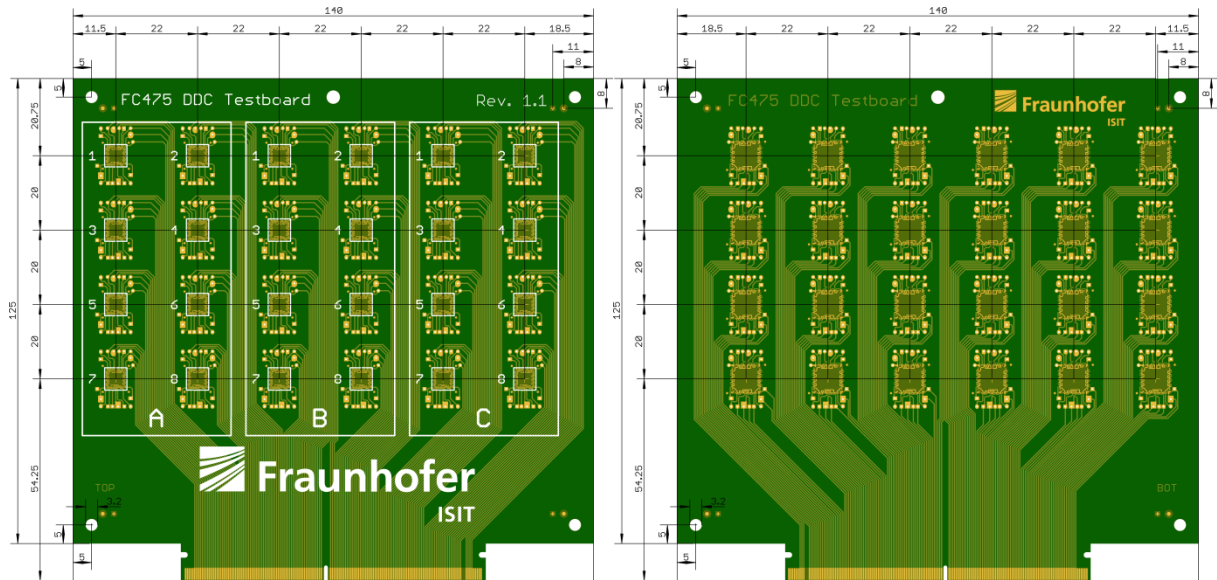
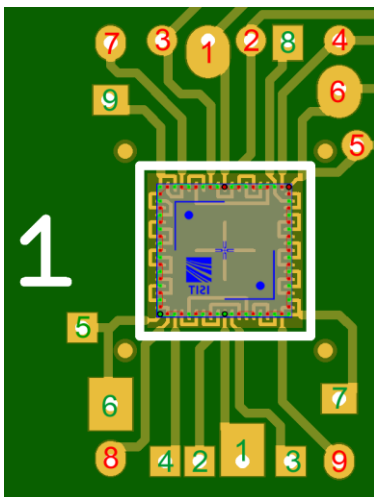
	PRODUCT DATA SHEET	page: 1 of 2
	FC475 DDC Testboard Rev. 1.1	last update 03.02.2017

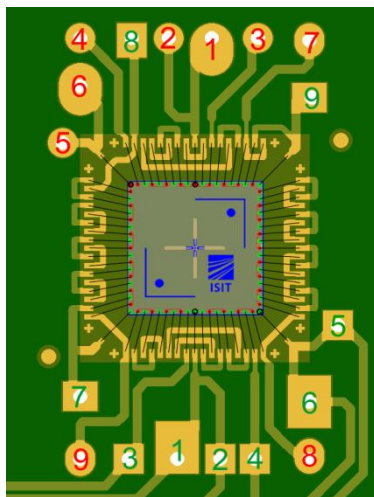
BOARD:



PINOUT:



Top




Bottom

Chain 1 – Chain 2

- 1: Kelvin probe +
- 2: Kelvin probe PCB (middle con.)
- 3: Kelvin probe die (middle con.)
- 4: Kelvin probe die (corner con.)
- 5: Kelvin probe PCB (corner con.)
- 6: Kelvin probe –

- 1 – 6: complete daisy chain
- 5 – 7: bottom edge contacts
- 7 – 8: right edge contacts
- 8 – 9: top edge contacts
- 9 – 5: left edge contacts

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TECHNICAL DATA:

- Fits into the DDC Multiplexer Hardware, which offers automated measurement, analysis and protocoling with the DDC Multiplexer Software
- carries up to 24 FC475 dies on top or bottom side
- 4 Kelvin sensing structures for 4-point probe contact resistance measurement per die
- the FC475 dummy component with two nested daisy chains allows
 - easy measurement of short cuts between adjacent contacts
 - advanced reliability tests with voltage applied between adjacent pads
- different types of fiducial marks for automated placement
- top side allows different flip chip technologies
- bottom side allows wire bonding

TECHNICAL INFORMATION:

die pitch	22mm x 20mm
fiducials	4 x 2 global fiducials: circular (d=1mm) and cross (w=1mm) 4 circular fiducials per die on top (d=500µm) 2 circular (d=500µm), 8 cross (w=300µm) fiducials per die on bottom
pad layout top side^[1]	72 pads with 250µm pitch and minimum width of 75µm.
pad layout bottom side^[1]	72 pads 100µm x 300µm with 300µm pitch for wire bonding
pad metal	Chemical gold (ENIG)
normal uses	High throughput die and flip chip placing from wafer feeder, automatic wire bonding, encapsulation and underfill processes. Reliability tests with voltage applied between adjacent pads.
typical technologies	<ul style="list-style-type: none"> • wire bonding • stud-bump bonding • solder flip chip • anisotropic conductive adhesive flip chip (ACA / ESC5) • isotropic conductive adhesive flip chip (ICA)
contact	<p>Fraunhofer Institut Siliziumtechnologie Fraunhoferstraße 1; D-25524 Itzehoe Internet: http://www.isit.fraunhofer.de</p> <p>Dr.-Ing. Dipl. Phys. Dirk Kähler Phone +49 (0) 48 21 / 17 – 46 04 Fax +49 (0) 48 21 / 17 – 42 50 Email: dirk.kaehler@isit.fraunhofer.de</p> <p>Dr.-Ing. Wolfgang Reinert Phone +49 (0) 48 21 / 17 – 42 16 Fax +49 (0) 48 21 / 17 – 42 50 Email: wolfgang.reinert@isit.fraunhofer.de</p>

[1] The pad dimensions may vary between orders. Pad dimensions will increase in next revision.

• Specifications subject to change without notice.

* All specified dimensions are approximate.