



Please note that Cypress is an Infineon Technologies Company.

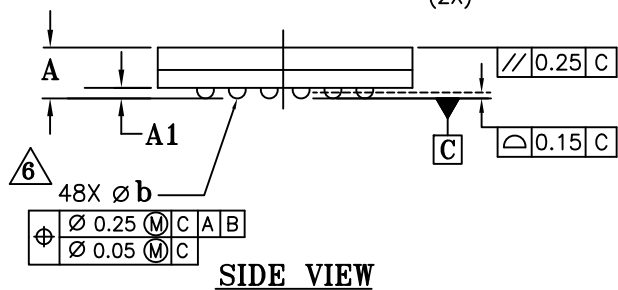
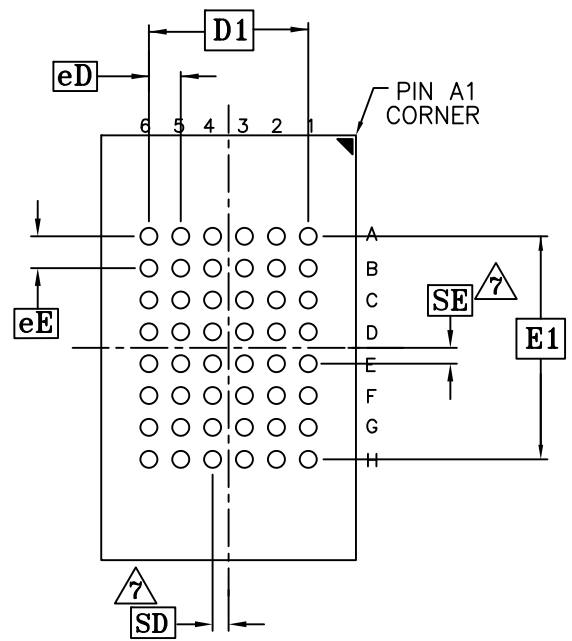
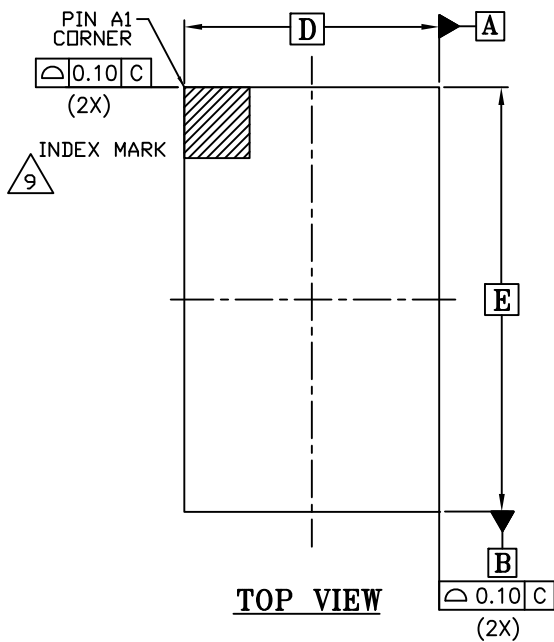
The document following this cover page is marked as “Cypress” document as this is the company that originally developed the product. Please note that Infineon will continue to offer the product to new and existing customers as part of the Infineon product portfolio.

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

SIDE VIEW

SYMBOL	DIMENSIONS		
	MIN.	NOM.	MAX.
A	-	-	1.20
A1	0.16	-	-
D	6.00 BSC		
E	10.00 BSC		
D1	3.75 BSC		
E1	5.25 BSC		
MD	6		
ME	8		
N	48		
øb	0.25	0.30	0.35
eE	0.75 BSC		
eD	0.75 BSC		
SD	0.375 BSC		
SE	0.375 BSC		

NOTES:

- DIMENSIONING AND TOLERANCING METHODS PER ASME Y14.5M-1994.
- ALL DIMENSIONS ARE IN MILLIMETERS.
- 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.
- [6] DIMENSION "b" IS MEASURED AT THE MAXIMUM BALL DIAMETER IN A PLANE PARALLEL TO DATUM C.
- [7] "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.
- "+" INDICATES THE THEORETICAL CENTER OF DEPOPULATED BALLS.
- [9] A1 CORNER TO BE IDENTIFIED BY CHAMFER, LASER OR INK MARK, METALLIZED MARK INDENTATION OR OTHER MEANS.

TITLE PACKAGE OUTLINE, 48 BALL FBGA 6X10X1.2 MM BA48B/BK48C/FCE048	
SPEC NO. 51-85128	REV *1
SCALE: TO FIT	SHEET 1 OF 2

THIS DRAWING CONTAINS INFORMATION WHICH IS THE PROPRIETARY PROPERTY OF CYPRESS SEMICONDUCTOR CORPORATION. THIS DRAWING IS RECEIVED IN CONFIDENCE AND ITS CONTENTS MAY NOT BE DISCLOSED WITHOUT WRITTEN CONSENT OF CYPRESS SEMICONDUCTOR CORPORATION.

PACKAGE CODE(S)	BA48B	BK48C	FCE048
-----------------	-------	-------	--------

DRAWN BY KOTA	DATE 5-APR-19
APPROVED BY CS	DATE 5-APR-19

REVISIONS			
Rev	ECN No.	Orig. of change	Reason for Revision
**	101902	HTN	NEW RELEASE
*A	103450	HTN	CHG. PKG. HEIGHT/ CHG. TITLE
*B	110926	HTN	CHG. PKG. BODY HEIGHT TO 0.95
*C	118430	HTN	CHG. PKG. BODY TOLERANCE/ADD MOLD CAP & SUBSTRATE DIM./CHG. LEAD COPLANARITY
*D	395148	JVP	CHANGE PACKAGE CODE FROM BA48F TO BA48B
*E	2813799	TZW	Changed Template & Title from 48LD FBGA (6x10x1.2MM) PACKAGE OUTL. to PACKAGE OUTLINE, 48LD FBGA 6X10X1.2 MM BA48B.
*F	3278241	QAD	NO CHANGE. SUNSET REVIEW.
*G	4593751	ROWI	Sunset Review, Changed Drawing Template.
*H	5775678	KOTA	ADD PACKAGE CODE BK48C.
*I	6533744	KOTA	Change to new POD format. Add package code FCE048.



TITLE PACKAGE OUTLINE, 48 BALL FBGA
6X10X1.2 MM BA48B/BK48C/FCE048

SPEC NO. 51-85128 REV *1

SCALE : TO FIT SHEET 2 OF 2

THIS DRAWING CONTAINS INFORMATION WHICH IS THE PROPRIETARY PROPERTY OF CYPRESS SEMICONDUCTOR CORPORATION. THIS DRAWING IS RECEIVED IN CONFIDENCE AND ITS CONTENTS MAY NOT BE DISCLOSED WITHOUT WRITTEN CONSENT OF CYPRESS SEMICONDUCTOR CORPORATION.

PACKAGE CODE(S)

BA48B

BK48C

FCE048

DRAWN BY

KOTA

APPROVED BY

CS

DATE

5-APR-19

DATE

5-APR-19