



Fine Tooling

广州市方瞳科技有限责任公司

FIDAS FT9602A

Strain Measurement Solution

Based On FIDAS Family

- **CONVENIENT**
- **HIGH PRECISION**
- **FLEXIBLE**



VERSION: ML210817A RELEASED DATE: 2021-08-17

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Product features:

- 24bit ADC
- Automatic Hardware Zero Offset Clear
- Electrical isolation between groups
- A single suitcase supports a maximum of synchronous 48 channels in 6 groups
- The host is equipped with an external trigger synchronization interface and can extend a maximum of 12000 channels using the host synchronization function
- Free Strain analysis software be compliance with IPC-JEDEC9704A
- FTStudio、LabVIEW、Visual Studio supported



Overview:

FT9602A Strain Measurement Solution it is designed for PCB Fixture stress test and other occasions. The FT9602A is based on the Compact Field Data Acquisition Suitcase (FIDAS) architecture. The FT9602A Strain Measurement Solution inherits the advantages of this architecture, which can be quickly inserted and removed, flexible extension channels and functions. The Stress analysis software in user computer is easy to get the data through high-speed USB 2.0 or Ethernet data port.

System support: windows XP/10 Linux

Soft compatibility: LabVIEW Visual Studio FT Studio

Report be compliance with IPC-JEDEC9704A: providing Channel Strain, P&D Strain, Strain Rate

Strain Measurement Report

Fixture Information:		Measurement Equipment & Setting:	
Fixture Name		Machine Make/Model	
Manufacturer		Machine Software/Version	
Manufacturer P/N		Sampling Rate	2000 Hz
Inspection Date		PWM Thickness	1.6 mm
Inspection by		Limit Strain	500 ue
Information:		Strain Gage Properties:	
Bord AA#		Gage Part Number	
P/N or INV#		Gage Vendor	
Form Factor		Gage Description	
Description		Gage Resistance	120 Ω

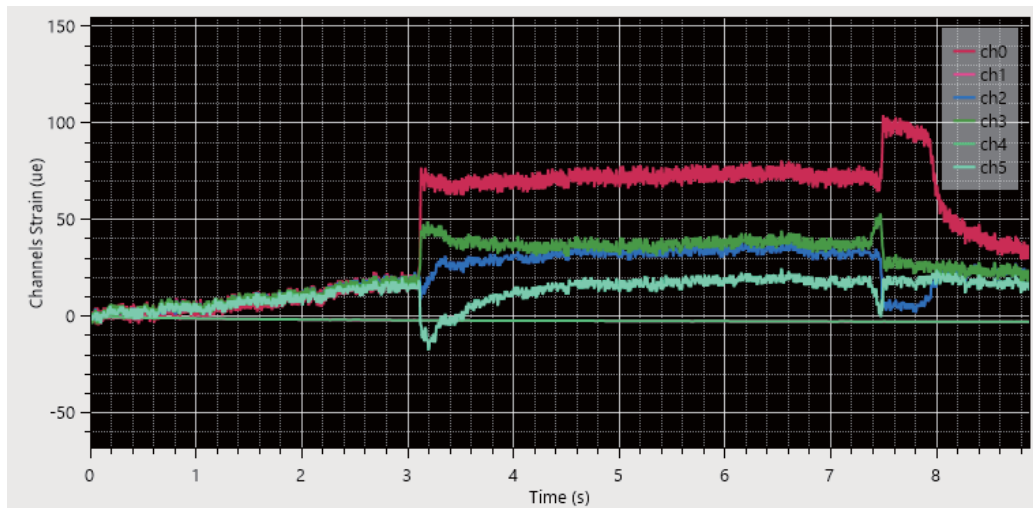
All Strain Listed in $\mu\text{Strain}(*10\&\wedge(-6) \text{ in/in})$

Summary of Strain Data

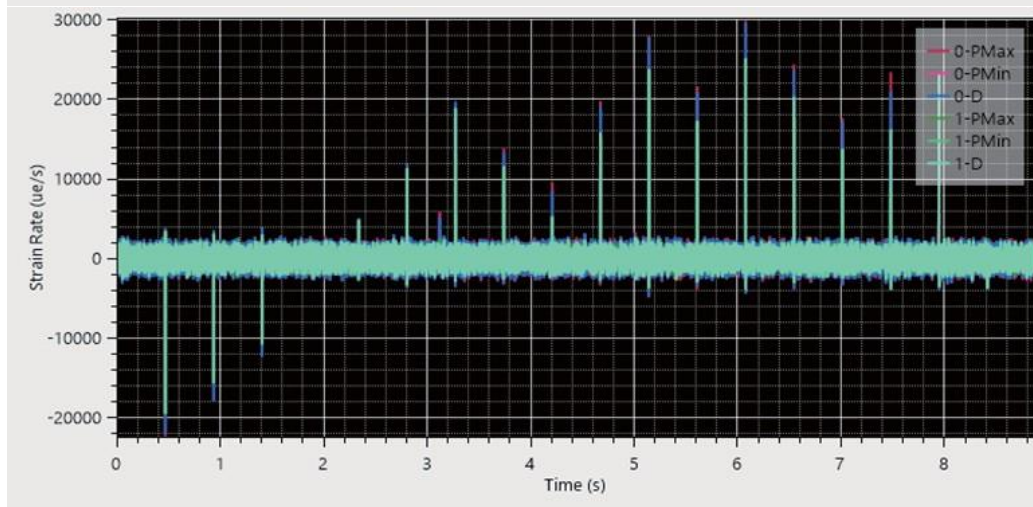
Assembly Step	Strain Gauge Map	e1	e2	e3	Diagonal Strain	e_Min Principal	e_Max Principal	Strain Limit	Result
		microstrain	microstrain	microstrain	microstrain	microstrain	microstrain	microstrain	
C:\Users\Admini	Sensor_1	104.5706967	-0.260480282	40.40560009	125.0267975	-20.38369927	133.6457439	500	Pass
	Sensor_2	54.18830593	-0.259031974	25.34729054	73.26267376	-21.03258737	75.04507983	500	Pass

Demo Report

Stress curve of channel



Channel strain rate



Specification

Items	Description
Sampling mode	Synchronous
Sample Rate	1KSps, 2KSps, 4KSps
Channels	Each FT9602A card has 8 CHs and one FIDAS suitcase can support max 6 cards
Wheatstone Bridge	1/4
Strain Sensor	120Ω in 2 wires / 3 wires
Range	±50000με
Error	±0.2% Reading ± 5με
Temperature drift	Gain Error < 5ppm/°C
INL	0.1% FS
Power Supply	adaptor input with DC24V
Operating environment	温度: -40°C~85°C, 相对湿度: 10%~90%RH
Storage environment	温度: -40°C~85°C, 相对湿度: 5%~95%RH 无凝露
Dimension of All System	W*D*H ≈ 285mm*210mm*145mm
Weight Of All System	About 3Kg

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