



Please note that Cypress is an Infineon Technologies Company.

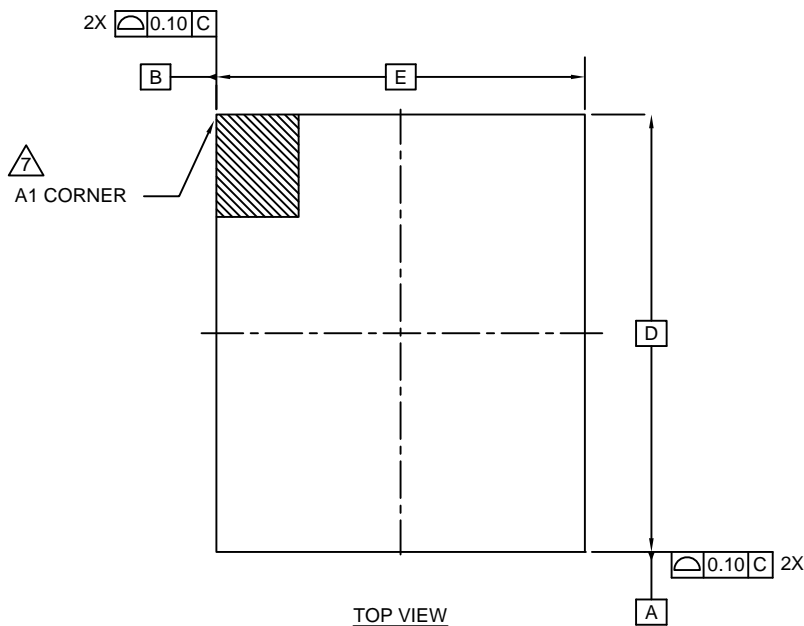
The document following this cover page is marked as “Cypress” document as this is the company that originally developed the product. Please note that Infineon will continue to offer the product to new and existing customers as part of the Infineon product portfolio.

Continuity of document content

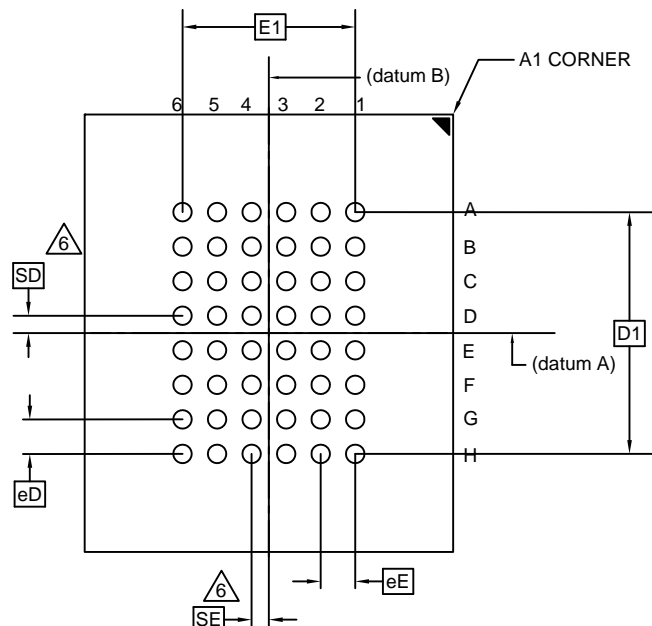
The fact that Infineon offers the following product as part of the Infineon product portfolio does not lead to any changes to this document. Future revisions will occur when appropriate, and any changes will be set out on the document history page.

Continuity of ordering part numbers

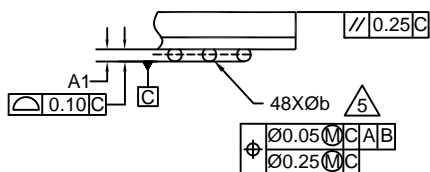
Infineon continues to support existing part numbers. Please continue to use the ordering part numbers listed in the datasheet for ordering.



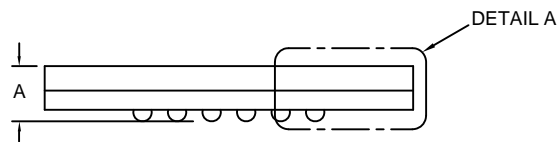
TOP VIEW



BOTTOM VIEW



DETAIL A




SIDE VIEW

SYMBOL	DIMENSIONS		
	MIN.	NOM.	MAX.
A	-	-	1.00
A1	0.16	0.21	0.26
D	9.50 BSC		
E	8.00 BSC		
D1	5.25 BSC		
E1	3.75 BSC		
MD	8		
ME	6		
N	48		
Ø b	0.25	0.30	0.35
eD	0.75 BSC		
eE	0.75 BSC		
SD	0.38		
SE	0.38		

NOTES:

- ALL DIMENSIONS ARE IN MILLIMETERS.
- SOLDER BALL POSITION DESIGNATION PER JEP95, SECTION 3, SPP-020.
- "e" REPRESENTS THE SOLDER BALL GRID PITCH.
- SYMBOL "MD" IS THE BALL MATRIX SIZE IN THE "D" DIRECTION. SYMBOL "ME" IS THE BALL MATRIX SIZE IN THE "E" DIRECTION. N IS THE NUMBER OF POPULATED SOLDER BALL POSITIONS FOR MATRIX SIZE MD X ME.
5. DIMENSION "b" IS MEASURED AT THE MAXIMUM BALL DIAMETER IN A PLANE PARALLEL TO DATUM C.
6. "SD" AND "SE" ARE MEASURED WITH RESPECT TO DATUMS A AND B AND DEFINE THE POSITION OF THE CENTER SOLDER BALL IN THE OUTER ROW. WHEN THERE IS AN ODD NUMBER OF SOLDER BALLS IN THE OUTER ROW, "SD" OR "SE" = 0. WHEN THERE IS AN EVEN NUMBER OF SOLDER BALLS IN THE OUTER ROW, "SD" = eD/2 AND "SE" = eE/2.
7. A1 CORNER TO BE IDENTIFIED BY CHAMFER, LASER OR INK MARK METALIZED MARK, INDENTATION OR OTHER MEANS.
- "+" INDICATES THE THEORETICAL CENTER OF DEPOPULATED SOLDER BALLS.

REVISIONS			
Rev	ECN No.	Orig. of change	Reason for Revision
**	122570	-	NEW RELEASE
*A	2811353	-	Changed Template and Title from 48 VFBGA (8x9.5x1.0MM) PACKAGE OUTLINE to PACKAGE OUTLINE, 48L VFBGA 8X9.5X1.0 MM BV48B.
*B	3437942	-	No Change. Sunset review
*C	3828214	XANC	Updated document template to align with spec. 001-82380.
*D	5086773	KOTA	Revise dwg with new POD format. Add new package VCG048.

 CYPRESS Company Confidential	
TITLE PACKAGE OUTLINE, 48 BALL VFBGA 8.0X9.5X1.0 MM VCG048/BZ48B	
SPEC NO. 51-85178	REV *D
SCALE : TO FIT	SHEET 2 OF 2

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PACKAGE CODE(S)

VCG048

BV48B
BZ48B

DRAWN BY

KOTA

DATE

14-JAN-16

APPROVED BY

CS

DATE

14-JAN-16