

TEST PRODUCT QUALIFICATION REPORT

TITLE:

Addition of UTAC Thailand (UT4) as an Alternate
Final Test Site for AD243X Device

REPORT NUMBER: 24_0279

REVISION:

A

DATE: December 12, 2024

PROJECT BACKGROUND

UT1 issued a PCN to ADI informing them that it is ceasing Final Test operations and consolidating all Final Tests to UT4.

SUMMARY

The Automotive Audio Bus provides a multichannel, 1 2 S/TDM link over distances of up to 15 m between nodes. It embeds bidirectional synchronous pulse-code modulation (PCM) data (for example, digital audio), clock, and synchronization signals onto a single unshielded twisted pair (UTP) differential cable. A2 B supports a direct point-to-point connection and allows multiple, daisy-chained nodes at different locations to contribute and consume time division multiplexed channel content.

This device is tested in USG (Singapore) using the 93K16 platform.

The AD243X will be tested using the same test platform in UT4 as an additional test site.

This report documents the successful completion of the product test transfer requirements for the release of testing of AD243X and other derivatives in UT1.

TEST AND PRODUCT INFORMATION

Device:	AD2438W, AD2438
Package:	32-LFCSP-5X5X0.75
Leads:	32
Tester:	93K16
Handler:	HT1028C HON TECH

Description and Test Results (Taken from the New Proposed Product Transfer Correlation Qualification Criteria)

Table 1 describes the qualification tests that were conducted and the corresponding test results for AD2438W. All units have been subjected to electrical tests on both the sending and receiving sites on the same test platform. Any device that does not meet the electrical qualification requirements, without further analysis and data to prove passing, will be considered a failure.

Table 1. Test Product Transfer Qualification Criteria

Generic	Package	Lot number	Lot Size	Sending Site	Receiving Site	% Mean Shift Criteria =< 5	Sigma Spread Criteria =< 1.3
AD2438W	LFCSP	KGU	100	UT1	UT4	PASSED	PASSED

The AD2438W was qualified by running a qualification lot of 100 units at both USG and UTL. Data from the two sites was analyzed, as summarized in Table 1. A passing result was recorded if the yield from the receiving site met or exceeded the yield from the sending site, as summarized in Table 2. Succeeding lots with increased quantity will be closely monitored once the device has begun a production run at STA.

Table 2. Test Product Transfer Qualification Lot Run

Generic	Package	Lot number	Lot Size	Test Site	Results
AD2438W	32-LFCSP-5X5X0.75	KGU	100	USG	PASSED

Table 3 shows that rejected units on both USG and UTL failed on the same test parameters.

Table 3: Test Product Reject Verification Criteria

GENERIC	Package	Lot number	Lot Size (units)	Reject units failed on the same test parameter for both UT1 and UT4?
AD2438W	32-LFCSP-5X5X0.75	KGU	5	YES

Approvals

TRB-68768
Technical Review Board

Additional Information

Homepage: <http://www.analog.com>

Datasheet: [AD2430/AD2438 \(Rev. Sp0\)](#)

Customer Service: http://www.analog.com/en/content/technical_support_page/fca.html