

**M/A-COM Technology Solutions Inc.**  
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September 24<sup>th</sup>, 2015

Digi-Key Corporation  
701 Brooks Ave South #  
Thief River Falls, Minnesota USA 56701

ATTN: Quality/Purchasing Manager

**Subject:** Change from Ag braze to CuSil between MEP and BeO on a family of Kyocera packages

**PCN #:** PCN-00779

Dear Valued Customer,

Please accept this letter as formal notification that braze material between MEP and BeO on a family of Kyocera packages used for some MACOM power transistor products has been changed from Ag to CuSil.

This change has been proposed by Kyocera as part of its value engineering project.

Extensive qualification tests have been conducted by MACOM and proved the Kyocera packages with CuSil braze material between MEP and BeO meet MACOM Technology Solutions (MACOM) reliability requirements. This braze material change is deemed suitable for being used in MACOM power transistor products and will have no effect in its products' form, fit, function, or reliability. Please refer to appendix for details.

You are receiving this notification because you have purchased one or more of the MACOM products subject to this change within the past two years.

Should you have any questions or concerns in respect to this change please do not hesitate to contact me immediately for discussion.

Sincerely,

**Zhuyi Wang**  
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**Qualification results quoted from QTR-0173**

Qualification Vehicle: PH9146

Lot Number: Qual lot #037

**Qualification Tests**

<b>Test</b>	<b>Specification</b>	<b>Fails/SS</b>	<b>Result</b>
Dimensions	10100064-XX, Rev. AR	0/25	PASS
DC Electrical Test	Refer to PH9146 Product Specification, Revision M1	0/20	PASS
Temperature Cycling	MIL-STD-750, Method 1051.6	0/20	PASS
Hermetic Seal	MIL-STD-750, Method 1071.8, Test Condition C and H	0/20	PASS
Shock	MIL-STD-750, Method 2016.2	0/20	PASS
Vibration, Variable Frequency	MIL-STD-750, Method 2056	0/20	PASS
Constant Acceleration	MIL-STD-750, Method 2006	0/20	PASS
Moisture Resistance	MIL-STD-750, Method 1021.3	0/20	PASS
Salt Atmosphere	MIL-STD-750, Method 1041.3	0/6	PASS
Terminal Strength	MIL-STD-750, Method 2036.4	0/7	PASS
Bond Strength	MIL-STD-750, Method 2037.1	0/3 (11 wires)	PASS

**Final MACOM products affected by braze material change**

<b>Package affected</b>	<b>Sellable products affected</b>
1000007445	SRF3682
3590	MAPHST0010
	MAPHST0037
	MAPHST0039
	MAPHST0048
	MAPHST0049
	MAPHST0055
	MAPHST0070
	MAPHST0082
	MAPHST0084
	MAPRST2933-20
	PH2226-50M
	PH2729-8.5M
	PH2731-5M
	PH3134-20L
	PH3134-25M
	PH3134-30S
	PH3135-20M
	PH3135-25S
	PH3135-30M
	PH3135-5M
	PH3135-5S
	PH8887
	PH8888
	PH8924
	PH8930
	PHA8005
	PH8950
	PH8981
	PH8982
	PH9030
	PH9031
	PH9088
	PH9096
	PH9107
	PH9112
	PH9139
	PH9146
	PH9197

PH9200  
PH9202  
PH9210

3642      MAPH-008691-000000  
            MAPP-010311-000000  
            MAPHST0036  
            MAPPST2933-190M  
            MAPRST2933-100  
            PH2729-130M  
            PHA2731-140L  
            PHA8001  
            PHA8002  
            PHA2729-240M  
            PH9038  
            PHA3135-130M  
            PH9199  
            PHA8007

7055      MAPH-009041-000000  
            MAPHST0034  
            PHA2729-300M  
            MAPHST0052  
            MAPHST0060  
            MAPR-002729-120L00  
            MAPR-002729-120LPO  
            MAPR-002729-170M00  
            MAPPST0016  
            MAPP-002729-300M00  
            MAPR-002731-115M00  
            MAPR-002731-135MPO  
            MAPRST2856-250  
            PH2226-110M  
            PH2729-110M  
            PH2856-160  
            PH8900  
            PH8900-2  
            PH8909  
            PH8918  
            PH8961  
            PH8988  
            PH9027  
            PH9061  
            PH9083

PH9143  
MAPPST0013  
PHA808  
PHA2731-190M  
PH9182  
PHA8012  
PHA8010  
PHA8010-D  
PHA8010-O  
PH9186  
PH9186-1  
PH9191  
PH9195

7081

MAPPST0001  
MAPH-009127-000000  
MAPH-009393-000000  
MAPHST0006  
MAPR-003134-065L00  
MAPR-003134-085L00  
MAPP-003134-150L00  
MAPP-008892-000000  
MAPR-003134-095M00  
MAPP-003134-180M00  
MAPP-008857-000000  
PH2729-65M  
PH3134-55L  
PH3134-65M  
PH3135-65M  
PH3135-90M  
PH3135-90S  
PH8889  
PH8891  
PH8906  
PH8925  
PH8931  
PHA8006  
PH8983  
PH8989  
PH9000  
PH9009  
PH9032  
PH9092  
PH9097



PH9105  
PH9181  
PH9203  
MAPPST0001

8774      MAPH-007821-000000  
            MAPH-008156-000000  
            MAPH-008353-000000  
            MAPH-008781-000000  
            MAPH-010010-000000  
            MAPH-011002-000000  
            MAPHST0005  
            MAPHST0020  
            MAPHST0020-1  
            MAPHST0033  
            MAPHST0045  
            MAPHST0046  
            MAPHST0063  
            MAPHST0089  
            MAPR-000912-500S00  
            MAPR-001214-300MPO  
            MAPRST0912-350  
            MAPRST1214-150UF  
            PH1090-350L  
            PH1090-550S  
            PH1214-220M  
            PH1214-300M  
            PH8863  
            PH8927  
            PH8948  
            PH9008  
            PH9084  
            PH9084-2  
            PH9117  
            PH9149  
            PH9150  
            PH9161  
            PH9161-1  
            PH9161A  
            PH9205

8336      MAPHST0011  
            PH1214-0.85L  
            PH1214-20EL

PH1214-25L  
PH1214-25M  
PH1214-25S  
PH1214-3L  
PH1214-40M  
PH8591  
PH8958  
PH9085

5124TOR

MAPHST0018  
MAPHST0024  
MAPHST0031  
MAPHST0087  
MAPRST1214-6UF  
PH1090-15L  
PH1214-12M  
PH1214-2M  
PH1214-6M  
PH2856-3  
PH3134-10M  
PH8890  
PH8929  
PH9015  
PH9034  
PH9076  
PH9159