

Microsemi Corporation

February 21, 2017

Product/Process Change Notification No: 160361

Change Classification: Minor

Subject: Halogen-free substrate introduction at ASEK

Description of Change:

Microsemi is migrating to a halogen-free substrate on all of the BGA products assembled at ASE, Kaohsiung, Taiwan (ASEK). ASEK is currently a qualified assembly site for Microsemi.

Substrate materials (core/prepreg) will be changed accordingly.

	Discontinued Materials	Recommended Materials
Mold Compound	CCL-HL832EX	CCL-HL832NX

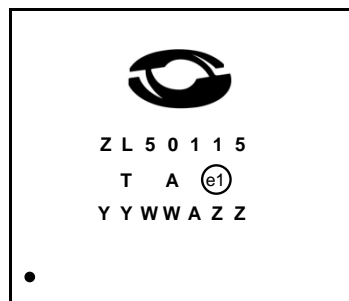
Reason for Change:

Mitsubishi Glass Company (MGC) has stopped production of halogen containing material.

Product Identification:

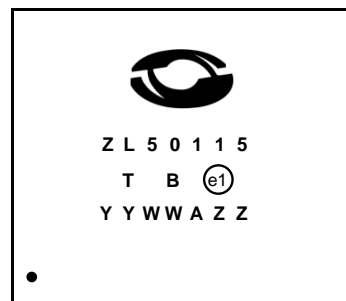
Customer will be able to identify product with the new substrate by the revision code in the device marking. The second character in the second line of the device marking contains a revision code. The product revision code will change from "A" to "B" to indicate product built with halogen-free substrate.

Example Rev A Mark



Pin 1 corner

Example Revision B Mark



Pin 1 corner

Application Impact:

There is no impact to the customers' applications since there are no changes to form, fit, function, or product reliability as a result of this change.

Products Affected by this Change:

Package	Body Size	Pin Count	Ordering Part Number
PBGA	23x23	324	ZL50116GAG2
PBGA	23x23	324	ZL50117GAG2
PBGA	23x23	324	ZL50118GAG2
LBGA	17x17	208	ZL50232GDG2
PBGA	19x19	324	ZL50075GAG2
PBGA	17x17	256	ZL50015GAG2
PBGA	17x17	256	ZL50016GAG2
PBGA	17x17	256	ZL50018GAG2
PBGA	17x17	256	ZL50019GAG2
PBGA	17x17	256	ZL50020GAG2
PBGA	17x17	256	ZL50022GAG2
PBGA	17x17	256	ZL50023GAG2
LBGA	13x13	144	ZL50011GDG2
LBGA	13x13	144	ZL50012GDG2
LBGA	13x13	144	ZL50010GDG2
PBGA	35x35	552	ZL50110GAG2
PBGA	35x35	552	ZL50111GAG2
PBGA	35x35	552	ZL50112GAG2
PBGA	35x35	552	ZL50114GAG2
PBGA	27x27	272	MT90869AG2
PBGA	27x27	272	ZL80007GAG2



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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.

MSC-F-0003 Rev 4

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Page 2 of 4

Production Shipment Schedule:

Product assembled with the halogen-free material is planned to ship no sooner than May 22, 2018, unless customer waives the 90-day notification period.

During a transition period, customers may see shipments of either revision while the inventory of halogen-containing substrates is depleted.

Qualification Data:

The Qualification Report accompanies this PCN.

Samples Availability:

Samples are available upon request.

Please contact your local Microsemi representative to place sample orders. Note: there may be a significant lead-time on some samples due to substrate availability and inventory.

Contact Information:

Communication Product Group
Microsemi Corporation
PCN@microsemi.com

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: 160361

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

Title

Please enter rationale for rejection, if applicable: _____



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