

# **Product Change Notice (PCN)**

Subject: Data Sheet Specification Change for Listed Intersil ISL3248\*E Products Publication Date: 5/14/2015 Effective Date: 8/14/2015

## **Revision Description:**

Initial Release

# **Description of Change:**

This notice is to inform you that Intersil has changed the maximum limit on the Driver Switching Characteristics and the typical thermal resistance (Theta JC) on the 14 lead SOIC package.

## Reason for Change:

The change aligns the data sheet with the product characteristics and is necessary to maintain product manufacturability in support of customer delivery requirements. Details regarding the change are contained on the following page. The updated data sheet is available on the Intersil web site at:

http://www.intersil.com/content/dam/Intersil/documents/isl3/isl32483e-85e.pdf

## **Product Identification:**

There have been no changes to the die/silicon or product itself. There will be no change in the external marking of the packaged parts.

Qualification status: Complete, see attached Sample availability: 5/14/2015 Device material declaration: Available upon request

Questions or requests pertaining to this change notice, including additional data or samples, must be sent to Intersil within 30 days of the publication date.

 For additional information regarding this notice, please contact your regional change coordinator (below)

 Americas: PCN-US@INTERSIL.COM
 Europe: PCN-EU@INTERSIL.COM
 Japan: PCN-JP@INTERSIL.COM
 Asia Pac: PCN-APAC@INTERSIL.COM

Appendix A – Affected Products List (see attached) Appendix B – Datasheet changes (see attached)



## Appendix A: Product List

ISL32483EIBZ ISL32483EIBZ-T ISL32483EIBZ-T7A ISL32485EIBZ ISL32485EIBZ-T ISL32485EIBZ-T7A

#### Appendix B: Datasheet changes

#### From:

### **Absolute Maximum Ratings**

V <sub>CC</sub> to Ground
DI, INV, RINV, DINV, DE, RE
Input/Output Voltages
A/Y, B/Z, A, B, Y, Z ±60V
A/Y, B/Z, A, B, Y, Z (Transient Pulse Through 100 $\Omega$ , see <u>Note 15</u> ) ±80V
R0
Short Circuit Duration
Y, Z Indefinite
ESD Rating see <u>"ESD PERFORMANCE" on page 6</u>
Latch-up (Tested per JESD78, Level 2, Class A) +125°C

## **Thermal Information**

Thermal Resistance (Typical)	θ <sub>JA</sub> (°C∕W)	θ <sub>JC</sub> (°C/W)
8 Ld SOIC Package ( <u>Notes 4, 5</u> )	108	47
14 Ld SOIC Package ( <u>Notes 4</u> , <u>5</u> )	. 88	39
Maximum Junction Temperature (Plastic Pac	kage)	+150°C
Maximum Storage Temperature Range	6	5°C to +150°C
Pb-Free Reflow Profile		see <u>TB493</u>

#### **Recommended Operating Conditions**

Supply Voltage (V <sub>CC</sub> )	
Temperature Range	
Bus Pin Common Mode Voltage Range	

DRIVER SWITCHING CHARACTERISTICS								
Driver Differential Output	t <sub>PLH</sub> , t <sub>PHL</sub>	PLH, $t_{PHL}$ $R_D = 54\Omega$ , $C_D = 50pF$ (Figure 4)	No CM Load	Full	•	70	125	ns
Delay			$-25 \text{V} \leq \text{V}_{\text{CM}} \leq 25 \text{V}$	Full	•	-	350	ns
Driver Differential Output	<sup>t</sup> skew	$R_D = 54\Omega, C_D = 50pF$	No CM Load	Full	•	4.5	15	ns
Skew		( <u>Figure 4</u> )	-25V ≤ V <sub>CM</sub> ≤ 25V ( <u>Note 18</u> )	Full	•	-	25	ns
Driver Differential Rise or Fall t <sub>R</sub> , t <sub>F</sub> Time	$R_D = 54\Omega, C_D = 50pF$	No CM Load	Full	70	170	300	ns	
		( <u>Figure 4</u> )	$-25 \text{V} \leq \text{V}_{\text{CM}} \leq 25 \text{V}$	Full	70	-	<mark>400</mark>	ns

## To:

#### **Absolute Maximum Ratings**

V <sub>CC</sub> to Ground
DI, INV, RINV, DINV, DE, $\overline{\text{RE}}$
Input/Output Voltages
A/Y, B/Z, A, B, Y, Z ±60V
A/Y, B/Z, A, B, Y, Z (Transient Pulse Through 100 $\Omega$ , see <u>Note 15</u> ) ±80V
R0
Short-circuit Duration
Y, Z Indefinite
ESD Rating see <u>"ESD PERFORMANCE" on page 6</u>
Latch-up (Tested per JESD78, Level 2, Class A) +125°C

#### **Thermal Information**

Thermal Resistance (Typical)	θ <sub>JA</sub> (°C/W)	θ <sub>JC</sub> (°C∕W)
8 Ld SOIC Package ( <u>Notes 4, 5</u> )	104	47
14 Ld SOIC Package ( <u>Notes 4, 5</u> )	78	<mark>42</mark>
Maximum Junction Temperature (Plastic Pac	kage)	+150°C
Maximum Storage Temperature Range	6	5°C to +150°C
Pb-free Reflow Profile		see <u>TB493</u>

## **Recommended Operating Conditions**

Supply Voltage (V <sub>CC</sub> )	I
Temperature Range40°C to +85°	2
Bus Pin Common Mode Voltage Range	/

DRIVER SWITCHING CHARACTERISTICS								
Driver Differential Output t <sub>PLH,</sub> t <sub>F</sub> Delay	t <sub>PLH</sub> , t <sub>PHL</sub>	$R_D = 54\Omega, C_D = 50pF$ ( <u>Figure 5</u> )	No CM load	Full	-	70	125	ns
			-25V ≤ V <sub>CM</sub> ≤ 25V	Full	-	-	350	ns
Driver Differential Output	<sup>t</sup> skew		No CM Load	Full	-	4.5	15	ns
Skew		( <u>Figure 5</u> )	-25V ≤ V <sub>CM</sub> ≤ 25V ( <u>Note 18</u> )	Full	•	-	25	ns
Driver Differential Rise or Fall t <sub>R</sub> , t <sub>F</sub> Time	$R_D = 54\Omega, C_D = 50pF$	No CM Load	Full	70	170	300	ns	
	(Figure 5)	( <u>Figure 5</u> )	-25V ≤ V <sub>CM</sub> ≤ 25V	Full	70	-	<mark>550</mark>	ns