

RTI PRODUCT SOLUTIONS



UNIVERSAL WLCSP TEST SOCKETS & QUARTZ/SAPPHIRE LIDS

PRODUCT OVERVIEW:

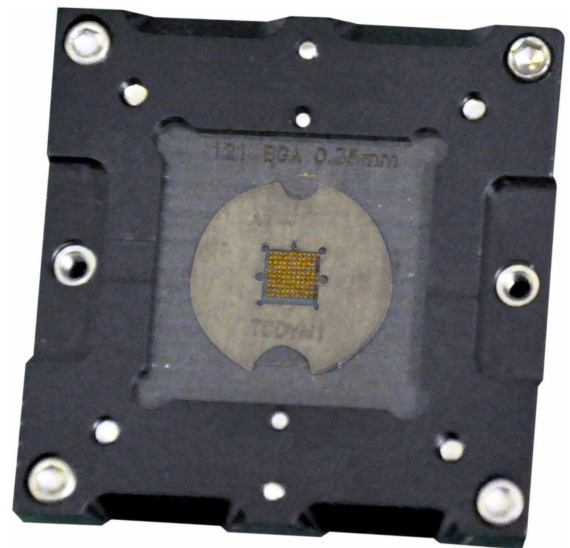
With RTI's line of wafer level test sockets and Failure Analysis lids you have full visibility of the most intricate bumped wafer level packages. Traditional FA lids that rely on making contact with a package using the lead frame around an exposed die. the Quartz FA lids use a piece of quartz or sapphire glass that makes direct contact to the wafer, allowing 100% edge to edge visibility of the DUT to the interconnect. Wafer level CSP sockets are truly low profile and are designed for use with EMMI and Laser optical testing, but not SEM electron testing which may charge up the glass and possibly cause white out. The glass disc is easily replaceable, should the need arise. Test various sized bumped and unbumped die level CSP in the same universal socket body (see Universal BGA data sheet) to save time and money.

WLCSP OPTICAL LID FEATURES:

- ◆ Replaceable quartz or sapphire swatches
- ◆ Average 94% consistent transmissivity
- ◆ Designed for 1.5" and larger socket bodies
- ◆ Ideal for EMMI and Laser test applications
- ◆ Socket + lid = 1cm total thickness
- ◆ Single lid may be used with multiple devices
- ◆ Universal socket body - test multiple device sizes with a single socket body.



910-1063 Quartz Glass
Screw Down FA Lid
For Wafer Level Testing



Universal WLCSP test socket body with
device specific alignment plate. Lid not shown.



LOW PROFILE OPTICAL FA LID FOR EMMI AND LASER (CONTINUED)

Wavelength (nm)	Intensity w/ Glass (W/cm ²)	Intensity w/out Glass (W/cm ²)	Glass transmissivity (%)
280	4.21E-06	4.48E-06	94.13%
290	5.23E-06	5.65E-06	92.72%
300	6.80E-06	7.33E-06	92.75%
310	9.18E-06	9.81E-06	93.56%
320	1.22E-05	1.30E-05	94.02%
330	1.61E-05	1.72E-05	93.66%
340	2.09E-05	2.21E-05	94.31%
350	2.65E-05	2.81E-05	94.31%
360	3.34E-05	3.56E-05	93.80%
370	4.09E-05	4.34E-05	94.22%
380	4.86E-05	5.17E-05	94.06%
390	5.67E-05	5.99E-05	94.64%
400	6.55E-05	6.97E-05	93.92%
410	7.48E-05	7.93E-05	94.30%
420	8.46E-05	8.98E-05	94.19%
430	9.34E-05	9.88E-05	94.54%
440	0.000102	0.000109	93.58%
450	0.00011	0.000117	94.02%
460	0.000118	0.000126	93.65%
470	0.000126	0.000133	94.74%
480	0.000133	0.000142	93.66%
490	0.000142	0.000151	94.04%
500	0.00015	0.00016	93.75%
510	0.000156	0.000166	93.98%
520	0.000162	0.000174	93.10%
530	0.000167	0.000178	93.82%
540	0.000171	0.000183	93.44%
550	0.000175	0.000186	94.09%
560	0.000177	0.00019	93.16%
570	0.00018	0.000192	93.75%
580	0.000181	0.000193	93.78%
590	0.000181	0.000193	93.78%
600	0.000181	0.000192	94.27%
610	0.000179	0.000191	93.72%
620	0.000178	0.000189	94.18%
630	0.000175	0.000185	94.59%
640	0.00017	0.000181	93.92%
650	0.000163	0.000174	93.68%
660	0.000157	0.000166	94.58%
670	0.000165	0.000175	94.29%
680	0.000178	0.00019	93.68%
690	0.000187	0.000199	93.97%
700	0.000189	0.0002	94.50%
710	0.000186	0.000198	93.94%
720	0.00018	0.000191	94.24%
730	0.000173	0.000184	94.02%
740	0.000166	0.000176	94.32%
750	0.000157	0.000168	93.45%

Wavelength (nm)	Intensity w/ Glass (W/cm ²)	Intensity w/out Glass (W/cm ²)	Glass transmissivity (%)
760	0.000148	0.000157	94.27%
770	0.00014	0.000149	93.96%
780	0.000132	0.00014	94.29%
790	0.000125	0.000133	93.98%
800	0.000118	0.000125	94.40%
810	0.000113	0.00012	94.17%
820	0.000108	0.000115	93.91%
830	0.000106	0.000112	94.64%
840	0.000105	0.000111	94.59%
850	0.000105	0.000112	93.75%
860	0.000107	0.000114	93.86%
870	0.00011	0.000117	94.02%
880	0.000113	0.000121	93.39%
890	0.000117	0.000125	93.60%
900	0.00012	0.000128	93.75%
910	0.000123	0.000131	93.89%
920	0.000125	0.000134	93.28%
930	0.000128	0.000136	94.12%
940	0.000129	0.000137	94.16%
950	0.000129	0.000137	94.16%
960	0.000129	0.000138	93.48%
970	0.000129	0.000137	94.16%
980	0.000128	0.000136	94.12%
990	0.000127	0.000134	94.78%
1000	0.000125	0.000133	93.98%
1010	0.000122	0.00013	93.85%
1020	0.00012	0.000128	93.75%
1030	0.000117	0.000124	94.35%
1040	0.000114	0.000121	94.21%
1050	0.000111	0.000118	94.07%
1060	0.000109	0.000116	93.97%
1070	0.000107	0.000114	93.86%
1080	0.000105	0.000111	94.59%
1090	0.000102	0.000109	93.58%
1100	0.000101	0.000107	94.39%

