



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

**PCN# 20120814000
TL074-EP/ TL072-EP Data Sheet
Change Notification / Sample Request**

Date: 8/24/2012
To: MOUSER PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

We request you acknowledge receipt of this notification within **30** days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance of the change. If you require samples or additional data to support your evaluation, please request within 30 days.

The changes discussed within this PCN will not take effect any earlier than **90** days from the date of this notification, unless customer agreement has been reached on an earlier implementation of the change. This notification period is per TI's standard process.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

For questions regarding this notice, contact your local Field Sales Representative or the PCN Manager (PCN_ww_admin_team@list.ti.com).

Sincerely,

PCN Team
SC Business Services
Phone: +1(214) 480-6037
Fax: +1(214) 480-6659

20120814000
Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
TL072QDREP	null

Technical details of this Product Change follow on the next page(s).

PCN Number:	20120814000			PCN Date:	08/24/2012
Title:	TL072-EP / TL074-EP Data Sheet				
Customer Contact:	PCN Manager	Phone:	+1(214)480-6037		Dept: Quality Services
Proposed 1st Ship Date:	11/24/2012	Estimated Sample Availability:	Date provided upon request		
Change Type:					
<input type="checkbox"/> Assembly Site	<input type="checkbox"/> Assembly Process	<input type="checkbox"/> Assembly Materials			
<input type="checkbox"/> Design	<input checked="" type="checkbox"/> Electrical Specification	<input type="checkbox"/> Mechanical Specification			
<input type="checkbox"/> Test Site	<input type="checkbox"/> Packing/Shipping/Labeling	<input type="checkbox"/> Test Process			
<input type="checkbox"/> Wafer Bump Site	<input type="checkbox"/> Wafer Bump Material	<input type="checkbox"/> Wafer Bump Process			
<input type="checkbox"/> Wafer Fab Site	<input type="checkbox"/> Wafer Fab Materials	<input type="checkbox"/> Wafer Fab Process			

PCN Details

Description of Change:

The product datasheet(s) is being updated to Change the Specs for IIB and IIO @ 125C. VIO value changed in TL072-EP/TL074-EP at Full Range. Slew rate changed at 25C.

The following change history provides further details. These changes may be reviewed at the datasheet links provided.

From (page 4):

ELECTRICAL CHARACTERISTICS

$V_{CC\pm} = \pm 15\text{ V}$ (unless otherwise noted)

PARAMETER	TEST CONDITIONS ⁽¹⁾	T _A ⁽²⁾	TL072			TL074			UNIT
			MIN	TYP	MAX	MIN	TYP	MAX	
V _{IO} Input offset voltage	V _O = 0, R _S = 50 Ω	25°C		3	6		3	9	mV
		Full range			9			15	
α _{VIO} Temperature coefficient of input offset voltage	V _O = 0, R _S = 50 Ω	Full range		18			18		μV/°C
I _{IO} Input offset current	V _O = 0	25°C		5	100		5	100	pA
		Full range			20			20	nA
I _{IB} Input bias current	V _O = 0	25°C		65	200		65	200	pA
		Full range			50			50	nA
V _{ICR} Common-mode input voltage range		25°C	±11	-12 to 15		±11	-12 to 15		V
V _{OM} Maximum peak output voltage swing	R _L = 10 kΩ	25°C	±12	±13.5		±12	±13.5		V
	R _L ≥ 10 kΩ	Full range	±12			±12			
	R _L ≥ 2 kΩ		±10			±10			
A _{VO} Large-signal differential voltage amplification	V _O = ±10 V, R _L ≥ 2 kΩ	25°C	35	200		35	200		V/mV
		Full range	15			15			
B ₁ Unity-gain bandwidth		25°C		3			3		MHz
r _i Input resistance		25°C		10 ¹²			10 ¹²		Ω
CMRR Common-mode rejection ratio	V _{IC} = V _{ICRmin} , V _O = 0, R _S = 50 Ω	25°C	80	86		75			dB
k _{SVR} Supply-voltage rejection ratio (ΔV _{CC±} /ΔV _{IO})	V _{CC} = ±9 V to ±15 V, V _O = 0, R _S = 50 Ω	25°C	80	86		80	86		dB
I _{CC} Supply current (each amplifier)	V _O = 0, No load	25°C		1.4	2.5		1.4	2.5	mA
V _{O1} /V _{O2} Crosstalk attenuation	A _{VO} = 100	25°C		120			120		dB

OPERATING CHARACTERISTICS

$V_{CC\pm} = \pm 15\text{ V}, T_A = 25^\circ\text{C}$

PARAMETER	TEST CONDITIONS	TL072			TL074			UNIT
		MIN	TYP	MAX	MIN	TYP	MAX	
SR Slew rate at unity gain	$V_I = 10\text{ V}, C_L = 100\text{ pF}, R_L = 2\text{ k}\Omega$, See Figure 1	5	13		5	13		V/ μs

To (page 4):

ELECTRICAL CHARACTERISTICS

$V_{CC\pm} = \pm 15\text{ V}$ (unless otherwise noted)

PARAMETER	TEST CONDITIONS ⁽¹⁾	T_A ⁽²⁾	TL072			TL074			UNIT
			MIN	TYP	MAX	MIN	TYP	MAX	
V_{IO} Input offset voltage	$V_O = 0, R_S = 50\ \Omega$	25°C		3	6		3	6	mV
		Full range			8			8	
ΔV_{IO} Temperature coefficient of input offset voltage	$V_O = 0, R_S = 50\ \Omega$	Full range		18			18		$\mu\text{V}/^\circ\text{C}$
I_{IO} Input offset current	$V_O = 0$	25°C		5	100		5	100	pA
		125°C			2			2	nA
I_{IB} Input bias current	$V_O = 0$	25°C		65	200		65	200	pA
		125°C			20			20	nA
V_{ICR} Common-mode input voltage range		25°C	± 11	-12 to 15		± 11	-12 to 15		V
V_{OM} Maximum peak output voltage swing	$R_L = 10\text{ k}\Omega$	25°C	± 12	± 13.5		± 12	± 13.5		V
	$R_L \geq 10\text{ k}\Omega$	Full range	± 12			± 12			
	$R_L \geq 2\text{ k}\Omega$		± 10			± 10			
A_{VO} Large-signal differential voltage amplification	$V_O = \pm 10\text{ V}, R_L \geq 2\text{ k}\Omega$	25°C	35	200		35	200		V/mV
		Full range	15			15			
B_1 Unity-gain bandwidth		25°C		3			3		MHz
r_i Input resistance		25°C		10^{12}			10^{12}		Ω
CMRR Common-mode rejection ratio	$V_{IO} = V_{IO(min)}, V_O = 0, R_S = 50\ \Omega$	25°C	80	86		80	86		dB
k_{SVR} Supply-voltage rejection ratio ($\Delta V_{OC}/\Delta V_{IO}$)	$V_{CC} = \pm 9\text{ V to } \pm 15\text{ V}, V_O = 0, R_S = 50\ \Omega$	25°C	80	86		80	86		dB
I_{CC} Supply current (each amplifier)	$V_O = 0, \text{No load}$	25°C		1.4	2.5		1.4	2.5	mA
V_{OI}/V_{O2} Crosstalk attenuation	$A_{VO} = 100$	25°C		120			120		dB

OPERATING CHARACTERISTICS

$V_{CC\pm} = \pm 15\text{ V}, T_A = 25^\circ\text{C}$

PARAMETER	TEST CONDITIONS	TL072			TL074			UNIT
		MIN	TYP	MAX	MIN	TYP	MAX	
SR Slew rate at unity gain	$V_I = 10\text{ V}, R_L = 2\text{ k}\Omega, C_L = 100\text{ pF}, \text{See Figure 1}$	8	13		8	13		V/ μs

The datasheet number will be changing.

Device Family	Change From:	Change To:
TL072-EP/TLE074-EP	SLOS747B	SLOS747C

The updated datasheet(s) can be accessed by the following link(s):

<http://www.ti.com/product/tl074-ep>

<http://www.ti.com/product/tl072-ep>

Reason for Change:			
To more accurately reflect device characteristics - no actual changes to device performance have occurred.			
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):			
Electrical specification performance changes as indicated above.			
Changes to product identification resulting from this PCN:			
None			
Product Affected:			
TL072QDREP	TL074QDREP	V62/12604-01XE	V62/11621-03XE

For questions regarding this notice, e-mails can be sent to the regional contacts shown below or your local Field Sales Representative.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com