

Product Change Notice (PCN)

Subject: Product Improvement – Design Change for the Listed Renesas ISL85415FRZ* Products

Publication Date: 7/24/2019

Effective Date: 10/24/2019

Revision Description:

Initial Release

Description of Change:

This notice is to advise our customers of a design revision for the Renesas Electronics America products listed below. The update improves the transition between PWM and PFM operating modes. The datasheet has also been updated for the following electrical parameter:

Parameter	Test condition	Minimum		Typical		Maximum		Units
		From	To	From	To	From	To	
FB Voltage	TA = -40°C to + 85°C	0.589	0.594	0.599	0.600	0.606	0.606	V
FB Voltage	TA = -40°C to + 125°C	0.589	0.594	0.599	0.600	0.609	0.606	V

Products impacted by the change are:

ISL85415FRZ-T ISL85415FRZ-TKR5194 ISL85415FRZ-TR5194
 ISL85415FRZ-T7A ISL85415FRZ-TKR5632 ISL85415FRZR5194

Reason for Change:

Under some conditions, the ISL85415FRZ* may not transition from PWM to PFM mode. This update adds additional hysteresis to the PWM-PFM comparator to ensure a smooth and consistent transition between these two operating modes. The product datasheet is available on the Renesas website at: [ISL85415FRZ* Datasheet](#)

Impact on fit, form, function, quality & reliability:

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

Product Identification:

There will be no change in the external marking of the packaged parts. Product affected by this change is identifiable via Renesas Electronics America Inc. internal traceability system.

Qualification status: Complete, see attached. Appendix A

Sample availability: 7/24/2019

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 - Qualification Results

Qualification Results					
Stress	Test Method	Product	Sample Size	# of Lots	Result
High Temperature Operating Life (HTOL) 125°C, 1000 hours	JESD22-A108	ISL85415FRZ-T	80	1	Pass
Electrical Characterization ¹	-	ISL85415FRZ-T	-	-	Pass
Human Body Model (HBM)	JS-001	ISL85415FRZ-T	3	1	2,500v
Charged Device Model (CDM)	JS-002	ISL85415FRZ-T	3	1	1,000v
Latch-up (LU)	JESD78	ISL85415FRZ-T	6	1	Pass

1. Electrical characterization over temperature was completed in accordance with REA internal procedures. Bench validation was also performed to verify the product meets published specifications.