Software

PCAS-100A

Printed Circuit Assembly Stress Measuring Software

Evaluates reliability of PCA* with strain gages.

- Allows a beginner to handle it easily.
- Analyzes the stress measurements results on PCB and creates reports.
- Use: Testing of printed circuit assembly ICT, BFT, heat sink assembly, system board integration, or system assembly
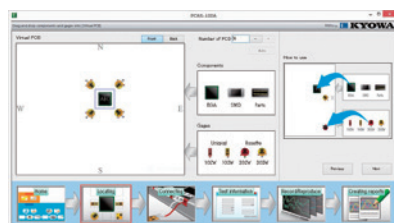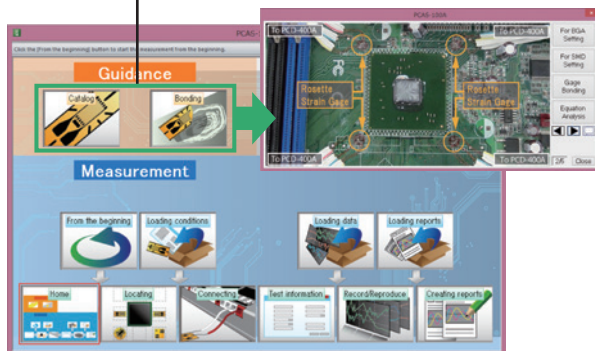
Combination with the PCD-400A or PCD-430A, the Printed Circuit Assembly Stress Measuring Software PCAS-100A is the dedicated software to test stress of PCA.
The PCAS-100A allows a beginner to test a PCA stress, analyze data, and create reports in accordance with IPC/JEDEC-9704A** .
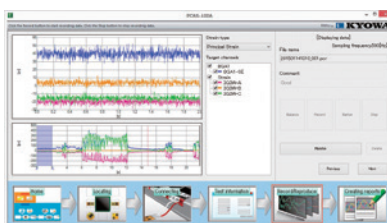
* PCA: Printed Circuit Assembly
** Evaluation method for PCA using strain gages is regulated by IPC/ JEDEC-9704A and it is valid for quality evaluation or failure analysis.
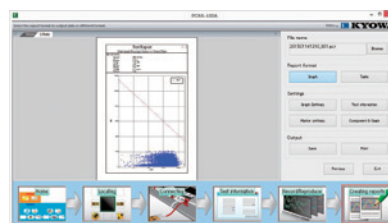
The Guidance lets you check kinds of strain gages and a bonding method.

Specifications

■Operating Environment

OS	Windows Vista®, Windows® 7, Windows® 8, 8.1 or Windows® 10, English/Japanese
	32, 64 bits support
CPU	Intel Core i3 or advanced
Memory	If 32-bit OS, 2 GB or more
	If 64-bit OS, 4 GB or more
Display	1024×768 pixels or more
	1280×1024 pixels or more recommended

■Measuring Conditions

Number of Channels	16 (Uniaxial gages: 16 PC / Triaxial gages: 5 PC)
Channel Conditions	Gage types (1G2W, 1G3W,2G2W, 2G3W, 3G2W, 3G3W, half bridge, and full bridge)
	Measuring range (200, 500, 1000, 2000, 5000, 10000, and 20000 ×10⁻⁶ strain)
	Gage factor
Measuring Modes	Manual measurement
	Recoding from REC to STOP, or designated number of data items from REC.
Sampling Frequencies	100, 200, 500, 1 k, 2 k, 5 k, and 10 k Hz
LPF	10, 30, 100 Hz, and FLAT
Measuring Condition Files	Saves and loads the pre-set measuring conditions.

■Measuring Instruments

Applicable Instruments	PCD-400A, PCD-430A (Max. 4 units)
Applicable Gage Types	Uniaxial, biaxial, and triaxial (rosette gage)

■Guidance

Catalog	Searches strain gages for PCA stress test.
Bonding	Describes the method of strain gage bonding on the PCB.

■Monitor

Y-time Graphs	X axis is time (s).
	Y axis is strain (Uniaxial-gage, principal, diagonal)
Strain-rate Graphs	X axis is strain-rate, Y axis is maximum principal strain.
	* Strain rate is the rate of change in strain per time.
Y Axis Range	Auto-scale
	Settable scale (×10⁻⁶ strain)
	1, 2, 5, 10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10000, and 20000

■Data Files

Saving File Formats	Kyowa standard file format KS2.

■Report

Report Types	Graph and tables
Graph-reports	Y-time graphs, strain-rate graphs
Table-reports	Maximum principal strain, minimum principal strain, diagonal strain, and strain-rate
Clipboard	Copies graphs and tables. Allows other application software to use the data.
Printing	Prints out reports.
Report Files	Allows report files (PCR format) to be saved, read and edited.

Locating gages

Measuring data

Creating reports