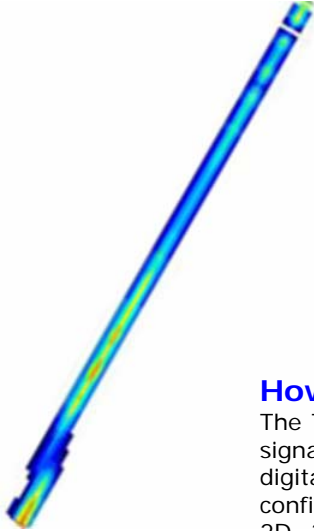




# Tactilus<sup>®</sup> Pressure Mapping System

## Application: LCD/FPD Bonding



### Thoroughly Analyze Actual Surface Contact Pressures

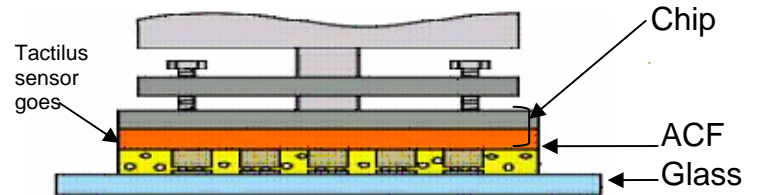
The Tactilus pressure mapping system can show precisely, in real-time, how pressure is distributed between two contacting surfaces, and the actual magnitude of pressure occurring. Tactilus can assess the quality of any bonding and heat sealing process or equipment. It can aid in ascertaining the accuracy of placement or the consistency of contact in such crucial areas as alignment of color filters, diffusion sheets, liquid crystal panels, pads on dye, TAB to an LCD, flip chip packaging and chip scale packaging. Balancing contact pressures between the bonding head/sealing interface during machine set-up can positively affect yield and machine performance. Tactilus' spatial resolution is fine enough to expose even minute surface defects and trends and can highlight lower/higher pressure areas of contact.

### How Tactilus Works

The Tactilus sensor element instantly collects pressure data and sends it as an analog signal back to an intermediary data "hub," where it is converted to a digital signal. The digital signal containing the collected data is then sent to an interface (software) configured for easy viewing and specific analysis capabilities. Tactilus' software enables 2D, 3D, 360 degree, isobaric and pinpoint region-of-interest image viewing, graphical displays of data in bar charts, line scans and histograms, statistical analysis of avg./min./max. pressures, total force over any selected area, pressure vs. time and more.

### Flexible, Durable and Portable

Because it employs the force sensing design principle of capacitance, the Tactilus sensor element has great advantages in both adaptability and customization. It's thin and highly flexible substrate material allows easy conformability to curvaceous surfaces and usage in invasive or intolerant environments. This robust sensor can last thousands of uses with consistent repeatability and is highly resistant to electromagnetic noise and temperature and humidity fluctuations. Conveniently portable, a complete Tactilus sensor system weighs less than five pounds.



### Tactilus Sensor Element Specifications

Pressure Range	0.1 to 200 PSI (.007 to 14.10 kg/cm <sup>2</sup> )
Sensor Size	Customizable from 1 sq in. (2.54cm <sup>2</sup> )
Spatial Resolution	Customizable from 1mm
Output Speed	100,000 sensing points/second
Substrate	Flex circuit
Accuracy	+/- 10%
Repeatability	+/- 2%
Hysteresis	+/- 5%
Non-Linearity	+/- 1.5%
Calibration	Pre-calibrated for specific needs

### Features:

- Resistant to electromagnetic noise, temperature and humidity fluctuations
- Flexible and durable sensor element
- Pressure and temperature measurement in real-time
- Longitudinal and latitudinal analysis
- Modular architecture with interchangeable sensor elements
- 100% customizable
- Intuitive and user friendly Windows<sup>®</sup> based software

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