

PCN: V17-002-32002150-0A

Product Change Notice

Issue Date: 28 Feb 2017

Change Type:

1. Upgrade electrical specifications in datasheet
2. Improve manufacturing process to include a) IR reflow b) better silicone c) high reliability gold wire

Parts Affected:

ACPL-M49T

All associated options and specials will also be affected.

Description and Extent of Change:

1.
 - a. To add $I_F = 4\text{mA}$ drive CTR (Current Transfer Ratio) test for 4-Pin configuration and incorporate Minimum and Maximum Limit specification.

Current Transfer Ratio (CTR) – 4 Pin Configuration	Min.	Typ.	Max.	Units	Test Conditions
New Specification	90	165	270	%	$T_A = 25^\circ\text{C}$ $V_{CC} = V_O = 5\text{V}$, $I_F = 4\text{mA}$

- b. To change CTR ($I_F = 10\text{mA}$) Typical and Maximum Limit specification. This is a room temperature specification only.

Current Transfer Ratio (CTR)	Min.	Typ.	Max.	Units	Test Conditions
Current Specification	32	45	80	%	$T_A = 25^\circ\text{C}$ $V_{CC} = 4.5\text{V}$, $V_O = 0.4\text{V}$, $I_F = 10\text{mA}$
New Specification	32	65	100	%	

2.
 - a) Change process flow to include IR reflow b) Change to better silicone c) Change to high reliability gold wire

Reasons for Change:

1. Upgrade datasheet specification (CTR) to enhance product performance by:
 - a. Adding new test condition to include $I_F = 4\text{mA}$ drive
 - b. Typical and Maximum limits are changed marginally due to improvement in 1a.
2. Change to higher reliability gold wire, silicone and addition of IR process as part of Broadcom's continuous quality and reliability improvement initiatives.

Effect of Change on Fit, Form, Function, Quality, or Reliability:

The product will be tested according to the new electrical datasheet specifications. All other remaining electrical specifications in datasheet and fit, form, function have not been changed. Appropriate electrical characterization has been performed on product to ensure normal parametric distribution, consistent electrical performance, and reliability.

Effective Date of Change:

Implementation of this PCN will be effective from product date code **1735** (yyww) inclusive. Product marking **1735** (yyww) and beyond.

Qualification Data:

Qualification data is completed and approved.

These changes have been reviewed and approved by Broadcom Limited engineers and managers per Broadcom Limited procedure: Change Control and Customer Notification, A-5962-6052-80.

Please contact your Broadcom Limited field sales engineer or Contact Center (<http://www.broadcom.com/contact/>) for any questions or support requirements. Please return any response as soon as possible, but not to exceed 30 days.