

909 N Sepulveda Blvd., Suite 230, El Segundo, CA 90245

Notification Date: June 24, 2014

# PCN Number:PCN140601PCN Title:EPC2012 Process and Material ChangeEffective Date:Lot C4228B00.1 (E605) onward

## Product Identification:

The following part numbers will be affected by this change:

EPC Part Number	Digi-Key Part Number
EPC2012	917-1017-2-ND
	917-1017-1-ND
	917-1017-6-ND

#### **Description of Changes:**

1. In order to ensure EPC's manufacturing capacity for the product EPC2012, we have qualified one additional bump site for the lead free bump. This resulted in the following changes :

Original ASE PbF SAC405 bump :

- UBM: 2KÅ Ti / 3.25KÅ Ni-Vd / 8KÅ Cu for PbF Solder (Cu is last deposit)
- Polyimide is outside of the passivation opening
- Lead Free Solder is SAC405 Sn95.5%, Ag4%, Cu 0.5%

New Chipbond PbF Sn/Ag2.5% bump for EPC2XXX products :

- UBM: Sputter 2KÅ Ti / 4KÅ Cu, plate 5um Cu / 3um Ni
- Polyimide is inside of the passivation opening.
- Lead Free Solder is Sn97.5%, Ag2.5%
- There was no reduction in the bump contact area to the aluminum in the bond pad.
- UBM size is unchanged

Chipbond is a certified ISO-9001 company and is an existing qualified partner of EPC for other production processes.

2. Mask change to improve device dynamic performance. Device Miller ratio has been improved.



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# **Device Identification**

EPC will begin to ship new product beginning June 2014. The new product will be identified by product lot date code as defined below where Marking Line 2 will contain values of 4228 or higher and where Marking Line 3 will contain values of B001 or higher.

Laser Markings	
Lot_Date Code Marking line 2	Lot_Date Code Marking Line 3
YYYY	ZZZZ

#### **Samples**

Available upon request

#### **Reliability Data**

Bump family qualification data available upon request.

#### Information Request

If there are any questions, comments or information required regarding this PCN please contact your local EPC Sales Representative or the following EPC contacts directly.

PC Sales Contact:	Renee Yawger	+1.908.475.5702	(renee.yawger@epc-co.com)
EPC Engineering Contact:	Bhasy Nair	+1.972.805.8585	(bhasy.nair@epc-co.com)

EPC CONSIDERS THIS CHANGE APPROVED IF THE CUSTOMERS DO NOT GIVE US ANY WRITTEN OBJECTION WITHIN 30 DAYS FROM NOFITIFACTION DATE OF THIS PCN LETTER.

## **EPC Approval:**

This PCN has been reviewed and approved by EPC's Quality & Reliability department:

Quality Director: \_\_\_\_Yanping Ma\_\_\_\_\_\_

Date: \_\_\_\_\_6/24/2014\_\_\_\_\_\_