Product Advisory (PA)

Subject: Correction to the Renesas Product ISL71830* and ISL71831* Datasheet and DLA SMD
Publication Date: 12/9/2022
Effective Date: 12/9/2022

Revision Description:
Initial Release

Description of Change:
This notice is to inform you of datasheet and DLA SMD corrections to the Electrical Specifications for the ISL71830* and ISL71831* as below;

1. Switch Output Off Leakage Max $I_{OUT(OFF)}$
   a. OLD = 0 nA at 125C
   b. NEW = 30 nA at 125C
2. Switch Output Leakage with Switch Enabled Max $I_{OUT(ON)}$
   a. OLD = 0nA at 125C
   b. NEW = 30nA at 125C

Corrections are reflected in Appendix A of the notice. The SMD is also revised as below;

- SMD 5962-15247 – Changes to Table IA
  - Rev A = OLD revision
  - Rev C = NEW revision
- SMD 5962-15248 – Changes to Table IA
  - Rev B = OLD revision
  - Rev C = NEW revision

Products Impacted by the change;

Renesas Part Number	Ordering Number	Renesas Part Number	Ordering Number
ISL71830SEHVF	5962L1524701VXC	ISL71831SEHVF	8962L1524801VXC
ISL71830SEHVX	5962L1524701V9A	ISL71831SEHVX	8962L1524801V9A
ISL71830SEHF/PROTO	N/A	ISL71831SEHF/PROTO	N/A
ISL71830SEHX/SAMPLE	N/A	ISL71831SEHX/SAMPLE	N/A
ISL71830SEHEV1Z	N/A	ISL71831SEHEV1Z	N/A

Reason for Change:
Change corrects the datasheet and DLA SMD to reflect the actual product performance. Details regarding the change are contained within Appendix A, for an updated datasheet please contact your local sales or marketing representative.

Impact on fit, form, function, quality & reliability:
The change will have no impact on the form, fit, function, quality, reliability and environmental compliance of the devices.

Product Identification:
There have been no changes to the product, this is a documentation correction only. There

will be no change in the external marking of the packaged products.

Qualification status: Not Applicable, correction only
Sample availability: 12/9/2022
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@Renesas.COM	Europe: PCN-EU@Renesas.COM	Japan: PCN-JP@Renesas.COM	Asia Pac: PCN-APAC@Renesas.COM

Appendix A:
Datasheet changes to Datasheet table page 5 and DLA SMD

Datasheet Change for ISL71830* & ISL71831*
FROM:

Electrical Specifications, V+ = 5V GND = 0V, V_{REF} = 3.3V, V_{IH} = 3.3V, V_{IL} = 0V, T_A = +25°C, unless otherwise noted. **Boldface** limits apply across the operating temperature range, -55°C to +125°C; over a total Ionizing dose of 75krad(SI) with exposure at a low dose rate of <10mrad(SI)/s. (Continued)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN (Note 9)	TYP	MAX (Note 9)	UNIT
Switch Output Off Leakage	$I_{OUT(OFF)}$	V+ = 5.5V, V_{OUT} = 5V, All inputs = 0.5V, T_A = +25°C, -55°C	-30	-	30	nA
		T_A = +125°C	0	-	150	nA
		Post radiation, +25°C	-30	-	30	nA
		V+ = 5.5V, V_{OUT} = 0.5V, All inputs = 5V, T_A = +25°C, -55°C	-30	-	30	nA
		T_A = +125°C	-60		0	nA
		Post radiation, +25°C	-30	-	30	nA
Switch Output Leakage with Switch Enabled	$I_{OUT(ON)}$	V+ = 5.5V, V_{IN} = V_{OUT} = 5V All unused inputs at 0.5V, T_A = +25°C, -55°C	-30	-	30	nA
		T_A = +125°C	0	-	150	nA
		Post radiation, +25°C	-30	-	30	nA
		V+ = 5.5V, V_{IN} = V_{OUT} = 0.5V All unused inputs at 5V, T_A = +25°C, -55°C	-30	-	30	nA
		T_A = +125°C	-60	-	0	nA
		Post radiation, +25°C	-30	-	30	nA

TO:

Electrical Specifications, V+ = 5V GND = 0V, V_{REF} = 3.3V, V_{IH} = 3.3V, V_{IL} = 0V, T_A = +25°C, unless otherwise noted. **Boldface** limits apply across the operating temperature range, -55°C to +125°C; over a total Ionizing dose of 75krad(SI) with exposure at a low dose rate of <10mrad(SI)/s. (Continued)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN (Note 9)	TYP	MAX (Note 9)	UNIT
Switch Output Off Leakage	$I_{OUT(OFF)}$	V+ = 5.5V, V_{OUT} = 5V, All inputs = 0.5V, T_A = +25°C, -55°C	-30	-	30	nA
		T_A = +125°C	0	-	150	nA
		Post radiation, +25°C	-30	-	30	nA
		V+ = 5.5V, V_{OUT} = 0.5V, All inputs = 5V, T_A = +25°C, -55°C	-30	-	30	nA
		T_A = +125°C	-60		30	nA
		Post radiation, +25°C	-30	-	30	nA
Switch Output Leakage with Switch Enabled	$I_{OUT(ON)}$	V+ = 5.5V, V_{IN} = V_{OUT} = 5V All unused inputs at 0.5V, T_A = +25°C, -55°C	-30	-	30	nA
		T_A = +125°C	0	-	150	nA
		Post radiation, +25°C	-30	-	30	nA
		V+ = 5.5V, V_{IN} = V_{OUT} = 0.5V All unused inputs at 5V, T_A = +25°C, -55°C	-30	-	30	nA
		T_A = +125°C	-60	-	30	nA
		Post radiation, +25°C	-30	-	30	nA

SMD Change for ISL71830* & ISL71831* Table IA

FROM:

Parameter	Symbol	Conditions		01			
Switch off leakage into the output with the part disabled	IOUT(OFF)	V_S = 5.5 V, V_{IN} = 0.5 V, V_{OUT} = 5.0 V,	1, 3	01	-30	30	nA
		see figure 5 2/	2		0	200	
		M, D, P, L, V_S = 5.5 V, V_{IN} = 0.5 V, V_{OUT} = 5.0 V, see figure 5 2/	1 3/		-30	30	
		V_S = 5.5 V, V_{IN} = 5.0 V, V_{OUT} = 0.5 V, see figure 5 2/	1, 3		-30	30	
			2		-60	0	
		M, D, P, L, V_S = 5.5 V, V_{IN} = 5.0 V, V_{OUT} = 0.5 V, see figure 5 2/	1 3/		-30	30	
Switch on leakage into the input/output for a selected switch	IOUT(ON)	V_S = 5.5 V, V_{IN} = V_{OUT} = 5.0 V, unused inputs = 0.5 V, see figure 5 2/	1, 3	01	-30	30	nA
			2		0	200	
		M, D, P, L, V_S = 5.5 V, V_{IN} = V_{OUT} = 5.0 V, unused inputs = 0.5 V, see figure 5 2/	1 3/		-30	30	
		V_S = 5.5 V, V_{IN} = V_{OUT} = 0.5 V, unused inputs = 5.0 V, see figure 5 2/	1, 3		-30	30	
			2		-60	0	
		M, D, P, L, V_S = 5.5 V, V_{IN} = V_{OUT} = 0.5 V, unused inputs = 5.0 V, see figure 5 2/	1 3/		-30	30	

TO:

Parameter	Symbol	Conditions		01			
Switch off leakage into the output with the part disabled	IOUT(OFF)	V_S = 5.5 V, V_{IN} = 0.5 V, V_{OUT} = 5.0 V,	1, 3	01	-30	30	nA
		see figure 5 2/	2		0	200	
		M, D, P, L, V_S = 5.5 V, V_{IN} = 0.5 V, V_{OUT} = 5.0 V, see figure 5 2/	1 3/		-30	30	
		V_S = 5.5 V, V_{IN} = 5.0 V, V_{OUT} = 0.5 V, see figure 5 2/	1, 3		-30	30	
			2		-60	30	
		M, D, P, L, V_S = 5.5 V, V_{IN} = 5.0 V, V_{OUT} = 0.5 V, see figure 5 2/	1 3/		-30	30	
Switch on leakage into the input/output for a selected switch	IOUT(ON)	V_S = 5.5 V, V_{IN} = V_{OUT} = 5.0 V, unused inputs = 0.5 V, see figure 5 2/	1, 3	01	-30	30	nA
			2		0	200	
		M, D, P, L, V_S = 5.5 V, V_{IN} = V_{OUT} = 5.0 V, unused inputs = 0.5 V, see figure 5 2/	1 3/		-30	30	
		V_S = 5.5 V, V_{IN} = V_{OUT} = 0.5 V, unused inputs = 5.0 V, see figure 5 2/	1, 3		-30	30	
			2		-60	30	
		M, D, P, L, V_S = 5.5 V, V_{IN} = V_{OUT} = 0.5 V, unused inputs = 5.0 V, see figure 5 2/	1 3/		-30	30	