# **Bill of Materials**

Compute	Note vial List	Wire	DIE ATTACH	MOLD CO	MPOUND
Generic	Material List	Size	EPOXY	FROM	ТО
AD5544	AD5544ACPZ-1-RL7				
	AD5544BCPZ-RL7				
AD5628	AD5628ACPZ-1-RL7				
	AD5628ACPZ-2-RL7				
	AD5628BCPZ-2-RL7				
	AD5628BCPZ-2-U1				
AD5629R	AD5629RACPZ-2-RL7				
	AD5629RACPZ-3-RL7				
	AD5629RBCPZ-1-RL7				
	AD5629RBCPZ-2-RL7				
AD5668	AD5668ACPZ-2-RL7	1.0 mil	ABLESTIK	SUMITOMO	SUMITOMO
	AD5668ACPZ-3-RL7	1.0 11111	8290	G770	G700
	AD5668BCPZ-1500RL7				
	AD5668BCPZ-1-RL7				
	AD5668BCPZ-2500RL7				
	AD5668BCPZ-2-RL7				
AD5669R	AD5669RACPZ-2-RL7				
	AD5669RACPZ-3-RL7				
	AD5669RBCPZ-1500R7				
	AD5669RBCPZ-1-RL7				
	AD5669RBCPZ-2500R7				
	AD5669RBCPZ-2-RL7				



# Qualification Data for LFCSP Devices at Amkor Philippines

QUALIFICATION RESULTS 20-LFCSP						
TEST	SPECIFICATION	SAMPLE SIZE (LOT/QTY)	RESULTS			
High Temperature Storage (HTS)	JESD22-A103 150°C, 1000 hours	1 x 77	Pass			
Temperature Cycle*	JES22-A104, -65°C to +150°C, 2 cycle per hour, 500 cycles	3 x 77	Pass			
Biased HAST *	JESD22-A110, 130°C, 85% RH, 96hrs	3 x 77	Pass			
Autoclave *	JESD22-A102, 121°C, 100% RH, 96hrs	3 x 77	Pass			
Solder Heat Resistance (SHR)*	JEDEC/IPC J-STD-020	3 x 11	Pass			
Electrostatic Discharge (ESD) Field Induced Charged Device Model (FICDM)	JESD22-C101, >500V	1 x 3	Pass			

# Qualification Data for LFCSP Devices at Amkor Philippines cont.

QUALIFICATION RESULTS 48-LFCSP						
TEST	SPECIFICATION	SAMPLE SIZE (LOT/QTY)	RESULTS			
High Temperature Storage (HTS)	JESD22-A103 150°C, 1000 hours	1 x 45	Pass			
Temperature Cycle*	JES22-A104, -65°C to +150°C, 2 cycle per hour, 500 cycles	3 x 45	Pass			
Biased HAST *	JESD22-A110, 130°C, 85% RH, 96hrs	3 x 45	Pass			
Autoclave *	JESD22-A102, 121°C, 100% RH, 96hrs	3 x 45	Pass			
Solder Heat Resistance (SHR)*	JEDEC/IPC J-STD-020 3 x 11		Pass			
Electrostatic Discharge (ESD) Field Induced Charged Device Model (FICDM)	JESD22-C101, >500V	1 x 3	Pass			

<sup>\*</sup>Preconditioned Per JEDEC/IPC J-STD-020

# TITLE:

Test Transfer of AD5628 (LFCSP) from STATS ChipPAC Malaysia (SCM) to STATS ChipPAC China (SCC)

# **PCN NUMBER:**

14\_0005

# **REVISION:**

Α

# **DATE:**

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

## **SUMMARY**

AD5628 LFCSP will be transferred from SCM to SCC.

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 AD5628 LFCSP from SCM to SCC.

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

### **TEST AND PRODUCT INFORMATION**

Device: AD5628

Package: LFCSP-4x4x0.75

Leads: 16

Tester Platform: MFLXMS Handler: Delta Edge

# **Description and Test Results**

Table 1 provides a description of the qualification tests conducted and corresponding test results for AD5628LFCSP. 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.

Table 1. Test Product Transfer Qual Criteria

Generic	Package	Lot number	Lot Size	Sending Site	Receiving Site	Mean Shift =< 0.5sigma	Sigma Ratio =< 1.3
AD5628	4x4x0.75 LFCSP	2712737.1	100	SCM	SCC	Passed	Passed

The AD5628 was qualified by running a qualification lot with 100 units both in SCM and SCC. Data between sites were analyzed as summarized in Table 1.

Table 2. Test Product Transfer Qualification Lot Run

GENERIC	Package	Lot number	Lot Size	Test Site	Results
AD5628	4x4x0.75 LFCSP	2712737.1	100	scc	Passed

# **Rejects Verifications**

5 valid rejects tested in SCM and SCC having the same result. Table 3. Setup verification using Reject units

Unit #	SCM	SCC
1	Failed	Failed
2	Failed	Failed
3	Failed	Failed
4	Failed	Failed
5	Failed	Failed

## Conclusion:

AD5628 LFCSP handler correlation data on both sites are correlated. Data are already approved by PE and CY, it is acceptable. AD5628 LFCSP device is now ready for transfer to SCC.

# **Approvals**

TRB#9670 Test Product Engineer Chute Yield Engineer

## **Supporting Documents**

Technical Review Board: TRB#9670

## **Additional Information**

Homepage: <a href="http://www.analog.com/en/index.html">http://www.analog.com/en/index.html</a>

Datasheet: http://www.analog.com/en/analog-to-digital-converters/video-

decoders/AD5628/products/product.html

Customer Service: http://www.analog.com/en/content/technical\_support\_page/fca.html

# TITLE:

Test Transfer of AD5629R (LFCSP) from STATS ChipPAC Malaysia (SCM) to STATS ChipPAC China (SCC)

# **PCN NUMBER:**

14\_0005

# **REVISION:**

Α

# **DATE:**

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

## **SUMMARY**

AD5629R LFCSP will be transferred from SCM to SCC.

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 AD5629R LFCSP from SCM to SCC.

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

### **TEST AND PRODUCT INFORMATION**

Device: AD5629R

Package: LFCSP-4x4x0.75

Leads: 16

Tester Platform: MFLEXMS Handler: Delta Edge

# **Description and Test Results**

Table 1 provides a description of the qualification tests conducted and corresponding test results for AD5629R 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.

Table 1. Test Product Transfer Qual Criteria

Generic	Package	Lot number	Lot Size	Sending Site	Receiving Site	Mean Shift =< 0.5sigma	Sigma Ratio =< 1.3
AD5629R	4x4x0.75 LFCSP	2772704.1	100	SCM	SCC	Passed	Passed

The AD5629R was qualified by running a qualification lot with 100 units both in SCM and SCC. Data between sites were analyzed as summarized in Table 1.

Table 2. Test Product Transfer Qualification Lot Run

GENERIC	Package	Lot number	Lot Size	Test Site	Results
AD5629R	4x4x0.75 LFCSP	2633592.1	100	scc	Passed

# **Rejects Verifications**

5 valid rejects tested in SCM and SCC having the same result. Table 3. Setup verification using Reject units

Unit #	SCM	SCC
1	Failed	Failed
2	Failed	Failed
3	Failed	Failed
4	Failed	Failed
5	Failed	Failed

## Conclusion

AD5629R LFCSP handler correlation data on both sites are correlated. Data are already approved by PE and CY, it is acceptable. AD5629R LFCSP device is now ready for transfer to SCC.

# **Approvals**

TRB#9670 Test Product Engineer Chute Yield Engineer

# **Supporting Documents**

Technical Review Board: TRB#9670

# **Additional Information**

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

Datasheet: http://www.analog.com/en/analog-to-digital-converters/video-

decoders/AD5629R/products/product.html

Customer Service: http://www.analog.com/en/content/technical\_support\_page/fca.html

# TITLE:

Test Transfer of AD5668 (LFCSP) from STATS ChipPAC Malaysia (SCM) to STATS ChipPAC China (SCC)

# **PCN NUMBER:**

14\_0005

# **REVISION:**

Α

# **DATE:**

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

## **SUMMARY**

AD5668 LFCSP will be transferred from SCM to SCC.

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 AD5668 LFCSP from SCM to SCC.

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

### **TEST AND PRODUCT INFORMATION**

Device: AD5668

Package: LFCSP-4x4x0.75

Leads: 16

Tester Platform: MFLXMS Handler: Delta Edge

# **Description and Test Results**

Table 1 provides a description of the qualification tests conducted and corresponding test results for AD5668LFCSP. 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.

Table 1. Test Product Transfer Qual Criteria

Generic	Package	Lot number	Lot Size	Sending Site	Receiving Site	Mean Shift =< 0.5sigma	Sigma Ratio =< 1.3
AD5668	4x4x0.75 LFCSP	2657432.1	100	SCM	SCC	Passed	Passed

The AD5668 was qualified by running a qualification lot with 100 units both in SCM and SCC. Data between sites were analyzed as summarized in Table 1.

Table 2. Test Product Transfer Qualification Lot Run

GENE	RIC	Package	Lot number	Lot Size	Test Site	Results
AD56	668	4x4x0.75 LFCSP	2657432.1	100	SCC	Passed

# **Rejects Verifications**

5 valid rejects tested in SCM and SCC having the same result. Table 3. Setup verification using Reject units

Unit #	SCM	SCC
1	Failed	Failed
2	Failed	Failed
3	Failed	Failed
4	Failed	Failed
5 Failed		Failed

## Conclusion:

AD5668 LFCSP handler correlation data on both sites are correlated. Data are already approved by PE and CY, it is acceptable. AD5668 LFCSP device is now ready for transfer to SCC.

# **Approvals**

TRB#9972 Test Product Engineer Chute Yield Engineer

## **Supporting Documents**

Technical Review Board: TRB#9972

## **Additional Information**

Homepage: <a href="http://www.analog.com/en/index.html">http://www.analog.com/en/index.html</a>

Datasheet: http://www.analog.com/en/analog-to-digital-converters/video-

decoders/AD5668/products/product.html

Customer Service: <a href="http://www.analog.com/en/content/technical\_support\_page/fca.html">http://www.analog.com/en/content/technical\_support\_page/fca.html</a>

# TITLE:

Test Transfer of AD5669R (LFCSP) from STATS ChipPAC Malaysia (SCM) to STATS ChipPAC China (SCC)

# **PCN NUMBER:**

14\_0005

# **REVISION:**

Α

# **DATE:**

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

## **SUMMARY**

AD5669R LFCSP will be transferred from SCM to SCC.

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 AD5669R LFCSP from SCM to SCC.

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

### **TEST AND PRODUCT INFORMATION**

Device: AD5669R

Package: LFCSP-4x4x0.75

Leads: 16

Tester Platform: MFLXMS Handler: Delta Edge

# **Description and Test Results**

Table 1 provides a description of the qualification tests conducted and corresponding test results for AD5669RLFCSP. 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.

Table 1. Test Product Transfer Qual Criteria

Generic	Package	Lot number	Lot Size	Sending Site	Receiving Site	Mean Shift =< 0.5sigma	Sigma Ratio =< 1.3
AD5669R	4x4x0.75 LFCSP	2754766.1	100	SCM	SCC	Passed	Passed

The AD5669R was qualified by running a qualification lot with 100 units both in SCM and SCC. Data between sites were analyzed as summarized in Table 1.

Table 2. Test Product Transfer Qualification Lot Run

GENERIC	Package	Lot number	Lot Size	Test Site	Results
AD5669R	4x4x0.75 LFCSP	2754766.1	100	SCC	Passed

# **Rejects Verifications**

5 valid rejects tested in SCM and SCC having the same result. Table 3. Setup verification using Reject units

Unit #	SCM	SCC		
1	Failed	Failed		
2	Failed	Failed		
3	Failed	Failed		
4	Failed	Failed		
5	Failed	Failed		

## Conclusion:

AD5669R LFCSP handler correlation data on both sites are correlated. Data are already approved by PE and CY, it is acceptable. AD5669R LFCSP device is now ready for transfer to SCC.

# **Approvals**

TRB#9670 Test Product Engineer Chute Yield Engineer

## **Supporting Documents**

Technical Review Board: TRB#9670

## **Additional Information**

Homepage: <a href="http://www.analog.com/en/index.html">http://www.analog.com/en/index.html</a>

Datasheet: http://www.analog.com/en/analog-to-digital-converters/video-

decoders/ad5669r/products/product.html

Customer Service: <a href="http://www.analog.com/en/content/technical\_support\_page/fca.html">http://www.analog.com/en/content/technical\_support\_page/fca.html</a>