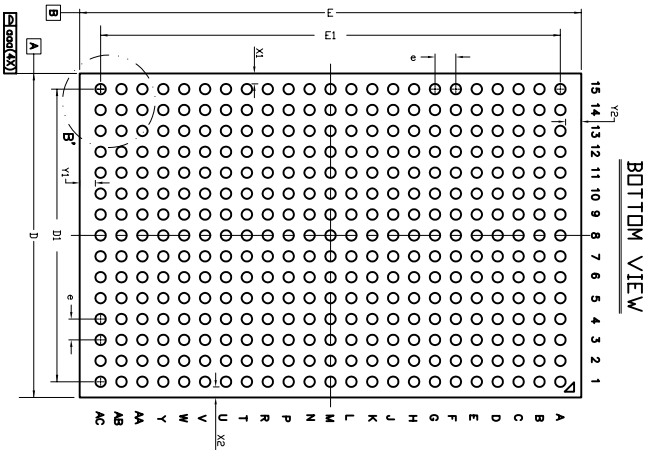
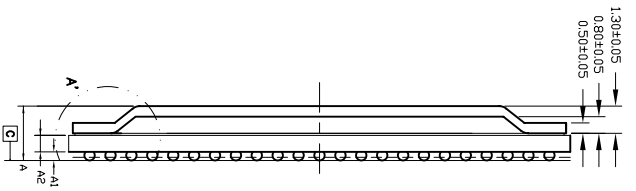
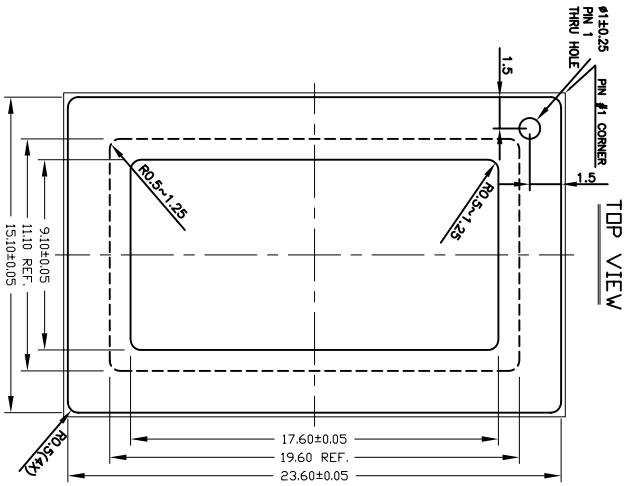
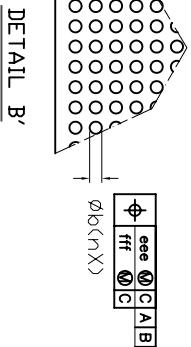
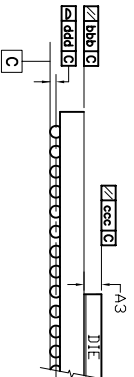


REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	6/4/13	CK LEE

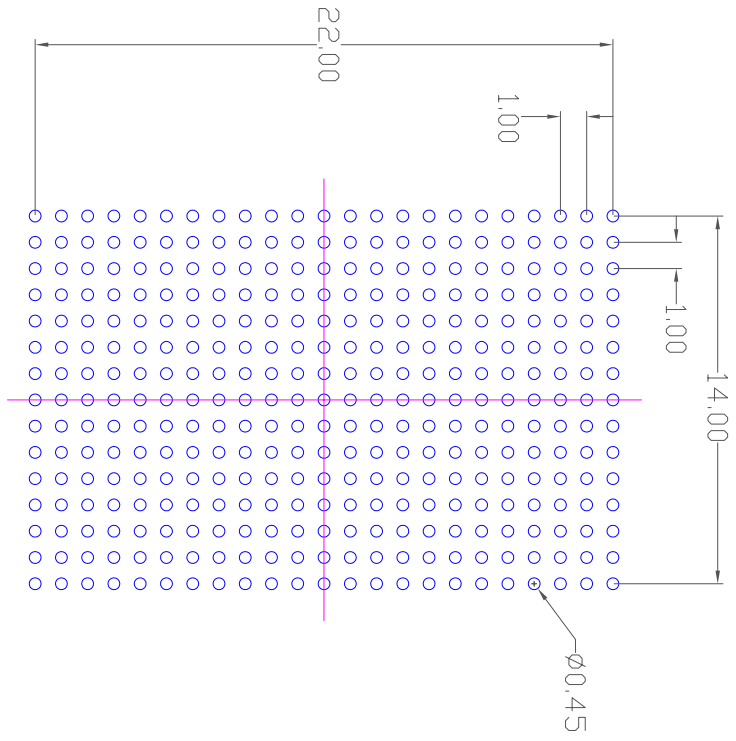


SYMBOL	COMMON DIMENSIONS		
	MIN.	NDM.	MAX.
TOTAL THICKNESS	A	2.35	2.85
STAND OFF	A1	0.36	0.46
SUBSTRATE THICKNESS	A2	0.79	REF
THICKNESS FROM SUBSTRATE SURFACE TO DIE BACKSIDE	A3	---	REF
BODY SIZE	D	15.50	BSC
BALL DIAMETER	E	24.00	BSC
BALL WIDTH	b	0.44	0.64
BALL PITCH	e	1.00	BSC
BALL COUNT	n	345	
EDGE BALL CENTER TO CENTER	D1	14.00	BSC
	E1	22.00	BSC
EXPOSE DIE SIZE	D2	---	BSC
	E2	---	BSC
PACKAGE EDGE TOLERANCE	aaa	0.10	
SUBSTRATE PARALLELISM	bbb	0.10	
TOP PARALLELISM	ccc	0.20	
COPLANARITY	ddd	0.15	
BALL OFFSET(PACKAGED)	eee	0.25	
BALL OFFSET (BALL)	fff	0.10	



TOLERANCES UNLESS SPECIFIED		6024 SILVER CREEK	
DECIMAL	ANGULAR	VALLEY ROAD, SAN JOSE, CA 95138	
XXX±		PHONE: (408) 284-8200	
XXXX±		FAX: (408) 284-3572	
XXXXX±		WWW.IDT.COM	
APPROVALS	DATE	TITLE	
DRAWN GJC	6/4/13	BLG345 FBGA PACKAGE OUTLINE	
CHECKED		15.5 X 24.0 mm, 1.0mm PITCH	
SIZE	DRAWING No.	REV	
C	PSC-4467	00	
DO NOT SCALE DRAWING		SHEET 1 OF 2	

REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	6/4/13	CK LEE



RECOMMENDED LAND PATTERN DIMENSION

- NOTE:
- 1) ALL dimensions are in mm, Angles in degrees.
 - 2) Top down view, as view on PCB.
 - 3) NSMD Land Pattern Assumed
 - 4) Land Pattern Recommendation as per IPC-7351B generic requirement for surface mount design and Land Pattern.

TOLERANCES UNLESS SPECIFIED		ANGULAR	
DECIMAL	XX±	ANGULAR	
	XXXX±		
	XXXX±		
APPROVALS	DATE	TITLE	
DRAWN CJK	6/4/13	BLG345 FCBCA PACKAGE OUTLINE	
CHECKED		15.5 X 24.0 mm, 1.0mm PITCH	
www.IDT.com		6024 SILVER CREEK	
IDT		VALLEY ROAD, SAN JOSE, CA 95138	
PHONE: (408) 284-8200		FAX: (408) 284-3572	
SIZE	DRAWING No.	REV	
C	PSC-4467	00	
DO NOT SCALE DRAWING		SHEET 2 OF 2	