

DIC3

Digital Image Correlation Module

## For Fast Thermal Strain and CTE

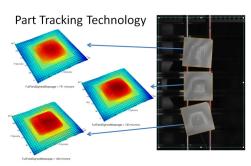
- Add-on module compatible with AXP3 & PS600T
- Field of View Measurement
  up to 225mm x 205mm in 1 second
- With resolutions down to
  0.5 microns in x-y & 100 microstrain
- Setup automation with:
- Software lens control
- Optional Autoloader

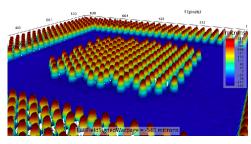


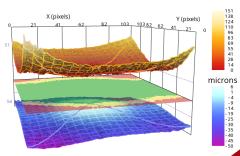
## ON VIRTUALLY ANY SUBSTRATE

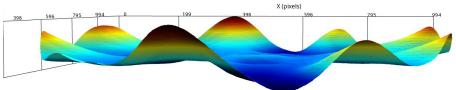
- PCBs
- Panels
- Wafers
- Stacked Die
- Individual Die
- Populated Boards
- Wafers on Film Frame
- Components
- Fan out Wafers
- CoWoS













## **DIC3** Technical Specifications

	AXP 3	PS600T
Vision Measurement Technology	Digital Image Correlation	
Maximum Field of View (FOV) (mm)	225x205	
Minimum Field of View (FOV) (mm)	36x33	
Maximum Sample Size (mm) - Overall	400x400	820x830
Minimum Sample Size (mm)	3x3	
Resolution, XY-axes (horizontal displacement)	0.5 micron (@ 90x75mm)	
Strain Resolution	100 μStrain	
Maximum Measurement Points per Acquisition	18,345,328	
Maximum Measurement Density (points per mm²)	614	
Minimum Measurement Density (points per mm²)	16	
Thermal Processing Technology	Radiant IR	
Maximum Temperature	300°C	
Maximum Heating Rate °C/sec (from 50°C to 250°C)*	3.5	3.5
Maximum Cooling Rate °C/sec (from 250°C to 125°C)*	2.25	1.25
Maximum Thermal Profiles	Unlimited	
Maximum Thermal Cycles Time	Unlimited	
Maximum Acquisitions per Cycle	Unlimited	
Independently Controlled Topside Heating?	yes	
Multi-Zone Bottom Heater?	yes	
Automated Data Collection?	yes	
Batch Data Analysis?	yes	
Electronically Controlled Lensing?	yes	
Software	Akrometrix Studio 10.1 or later, VIC3D	
Data Export Formats	.csv, .bmp, .png, .avi	
Sample Set-up time, typical	8 minutes	
Sample preparation method, typical	black/white speckle paint	
Data Acquisition (Measurement) Time, approximate	1 seconds	
Data Analysis Time per Acquisition, approximate	8 seconds	
Appromixate Depth, Width, Height (mm)	400x630x441	400x840x441
Appromixate Weight (kg)	12.5	13
Electrical Requirements	powered by base system	
Air Requirements	minimum 20 psi	
Other Utilities	exhaust 14286 lpm	

<sup>\*</sup>Thermal Ramp rates based on 27x27x1.4mm substrates sample

