

## Product Change Notice

**Issue Date: 26 Nov 2012**  
**Revised Date: 19 Feb 2013**

### Change Type:

1. IC change
2. Leadframe change
3. Datasheet specifications change

### Parts Affected:

ACPL-331J-000E	ACPL-332J-000E	QCPL-324J-500E
*ACPL-331J-000NE	*ACPL-332J-000NE	*QCPL-324J-500NE
ACPL-331J-500E	ACPL-332J-500E	**ACPL-332J-500ME
*ACPL-331J-500NE	*ACPL-332J-500NE	

All associated options and specials will also be affected.

\* Options are no longer valid or have been replaced.

\*\* New options.

### Description and Extent of Change:

1. IC change to increase the absolute maximum ratings of output supply voltage.

Total Output Supply Voltage (abs max)	Symbol	Max.	Units
Current Specification	$V_{CC2} - V_{EE}$	33	V
New Specification	$V_{CC2} - V_{EE}$	35	V

Positive Output Supply Voltage (abs max)	Symbol	Max.	Units
Current Specification	$V_{CC2} - V_E$	$33 - (V_E - V_{EE})$	V
New Specification	$V_{CC2} - V_E$	$35 - (V_E - V_{EE})$	V

2. Qualify stamped leadframe.
3. Datasheet specifications change

The maximum of Threshold Input Current Low to High will be changed from 8mA to 6mA.

Threshold Input Current Low to High	Symbol	Max.	Units	Test Conditions
Current Specification	$I_{FLH}$	8	mA	$I_O = 0 \text{ mA}, V_O > 5V$
New Specification	$I_{FLH}$	6	mA	$I_O = 0 \text{ mA}, V_O > 5V$

The Propagation Delay Difference between Two Parts will be changed from  $\pm 350\text{ns}$  to  $\pm 150\text{ns}$ .

Propagation Delay Difference between Two Parts	Symbol	Min.	Max.	Units	Test Conditions
Current Specification	$PDD(t_{PHL} - t_{PLH})$	-350	350	ns	$R_g=10\Omega, C_g=10\text{nF}, f=10\text{kHz}, \text{Duty Cycle}=50\%, I_F = 10 \text{ mA}, V_{CC2} = 30 \text{ V}$
New Specification	$PDD(t_{PHL} - t_{PLH})$	-150	150	ns	$R_g=10\Omega, C_g=10\text{nF}, f=10\text{kHz}, \text{Duty Cycle}=50\%, I_F = 10 \text{ mA}, V_{CC2} = 30 \text{ V}$

**Reasons for Change:**

1. To improve the robustness of the IC.
2. To improve production efficiency
3. To reflect the devices true performance.

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

Appropriate electrical characterization and reliability qualification will be performed on representative products to ensure normal parametric distribution, consistent electrical performance, and reliability.

**Effective Date of Change:**

IC and leadframe changes for ACPL-332J-500ME will be effective from product date code 1309 (yyww). IC and leadframe changes for the rest of the parts and options will be effective from product date code 1322 (yyww). Timing of shipment of parts with date code 1322 will depend on customer demand and Avago's inventory levels. Datasheet specifications change for  $I_{FLH}$  and PDD will take immediate effect.

**Qualification Data:**

Qualification data has been generated and approved.

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

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