



---

# POWER8 Processor Single Chip Module

Physical Outline Drawing

FC PLGA

**Advance**

March 25, 2014



© Copyright International Business Machines Corporation 2014

Printed in the United States of America March 2014

IBM, the IBM logo, and [ibm.com](http://ibm.com) are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at [www.ibm.com/legal/copytrade.shtml](http://www.ibm.com/legal/copytrade.shtml).

Other company, product, and service names may be trademarks or service marks of others.

All information contained in this document is subject to change without notice. The products described in this document are NOT intended for use in applications such as implantation, life support, or other hazardous uses where malfunction could result in death, bodily injury, or catastrophic property damage. The information contained in this document does not affect or change IBM product specifications or warranties. Nothing in this document shall operate as an express or implied license or indemnity under the intellectual property rights of IBM or third parties. All information contained in this document was obtained in specific environments, and is presented as an illustration. The results obtained in other operating environments may vary.

While the information contained herein is believed to be accurate, such information is preliminary, and should not be relied upon for accuracy or completeness, and no representations or warranties of accuracy or completeness are made.

**Note:** This document contains information on products in the design, sampling and/or initial production phases of development. This information is subject to change without notice. Verify with your IBM field applications engineer that you have the latest version of this document before finalizing a design.

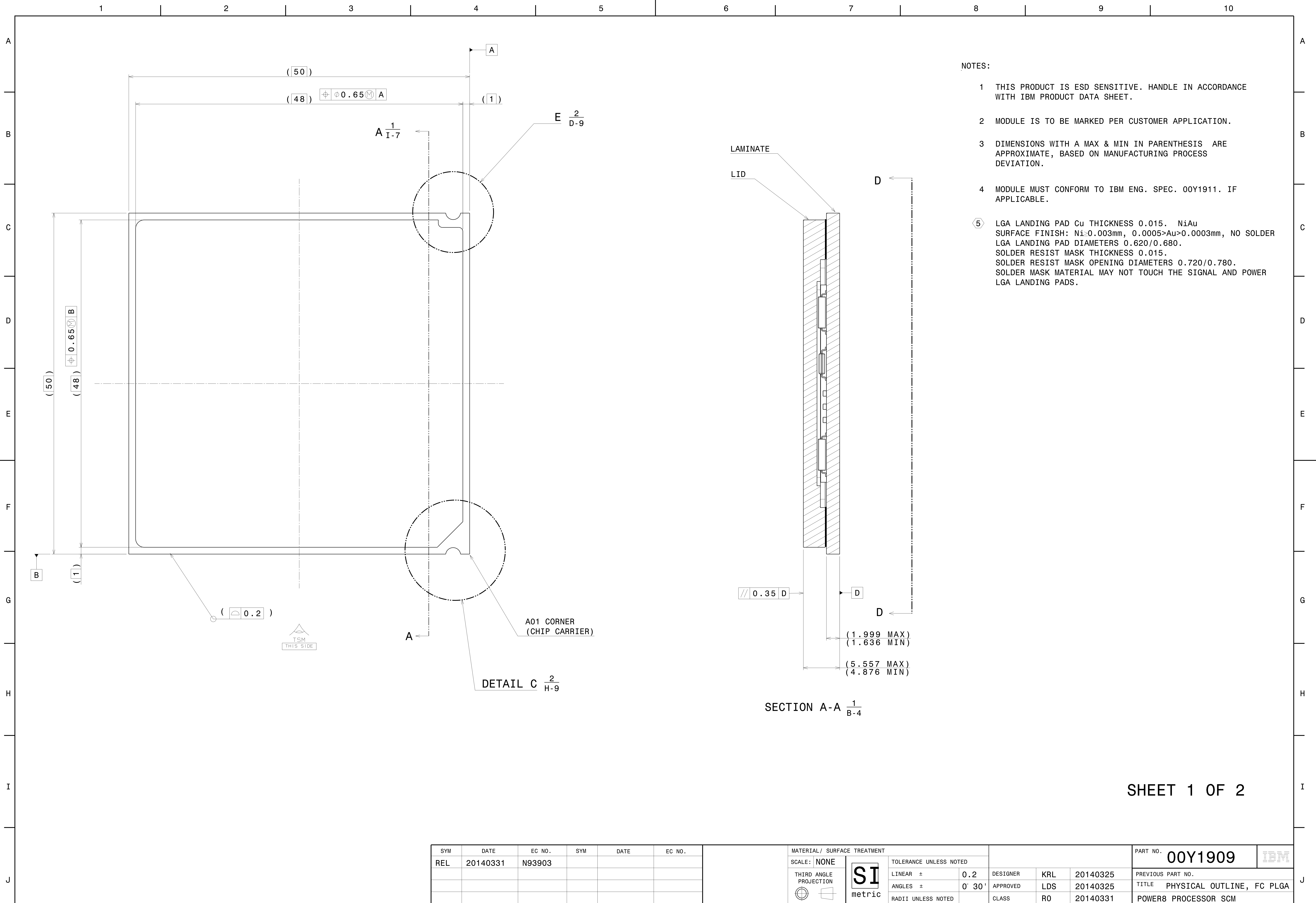
You may use this documentation solely for developing technology products compatible with Power Architecture®. You may not modify this documentation. You may distribute the documentation to suppliers and other contractors hired by you to solely produce your technology products compatible with Power Architecture technology and to your customers (either directly or indirectly through your resellers) in conjunction with their use and instruction of your technology products compatible with Power Architecture technology. No other license, express or implied, by estoppel or otherwise to any intellectual property rights is granted by this document.

THE INFORMATION CONTAINED IN THIS DOCUMENT IS PROVIDED ON AN "AS IS" BASIS. IBM makes no representations or warranties, either express or implied, including but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement, or that any practice or implementation of the IBM documentation will not infringe any third party patents, copyrights, trade secrets, or other rights. In no event will IBM be liable for damages arising directly or indirectly from any use of the information contained in this document.

IBM Systems and Technology Group  
2070 Route 52, Bldg. 330  
Hopewell Junction, NY 12533-6351

The IBM home page can be found at [ibm.com](http://ibm.com)®.

Version 1.0  
March 25, 2014

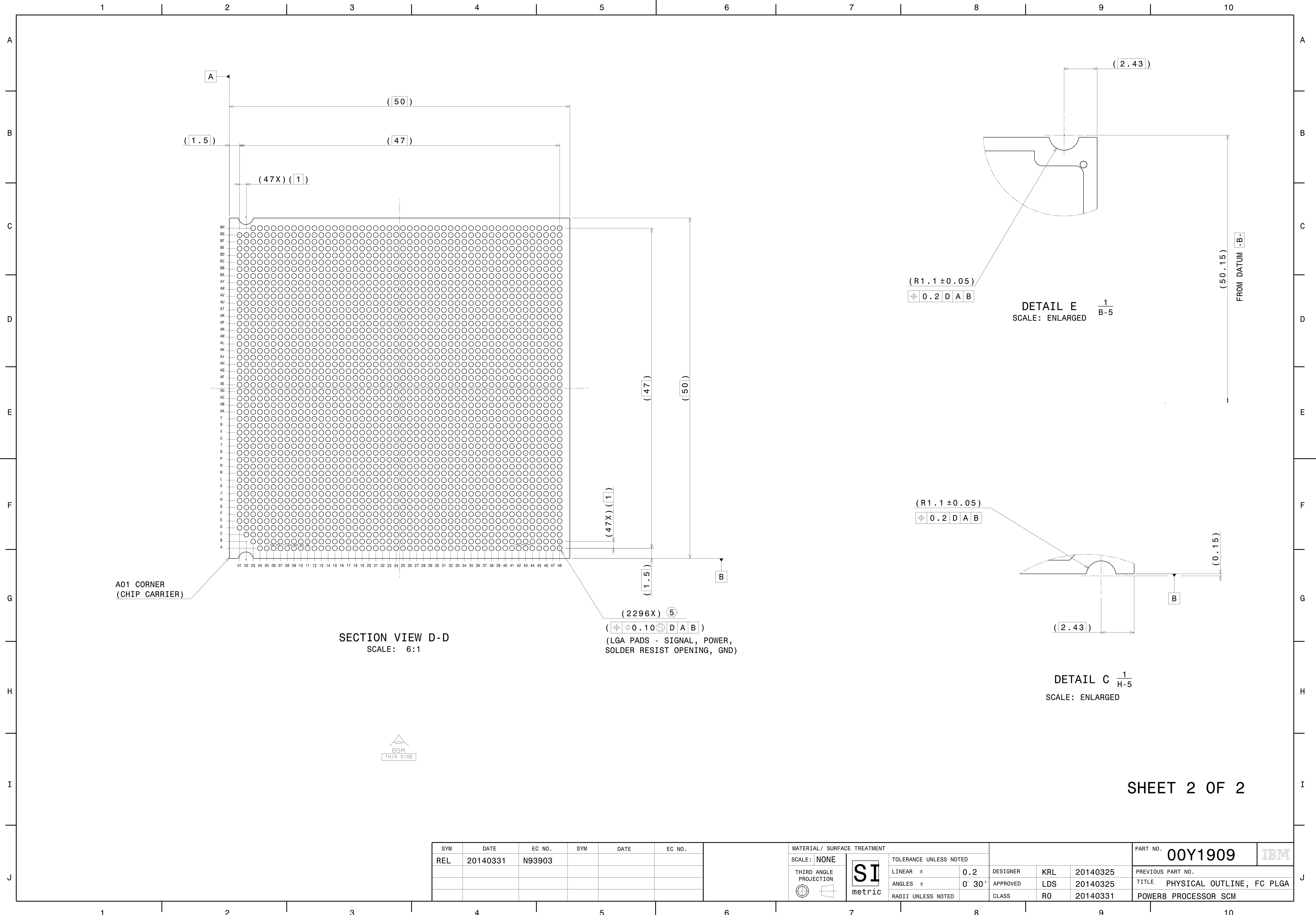


NOTES:

- 1 THIS PRODUCT IS ESD SENSITIVE. HANDLE IN ACCORDANCE WITH IBM PRODUCT DATA SHEET.
- 2 MODULE IS TO BE MARKED PER CUSTOMER APPLICATION.
- 3 DIMENSIONS WITH A MAX & MIN IN PARENTHESIS ARE APPROXIMATE, BASED ON MANUFACTURING PROCESS DEVIATION.
- 4 MODULE MUST CONFORM TO IBM ENG. SPEC. 00Y1911. IF APPLICABLE.
- ⑤ LGA LANDING PAD Cu THICKNESS 0.015. NiAu SURFACE FINISH: Ni=0.003mm, 0.0005>Au>0.0003mm, NO SOLDER LGA LANDING PAD DIAMETERS 0.620/0.680. SOLDER RESIST MASK THICKNESS 0.015. SOLDER RESIST MASK OPENING DIAMETERS 0.720/0.780. SOLDER MASK MATERIAL MAY NOT TOUCH THE SIGNAL AND POWER LGA LANDING PADS.

SHEET 1 OF 2

SYM	DATE	EC NO.	SYM	DATE	EC NO.	MATERIAL/ SURFACE TREATMENT	TOLERANCE UNLESS NOTED			PART NO.	IBM	
REL	20140331	N93903				SCALE: NONE	LINEAR ±	0.2	DESIGNER	KRL	20140325	PREVIOUS PART NO.
						THIRD ANGLE PROJECTION	ANGLES ±	0° 30'	APPROVED	LDS	20140325	TITLE
						metric	RADII UNLESS NOTED		CLASS	RO	20140331	POWER8 PROCESSOR SCM



A01 CORNER  
(CHIP CARRIER)

SECTION VIEW D-D  
SCALE: 6:1

(2296X) (5)  
( $\phi 0.10$ ) (D | A | B)  
(LGA PADS - SIGNAL, POWER,  
SOLDER RESIST OPENING, GND)

DETAIL E  
SCALE: ENLARGED  $\frac{1}{B-5}$

(R1.1 ± 0.05)  
 $\phi 0.2$  (D | A | B)

DETAIL C  
SCALE: ENLARGED  $\frac{1}{H-5}$

(R1.1 ± 0.05)  
 $\phi 0.2$  (D | A | B)

SHEET 2 OF 2

SYM	DATE	EC NO.	SYM	DATE	EC NO.
REL	20140331	N93903			

MATERIAL/ SURFACE TREATMENT			PART NO.		
SCALE: NONE	TOLERANCE UNLESS NOTED		00Y1909		
THIRD ANGLE PROJECTION	LINEAR ± 0.2	DESIGNER KRL	20140325	PREVIOUS PART NO.	
	ANGLES ± 0° 30'	APPROVED LDS	20140325	TITLE PHYSICAL OUTLINE, FC PLGA	
	RADII UNLESS NOTED	CLASS RO	20140331	POWER8 PROCESSOR SCM	