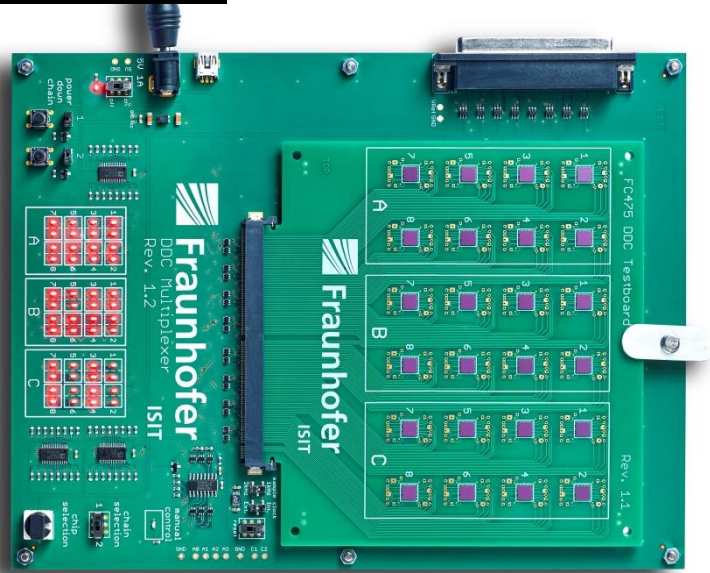


**DDC MULTIPLEXER HARDWARE :**



**DDC MULTIPLEXER SOFTWARE:**

DDC Multiplexer - Fraunhofer ISIT

PCB-ID: FC475 Test No. 1

Measurement start

Progress

Show protocols

Testchip: FC475

Mounting: Top (Flipchip)

Threshold R1+R2+R3 [Ω]: 15

Threshold R1 [mΩ]: 25

Threshold R3 [mΩ]: 25

Load settings Save settings

Exit

Overview

Group A - Details Group B - Details Group C - Details Chip Info

FC475 Test No. 1 (FC475:Top (Flipchip))

Legend:   
■ Resistance OK   
■ Threshold exceeded   
■ Short circuit

FC475B Schematic Diagram

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DDC Multiplexer - Fraunhofer ISIT

PCB-ID: FC475 Test No. 1

Measurement start

Progress

Show protocols

Testchip: FC475

Mounting: Top (Flipchip)

Threshold R1+R2+R3 [Ω]: 15

Threshold R1 [mΩ]: 25

Threshold R3 [mΩ]: 25

Load settings Save settings

Exit

Overview

Group A - Details Group B - Details Group C - Details Chip Info

Group A

Group A Chain 1


	R1-R2-R3 [Ohm]	R1 [mOhm]	R3 [mOhm]
1	12,74	5,32	5,11
2	12,74	5,58	5,42
3	12,68	5,51	5,30
4	12,71	5,88	6,23
5	12,81	5,71	7,02
6	12,76	5,73	5,63
7	12,75	5,53	5,64
8	12,85	6,23	6,45

Group A Chain 2

	R1-R2-R3 [Ohm]	R1 [mOhm]	R3 [mOhm]
1	13,20	5,72	7,82
2	13,24	5,93	7,35
3	13,15	5,71	7,13
4	13,20	5,91	7,28
5	13,31	6,05	8,37
6	13,25	6,11	7,36
7	13,24	5,93	6,73
8	13,33	6,22	7,31

Legend:   
■ Resistance OK   
■ Threshold exceeded   
■ Short circuit

FC475B Schematic Diagram

	PRODUCT DATA SHEET	page: 2 of 2
	DDC Multiplexer Rev. 1.2	last update 24.01.2017

## FEATURES:

- Carries a FC475 DDC Testboard or a CSP1200-220 Testboard with up to 24 dies with two daisy chains per die.
- Fast visualization of short cuts or broken connections with LED matrix
- Allows 6 differential measurements with up to 4 kelvin probe measurements per die
- On board high accuracy differential amplifier for small contact resistances
- Automated measurement, analysis and protocolling with the DDC Multiplexer Software
- Easy measurement of short cuts between adjacent contacts

## TECHNICAL INFORMATION:

### available testboards

1. FC475 DDC Testboard for flip chip or wire bonding
2. CSP1200-220 Testboard for flip chip in different die geometries

### automated measurements

1. Up to 4 single contact resistances with kelvin probe measurements per die
2. Total resistance of both daisy chains including all contacts
3. Short cuts between adjacent contacts

### full measurement time

10 seconds

### expected accuracy

(with NI 9205)

5mΩ - 15mΩ: ±10%  
15mΩ - 50mΩ: ±5%  
50mΩ - 100mΩ: ±2,5%  
> 100mΩ : ±1%

### external hardware

National Instruments cRIO-Chassis with NI 9205 Analog Input Module

### measurement protocol

Including

- Date and time
- Measurement settings
  - o Testchip and mounting
  - o Thresholds for resistances
- Measurement results
- Overview image

### contact

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\* Specifications subject to change without notice.

\* All specified dimensions are approximate.