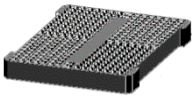
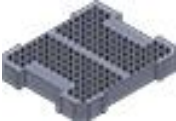


# Memory Test Solutions – Grypper

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
	<b>24</b> - 6.0 x 8.0 – 1.0 – Grypper/G80	0.40	<b>107282-0011</b>	<b>107282-0012</b>	<b>107282-0010</b>
	Device Press – 6.0 x 8.0		103864-0107		
	Stencil – 24 – 6.0 x 8.0		N/R	N/R	104553-0334
	<b>63</b> - 9.0 x 11.0 - 0.8 - Grypper	0.45	<b>105526-0097</b>	<b>105526-0090</b>	<b>105526-0082</b>
	Device Press – 9.0 x 11.0		103864-0048		
	Stencil MOQ (10)		N/R	N/R	104553-0083
	<b>100</b> - 12.0 x 18.0 - 1.0 - Grypper	0.45	<b>105526-0089</b>	<b>105526-0088</b>	<b>105526-0057</b>
	Device Press - 12.0 x 18.0		103864-0083		
	Stencil – 100 – 12.0 x 18.0		N/R	N/R	104553-0133
	<b>100</b> - 14.0 x 18.0 - 1.0 - Grypper	0.50	<b>111050-0002</b>	<b>111050-0001</b>	<b>111050-0003</b>
	Device Press- 14.0 x 18.0		103864-0116		
	Stencil - 100 - 14.0 x 18.0		N/R	N/R	104553-0533
	<b>132</b> - 12.0 x 18.0 - 1.0 - Grypper	0.50	<b>104670-0040</b>	<b>104670-0043</b>	<b>104670-0032</b>
	Device Press- 12.0 x 18.0		103864-0083		
	Stencil - 132 - 12.0 x 18.0		N/R	N/R	104553-0217
	<b>152</b> - 14.0 x 18.0 - 1.0 - Grypper	0.50	<b>104670-0041</b>	<b>108656-0036</b>	<b>104670-0036</b>
	Device Press - 14.0 x 18.0		103864-0116		
	Stencil - 152 - 14.0 x 18.0		N/R	N/R	104553-0248
	<b>252</b> - 12.0 x 18.0 - 0.8 - Grypper/G80	0.45	<b>111041-0002</b>	<b>111041-0001</b>	<b>111041-0003</b>
	Device Press - 12.0 x 18.0		103864-0083		
	Stencil - 252 – 12.0 x 18.0		N/R	N/R	104553-0501
	<b>272</b> - 14.0 x 18.0 - 0.8 - Grypper/G80	0.55	<b>107206-0052</b>	<b>107206-0016</b>	<b>107206-0013</b>
	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
	<b>316</b> - 14.0 x 18.0 - 0.8 - Grypper/G80	0.50	<b>107088-0011</b>	<b>107088-0012</b>	<b>107088-0010</b>
	Device Press - 14.0 x 18.0		103864-0116		
	Stencil - 316 – 14.0 x 18.0				104553-0289
	<b>154</b> - 11.5 x 13.5 - 0.80 - Grypper	0.50	<b>GR1110-0002</b>	<b>GR1110-0001</b>	<b>GR1110-0003</b>
	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 4.2 Standards for standard device pin configurations

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