



SMT First Article Inspection System FAI-600IV



FA 5001V First Article Inspection System

Powerful First Article Inspection System offering unparalleled automated manufacturing verification test and reporting capabilities.

The BLUIRIS FAI-600IV First Article Inspection System quickly and accurately verify First Article Samples. Using advanced optical and computing techniques, the FAI-600IV measures properties of an initial sample against the specifications. Tests conducted include checking whether a correct component has been used, whether a component is in the defined location, and whether a component is positioned accurately. The values of components such as resisters, capacitors and inductors can be automatically checked and verified. The system can eliminate up to 99.99% errors due to manual inspection methods. Test results are provided in insightful, detailed reports.





First Article Inspection Introduction



1. Save Labor Cost

With traditional methods and approaches, the first inspection process typically requires at least two operators to perform the task. With the FAI-600IV, only one operator is required.



2、Save Time

Reduce the time it takes to perform first article inspections by up to 80%.



3、Improve Quality

Eliminate up to 99.99% of errors caused by manual methods.



5、Easy to use

Intuitive and easy to use. FAI-600IV operators can to learn to use the FAI-600IV in under two days.



4. First Article Inspection Report

Comprehensive reporting including pass/fail information, observed values, and insightful charts and graphs. Reports can be viewed, printed, saved or emailed.



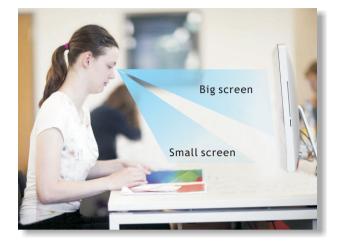
6、Multiple Customer Deployments

FAI-600IV systems are deployed at hundreds of customer sites. Representative customers include Benchmark, Celestica, VALEO,VIVO. See more of our customers in back cover



Duet Display

We provide two displays. Big one shows all the information, the other one just show the current work window. The operator need not raise her/his head frequently.



Programming

Auto generate a test program in under 5 minutes.

(2) Or (3) Or (3) Cli (4) Cli	you can select any you can click 'click t ck 'move up', 'move ck 'ok' button to star	nt load pois image, cad and bom file at the same time or of the sixt, club; might bowser burnet to load pob image, cad and bom file o browse or reload burnon to load corresponding pob data file down't button to correct pob image, cad file or bom file item todamid data file and analysis neel loading procedure	e one after another		
Item	Workflow	File Information	Operation Remin	0	Scan Image
1	load PCB Picture	ciusersifai desktopitest pobajog	Reload Reload	0	Browse all
	load BOM file	c:\users\fai\desktop\test\bom.xlsx	Reload	-	Single browse
3				0	oungre browse
3				0	Move up
3					
3				0	Move up

Auto check

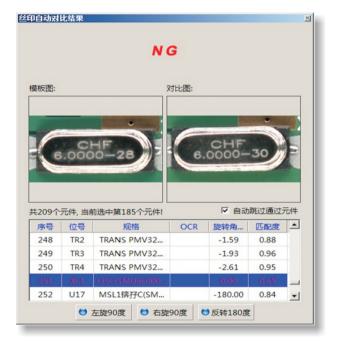
For components without markings, a built-in LCR meter can perform test measurements for inductance, capacitance and resistance; the FAI-600IV automatically changes the test frequency based on BOM information.

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urrent exporting Item No.	list has totally 419 co Location	nponents, including passed 7,		Part No.	Measured Value	Result	Remarks
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73	C300	(104.600,51.200)	CAP,1206,10uF,16V,+80%-20%,15V	121809010106	8.793283uF	V PASS	
74	C46	(56.500,48.000)	CAP,0603,1mF,16V,±10%,X7R	121803000102	0.971165nF	V PASS	
75	CI	(109.750.70.500)	CAP.0603.1uF.16V.+80%-20%-Y5V	121803010105	2.028055uF	X NG	wrong mater



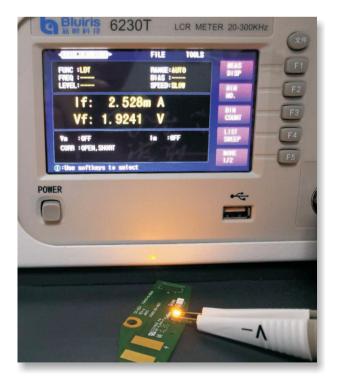
Auto optical inspection and "Golden Board"

For components with silk screening, the FAI-600IV system checks all components in under a minute. AGolden Boardcan serve as a test reference.



LED & Diode Test

LCR meter provides LDT function additionally, light on testing on LED, and conductivity test on diode.





Detailed Search

Report data can be viewed and sorted in a number of different ways. For example, components can be sorted according to whether they have passed or failed a test, or by their part numbers.

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Condition Sort	•		8.08.000
Query by Current Condition	i 💦 🔸	<u>। </u>	
Condition Query	•	Class Query	
Show detect fail pcb cell on	lv	No. Query	
Show pass only	·	Location Que	ry 🔛
Show none detect pcb cell of	mlv	Index Query	
Show all pcb cell		Specification	Query
		Synthetical Q	uery
Move between none pass		Coord Query	111
Move between all		A DYCEL	900
Enable location by mouse			(mm)
Disable location by mouse			U D
Locate to begin of list(K)	Home	01 👔 🥌	0
Locate to begin of list(K)			
Locate to begin of list(<u>R</u>)	End 🖥		LF
	End Ctrl+Home		2015 CDLF

FAI System configure	
- Data Import	Measuring and detect
✓ Ignore continual delim chars	Enable pass all empty specification cell
₩ Enable dash connector of location(ex. C1-3 means C1, C2, C3)	✓ Enable show all query cell
✓ Enable wave-line connector of location(ex. C1~3 means C1, C2, C3)	Enable skip passed pcb cell when press WASD key
Compatible for high version cad and bom files	Enable skip none RC cells when press WASD key
 Enable large data read mode Enable pcb cell list order by bom 	☐ Enable specification parse result confirm when new sample
T Enable SCN config when new sample	\square Enable pass identical cells when passed number not less th 3
Enable bom location prefix check(ex. C1, 2 means C1, C2)	✓ Enable error reason define
Specification parse	UI display
\overline{arphi} Enable prefer to abtain type from specification	✓ Enable location curve line color define (Click)
Enable character F as error	✓ Enable particial image rect line color define (Click)
✓ Enable general default parse error define 5 %	✓ Enable location curve line width define 2 (pixel)
✓ Enable zero resistance parse error define 0.50 ohm	✓ Enable particial image rect line width define 3 (pixel)
😁 Save	😁 Cancel



Report

Each report includes the company's name, test time, operator's name, model number, total number of components, how many components passed and failed. The measured values of all components and their nominal values are also shown. Reports can be viewed, printed, saved or emailed to customers.

Conclusion	: F	ASS			ection Re Pass Rate :	100%		
Campany:	F	IPG			Detector :	QA002		
Sample :	1	EST001			Lot No. :			
Cutomer :					Batch Qty. :			
Scanning E)ur. : 0	0:01:50			Process Dur. :	00:01:05		
Measuring					Report Date :			
Producing					Total Inspec. :			
PASS :		19	NG :	0	Non-detected			
				Overall Pictu				
	6							
	Des	Part No.	Ite	em Description	Thumbrail	Stand. Pic.	Measured value	Remarks
No. Ref	Des 17	Part No. 121803020104		em Description (03.0.1uF,50V,+80%- 20%,V5V	11-14-14	Stand. Pic.	Measured value 0.105442uF	
No. Ref			CAP,06	i03,0.1uF,50V,+80%-		Stand. Pic.		Remarks PASS(Auto)
No. Ref 5 C 7 C	17	121803020104	CAP,06 CAP,06	03,0.1uF,50V,+80%- 20%,Y5V 03,0.1uF,50V,+80%-		Stand. Pic.	0.105442uF	PASS(Auto

System Docking

FAI system can dock with ERP, MES system, test report can be uploaded or captured by remote server easily.

Ftp report upload setti	ng					
Server IP:	192 . 168 . 1 . 111	📝 auto create upload directory				
Port:	21					
UserName:	FAI600					
Password:	•••••					
Upload Directory:	FAIReportText					
Local Directory:	D:\FAIERPText					
Item No.	File Format	Upload Allowed?				
001	txt	Allowed				
002	pdf	Allowed				
003	xml	Forbidden				
	😸 Save 👼	Cancel				



FAI-600IV First Article Inspection

- Makes SMT efficient
- Reduce labor cost
- Auto test and check
- Improve quality
- Optimize work procedures
- Trace back

Comparison between the FAI-600IV and traditional methods

Criteria	FAI-600IV	Traditional	Note
Labor	One operator	At least two operators	FAI-600IV can achieve at least 50% labor cost savings
Speed	Fast	Low to medium	FAI-600IV reduce test time up to 80%
Accuracy	Very accurate	Uncertain	FAI-600IV test results are up to 99.99% accurate and reliable
Vision	Clear	Unclear	FAI-600IV scans PCBs with the latest optical technologies
Verification	Automated	Human	
Report	Detail	Unclear	Reports can be viewed, saved and emailed. They are automatically generated
Auditing	Yes	Νο	An operator needs to sign in to the FAI-600IV providing tracking and auditing information





Specifications

Maximum Board Size	410x310mm, larger size needs customized
Maximum Component Height	26mm
Resolution	600-2400dpi
Accuracy	0.05%
LCR Meter Test Frequency	20Hz~300KHz, higher option available
Monitor Size	21.5 inch
Languages Supported	English/Chinese
Power Supply	AC 100~230V 1.2KVA
Dimension	W1305xD800xH1200mm
Weight	200Kgs

*Specification might be changed without notice





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