pSemi Corporation
9369 Carroll Park Drive, San Diego, CA. 92121

Product / Process Change (PCN) Notification

PCN Number: CO-20889 Date Issued: July 23rd, 2018 PCN Effective Date: July 23rd, 2018 Product(s) Affected: PE43704 Sample Availability: July 23rd, 2018 Change Control Board Approval #: CO-20889	Contact: Elizabeth La Greca Title: Director, Sales Operations Phone: 1-858-795-0106 Email: pcn@psemi.com

Change Category:

☐ Wafer Fabrication Process	☐ Shipping/Labeling
☐ Design/Mask Change	☐ Equipment
☐ Singulation Process	☐ Material
☐ Assembly Process	☒ Product Specification: Specification change
☒ Electrical Test: Test program change	☐ Product End of Life
☐ Manufacturing Site	☐ Other - Ordering codes change

Purpose of Change:

The purpose of this change is to inform customers the PE43704 product specification datasheet has been updated to include relaxed insertion loss limits and attenuation error limits in order to ensure continuity of supply to the PE43704 customer base.

Description of Change:

Insertion loss max values in Table 1, 2 & 3 are updated.

Frequency	Typical IL	Original max IL	Updated max IL	Units
9 kHz-2 GHz	1.3	1.4	1.6	dB
2 GHz-4 GHz	1.7	1.9	2.0	dB
4 GHz-6 GHz	2.4	2.7	2.8	dB

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Attenuation error max values in Table 1 (0.25 dB steps) are updated.

0.25 dB steps		Original DS Limits	Updated DS Limits
Attenuation setting	**Frequency**	**Original max AE (dB)**	**Updated max AE (dB)**
0-15.75 dB	9 kHz≤4 GHz	+(0.15+3% of Attenuation setting) -(0.1+1% of Attenuation setting)	+(0.15+4.5% of Attenuation setting) -(0.1+2% of Attenuation setting)
	4 GHz-6 GHz	+(0.15+5% of Attenuation setting) -0.15	+(0.15+6% of Attenuation setting) -(0.15+1% of Attenuation setting)
16-31.75 dB	9 kHz ≤4 GHz	+(0.15+3% of Attenuation setting) -(0.1+1% of Attenuation setting)	+(0.15+4.5% of Attenuation setting) -(0.1+2.5% of Attenuation setting)
	4 GHz-6 GHz	+(0.25+5% of Attenuation setting) 0	+(0.25+6.5% of Attenuation setting) -(0.2+1% of Attenuation setting)

Attenuation error max values in Table 2 (0.5 dB steps) are updated.

0.5 dB steps		Original DS Limits	Updated DS Limits
Attenuation setting	**Frequency**	**Original max AE (dB)**	**Updated max AE (dB)**
0-15.5 dB	9 kHz≤4 GHz	+(0.15+3% of Attenuation setting) -(0.1+2% of Attenuation setting)	+(0.15+4.5% of Attenuation setting) -(0.1+2% of Attenuation setting)
	4 GHz-7 GHz	+(0.25+5% of Attenuation setting) -0.25	+(0.25+5.5% of Attenuation setting) -(0.15+1% of Attenuation setting)
16-31.5 dB	9 kHz≤4 GHz	+(0.15+3% of Attenuation setting) -(0.1+2% of Attenuation setting)	+(0.15+4.5% of Attenuation setting) -(0.1+2.5% of Attenuation setting)
	4 GHz-7 GHz	+(0.25+6% of Attenuation setting) -(0.25+2.5% of Attenuation setting)	+(0.25+6.5% of Attenuation setting) -(0.25+2.5% of Attenuation setting)

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Attenuation error max values in Table 3 (1 dB steps) are updated.

1 dB steps		Original DS Limits	Updated DS Limits
Attenuation setting	**Frequency**	**Original max AE (dB)**	**Updated max AE (dB)**
0-15 dB	9 kHz≤4 GHz	+(0.15+3% of Attenuation setting) -(0.1+1% of Attenuation setting)	+(0.15+4.5% of Attenuation setting) -(0.1+2% of Attenuation setting)
	4 GHz≤7 GHz	+(0.25+6% of Attenuation setting) -(0.25+2% of Attenuation setting)	+(0.25+6% of Attenuation setting) -(0.25+2% of Attenuation setting)
	7 GHz-8 GHz	+(0.25+7% of Attenuation setting) -(0.25+2% of Attenuation setting)	+(0.25+7% of Attenuation setting) -(0.25+2% of Attenuation setting)
16-31.5dB	9 kHz≤4 GHz	+(0.15+3% of Attenuation setting) -(0.1+1% of Attenuation setting)	+(0.15+4.5% of Attenuation setting) -(0.1+2.5% of Attenuation setting)
	4 GHz≤7 GHz	+(0.25+6% of Attenuation setting) -(0.25+3% of Attenuation setting)	+(0.25+6.5% of Attenuation setting) -(0.25+3% of Attenuation setting)
	7 GHz-8 GHz	+(0.25+7% of Attenuation setting) -(0.25+4% of Attenuation setting)	+(0.25+7% of Attenuation setting) -(0.25+4% of Attenuation setting)

There is no change to form, fit or reliability.

The ordering codes will remain the same – PE43704MLCA-Z/EK43704-11 (MagnaChip). See separate PCN (PCN# CO-20896) regarding the Lapis transition.

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Customer Acknowledgement of Receipt:

☐ Change Denied *(Include explanation in comments section below)* ☐ Change Approved	**Name:**	
	Title:	
	Company:	
	Date:	
	Signature:	
Customer Comments:		