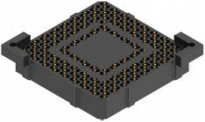
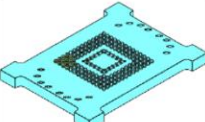


# Memory Test Solutions – Grypper

BGA Snaps into Socket – Zero Footprint – No Lid Required – S21 Electrical Performance >25 GHz

## Standard eMMC / UFS Grypper-G40 Sockets

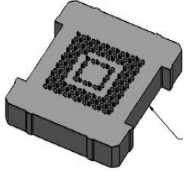
 Ball Count-Socket Size- Pitch	Device Solder Ball Diameter +/- 0.05mm	Standard with SAC 305 Solder Balls	Option with Eutectic Solder Balls	Option with No Solder Balls
<b>153</b> - 11.5 x 13.0 - 0.5	0.30	107250-0026	108387-0026	107248-0026
Alignment Frame		108639-0003		
Device Press - 11.5 x 13.0		103864-0128		
Stencil - 153 - 11.5 x 13.0		N/R	N/R	104553-0220
<b>153 - with build in Alignment Feature</b> - alignment frame not required - use press and stencil from above				
				
<b>153</b> - 11.5 x 13.0 - 0.5	0.30	107250-0065	108387-0064	108519-0064
				
<b>169</b> - 12.0 x 16.0 - 0.5	0.30	107250-0009	108387-0009	107248-0009
Alignment Frame		108639-0028		
Device Press - 12.0 x 16.0		103864-0080		
Stencil – 169 - 12.0 x 16.0		N/R	N/R	104553-0166
<b>169</b> - 14.0 x 18.0 - 0.5	0.30	107250-0012	108387-0066	107248-0012
Alignment Frame		108639-0026		
Device Press - 14.0 x 18.0		103864-0116		
Stencil - 169 -14.0 x 18.0		N/R	N/R	104553-0175

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

Other configurations / socket outline sizes available upon request

Alignment Frames are now ordered separately and recommended to ensure device alignment before inserting into the socket

**153 - Smaller Outline Sockets**

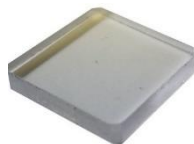
 Ball Count-Socket Size- Pitch	Device Solder Ball Diameter +/- 0.05mm	Standard with SAC 305 Solder Balls	Option with Eutectic Solder Balls	Option with No Solder Balls
<b>153</b> - 11.5 x 10.0 - 0.5	0.30	107250-0050	108387-0067	107248-0050
Alignment Frame		108639-0010		
Device Press - 11.5 x 10.0		103864-0095		
Stencil - 153 - 11.5 x 10.0		N/R	N/R	104553-0287
<b>153</b> - 11.0 x 10.0 - 0.5	0.30	107250-0045	108387-0068	107248-0045
Alignment Frame		108639-0004		
Device Press - 10.0 x 10.0		103864-0054		
Stencil - 153 - 10.0 x 10.0		N/R	N/R	104553-0275
<b>153</b> - 10.5 x 10.5 - 0.5	0.30	107250-0052	108387-0069	107248-0052
Alignment Frame		108639-0011		
Device Press - 10.5 x 10.5		103864-0073		
Stencil - 153 - 10.5 x 10.5		N/R	N/R	104553-0292
<b>153</b> - 11.5 x 8.0 - 0.5	0.30	108348-0004	108387-0070	107610-0004
Alignment Frame		108639-0001		
Device Press - 11.4 x 8.0		103864-0108		
Stencil - 153 - 11.5 x 8.0		N/R	N/R	104553-0236
<b>153</b> - 10.0 x 10.0 - 0.5	0.30	107250-0059	108387-0059	107248-0059
Alignment Frame		108639-0029		
Device Press - 10.0 x 10.0		103864-0033		
Stencil - 153 - 10.0 x 10.0		N/R	N/R	104553-0318
<b>153</b> - 7.5 x 11.5 - 0.5	0.30	109069-0002	109069-0001	109069-0003
Alignment Frame		n/a		
Device Press - 7.5 x 10.3		103864-0119		
Stencil - 153 - 7.5 x 11.5		N/R	N/R	104553-0418
<b>153</b> - 7.5 x 7.5 - 0.5	0.30	109106-0002	109106-0001	109106-0003
Alignment Frame		n/a		
Device Press - 7.0 x 7.0		103864-0077		
Stencil - 153 - 7.5 x 7.5		N/R	N/R	104553-0496

N/R – Not Required for sockets with solder balls attached

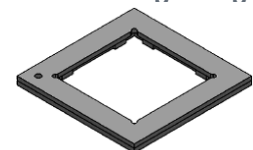
n/a – These sockets are smaller than typical devices for custom applications – Ask Ironwood regarding alignment options



**Extraction Tool: 105900-0004**  
Used for device removal



**Device Press: Recommended to ensure even pressure across the back of the device**



**Alignment Frame: Used to ensure proper alignment of the device into the test socket**