

# Bill of Materials

Generic	Material List	Wire Size	DIE ATTACH EPOXY	MOLD COMPOUND	
				FROM	TO
AD8137	AD8137WYCPZ-R7 AD8137YCPZ-REEL AD8137YCPZ-REEL7	1.0 mil	ABLESTIK 8290	SUMITOMO G770	SUMITOMO G700
ADA4432-1	ADA4432-1BCPZ-R7 ADA4432-1WBCPZ-R7	0.8 mil			
ADA4433-1	ADA4433-1BCPZ-R7 ADA4433-1WBCPZ-R7				

QUALIFICATION RESULTS FOR 8-LFCSP			
TEST	SPECIFICATION	SAMPLE SIZE	RESULTS
Highly Accelerated Stress Test (HAST)*	JEDEC <i>JESD22-A110</i>	<b>231</b>	<b>Pass</b>
Temperature Cycle (TC)*	JEDEC <i>JESD22-A104</i>	<b>231</b>	<b>Pass</b>
Autoclave (AC)*	JEDEC <i>JESD22-A102</i>	<b>231</b>	<b>Pass</b>
High Temperature Storage Life (HTSL)	JEDEC <i>JESD22-A103</i>	<b>77</b>	<b>Pass</b>
Solder Heat Resistance (SHR)*	JEDEC/IPC <i>J-STD-020</i>	<b>33</b>	<b>Pass</b>
Electrostatic Discharge <i>Field-Induced Charged Device Model</i>	JEDEC <i>JESD22-C101</i>	<b>3/voltage</b>	<b>Pass ±1250V</b>

\*Preconditioned per JEDEC/IPC J-STD-020

QUALIFICATION RESULTS FOR 16-LFCSP			
TEST	SPECIFICATION	SAMPLE SIZE	RESULTS
Highly Accelerated Stress Test (HAST)*	JEDEC <i>JESD22-A110</i>	<b>231</b>	<b>Pass</b>
Temperature Cycle (TC)*	JEDEC <i>JESD22-A104</i>	<b>231</b>	<b>Pass</b>
Autoclave (AC)*	JEDEC <i>JESD22-A102</i>	<b>231</b>	<b>Pass</b>
High Temperature Storage Life (HTSL)	JEDEC <i>JESD22-A103</i>	<b>77</b>	<b>Pass</b>
Solder Heat Resistance (SHR)*	JEDEC/IPC <i>J-STD-020</i>	<b>33</b>	<b>Pass</b>
Electrostatic Discharge <i>Field-Induced Charged Device Model</i>	JEDEC <i>JESD22-C101</i>	<b>3/voltage</b>	<b>Pass ±1250V</b>

\*Preconditioned per JEDEC/IPC J-STD-020

# **TEST PRODUCT QUALIFICATION REPORT**

**TITLE:**

Test Transfer of ADA4433-1 (LFCSP) from STATS ChipPAC Malaysia (SCM) to Amkor Technology Philippines (AP3)

**PCN NUMBER:**

**13\_0205**

**REVISION:**

**C**

**DATE:**

**04 July, 2014**

## PROJECT BACKGROUND

Test transfers are carried out to qualify Amkor Technology Philippine (AP3) as an additional test site for ADI devices to support production, and where STATS ChipPAC Malaysia (SCM) factory will shut down in 2014.

## SUMMARY

ADA4433-1 LFCSP will be transferred from SCM to AP3 for test only.

This report documents the successful completion of the product test transfer requirements of ADA4433-1 LFCSP from SCM to AP3.

Test product qualification was performed according to Analog Devices Specification (ADI0012 / TST000137 / TST00095)

## TEST AND PRODUCT INFORMATION

Device: ADA4433-1  
Package: LFCSP-3x3x0.75  
Leads: 8  
Tester Platform: MFLEXHP  
Handler: SRM D248

## DESCRIPTION AND TEST RESULTS

Table 1 provides a description of the qualification tests conducted and corresponding test results for ADA4433-1 LFCSP. All the units have undergone electrical tests on both the sending and receiving sites on the same test platform. Any device that did not meet the electrical qualification requirements without further analysis and data to prove passing, the qualification would be considered failed.

Table1. Test Product Transfer Qual Criteria

Generic	Package	Lot Size	Sending Site	Receiving Site	Mean Shift = $< 0.5\sigma$	Sigma Ratio = $< 1.3$
ADA4433-1	5x5x0.85 LFCSP	100	SCM	AP3	Passed	Passed

The ADA4433-1 was qualified by running a qualification lot with 100 units both in SCM and AP3. Data between sites were analyzed as summarized in Table 1.

A passing result was recorded when the yield from receiving site met or exceeded yield from sending site as summarized in Table 2. Succeeding lots with increased quantity will be closely monitored once the device has started production run at AP3.

Table2. Test Product Transfer Qualification Lot Run

<b>GENERIC</b>	<b>Package</b>	<b>Lot Size</b>	<b>Test Site</b>	<b>Results</b>
ADA4433	3x3x0.75 LFCSP	100	AP3	Passed

No valid rejects were encountered during the said evaluation in both sending and receiving sites.

**REJECT VERIFICATION**

5 valid rejects tested in SCM and AP3 having the same result.

Table3. Setup verification using Reject units

<b>Units #</b>	<b>SCM</b>	<b>AP3</b>
1	Failed	Failed
2	Failed	Failed
3	Failed	Failed
4	Failed	Failed
5	Failed	Failed

**CONCLUSION:**

ADA44433 LFCSP handler correlation data on both sites are correlated. Data are already approved by Product Engineering and Technical Review Board, it is acceptable. ADA4433-1 LFCSP device is now ready for transfer to AP3.

**APPROVALS:**

Test Technical Review Board

**SUPPORTING DOCUMENTS:**

Technical Review Board: TRB#9943

**ADDITIONAL INFORMATION:**

Homepage: <http://www.analog.com/en/index.html>

Datasheet: <http://www.analog.com/en/specialty-amplifiers/video-ampsbuffersfilters/ada4433-1/products/product.html>

Customer Service: [http://www.analog.com/en/content/technical\\_support\\_page/fca.html](http://www.analog.com/en/content/technical_support_page/fca.html)

# **TEST PRODUCT QUALIFICATION REPORT**

**TITLE:**

Test Transfer of ADA4432-1 (LFCSP) from STATS ChipPAC Malaysia (SCM) to Amkor Technology Philippines (AP3)

**PCN NUMBER:**

13\_0205

**REVISION:**

A

**DATE:**

20 June, 2014

## PROJECT BACKGROUND

Test transfers are carried out to qualify Amkor Technology Philippine (AP3) as an additional test site for ADI devices to support production, and where STATS ChipPAC Malaysia (SCM) factory will shut down in 2014.

## SUMMARY

ADA4432-1 LFCSP will be transferred from SCM to AP3 for test only.

There is no change to the form, fit, function, quality or reliability between platforms.

This report documents the successful completion of the product test transfer requirements of ADA4432-1 LFCSP from SCM to AP3.

Test product qualification was performed according to Analog Devices Specification (ADI0012 / TST000137 / TST00095)

## TEST AND PRODUCT INFORMATION

Device:	ADA4432-1
Package:	LFCSP-3x3x0.75
Leads:	8
Tester Platform:	MFLEXHP
Handler:	SRM D248

## DESCRIPTION AND TEST RESULTS

Table 1 provides a description of the qualification tests conducted and corresponding test results for ADA4432-1 LFCSP. All the units have undergone electrical tests on both the sending and receiving sites on the same test platform. Any device that did not meet the electrical qualification requirements without further analysis and data to prove passing, the qualification would be considered failed.

Table1. Test Product Transfer Qual Criteria

Generic	Package	Lot Size	Sending Site	Receiving Site	Mean Shift = $\leq 0.5\sigma$	Sigma Ratio = $\leq 1.3$
ADA4432-1	5x5x0.85 LFCSP	100	SCM	AP3	Passed	Passed

The ADA4432-1 was qualified by running a qualification lot with 100 units both in SCM and AP3. Data between sites were analyzed as summarized in Table 1.

A passing result was recorded when the yield from receiving site met or exceeded yield from sending site as summarized in Table 2. Succeeding lots with increased quantity will be closely monitored once the device has started production run at AP3.

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1	Failed	Failed
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4	Failed	Failed
5	Failed	Failed

**CONCLUSION:**

ADA44432 LFCSP handler correlation data on both sites are correlated. Data are already approved by Engineering and Technical Review Board, it is acceptable. ADA4432-1 LFCSP device is now ready for transfer to AP3.

**APPROVALS:**

Technical review Board

**SUPPORTING DOCUMENTS:**

Technical Review Board: TRB#9942

**ADDITIONAL INFORMATION:**

Homepage: <http://www.analog.com/en/index.html>

Datasheet: <http://www.analog.com/en/specialty-amplifiers/video-ampsbuffersfilters/ada4432-1/products/product.html>

Customer Service: [http://www.analog.com/en/content/technical\\_support\\_page/fca.html](http://www.analog.com/en/content/technical_support_page/fca.html)