



MODEL 3214 SERIES

KEY FEATURES

- Robot automation
- SLT or ATE application
- Fixed Tray or Auto Stacker options
- Flexible test interface
- Position adjustable HMI access and operation
- Integration with Cobra thermal engine
- -70°C to 150°C temperature range**
- Heat dissipation > 1KW
- Easy thermal maintenance and swap
- Programmable temperature and contact force
- Power Monitor to prevent thermal runaway
- Thermal Sensing Diode feedback
- Quiet Operation < 70 db
- EMO safety controls

COBRA AUTOMATED TEST SYSTEM (CATS) MODEL 3214 SERIES

Chroma ATE U.S.A brings you the latest generation of dedicated SLT Handling Solutions, the 3214 CATS Series. This one-of-a-kind hybrid (ATE / SLT) innovative handler is meant for Engineering IC Characterization and Validation. Using a 4X multi-site IC testing scenario, combined with "true-ATC (Active Thermal Control)" thermal sequence capabilities, it is capable of handling packages of various types. This handling solution can accommodate the utmost of your power-hungry devices pushing the threshold of >1KW of power dissipation.

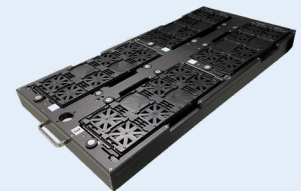
The 3214 uses device transfer technologies which differ from the industry standard of P&P (Pick and Place). It uses the latest in bleeding edge, fully integrated, and

articulated robot management. Featuring a reduction in change-kit parts per site, leading to overall cost savings. Delivering the IC's through a uniquely designed and precision enabling change-kit feature, resulting in a high accuracy placement of the device. Its RAC (Remote Access Control), real-time and worldwide access HiRes camera modules capture the products' test sequencing from anywhere around the world.

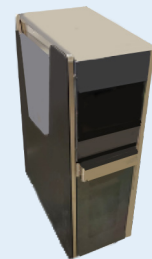
Chroma's 3214 can test up to 4 devices in parallel from low to high temperatures with ATC ranging from -70°C to 150°C**. The CATS also brings the luxury of a mix & match to variant IC designs. For any Cobra thermal engine upgrades, contact the factory for more information.



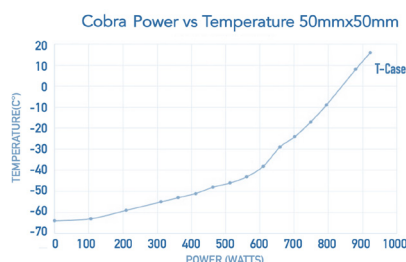
Robot Automation



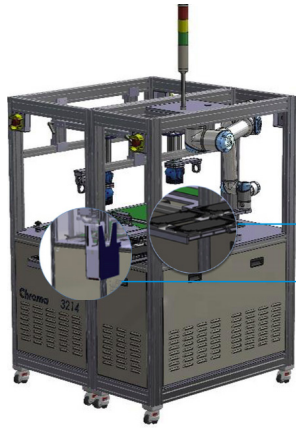
Fixed Tray Option



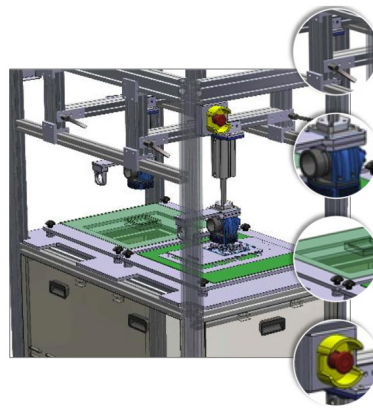
Auto Stacker Option



SPECIFICATIONS



- Fixed Tray Carrier for x4 JEDEC Trays
- Auto Stacker for x25 JEDEC Trays



- X/Y/Z Adjustable Gantry
- Direct Cobra Head Attachment
- Multiple EVB Types
- EMO Safety Controls

CATS Model 3214	System Details	
System Mechanical Dimensions	1990 mm (L) x 1160 mm (W) x 1686 mm (H) or 2256 (H) mm with Light Tower, 1500 lbs	
Modules Combination	x1 Robot module, x1/x2 SLT modules. Option: x1/x2 ATE module or x1 SLT/x1 ATE**	
Facility Requirement	Power Supply: 208 VAC, 50/60 Hz, Three-phase, 30 Amps** CDA 90 psi above, constant supply, minimum 200 LPM, Dew Point -55°C to -70°C Cooling water 18°C to 20°C, minimum 10 LPM ** Note: Individual power source is required for tester.	
Applicable Device Size	Type: GBA, uBGA, PGA, QFP, CSP, BCC, QFN, Flip-Chip, TSOP Outer Dimensions: 5mm x 5mm to 90mm x 90mm** Lead/Ball Pitch: 0.4mm / 0.4mm and above	
System Platform Performance	Site Numbers	Quad sites by two SLT modules, maximum board size 450mm x 450mm
	Test Site Platform	Horizontal PCB, Vertical PCB or Chassis
	Tray Supply Model	x4 JEDEC trays with Fixed Tray Carrier or x25 JEDEC trays with Auto Stacker
	Testing Model	Configurable independent sites in parallel test or sequential site to site test
	Index Time:	~90 seconds
	Jam Rate	1/1000
Thermal Engine	Contact Force	>500 lbs**
	Cobra Temperature System**	
	<ul style="list-style-type: none"> - 70°C to 150°C ** Accuracy: 2°C with no load (T/C Accuracy is 1°C) Stability: 1°C under controlled conditions Tolerance: ± 3°C steady state 	
	Temperature Transition Rates Ramp rate cooling: >2°C/sec Ramp rate heating: <1°C/sec	
System Operation Control	GUI on HMI, Thermal control by GUI setting or protocol command	
Communication Interface	TCP/IP, option GPIB for ATE module with optional temperature control protocol command	
Optional Features**	<ul style="list-style-type: none"> Fixed Tray Carrier Auto Stacker Camera Package ESD Ion Fans Package Pin#1 CCD** 2D Barcode** 	<ul style="list-style-type: none"> Thermal Engine Attached Options: <ul style="list-style-type: none"> - TSD - Power Monitor Box - Humidity Sensor - Individual Site / Temperature Display

**Contact us for more information (Note: All specifications are subject to change without notice)

ORDERING INFORMATION

**U.S.A. HEADQUARTERS
CHROMA ATE INC.**
7 Chrysler
Irvine, CA 92618, USA
Tel: +1-949-421-0355
Fax: +1-949-421-0353
http://www.chroma.com
Email: info@chroma.com

**Developed and
manufactured by :**

CHROMA ATE INC. (U.S.A.)
675 Sycamore Dr., Suite 100
Milpitas, CA 95035, USA
Tel: +1-408-969-9998
Fax: +1-949-421-0353
http://www.chroma.com
Email: info@chroma.com

Global Offices:

**GLOBAL HEADQUARTERS
CHROMA ATE INC.**

88 Wenmao Rd., Guishan Dist.,
Taoyuan City 333001, Taiwan
Tel: +886-3-327-9999
Fax: +886-3-327-8898
http://www.chroma.com
E-mail: info@chroma.com

**EUROPE
CHROMA ATE EUROPE B.V.**

Morsestraat 32, 6716 AH Ede,
The Netherlands
Tel: +31-318-648282
Fax: +31-318-648288
http://www.chroma.eu.com
E-mail: sales@chroma.eu.com



**JAPAN
CHROMA JAPAN CORP.**

472 Nippa-cho, Kouhoku-ku,
Yokohama-shi, Kanagawa,
223-0057 Japan
Tel: +81-45-542-1118
Fax: +81-45-542-1080
http://www.chroma.co.jp
E-mail: info@chroma.com

**CHINA
CHROMA ELECTRONICS**

(SHENZHEN) CO., LTD.
8F, No.4, Nanyou Tian An
Industrial Estate, Shenzhen,
China PC: 518052
Tel: +86-755-2664-4598
Fax: +86-755-2641-9620
E-mail: info@chroma.com