



akrometrix

Thermal Warpage & Strain Metrology

AXP 2.0-DFP2 Thermal Warpage System

NEW!!! - Flexible 2nd Gen.
Digital Fringe Projection (DFP2)
Thermal Warpage System

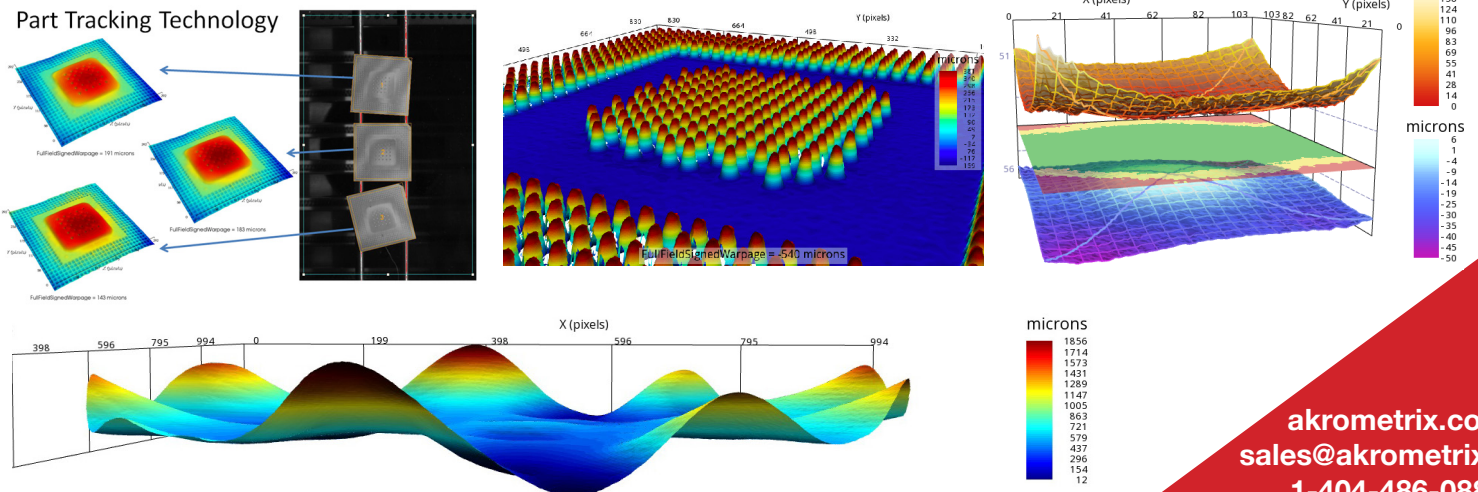
- **AXP 2.0 System Capable of** measuring CTE and Subfreezing Warpage with optional modules.
- **Replicates Reflow Oven Warpage** characteristics of new products thru the R&D product development process.
- **Ideal for measuring SMT Components/PCBs** across discontinuous surfaces with significant variation in step-heights across the entire surface area.
- **Accommodates substrates up** to 375mm x 400mm with data acquisition times within 1 second
- **Vision Technology:** Akrometrix Digital Fringe Projection 2
- **Runs on Akrometrix Studio Software**



ON VIRTUALLY ANY SUBSTRATE

- PCBs
- Panels
- Wafers
- Stacked Die
- Individual Die
- Populated Boards
- Wafers on Film Frame
- Components
- Fan out Wafers

Part Tracking Technology



akrometrix.com
sales@akrometrix.com
1-404-486-0880

AXP 2.0-DFP2 Technical Specifications

Vision Measurement Technology	Digital Fringe Projection 2
Maximum Field of View (FOV) (mm)	192x240
Minimum Field of View (FOV) (mm)	36x45
Maximum Sample Size (mm)	400x400
Minimum Sample Size (mm)	0.5x0.5
Maximum Measured Surface Coplanarity	50,000 microns
Resolution, Z-axis (vertical displacement)	2.5 microns
Accuracy, Z-axis (vertical displacement)	2.5 microns / 3%
Resolution, z-axis at max FOV (vertical displacement)	8 microns
Resolution, XY-axes (horizontal displacement)	N/A
Strain Resolution	N/A
Maximum Measurement Points per Acquisition	5,304,320
Maximum Measurement Density (points per mm ²)	3274
Minimum Measurement Density (points per mm ²)	115
Thermal Processing Technology	Radiant IR
Maximum Heating Rate, 50°C to 250°C (°C/s)*	3.5
Maximum Cooling Rate, 250°C to 125°C (°C/sec)*	2.25
Maximum Temperature (°C)	300
Cycle Time 25°C to 250°C to 25°C (minutes)*	8
Maximum Thermal Profiles	Unlimited
Maximum Thermal Cycles Time	Unlimited
Maximum Acquisitions per Cycle	Unlimited
Automated Data Collection	yes
Batch Data Analysis	yes
Software	Akrometrix Studio 8.5 or later
Data Export Formats	.dat, .txt, .png
Sample Set-up time, typical	5 minutes
Sample preparation method, typical	white paint
Data Acquisition (Measurement) Time, approximate	1 second
Data Analysis Time per Acquisition, approximate	5 seconds
Approximate Length, Width, Height (mm)	800x500x300
Approximate Weight (kg)	12.5
Electrical Requirements	powered by AXP
Air Requirements	N/A
Other Utilities	exhaust 14286 lpm

