

Poster Sessions are a great way to multitask during a break, stretch your legs after a long session, and even network through interaction with the poster presenters and other curious attendees. This year's session offers a variety of relevant topics that augment what you'll learn sitting in the general sessions.

**CSH Coating for High Temperature**  
Ichiro Fujishiro—Yamaichi Electronics

**Top Side Probing on Handler**  
Shaul Lupo—Intel Israel

**“Auto-Centering Manual Actuator” —  
One Manual Lid for Different Package Sizes Testing**  
Ying Hoe Mah, Shamal Mundiath—JF Technology Berhad

**Novel Approach Of Enabling Customer Shadow EPROM aka  
“EXTERNAL-EPROM” In HVM Environment**  
Maroon Maroon, Mouller Keren—Intel Corporation



This Poster

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BiTS 2013



## **“Auto Centering Manual Actuator” One Manual Lid for Different Package Sizes Testing**

Ying Hoe Mah, Shamal Mundiyyath  
JF Technology Berhad

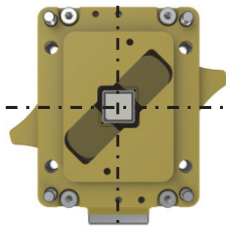
### **Conventional style manual actuator challenges**

- Less accurate for package centering due to package tolerance (i.e. assembly spec)
- Need many in inventory for different package sizes
- Higher cost due to inventory build up
- Higher chance of misplacing
- Higher chance of mistakes

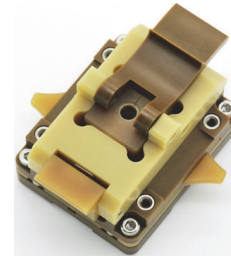
### **Innovation-driven solution**

Auto Centering Manual Actuator (ACMA) offers an innovation-driven solution with high accuracy in centering alignment to cater to different package sizes using just a single manual actuator for reliable R&D, Engineering and Production verification purposes. Let's see how it's done...!

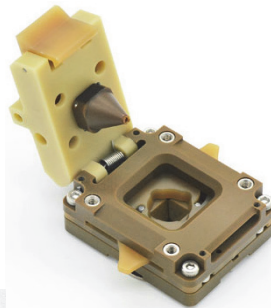
## Auto-Centering Manual Actuator (ACMA)



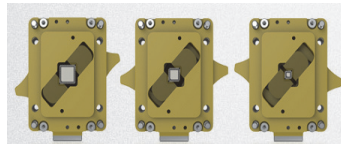
Two guiding jaws have been designed to position (center) various size packages for reliable testing.



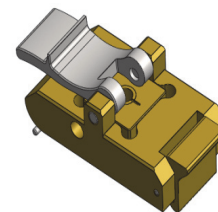
Optimum thermal access hole for R&D and Engineering testing.



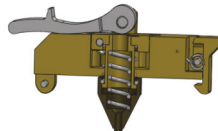
Various package sizes



Various package sizes positioned with one MA (2x2 to 7x7mm) to the center.  
 Minimize the quantity of manual actuators and the resources for manufacturing. (Promote Eco-System)

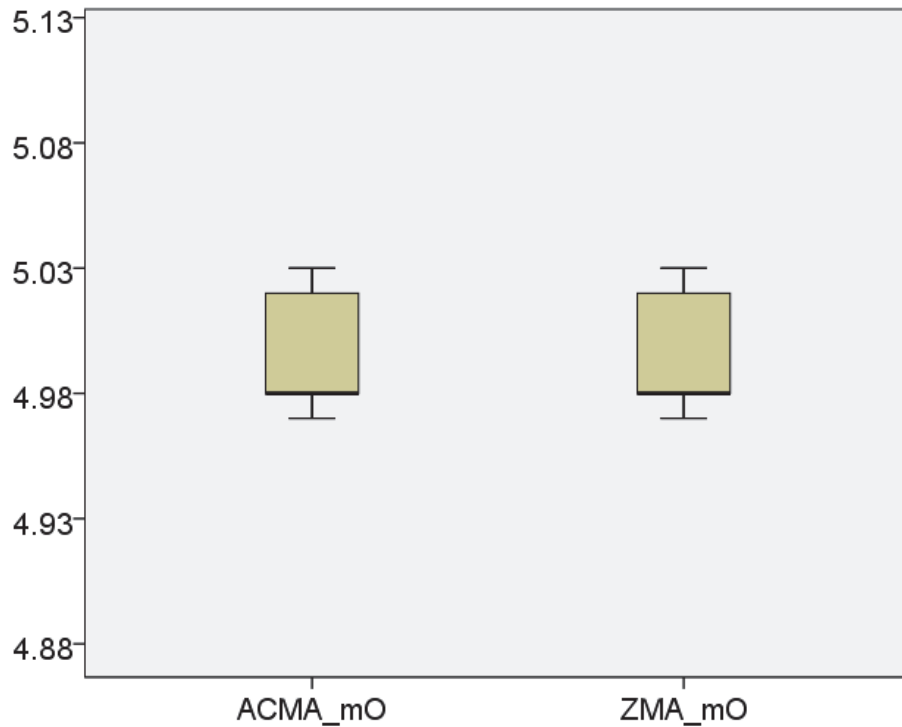


Self-locking and aesthetic cam lever for low/high load application.



Spring loaded/vertical compliant device loading mechanism to enhance gram force for different sizes of packages under test.

**Comparable DC resistance performance**



**Descriptive Statistics**

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance	Skewness	
					Statistic	Std. Error			Statistic	Std. Error
ACMA_mO	50	.06	4.97	5.03	4.9962	.00344	.02432	.001	.384	.337
ZMA_mO	50	.06	4.97	5.03	4.9960	.00345	.02441	.001	.400	.337
Valid N (listwise)	50									

The Cpk index > 4.0 indicates both ACMA and manual actuator characteristics were comparable to the objective.