

# TEST PRODUCT QUALIFICATION REPORT

**TITLE:**

Qualification of TeamQuest Technology Inc. Philippines as an  
Alternate Test Site for TC-Vos testing

**REPORT NUMBER:**

PCN 17\_0079

**REVISION:**

A

**DATE:**

8 AUGUST 2017

## PROJECT BACKGROUND

The objective of this project is to qualify an alternative (back-up) TC-Vos testing site of ADGT to ensure continuity of supply.

TeamQuest is our chosen Subcon which happened to be the ADGT major service provider for burn-in, and previously had experiences in TC-Vos testing.

TC-Vos is a test system used in testing the Temperature Coefficient (TC) or a measure of a device parameter's response as a function of temperature. The same test method, process controls, equipment, environment and ESD controls as with ADGT were established in TeamQuest.

The team identified ADR360/6 to be the vehicle part to qualify TeamQuest Technology as alternate site for TC-Vos testing.

## SUMMARY

The ADR360/ADR361/ADR363/ADR364/ADR365/ADR366 are precision 2.048 V, 2.5 V, 3.0 V, 4.096 V, 5.0 V, and 3.3 V band gap voltage references that offer low power and high precision in tiny footprints. The device is tested in ADGT in CTSLCT\_40 platform and undergo a TC-Vos process.

There is no change in form, fit, function, quality or reliability of the product.

This report documents the successful completion of the product test transfer requirements for the qualification of TeamQuest for TC-Vos testing.

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

## TEST AND PRODUCT INFORMATION

Device:	ADR360/ADR361/ADR363/ADR364/ADR365/ADR366
Package:	TSOT
Leads:	5
Parts affected:	ADR360BUJZ, ADR361BUJZ, ADR363BUJZ, ADR364BUJZ, ADR365BUJZ, ADR366BUJZ
Tester:	CTSLCT_40, TC-Vos
Handler:	ISMECA_ST_UJ, TC-Vos Oven

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

Table 1 provides a description of the qualification tests conducted and corresponding test results for ADR360/6. 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 Criteria =< 5	Sigma Spread Criteria =< 1.3
ADR360	TSOT	SB41061.1	1500	ADGT	Team Quest	Passed	Passed
ADR366	TSOT	AO30108.2	1500	ADGT	Team Quest	Passed	Passed

The ADR36X was qualified by running a qualification lot with 1500 units both in ADGT and TeamQuest. 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 TeamQuest.

Table 2. Test Product Transfer Qualification Lot Run

Generic	Package	Lot number	Lot Size	Test Site	Results
ADR360	TSOT	SB41061.3	1500	Team Quest	Passed
ADR366	TSOT	AO30108.11	1500	Team Quest	Passed

**Approvals:**

TRB#32333

Technical Review Board

**Supporting Documents**

Technical review board TRB#32333

**Additional Information**

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

Datasheet: [http://www.analog.com/media/en/technical-documentation/data-sheets/ADR360\\_361\\_363\\_364\\_365\\_366.pdf](http://www.analog.com/media/en/technical-documentation/data-sheets/ADR360_361_363_364_365_366.pdf)

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