

# TEST PRODUCT QUALIFICATION REPORT

**TITLE:**

LTM4620A Test Site Transfer from Analog Devices Singapore to  
Analog Devices Penang

**PCN Number:**

**REVISION:**

A

**DATE:**

JANUARY 17, 2020

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**Table 1** – LTM4620A Test Details

**Table 2** - Qualification Activities and Acceptance Criteria

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## PROJECT BACKGROUND:

The LTM4620A is currently undergoing production testing at the Analog Devices Singapore (ADSG). It was a strategic decision from business standpoint to qualify Analog Devices Penang (ADPG) to become as new test site to ensure a continuity in the supply chain due to ADSG plant shutdown. ADPG is situated in Bayan Lepas, Penang, Malaysia.

After qualification and replication of necessary test capability, ADPG will serve as the primary test site facility to serve for micromodule future demands.

## SUMMARY:

The LTM4620A is a complete dual 13A output switching mode DC/DC power supply. Included in the package are the switching controller, power FETs, inductors, and all supporting components. Operating from an input voltage range of 4.5V to 16V, the LTM4620A supports two outputs each with an output voltage range of 0.6V to 2.5V, set by a single external resistor. Its high efficiency design delivers up to 13A continuous current for each output. Only a few input and output capacitors are needed.

## TEST AND PRODUCT INFORMATION:

|                  |                  |
|------------------|------------------|
| Device:          | LTM4620A         |
| Package:         | BGA              |
| Leads:           | 144L             |
| FG Part Name:    | LTM4620AIY#PBF   |
| Tester Platform: | ETS-364B         |
| Handler:         | Multitest MT9510 |

The LTM4620A is planned to be tested in Analog Devices Penang (ADPG) using the following as shown in the Table 1 below:

**Table 1: LTM4620A Test Details**

| Parameters        | ADSG   | ADPG   | Remarks  |
|-------------------|--|--|--|
| Tester Platform   | ETS364B  | ETS364B  | No change  |
| Handler           | MT9510   | MT9510   | No Change  |
| Test Flow         | Tested in FT room and QA room, hot, cold temp per setup specification. | Tested in FT room and QA room, hot, cold temp per setup specification. | No Change  |
| Contactors        | 144 Lds Gemini Kelvin  | 144 Lds Gemini Kelvin  | No Change  |
| Performance Board | LTM4620 Dualsite   | LTM4620 Dualsite   | No change<br>(Apply ADI Hardware naming standard)  |
| Test Program      | LTM4620A_06  | LTM4620A_06  | No change<br>(Apply ADI Program Filename Standard) |

There is no change to the form, fit and function of the product.

This report documents the successful completion of the product test transfer requirements of LTM4620A at ADPG.

**DESCRIPTION AND TEST RESULTS:**

Below tables provide description of the qualification tests conducted and corresponding test results for LTM4620A. All the units have undergone electrical tests on both the sending and receiving sites on the same test platform. Any device that will not meet the electrical qualification requirements will mean failure of the qualification and require solid corrective actions and a repeat of the qualification process. Qualification activities performed, and acceptance criteria is shown on Table 2 below:

**Table 2: Qualification Activities and Acceptance Criteria**

| Qualification Activity | Sample Quantity   | Accept Criteria  |
|------------------------|---|--|
| Correlation device run | 5 correlation device units  | *100% Passing correlation devices  |
| Correlation Lot Run    | Minimum of 300 known Bin1 units tested in full product test flow (ALL temperature passes). Test lot in Sending site (ADSG) and Receiving site (ADGT). | *CpK≥1.67<br>* For tightened limits, Mean Shift Criteria and sigma-spread criteria to apply<br>* Mean Shift Criteria<br>(ABS (SS_mean - RS_Mean) / Limit Range ) x 100 ≤ 5%<br>* Sigma-spread criteria<br>* (RS_Sigma / SS_Sigma ) ≤ 1.3 |
| GR&R                   | 10 Bin 1 units tested on 1 board and 2 testers  | R&R % =<10%  |

- SS = Sending Site
- RS = Receiving Site

To validate full set-up functionality such as hardware, software, test paraphernalia and tester platform, 5 correlation devices of LTM4620A were tested both in AD SG and AD PG. Data between sites were analyzed and summarized in Table 3.

**Table 3: Correlation Device Run result**

| Generic | Package       | No. of correlation device | ALL correlation devices passed? |
|---------|---------------|---------------------------|---------------------------------|
| LTM4620 | BGA 144 Leads | 5 units                   | YES                             |

The LTM4620A was qualified by testing a correlation lot with minimum 300 units both in AD SG and AD PG. This is to capture variation in hardware, tester and set-up condition thru mean shift and sigma spread. This is to ensure the parameter measurement are still within the accepted range of variations. Data between sites were analyzed and summarized in Table 4.

**Table 4: Product Site Transfer Correlation**

| Temperature | Generic | Package       | Lot Number | Lot Size | Sending Site | Receiving Site | Total No. of Correlation Parameters | Result     |
|-------------|---------|---------------|------------|----------|--------------|----------------|-------------------------------------|------------|
| Ambient     | LTM4620 | BGA 144 Leads | 1040166.4  | 357      | AD SG        | AD PG          | 328                                 | ALL PASSED |
| Hot         | LTM4620 | BGA 144 Leads | 1040166.4  | 349      | AD SG        | AD PG          | 329                                 | ALL PASSED |
| Cold        | LTM4620 | BGA 144 Leads | 1040166.4  | 352      | AD SG        | AD PG          | 311                                 | ALL PASSED |

To gather test performance data to allow estimation of the overall test repeatability and reproducibility from the production test solution, GR&R was performed on 10 serialized units tested on 1 test board and 2 test systems. GR&R result was analyzed and summarized in Table 7.

**Table 5: GR&R Result**

| Generic | Package       | Lot Number | No. of Units | No. of Test Boards | No. of Testers | All parameters passed R&R % =<10%?                                      |
|---------|---------------|------------|--------------|--------------------|----------------|---|
| LTM4620 | BGA 144 Leads | 1040166.4  | 10           | 1                  | 2              | Yes – ALL PASSED<br>(Justification provided for the test exceeding 10%) |

**APPROVALS:**

Technical Review Board No. 62174- AD SG to AD PG Test Transfer

**ADDITIONAL INFORMATION:**

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

Customer Service: <https://www.analog.com/en/support/technical-support.html>

# TEST PRODUCT QUALIFICATION REPORT

**TITLE:**

LTM4622 Test Site Transfer from Analog Devices Singapore to  
Analog Devices Penang

**PCN Number:**

**REVISION:**

A

**DATE:**

JANUARY 17, 2020

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### Summary

**Table 1** – LTM4622 Test Details

**Table 2** - Qualification Activities and Acceptance Criteria

**Table 3** – Correlation Device Run Results

**Table 4** – Product Site Transfer Correlation

**Table 5** – GR&R Result

## PROJECT BACKGROUND:

The LTM4622 is currently undergoing production testing at the Analog Devices Singapore (ADSG). It was a strategic decision from business standpoint to qualify Analog Devices Penang (ADPG) to become as new test site to ensure a continuity in the supply chain due to ADSG plant shutdown. ADPG is situated in Bayan Lepas, Penang, Malaysia.

After qualification and replication of necessary test capability, ADPG will serve as the primary test site facility to serve for micromodule future demands.

## SUMMARY:

The LTM4622 is a complete dual 2.5A step-down switching mode  $\mu$ Module<sup>®</sup> (power module) regulator in a tiny ultrathin 6.25mm × 6.25mm × 1.82mm LGA and 6.25mm × 6.25mm × 2.42mm BGA packages. Included in the package are the switching controller, power FETs, inductor and support components. Operating over an input voltage range of 3.6V to 20V, the LTM4622 supports an output voltage range of 0.6V to 5.5V, set by a single external resistor. Its high efficiency design delivers dual 2.5A continuous, 3A peak, output current. Only a few ceramic input and output capacitors are needed.

## TEST AND PRODUCT INFORMATION:

|                  |                  |
|------------------|------------------|
| Device:          | LTM4622          |
| Package:         | BGA              |
| Leads:           | 25L              |
| FG Partname:     | LTM4622IY#PBF    |
| Tester Platform: | ETS-364B         |
| Handler:         | Multitest MT9510 |

The LTM4622 is planned to be tested in Analog Devices Penang (ADPG) using the following as shown in the Table 1 below:

**Table 1: LTM4622 Test Details**

| Parameters        | ADSG   | ADPG   | Remarks  |
|-------------------|--|--|--|
| Tester Platform   | ETS364B  | ETS364B  | No change  |
| Handler           | MT9510   | MT9510   | No Change  |
| Test Flow         | Tested in FT room and QA room, hot, cold temp per setup specification. | Tested in FT room and QA room, hot, cold temp per setup specification. | No Change  |
| Contactors        | 25 Lds Gemini Kelvin   | 25 Lds Gemini Kelvin   | No Change  |
| Performance Board | LTM4622  | LTM4622  | No change<br>(Apply ADI Hardware naming standard)  |
| Test Program      | LTM4622_01   | LTM4622_01   | No change<br>(Apply ADI Program Filename Standard) |

There is no change to the form, fit and function of the product.

This report documents the successful completion of the product test transfer requirements of LTM4622 at ADPG.

**DESCRIPTION AND TEST RESULTS:**

Below tables provide description of the qualification tests conducted and corresponding test results for LTM4622. All the units have undergone electrical tests on both the sending and receiving sites on the same test platform. Any device that will not meet the electrical qualification requirements will mean failure of the qualification and require solid corrective actions and a repeat of the qualification process. Qualification activities performed, and acceptance criteria is shown on Table 2 below:

**Table 2: Qualification Activities and Acceptance Criteria**

| Qualification Activity | Sample Quantity   | Accept Criteria  |
|------------------------|---|--|
| Correlation device run | 5 correlation device units  | *100% Passing correlation devices  |
| Correlation Lot Run    | Minimum of 300 known Bin1 units tested in full product test flow (ALL temperature passes). Test lot in Sending site (ADSG) and Receiving site (ADGT). | *CpK≥1.67<br>* For tightened limits, Mean Shift Criteria and sigma-spread criteria to apply<br>* Mean Shift Criteria<br>(ABS (SS_mean - RS_Mean) / Limit Range ) x 100 ≤ 5%<br>* Sigma-spread criteria<br>* (RS_Sigma / SS_Sigma ) ≤ 1.3 |
| GR&R                   | 10 Bin 1 units tested on 1 board and 2 testers  | R&R % =<10%  |

- SS = Sending Site
- RS = Receiving Site

To validate full set-up functionality such as hardware, software, test paraphernalia and tester platform, 5 correlation devices of LTM4622 were tested both in AD SG and AD PG. Data between sites were analyzed and summarized in Table 3.

**Table 3: Correlation Device Run result**

| Generic | Package      | No. of correlation device | ALL correlation devices passed? |
|---------|--------------|---------------------------|---------------------------------|
| LTM4622 | BGA 25 Leads | 5 units                   | YES                             |

The LTM4622 was qualified by testing a correlation lot with minimum 300 units both in AD SG and AD PG. This is to capture variation in hardware, tester and set-up condition thru mean shift and sigma spread. This is to ensure the parameter measurement are still within the accepted range of variations. Data between sites were analyzed and summarized in Table 4.

**Table 4: Product Site Transfer Correlation**

| Temperature | Generic | Package      | Lot Number | Lot Size | Sending Site | Receiving Site | Total No. of Correlation Parameters | Result     |
|-------------|---------|--------------|------------|----------|--------------|----------------|-------------------------------------|------------|
| Ambient     | LTM4622 | BGA 25 Leads | 1040166.4  | 514      | AD SG        | AD PG          | 180                                 | ALL PASSED |
| Hot         | LTM4622 | BGA 25 Leads | 1040166.4  | 507      | AD SG        | AD PG          | 194                                 | ALL PASSED |
| Cold        | LTM4622 | BGA 25 Leads | 1040166.4  | 507      | AD SG        | AD PG          | 185                                 | ALL PASSED |

To gather test performance data to allow estimation of the overall test repeatability and reproducibility from the production test solution, GR&R was performed on 10 serialized units tested on 1 test board and 2 test systems. GR&R result was analyzed and summarized in Table 7.

**Table 5: GR&R Result**

| Generic | Package      | Lot Number | No. of Units | No. of Test Boards | No. of Testers | All parameters passed R&R % =<10%?                                      |
|---------|--------------|------------|--------------|--------------------|----------------|---|
| LTM4622 | BGA 25 Leads | 1040166.4  | 10           | 1                  | 2              | Yes – ALL PASSED<br>(Justification provided for the test exceeding 10%) |

**APPROVALS:**

Technical Review Board No. 62174- AD SG to AD PG Test Transfer

**ADDITIONAL INFORMATION:**

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

Customer Service: <https://www.analog.com/en/support/technical-support.html>



# TEST PRODUCT\* QUALIFICATION REPORT

**TITLE:**

LTM4644 Test Site Transfer from Analog Devices Singapore to Analog Devices Penang

**PCN Number:**

**REVISION:**

A

**DATE:**

JAN 17, 2020

## CONTENTS:

### Summary

**Table 1** – LTM4644 Test Details

**Table 2** - Qualification Activities and Acceptance Criteria

**Table 3** – Correlation Device Run Results

**Table 4** – Product Site Transfer Correlation

**Table 5** - GR&R Result

## PROJECT BACKGROUND:

The LTM4644 is currently undergoing production testing at the Analog Devices Singapore (ADSG). It was a strategic decision from business standpoint to qualify Analog Devices Penang (ADPG) to become as new test site to ensure a continuity in the supply chain due to ADSG plant shutdown. ADPG is situated in Bayan Lepas, Penang, Malaysia.

After qualification of necessary test capability, ADPG will serve as the primary test site facility to serve for micromodule future demands.

## SUMMARY:

The LTM4644/LTM4644-1 is a quad DC/DC step-down  $\mu$ Module (micromodule) regulator with 4A per output. Outputs can be paralleled in an array for up to 16A capability. Included in the package are the switching controllers, power FETs, inductors and support components. Operating over an input voltage range of 4V to 14V or 2.375V to 14V with an external bias supply, the LTM4644/LTM4644-1 supports an output voltage range of 0.6V to 5.5V

## TEST AND PRODUCT INFORMATION:

|                  |                  |
|------------------|------------------|
| Device:          | LTM4644          |
| Package:         | BGA              |
| Leads:           | 77 leads         |
| FG Partname:     | LTM4644IY#PBF    |
| Tester Platform: | ETS364B          |
| Handler:         | Multitest MT9510 |

The LTM4644 is planned to be tested in Analog Devices Penang (ADPG) using the following as shown in the Table 1 below:

**Table 1: LTM4644 Test Details**

| Parameters        | ADSG   | ADPG   | Remarks   |
|-------------------|--|--|-----------|
| Tester Platform   | ETS364B  | ETS364B  | No change |
| Handler           | MT9510   | MT9510   | No Change |
| Test Flow         | Tested in FT room and QA room, hot, cold temp per setup specification. | Tested in FT room and QA room, hot, cold temp per setup specification. | No Change |
| Contactors        | 77 Lds Gemini Kelvin   | 77 Lds Gemini Kelvin   | No Change |
| Performance Board | LTM4644 Test Board   | LTM4644 Test Board   | No change |
| Test Program      | LTM4644_04   | LTM4644_04   | No change |

There is no change to the form, fit and function of the product.

This report documents the successful completion of the product test transfer requirements of LTM4644 at ADPG.

**DESCRIPTION AND TEST RESULTS:**

Below tables provide description of the qualification tests conducted and corresponding test results for LTM4644. All the units have undergone electrical tests on both the sending and receiving sites on the same test platform. Any device that will not meet the electrical qualification requirements will mean failure of the qualification and require solid corrective actions and a repeat of the qualification process. Qualification activities performed, and acceptance criteria is shown on Table 2 below:

**Table 2: Qualification Activities and Acceptance Criteria**

| Qualification Activity | Sample Quantity   | Accept Criteria  |
|------------------------|---|--|
| Correlation device run | 5 correlation device units  | *100% Passing correlation devices  |
| Correlation Lot Run    | Minimum of 300 known Bin1 units tested in full product test flow (ALL temperature passes). Test lot in Sending site (ADSG) and Receiving site (ADPG). | *CpK≥1.67<br>* For tightened limits, Mean Shift Criteria and sigma-spread criteria to apply<br>* Mean Shift Criteria<br>(ABS (SS_mean - RS_Mean) / Limit Range ) x 100 ≤ 5%<br>* Sigma-spread criteria<br>* (RS_Sigma / SS_Sigma ) ≤ 1.3 |
| GR&R                   | 10 Bin 1 units tested on 1 board and 2 testers  | R&R % =<10%  |

- SS = Sending Site
- RS = Receiving Site

To validate full set-up functionality such as hardware, software and tester platform, 5 correlation devices of LTM4644 were tested both in AD SG and AD PG. Data between sites were analyzed and summarized in Table 3.

**Table 3: Correlation Device Run result**

| Generic | Package      | No. of correlation device | ALL correlation devices passed? |
|---------|--------------|---------------------------|---------------------------------|
| LTM4644 | BGA 77 Leads | 5 units                   | YES                             |

The LTM4644 was qualified by testing a correlation lot with minimum 300 units both in AD SG and AD PG. This is to capture variation in hardware, tester and set-up condition thru mean shift and sigma spread. This is to ensure the parameter measurement are still within the accepted range of variations. Data between sites were analyzed and summarized in Table 4.

**Table 4: Product Site Transfer Correlation**

| Temperature | Generic | Package      | Lot Number | Lot Size | Sending Site | Receiving Site | Total No. of Correlation Parameters | Result     |
|-------------|---------|--------------|------------|----------|--------------|----------------|-------------------------------------|------------|
| Ambient     | LTM4644 | BGA 77 Leads | 1039147.7  | 1151     | ADSG         | ADPG           | 420                                 | ALL PASSED |
| Hot         | LTM4644 | BGA 77 Leads | 1039147.7  | 1000     | ADSG         | ADPG           | 505                                 | ALL PASSED |
| Cold        | LTM4644 | BGA 77 Leads | 1039147.7  | 1000     | ADSG         | ADPG           | 466                                 | ALL PASSED |

To gather test performance data to allow estimation of the overall test repeatability and reproducibility from the production test solution, GR&R was performed on 10 serialized units tested on 1 test board and 2 test systems. GR&R result was analyzed and summarized in Table 5.

**Table 5: GR&R Result**

| Generic | Package      | Lot Number | No. of Units | No. of Test Boards | No. of Testers | All parameters passed R&R % =<10%?   |
|---------|--------------|------------|--------------|--------------------|----------------|--|
| LTM4644 | BGA 77 Leads | 1039147.7  | 10           | 1                  | 2              | Yes – ALL PASSED<br><br>(Justification provided for the tests exceeding 10%) |

**APPROVALS:**

Technical Review Board No. [60579](#) - AD SG to AD PG Test Transfer

**ADDITIONAL INFORMATION:**

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

Customer Service: <https://www.analog.com/en/support/technical-support.html>

# TEST PRODUCT QUALIFICATION REPORT

**TITLE:**

LTM8008 Test Site Transfer from Analog Devices Singapore to Analog Devices Penang

**PCN Number:**

**REVISION:**

A

**DATE:**

JAN 17, 2020

## CONTENTS:

### Summary

**Table 1** – LTM8008 Test Details

**Table 2** - Qualification Activities and Acceptance Criteria

**Table 3** – Correlation Device Run Results

**Table 4** – Product Site Transfer Correlation

**Table 5** - GR&R Result

## PROJECT BACKGROUND:

The LTM8008 is currently undergoing production testing at the Analog Devices Singapore (ADSG). It was a strategic decision from business standpoint to qualify Analog Devices Penang (ADPG) to become as new test site to ensure a continuity in the supply chain due to ADSG plant shutdown. ADPG is situated in Bayan Lepas, Penang, Malaysia.

After qualification of necessary test capability, ADPG will serve as the primary test site facility to serve for micromodule future demands.

## SUMMARY:

The LTM8008 is a 72VIN,  $\mu$ Module<sup>®</sup> SEPIC converter with six post regulators. The SEPIC controller's fixed frequency, current-mode architecture results in stable operation over a wide range of supply and output voltages and features soft-start and frequency foldback functions to limit inductor current during start-up and output short-circuit.

The LTM8008 also includes six high performance, fixed output LDOs for post-regulation: one 5V at 500mA, one 3.3V at 300mA, and four 5V at 150mA. The output of the SEPIC controller is internally set to 5.6V for optimal efficiency. In addition to providing these outputs, the SEPIC converter can supply up to an additional 500mA to the system load.

## TEST AND PRODUCT INFORMATION:

|                  |                  |
|------------------|------------------|
| Device:          | LTM8008          |
| Package:         | LGA              |
| Leads:           | 121 leads        |
| FG Partname:     | LTM8008HV#3GSPBF |
| Tester Platform: | ETS364B          |
| Handler:         | Multitest MT9510 |

The LTM8008 is planned to be tested in Analog Devices Penang (ADPG) using the following as shown in the Table 1 below:

**Table 1: LTM8008 Test Details**

| Parameters        | ADSG   | ADPG   | Remarks   |
|-------------------|--|--|-----------|
| Tester Platform   | ETS364B  | ETS364B  | No change |
| Handler           | MT9510   | MT9510   | No Change |
| Test Flow         | Tested in FT room and QA room, hot, cold temp per setup specification. | Tested in FT room and QA room, hot, cold temp per setup specification. | No Change |
| Contactors        | 121 Lds ECT  | 77 Lds ECT   | No Change |
| Performance Board | LTM8008 QUADSITE   | LTM8008 QUADSITE   | No change |
| Test Program      | LTM8008_00   | LTM8008_00   | No change |

There is no change to the form, fit and function of the product.

This report documents the successful completion of the product test transfer requirements of LTM8008 at ADPG.

**DESCRIPTION AND TEST RESULTS:**

Below tables provide description of the qualification tests conducted and corresponding test results for LTM8008. All the units have undergone electrical tests on both the sending and receiving sites on the same test platform. Any device that will not meet the electrical qualification requirements will mean failure of the qualification and require solid corrective actions and a repeat of the qualification process. Qualification activities performed, and acceptance criteria is shown on Table 2 below:

**Table 2: Qualification Activities and Acceptance Criteria**

| Qualification Activity | Sample Quantity   | Accept Criteria  |
|------------------------|---|--|
| Correlation device run | 5 correlation device units  | *100% Passing correlation devices  |
| Correlation Lot Run    | Minimum of 300 known Bin1 units tested in full product test flow (ALL temperature passes). Test lot in Sending site (ADSG) and Receiving site (ADPG). | *CpK≥1.67<br>* For tightened limits, Mean Shift Criteria and sigma-spread criteria to apply<br>* Mean Shift Criteria<br>(ABS (SS_mean - RS_Mean) / Limit Range ) x 100 ≤ 5%<br>* Sigma-spread criteria<br>* (RS_Sigma / SS_Sigma ) ≤ 1.3 |
| GR&R                   | 10 Bin 1 units tested on 1 board and 2 testers  | R&R % =<10%  |

- SS = Sending Site
- RS = Receiving Site

To validate full set-up functionality such as hardware, software and tester platform, 5 correlation devices of LTM8008 were tested both in AD SG and AD PG. Data between sites were analyzed and summarized in Table 3.

**Table 3: Correlation Device Run result**

| Generic | Package       | No. of correlation device | ALL correlation devices passed? |
|---------|---------------|---------------------------|---------------------------------|
| LTM8008 | LGA 121 Leads | 5 units                   | YES                             |

The LTM8008 was qualified by testing a correlation lot with minimum 300 units both in AD SG and AD PG. This is to capture variation in hardware, tester and set-up condition thru mean shift and sigma spread. This is to ensure the parameter measurement are still within the accepted range of variations. Data between sites were analyzed and summarized in Table 4.

**Table 4: Product Site Transfer Correlation**

| Temperature | Generic | Package       | Lot Number | Lot Size | Sending Site | Receiving Site | Total No. of Correlation Parameters | Result     |
|-------------|---------|---------------|------------|----------|--------------|----------------|-------------------------------------|------------|
| Ambient     | LTM8008 | LGA 121 Leads | Z48258.10  | 1190     | ADSG         | ADPG           | 97                                  | ALL PASSED |
| Hot         | LTM8008 | LGA 121 Leads | Z48258.10  | 1153     | ADSG         | ADPG           | 104                                 | ALL PASSED |
| Cold        | LTM8008 | LGA 121 Leads | Z48258.10  | 1155     | ADSG         | ADPG           | 98                                  | ALL PASSED |

To gather test performance data to allow estimation of the overall test repeatability and reproducibility from the production test solution, GR&R was performed on 10 serialized units tested on 1 test board and 2 test systems. GR&R result was analyzed and summarized in Table 5.

**Table 5: GR&R Result**

| Generic | Package       | Lot Number | No. of Units | No. of Test Boards | No. of Testers | All parameters passed R&R % =<10%?   |
|---------|---------------|------------|--------------|--------------------|----------------|--|
| LTM8008 | LGA 121 Leads | Z48258.10  | 10           | 1                  | 2              | Yes – ALL PASSED<br><br>(Justification provided for the tests exceeding 10%) |

**APPROVALS:**

Technical Review Board No 62174- AD SG to AD PG Test Transfer

**ADDITIONAL INFORMATION:**

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

Customer Service: <https://www.analog.com/en/support/technical-support.html>