

5 Reasons

Why to Choose catman DAQ Software for PCB Strain Testing

Reason 1: Easy Sensor Assignment and Setup

Thanks to the integrated sensor database, easy assignment of the strain gauge sensors such as the miniature [HBM Rosette RF9](#), is guaranteed. Simply "Drag & Drop" the strain gauge to the three active strain channels of the connected measurement module, such as the [QuantumX MX1615B](#), set the sensor parameters, included in each strain gauge data sheet, and carry out a zero balancing of the measurement channels. A smooth workflow without any programming skills needed.

Reason 2: Temperature Compensation

For $\frac{1}{4}$ bridge applications, we recommend temperature compensation in the strain gauge configuration, to prevent unwanted temperature effects on your measurement. This can be easily set in the software by using the menus and options tailored for strain measurements.

Reason 3: Rosette Calculation With a Few Clicks

To calculate the maximum and minimum principal strain, signals used for rosette calculation can be set up with just a few clicks. To do so, add all three measurement signals and select the correct rosette type and the relevant strain (principal strain, angle, shear strain, etc.).

Reason 4: Strain Rate Calculation

Since mechanical impacts in real use cases influence the life span of a printed circuit board, the strain rate must also be considered in the analysis. The strain rate can be calculated quickly and easily using the integrated function in catman.

Reason 5: Powerful Visualization and Analysis

One of [catman's strengths](#) is the quick and easy visualization and analysis of data in compliance with the IPC/JEDEC-9704 standard. Configure your own user interface with just a few clicks and start the strain measurement on the PCB. Afterwards, check whether the measured data meet the acceptable criteria for PCB strain. To do this, create a diagram which shows the principal strain in relation to the strain rate of the strain gauge. Compare this newly created graph with the self-generated maximum allowable PCB principal strain based on IPC/JEDEC-9704.

Do you want to know more about measuring strain on PCBs?

[Find out more in our Tech Note.](#)

