



TTC-1002 Thermal Test Chip
Wafer Requirements Questionnaire

Company: _____
 Contact: _____
 Tel: _____
 E-mail: _____
 Date: _____

		Wafer Requirement #1	Wafer Requirement #2	Wafer Requirement #3
1 Wafer Type				
Wire Bond – wire bond pads with connection metallization across scribe lanes so only periphery wire-bonding is required (See Thermal Test Die Physical Information sheet for pad dimension and material details.) Bumped – standard bump wafers have isolated unit cells so that each cell can be connected separately(See Thermal Test Die Physical Information sheet for bump dimension and material details.) Standard Bump Material Special Order Bump Material	Quantity	Quantity	Quantity	
	Quantity	Quantity	Quantity	
	Bump Material	Bump Material	Bump Material	
	<input type="checkbox"/> SAC305	<input type="checkbox"/> SAC305	<input type="checkbox"/> SAC305	
	<input type="checkbox"/> Sn(97.5%)Ag(2.5%)	<input type="checkbox"/> Sn(97.5%)Ag(2.5%)	<input type="checkbox"/> Sn(97.5%)Ag(2.5%)	
<input type="checkbox"/> Pb(63%-Sn(37%)	<input type="checkbox"/> Pb(63%-Sn(37%)	<input type="checkbox"/> Pb(63%-Sn(37%)		
<input type="checkbox"/> Pb(95%-Sn(5%)	<input type="checkbox"/> Pb(95%-Sn(5%)	<input type="checkbox"/> Pb(95%-Sn(5%)		
<input type="checkbox"/> Other (contact TEA)	<input type="checkbox"/> Other (contact TEA)	<input type="checkbox"/> Other (contact TEA)		
2 Wafer Thinning				
Standard	<input type="checkbox"/> 625μ	<input type="checkbox"/> 625μ	<input type="checkbox"/> 625μ	
Polishing only	<input type="checkbox"/> 600μ	<input type="checkbox"/> 600μ	<input type="checkbox"/> 600μ	
Custom	<input type="checkbox"/> _____ μ	<input type="checkbox"/> _____ μ	<input type="checkbox"/> _____ μ	
3 Wafer Backside Metallization				
None (left as processed and typically silicon oxide coated)	<input type="checkbox"/> None	<input type="checkbox"/> None	<input type="checkbox"/> None	
Soft Solder Die Attach (Ti-Ni-Ag => ~ 1000Å Titanium, ~ 3,000Å Nickel, ~ 3000Å Silver)	<input type="checkbox"/> Ti-Ni-Ag	<input type="checkbox"/> Ti-Ni-Ag	<input type="checkbox"/> Ti-Ni-Ag	
Conductive Epoxy Die Attach (Au alloyed into silicon, 1,000 – 2,000Å Gold) Specify required Gold thickness	<input type="checkbox"/> Au _____ Å	<input type="checkbox"/> Au _____ Å	<input type="checkbox"/> Au _____ Å	
Direct (Eutectic) Die Attach (Au alloyed into silicon, 7,000 – 10,000Å Gold) Specify required Gold thickness	<input type="checkbox"/> Au _____ Å	<input type="checkbox"/> Au _____ Å	<input type="checkbox"/> Au _____ Å	
Custom	<input type="checkbox"/> Contact TEA	<input type="checkbox"/> Contact TEA	<input type="checkbox"/> Contact TEA	
4 Wafer Sawing				
None (Supplied as intact wafer(s))	<input type="checkbox"/> None	<input type="checkbox"/> None	<input type="checkbox"/> None	
One array (chip) size	<input type="checkbox"/> Array Size _____	<input type="checkbox"/> Array Size _____	<input type="checkbox"/> Array Size _____	
Multiple array (chip) sizes	<input type="checkbox"/> Contact TEA	<input type="checkbox"/> Contact TEA	<input type="checkbox"/> Contact TEA	
Sawn wafers shipment packaging	<input type="checkbox"/> membrane ring	<input type="checkbox"/> membrane ring	<input type="checkbox"/> membrane ring	
	<input type="checkbox"/> membrane	<input type="checkbox"/> membrane	<input type="checkbox"/> membrane	
	<input type="checkbox"/> waffle pack	<input type="checkbox"/> waffle pack	<input type="checkbox"/> waffle pack	
	<input type="checkbox"/> Gel Pack	<input type="checkbox"/> Gel Pack	<input type="checkbox"/> Gel Pack	
5 Special Requirements				
Please check here if there are requirements other than those covered above; TEA will contact you to discuss these requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Disclaimer

Thermal test chips are offered for use in characterizing assembly processes, packages, materials and any other applications requiring precise control of heat flux generation and temperature measurement. Applying the data from the test die to a functional system is the responsibility of the user. TEA makes no warranty, expressed or implied including the implied warranties of merchantability and fitness for a particular purpose, that the user's system designed using that data will perform as intended by the user.