

## Microsemi Corporation

February 02nd 2017

### Product/Process Change Notification No: PCN 2017-002

**Change Classification:** Major

**Subject:** Addition of second die source and device assembly of the MSMBxSAC and MSMCxLCE series TVS and their derivatives.

#### Description of Change:

This correspondence is official notification of the addition of second die source and assembly for the Microsemi manufactured parts listed below. This is a follow on PCN from IPCN 2016-010. Product built with original die source and assembly will remain available until we deplete bridging inventory that we have in die bank. The part specifications are available on the Microsemi website at [www.microsemi.com](http://www.microsemi.com).

Qualification and Reliability data is enclosed in the Appendix section below. Further technical information is available from your local Sales office or Felim Downey at ([felim.downey@microsemi.com](mailto:felim.downey@microsemi.com)).

#### Reason for Change:

Consolidation of product line assembly as part of Microsemi's ongoing initiative driving operational and service efficiencies.

#### Application Impact:

There will be no change to form, fit or function of the product.

#### Method of Identifying Changed Product:

This will be listed on the Certificate of Conformance shipped with all affected products.

Die Source: China

Assembly Division: China

Screening Division: Ireland

#### Products Affected by this Change:

All M/MA/MXL/MX level parts in the following Transient Voltage Suppressor series:

MSMBSAC5.0 thru MXLSMBSAC75, e3.

MSMCJLCE6.5A thru MXLSMCJLCE170A, e3.

MSMCGLCE6.5A thru MXLSMCGLCE170A, e3.

## Production Shipment Schedule:

First expected shipments in May 2017

During a transition period, customers may see shipments with either location while any existing inventory of parts is depleted.

## Qualification and Reliability Data:

Screening Level	Test Performed	Conditions	Duration or Qty	Standard / Ref	Sample size	No. Of Lots	Failures
M	Temperature Cycle	-55 °C to +150 °C	1000 cycles	MIL-STD-750F Method 1051	77	3	0
M	HTRB	125 °C	1000 hours	MIL-STD-750F Method 1038	77	3	0
M	Autoclave	121 °C, 100 % RH, 15 psig	96 hours	JESD22-A102	77	3	0
M	H <sup>3</sup> TRB	85°C, 85% RH, 15psig	1000 hours	JESD22-A101	77	3	0
M	HAST	85°C, 85% RH	96 hours	-	77	1	0
M	Resistance to Solder Heat	-	-	JESD22-B106	30	3	0
M	Radiography	-	-	MIL-STD-750 Method 4081	30	2	0
M	Solderability	-	-	J-STD-002	10	2	0
MX	Physical Dimensions	-	-	MIL-STD-750F Method 2066	15	3	0
MX	Terminal Strength	-	-	MIL-STD-750F Method 2036	22	1	0
MX	Forward Surge Current	8.3ms half sine wave	1 repetition	MIL-STD-750 Method 4066 Condition A	22	3	0
MX	Vcf Test, Forward voltage	Unidirectional only	1 repetition	MIL-STD-750 Method 4011	45	3	0
MX	Surge Tests	100 % I <sub>PP</sub>	100 repetitions	10/1000 µS waveform	22	2	0
MX	High Temperature (non-operating)	150 °C	340 hours	MIL-STD-750F Method 1032	32	3	0
MX	Salt Atmosphere (Corrosion)	-	-	MIL-STD-750F Method 1021	15	3	0



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### About Microsemi

Microsemi Corporation (Nasdaq: MSCC) offers a comprehensive portfolio of semiconductor and system solutions for aerospace & defense, communications, data center and industrial markets. Products include high-performance and radiation-hardened analog mixed-signal integrated circuits, FPGAs, SoCs and ASICs; power management products; timing and synchronization devices and precise time solutions, setting the world's standard for time; voice processing devices; RF solutions; discrete components; enterprise storage and communication solutions; security technologies and scalable anti-tamper products; Ethernet solutions; Power-over-Ethernet ICs and midspans; as well as custom design capabilities and services. Microsemi is headquartered in Aliso Viejo, Calif., and has approximately 4,800 employees globally. Learn more at [www.microsemi.com](http://www.microsemi.com).

Reliability Term	M Level
Cumulative Device Hours	231,000
Equivalent Device Hours	>18 million
# of Failures	0
Failure Rate (per hour)	5.032E-08
FIT (Failures In Time per billion hours)	51
MTTF (Mean Time To Failure in years)	2,243

### Samples Availability:

Please contact your local Microsemi representative to place sample orders.

### Contact Information:

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Regards,

Microsemi Corporation

Any projected dates in this PCN are based on the most current product information at the time this PCN is being issued, but they may change due to unforeseen circumstances. For the latest schedule and any other information, please contact your local Microsemi Sales Office, the factory contact shown above, or your local distributor.

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# CHANGE APPROVAL SUPPLEMENT

## Customer Acknowledgement / Approval for

### Product/Process Change Notification No: PCN 2017-00201

Microsemi Corporation intends to implement this change 90 days after this notification. Acknowledgement of your company's acceptance of this change is requested per contractual agreement. Response within 30 days is required.

Accepted

Rejected

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name

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Title

**Please enter rationale for rejection, if applicable:** \_\_\_\_\_

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