

## TECHNICAL FEATURES

### SYSTEM DESCRIPTION

#### Computer

- \* Pentium (current model) controller in a tower case
- \* Large RAMBUS RAM or ECC RAM
- \* Large format hard disk drive
- \* DVD-RW/CD-ROM Drive, 3.5" Floppy Disk and ZIP Drive
- \* 100 Mb Ethernet board
- \* Keyboard, Serial Mouse, USB 2.0,
- \* 17" Color Monitor
- \* Beijert proprietary interfaces

#### Software

- \* Microsoft Windows® NT / Windows® 2000 / XP
- \* Microsoft Excel (Spreadsheet & Database)
- \* BE Supervisor II executive system
- \* BE System diagnostics
- \* BE System calibration software
- \* SPC Analysis Software

#### Measurement Center

- \* All measurement electronics and I/O connections are contained in the system kiosk.
- \* The measurement center comes as standard with 128 channels .
- \* Mechanics are mounted on a stable platform, both probe card and motherboards are mounted onto a comfortable table.

#### Different Models available

- \* Std for small Probe Cards
- \* XL for large Probe Cards
- \* XXL for large Probe Cards Multiple Die

### MEASUREMENT DESCRIPTION

more detailed information can be found in the datasheet or see our website

<b>Contact resistance</b>	0-9 ohms, 1 milli ohm resolution
<b>Leakage</b>	0-300 nano-amps, 0,1 nano-amp
<b>Planarity</b>	travel 10 or 20 mm 0,1 micron resolution
<b>Alignment</b>	travel FOV 1 X 1 inch (X & Y) 0,1 micron resolution
<b>Gram Force</b>	1-30 gram 0,1 gram resolution
<b>Motherboards</b>	up to 18 inch square

#### Options

- \* Expandable PMU channel up to 1,000+
- \* Powerful Z stage lift to 100 Kg
- \* Hot chuck / Bussed probes, Relay control board
- \* LCR components board
- \* Microscope Leica / other configurations
- \* N.I.S.T. calibration card
- \* Ultra Low Leakage measurement Parametric probecards
- \* RF Tag Inventory control system
- \* Auto fine leveling for different probecard platforms

#### Operating Environment

Temperature	20-23 degrees celsius (65-75 F.)
Humidity	30-50% RH
Mains voltage	120VAC 60 Hz or 220 VAC 50 Hz.

#### Weight and dimensions desk

Dimensions	31 X 84 X 60 CM (Height X Depth X Width) .
Weight	70 Kgs including PC and ancillaries

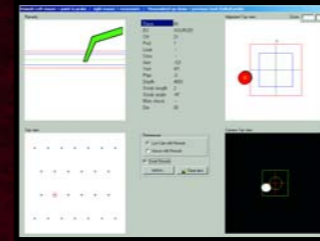


Supervisor II is a registered trademark of Beijert Engineering.  
All specifications are subject to change without notice.  
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Supervisor II is manufactured by  
Beijert Engineering Rev.10- 25.03.2004  
Patent Pending

**BITA ELEKTRONIK SVENSKA AB**

## SUPERVISOR II PROBE CARD VERIFICATION AND MANAGEMENT SYSTEM



BEIJERT probe card test solutions  
Engineering for the semiconductor industry



# SUPERVISOR II

# PROBE CARD TESTER

## INTRODUCTION

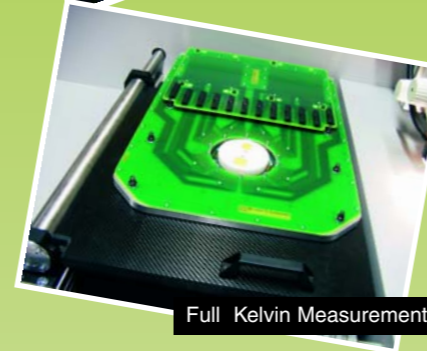
Supervisor II is a probe card test and verification system that is used as a production tool for the verification of large complex probe cards before and after use and to facilitate rework of probe cards that do not conform to predefined standards. Supervisor II comprises a computer, specialized Windows® application software, a precision measurement subsystem, dual vision subsystem, precision motion subsystem and analysis software.

Supervisor II is intended for the measurement and adjustment of probe cards: planarization, XY location, probe tip analysis, probe pin to channel verification, probe contact resistance, leakage between probes, gram force and component measurement. All are standard in an easy-to-use automated test system.



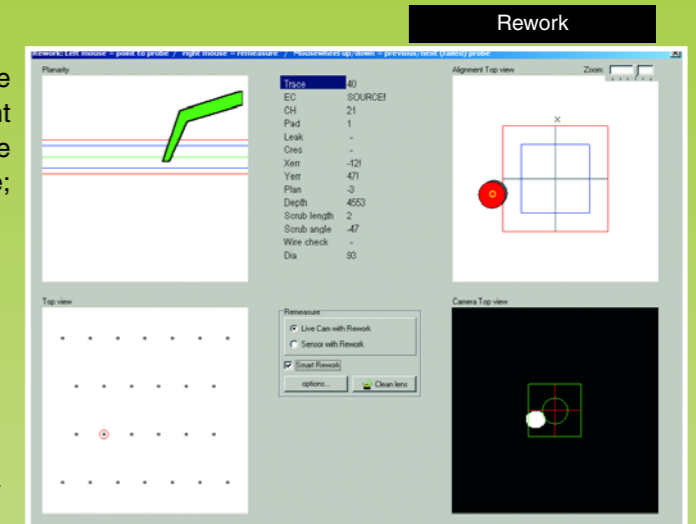
### CONTACT FORCE

Supervisor II offers two options to check the contact force (gram force). One measurement technique is to measure all probes in one movement and calculate the average value; the other technique is to measure each probe individually.



### GRAPHIC DISPLAY

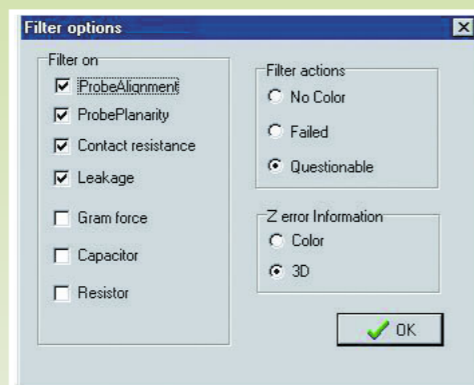
Supervisor II provides a clear, easy to read display of individual probe parameters.



localChannel	Name
11	pb1
10	pb4
19	pb5
8	pb11
9	pb11
6	pb14
7	pb16
5	pb17
4	pb24

### EASY OPERATION

Supervisor II has easy to use software; the operator selects which module they need. To make a new file for a new probe card "Trace Probe" may be used. This works with software to allow a new file to be quickly built. When the test is complete the software indicates pass/fail with a traffic light icon. The operator is then able to analyse and repair cards.



### TEST ELECTRICAL PARAMETERS

In addition to alignment and planarity, the system can measure contact resistance and compare the results against the stored reference data file. Probe tips can be cleaned orbitally or scrub with the Supervisor II to allow for retest of contact resistance. Supervisor II has two user selectable leakage test modes one to check to adjacent probes the second to all test probes. Testing of bussed probes and electronic components mounted on your probe card is possible with our optional modules.

## FUTURE

WWW.PROBECARDTESTER.COM

OPTIONS



PMC boards



Other features

### SUPERVISOR AS A PRODUCTION TOOL

Although Supervisor II has considerable measurement and analytical capabilities, Supervisor II has been designed from the beginning to serve as a verification system. Its primary purpose is to ensure the integrity of probe card assemblies and verify that they are ready for test. SPC characterization before and after wafer sort will also allow analysis of probe card performance characteristics and facilitate correlation to test yield.

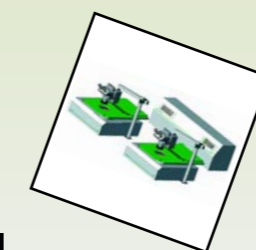
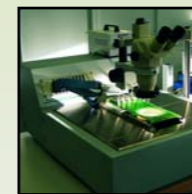
Ch	EC	Tr	Pad	Yerr	Yerr	Plan	Depth	Leak	Cres	SI	SA	WT	Dia	GramF
24	Pd1	22	1	40.0	11.0	2	4465	0	1289	4	148	24	86	-
23	Pd8	21	8	16.0	-22.0	-10	4579	1	578	2	-35	23	82	-
22	Pd16	20	16	-14.0	-19.0	0	4569	2	698	2	-85	22	86	-
14	Pd18	42	18	2.0	28.0	-10	4579	5	568	4	14	14	86	-

### CLEAR REPORTS

Supervisor II provides clear test reports in the universally familiar MS Excel format. The reports can be displayed on the screen for use or saved as a file 70 for the Beijert "Analyst SPC" evaluation sent to a laser printer or uploaded via your network.

### SUPERVISOR II HIGHLIGHTS

- \* Fully automated production verification
- \* Allows large probecards for XY check
- \* Neural software evaluation of probetip characteristic
- \* Motherboard with contact blocks for easy connections
- \* Imports industry std data files
- \* Server Attached Systems (SAS)



For all types of probecards to 1.000+ contact points

**SUPERVISOR II - COMPLETELY AUTOMATED PROBE CARD VERIFICATION AND MANAGEMENT SYSTEM**