.0 - 0.8 - Grypper/G80 | 0.45 | 111041-0002 | 111041-0001 | 111041-0003 |
| | Device Press - 12.0 x 18.0 | | 103864-0083 | | |
| | Stencil - 252 – 12.0 x 18.0 | | N/R | N/R | 104553-0501 |
|  | 272 - 14.0 x 18.0 - 0.8 - Grypper/G80 | 0.55 | 107206-0052 | 107206-0016 | 107206-0013 |
| | Device Press - 14.0 x 18.0 | | 103864-0116 | | |
| | Stencil - 272 – 14.0 x 18.0 | | N/R | N/R | 104553-0354 |

| Typical Applications | Ball Count - Socket size - Pitch- Product | Device Ball Diameter +/- 0.05 mm | Option with SAC 305 Solder Balls | Option with Eutectic Solder Balls | Standard- No Solder Balls |
|---|--|----------------------------------|----------------------------------|-----------------------------------|---------------------------|
|  | 316 - 14.0 x 18.0 - 0.8 - Grypper/G80 | 0.50 | 107088-0011 | 107088-0012 | 107088-0010 |
| | Device Press - 14.0 x 18.0 | | 103864-0116 | | |
| | Stencil - 316 – 14.0 x 18.0 | | | | 104553-0289 |
|  | 154 - 11.5 x 13.5 - 0.80 - Grypper | 0.50 | GR1110-0002 | GR1110-0001 | GR1110-0003 |
| | Alignment Frame | | 108639-0179 | | |
| | Device Press - 11.5 x 13.0 | | 103864-0128 | | |
| | Stencil - 154 – 11.5 x 13.5 | | | | 104553-0605 |

Actual device measurements should be reviewed to ensure proper fit with socket contacts

Options: **With Solder balls: SAC 305 or Eutectic**

Extraction Tool: 105900-0004



Reference JEDEC and ONFi Specifications; JEDEC - JESD230 and ONFi 5.1 Standards for standard device pin configurations

Additional NAND sockets are also available – Contact Ironwood with your device drawing / application for quote