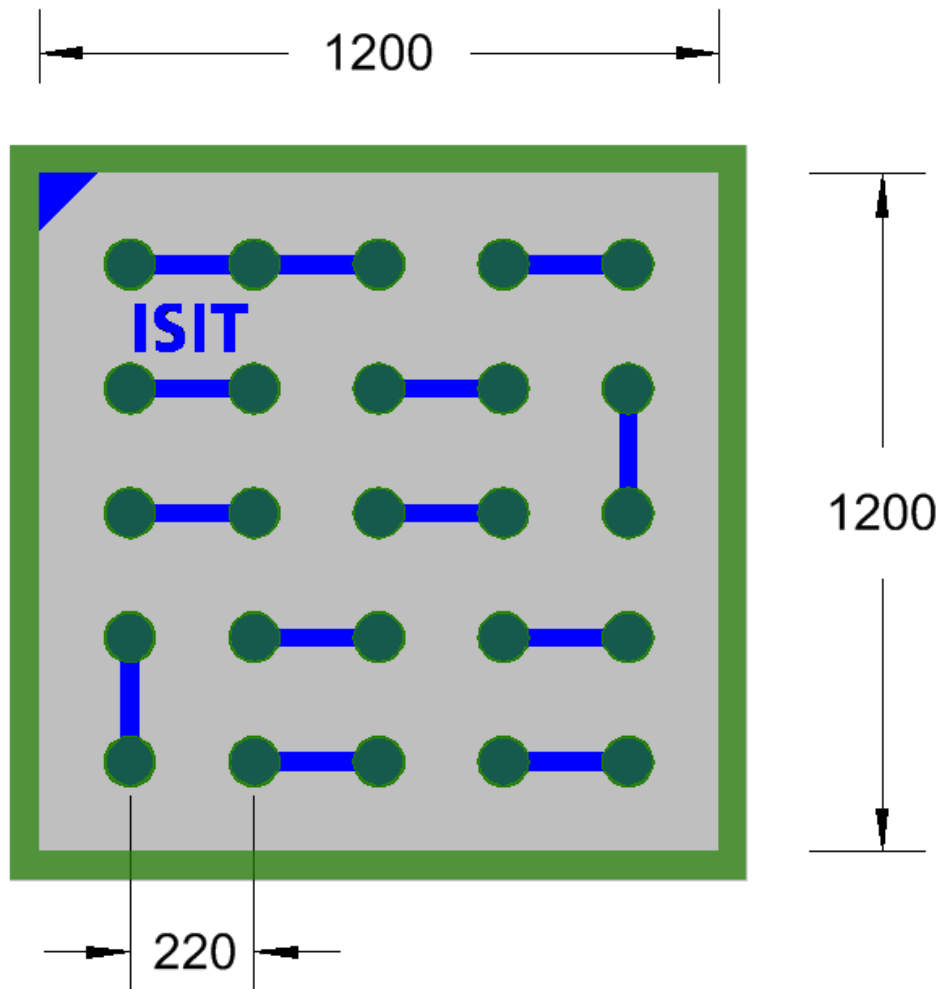

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	Silicon Test Wafer CSP1200-220 8''	last update 20.02.2017

**LAYOUT:**



**TECHNICAL DATA:**

- Flip Chip Silicon Die (Chip Size Package)
- dummy component with daisy chain grid contacts
- one contact designed for Kelvin probe measurement of the contact resistance
- pin one mark for automated placement
- design size 1.20 mm x 1.20 mm with 100 µm dicing street (without passivation)
- circular aluminium pads with 80 µm diameter
- circular passivation opening with 90 µm diameter
- contact pitch 220 µm
- custom specific wafer thickness
- pad modifications with electroless NiAu and 150µm solder balls or stud bumps available

	PRODUCT DATA SHEET	page: 2 of 2
	<b>Silicon Test Wafer CSP1200-220 8''</b>	last update 20.02.2017

**TECHNICAL INFORMATION:**

<b>designed chip size</b>	1.20 mm x 1.20 mm
<b>die pitch</b>	1.30 mm x 1.30 mm
<b>typical die size after dicing</b>	1.27 mm x 1.27 mm
<b>wafer thickness</b>	other geometries, e.g. 4x4 dies available on request
<b>pad layout</b>	50µm (Taiko geometry), other thicknesses available on request
<b>pad geometry</b>	25 pads, in daisy chain geometry with 220µm pitch and 1 Kelvin sensing structures for contact resistance measurement
<b>pad metal</b>	aluminum: 80µm diameter (circular)
<b>passivation</b>	passivation opening: 90µm diameter (circular) 1.4 µm AlCu0.5 PECVD: 300 nm LTO + 800 nm SiN
<b>optional pad modifications</b>	electroless NiAu with 150µm solder balls or stud bumps
<b>delivery</b>	8" wafer, 16768 dies, diced on tape
<b>normal uses</b>	High throughput die and flip chip placing from wafer feeder, automatic wire bonding, encapsulation and underfill processes, reliability tests.
<b>typical technologies</b>	<ul style="list-style-type: none"> <li>• soldering</li> <li>• stud-bump bonding</li> <li>• anisotropic conductive adhesive flip chip (ACA / ESC5)</li> <li>• isotropic conductive adhesive flip chip (ICA)</li> </ul>
<b>available substrates</b>	Substrates available on request
<b>contact</b>	Fraunhofer Institut für Siliziumtechnologie Fraunhoferstraße 1; D-25524 Itzehoe Internet: <a href="http://www.isit.fraunhofer.de">http://www.isit.fraunhofer.de</a>  Dr.-Ing. Dipl. Phys. Dirk Kähler Phone +49 (0) 48 21 / 17 – 46 04 Fax +49 (0) 48 21 / 17 – 42 50 Email: <a href="mailto:dirk.kaehler@isit.fraunhofer.de">dirk.kaehler@isit.fraunhofer.de</a>  Dr.-Ing. Wolfgang Reinert Phone +49 (0) 48 21 / 17 – 42 16 Fax +49 (0) 48 21 / 17 – 42 50 Email: <a href="mailto:wolfgang.reinert@isit.fraunhofer.de">wolfgang.reinert@isit.fraunhofer.de</a>
<b>geometry variations</b>	Arbitrary customer-specific layouts including a company's logotype can be realised on 8" glass and silicon wafers.

\* Specifications subject to change without notice.

All dimensions are approximate values, which are influenced by process variations.