

Product Change Notice (PCN)

Subject: Alternate Bond Wire Material for Dr MOS used in the listed Intersil HDA modules

Publication Date: 11/24/2017

Effective Date: 2/22/2018

Revision Description:

Initial Release

Description of Change:

This notice is to inform you that Dr MOS (Integrated Power MOSFET and Driver in one small package) is a supplied part to Intersil. Intersil is qualifying Palladium Coated Copper (PCC) wire as an alternate to the Gold (Au) wire for Dr MOS currently used for assembly of the listed Intersil HDA modules.

Product List

ISL8270MAIRZ	ISL8273MAIRZ	ZL9023MAIRZ-T
ISL8270MAIRZ-T	ISL8273MAIRZ-T	ZL9023MBIRZ
ISL8270MBIRZ	ISL8273MCIRZ	ZL9023MBIRZ-T
ISL8270MBIRZ-T	ISL8273MCIRZ-T	ZL9025MAIRZ
ISL8271MAIRZ	ISL8277MAIRZ	ZL9025MAIRZ-T
ISL8271MAIRZ-T	ISL8277MAIRZ-T	ZL9025MBIRZ
ISL8271MAIRZ-TS2490	ISL8277MAIRZ-T1	ZL9025MBIRZ-T
ISL8271MBIRZ	ISL8278MAIRZ	ZL9030MAIRZ
ISL8271MBIRZ-T	ISL8278MAIRZ-T	ZL9030MAIRZ-T
ISL8272MAIRZ	ISL8278MAIRZ-T1	ZL9030MBIRZ
ISL8272MAIRZ-T	ZL9023MAIRZ	ZL9030MBIRZ-T

Reason for Change:

The qualification plan for PCC bond wire Dr MOS follows JEDEC and other applicable industry standards to confirm there is no impact to form, fit, function or interchangeability of the product. The remainder of the manufacturing operations (package assembly, test, shipment, etc.) will continue to be processed to previously established conditions and systems. A summary of the PCC bond wire Dr MOS qualification results from the supplier are included for reference. Refer Appendix A.

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:

Product affected by this change is identifiable via Intersil's internal traceability system.

Qualification status: Completed, see attached

Sample availability: 12/1/2017

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 –Dr MOS's Qualification Results (see attached)

Test Description	Condition	FDMF6820B 40 Lead, Clipbond PQFN DrMOS, 6.0mm x 6.0mm Package	FDMF6821B 40 Lead, Clipbond PQFN DrMOS, 6.0mm x 6.0mm Package	FDMF6840C 40 Lead, Clipbond PQFN DrMOS, 6.0mm x 6.0mm Package
Preconditioning, MSL 1		N = 2253 Acc = 0 L1 Pb-free	N = 231 Acc = 0 L1 Pb-free	N = 1194 Acc = 0 L1 Pb-free
Highly Accelerated Stress Test (b-HAST) 85%RH, 110°C, Bias	96 hrs	N = 270 Acc = 0	N = 77 Acc = 0	
	192 hrs		N = 77 Acc = 0	N = 231 Acc = 0
	300 hrs	N = 135 Acc = 0		N = 366 Acc = 0
High Temperature Operating Life (HTOL) 125°C, Bias	1000 hrs	N = 231 Acc = 0		
Highly Accelerated Stress Test (u-HAST) 85%RH, 110°C, Unbias	96 hrs	N = 462 Acc = 0		N = 231 Acc = 0
	192 hrs	N = 462 Acc = 0		N = 231 Acc = 0
Temperature Cycle (TCT) -65°C to 150°C	50 cyc	N = 231 Acc = 0		
	100 cyc	N = 462 Acc = 0	N = 77 Acc = 0	N = 462 Acc = 0
	250 cyc	N = 231 Acc = 0		
	500 cyc	N = 462 Acc = 0	N = 77 Acc = 0	N = 231 Acc = 0
	1000 cyc	N = 462 Acc = 0	N = 77 Acc = 0	N = 231 Acc = 0
High Temperature Storage Life (HTSL) 150°C	168 hrs	N = 462 Acc = 0	N = 77 Acc = 0	N = 231 Acc = 0
	500 hrs	N = 462 Acc = 0	N = 77 Acc = 0	N = 231 Acc = 0
	1000 hrs	N = 462 Acc = 0	N = 77 Acc = 0	N = 231 Acc = 0
Power Cycle Delta 100CC, 2 min cycle	5000 cyc	N = 308 Acc = 0		N = 231 Acc = 0
	10000 cyc	N = 308 Acc = 0		

Completed and Passed
Not Applicable