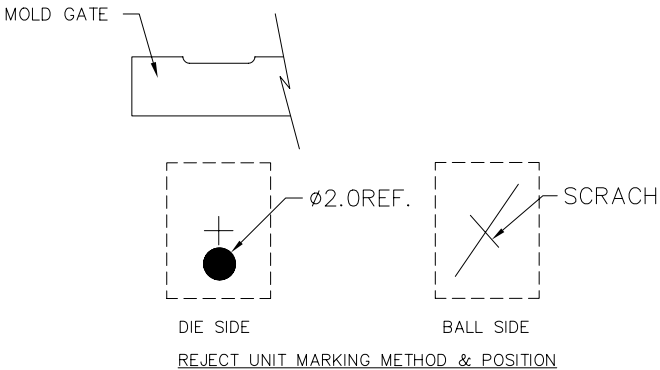
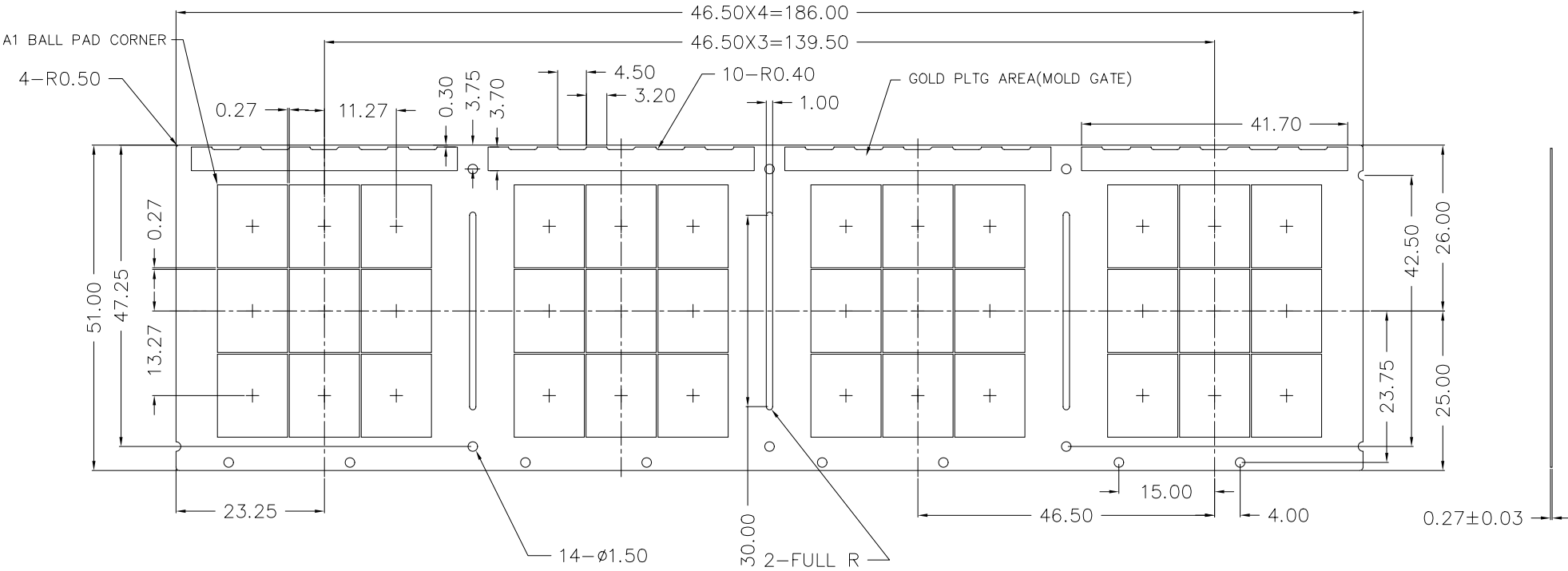


REV.	DESCRIPTION	DATE	ENG	APPROVAL
-	GENERATION		MJ BAIK	



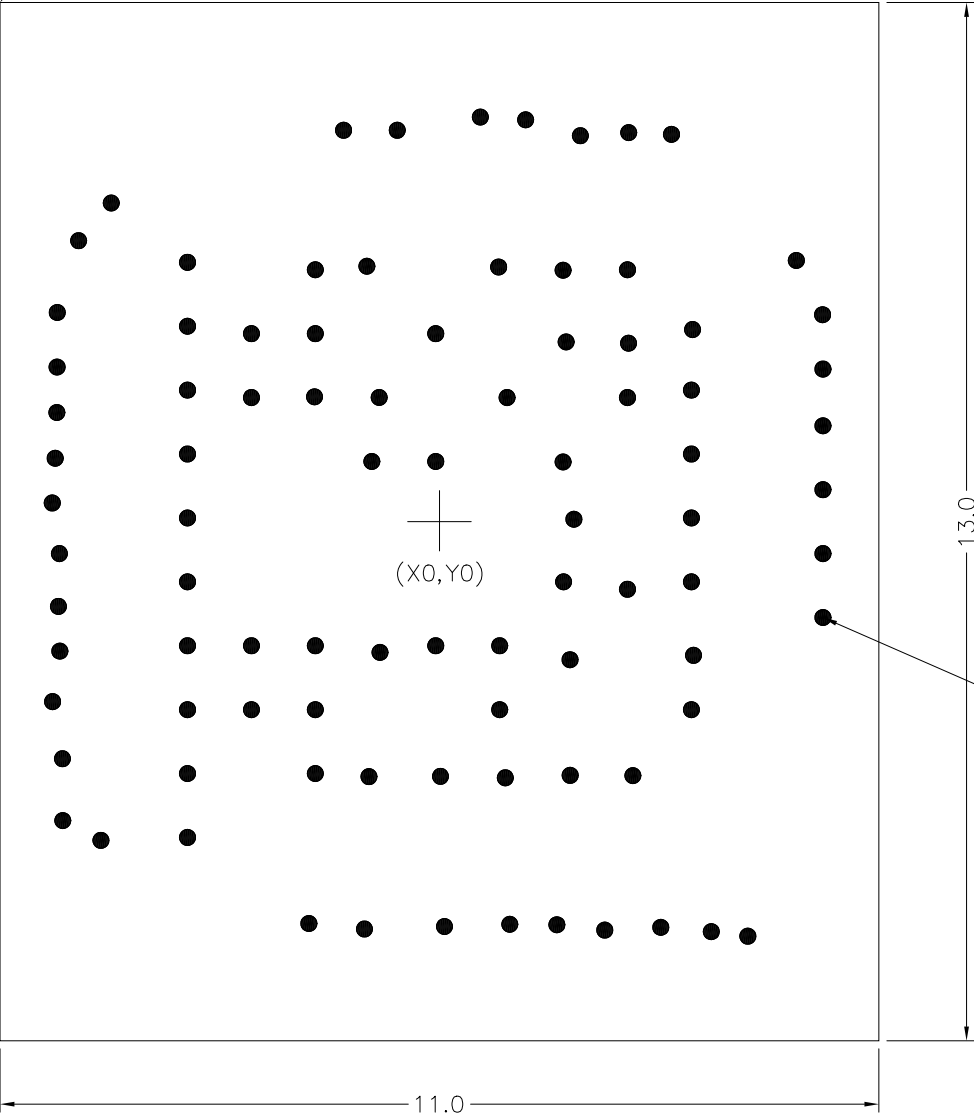
STRIP LAYOUT
PKG TOP VIEW

UNLESS SPECIFIED OTHERWISE	
LAMINATE CORE	BT CCL-HL832HS, 0.15MM±0.01MM
SOLDER MASK	TAIYO PSR4000-AUS5, MIN15UM ON METAL
LAMINATE COPPER	12±5UM
PLATING	COPPER 15UM+15UM/-0.0UM IN VIA HOLE
	NICKEL 5UM~15UM
	GOLD 0.5UM~1.0UM

DIMENSIONAL UNIT: MM	DATE: 10/23/02	DRAWN: MJ BAIK	TITLE: FBGA 11.0X13.0MM 100 BALL 0.80MM BALL PITCH, 2 LAYER 3X3 MATRIX 36UNITS WIDE SUBSTRATE DESIGN	
SCALE: 1:1	UNTOLERANCED DIMENSIONS	ENGINEER: MJ BAIK		
PROJECTION	INCH MILLIMETER	CHECKED: DS SEO		
UNLESS SPECIFIED	ANGLE : ±1°	APPROVED: -		
Signetics Korea		CAD FILE: EEV-FLB11132	DRAWING NUMBER: EEV-FLB11132	REV. -
				SHEET: 1 OF 6

REV.	DESCRIPTION	DATE	ENG	APPROVAL
-	GENERATION		MJ BAIK	

A1 BALL PAD CORNER

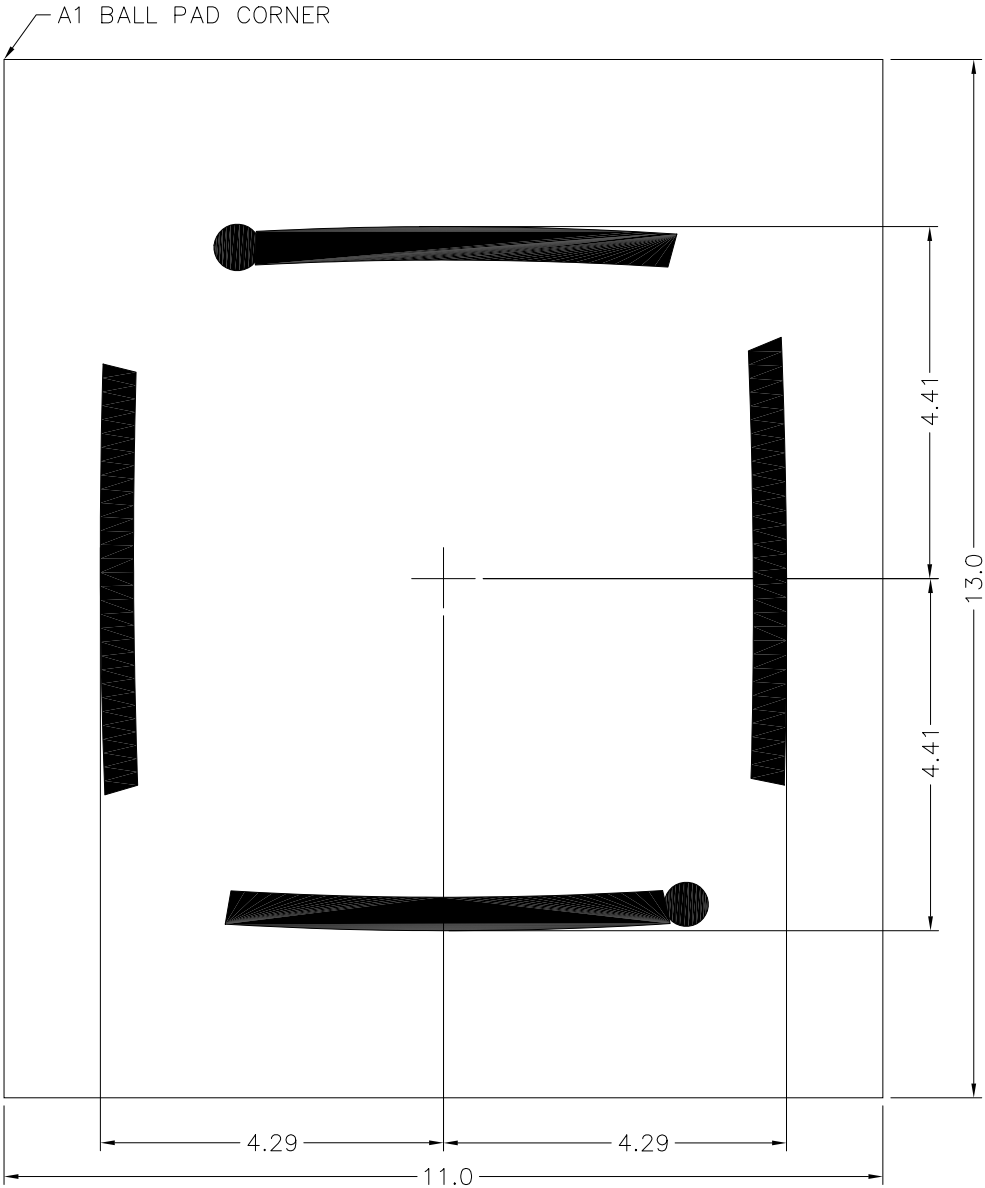


PTH DRILL DIA:90-ø0.20

UNIT TOOLING DRAWING
PKG TOP VIEW

DIMENSIONAL UNIT: MM	DATE: 10/23/'02	DRAWN: MJ BAIK	TITLE: FBGA 11.0X13.0MM 100 BALL 0.80MM BALL PITCH, 2 LAYER 3X3 MATRIX 36UNITS WIDE SUBSTRATE DESIGN									
SCALE: 10:1	UNTOLERANCED DIMENSIONS	ENGINEER: MJ BAIK										
PROJECTION UNLESS SPECIFIED	<table><tr><th>INCH</th><th>MILLIMETER</th></tr><tr><td>.XX : N/A</td><td>.X : ±0.1</td></tr><tr><td>.XXX : ±0.001</td><td>.XX : ±0.05</td></tr><tr><td>.XXXX : N/A</td><td>.XXX : ±0.03</td></tr><tr><td colspan="2">ANGLE : ±1°</td></tr></table>	INCH				MILLIMETER	.XX : N/A	.X : ±0.1	.XXX : ±0.001	.XX : ±0.05	.XXXX : N/A	.XXX : ±0.03
INCH	MILLIMETER											
.XX : N/A	.X : ±0.1											
.XXX : ±0.001	.XX : ±0.05											
.XXXX : N/A	.XXX : ±0.03											
ANGLE : ±1°												
		APPROVED: -										
Signetics Korea		CAD FILE: EEV-FLB11132	DRAWING NUMBER: EEV-FLB11132		REV. -							
					SHEET: 2 OF 6							

REV.	DESCRIPTION	DATE	ENG	APPROVAL
-	GENERATION		MJ BAIK	

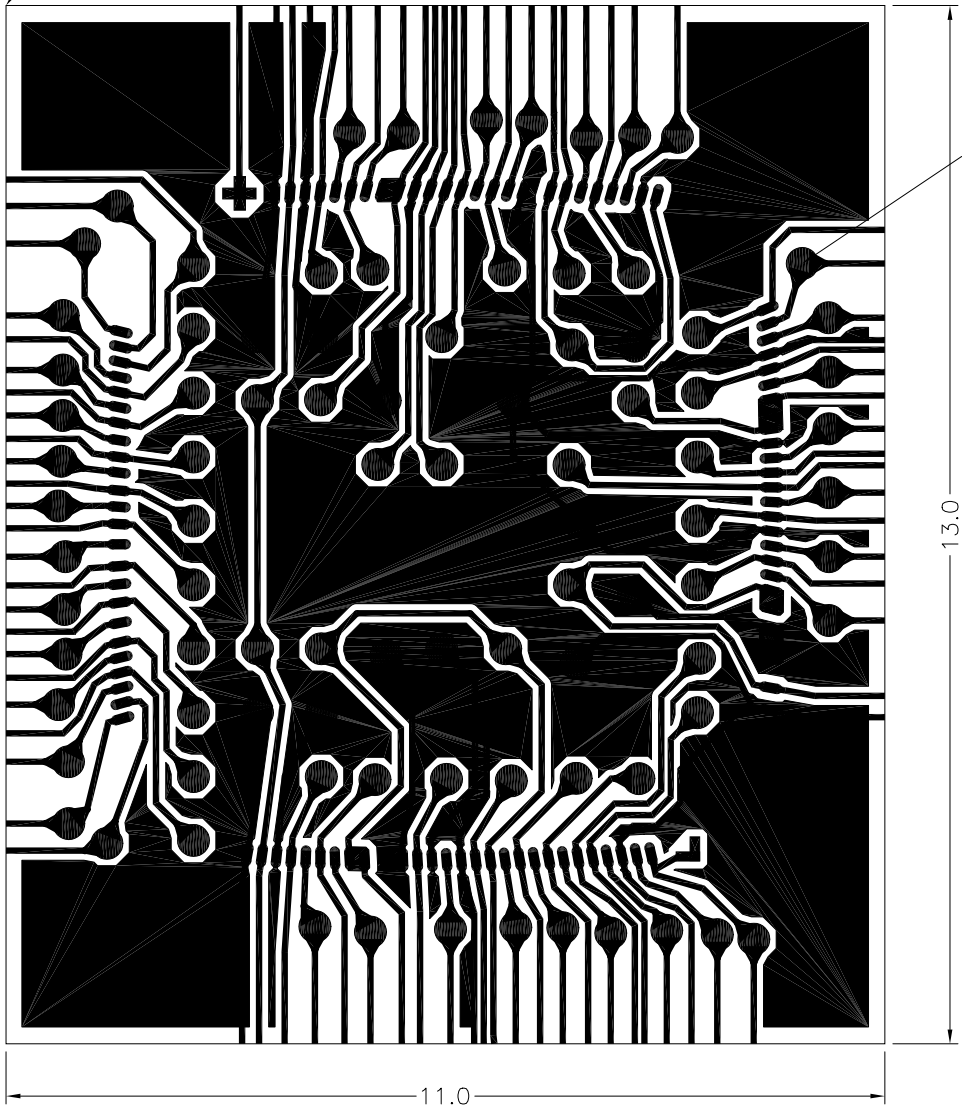


SOLDER MASK LAYER 1 — TOP
PKG TOP VIEW

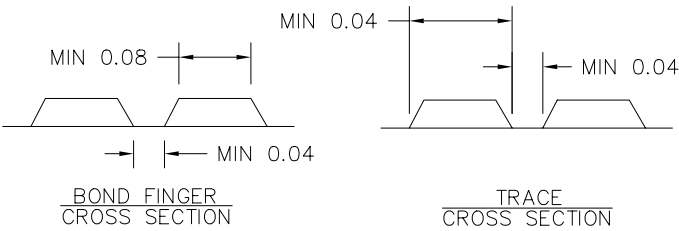
DIMENSIONAL UNIT: MM	DATE: 10/23/'02	DRAWN: MJ BAIK	TITLE: FBGA 11.0X13.0MM 100 BALL 0.80MM BALL PITCH, 2 LAYER 3X3 MATRIX 36UNITS WIDE SUBSTRATE DESIGN									
SCALE: 10:1	UNTOLERANCED DIMENSIONS	ENGINEER: MJ BAIK										
PROJECTION UNLESS SPECIFIED	<table><tr><th>INCH</th><th>MILLIMETER</th></tr><tr><td>.XX : N/A</td><td>.X : ±0.1</td></tr><tr><td>.XXX : ±0.001</td><td>.XX : ±0.05</td></tr><tr><td>.XXXX : N/A</td><td>.XXX : ±0.03</td></tr><tr><td colspan="2">ANGLE : ±1°</td></tr></table>	INCH				MILLIMETER	.XX : N/A	.X : ±0.1	.XXX : ±0.001	.XX : ±0.05	.XXXX : N/A	.XXX : ±0.03
INCH	MILLIMETER											
.XX : N/A	.X : ±0.1											
.XXX : ±0.001	.XX : ±0.05											
.XXXX : N/A	.XXX : ±0.03											
ANGLE : ±1°												
		APPROVED: -										
Signetics Korea		CAD FILE: EEV-FLB11132	DRAWING NUMBER: EEV-FLB11132		REV. -							
					SHEET: 3 OF 6							

REV.	DESCRIPTION	DATE	ENG	APPROVAL
-	GENERATION		MJ BAIK	

A1 BALL PAD CORNER



VIA PAD: 90- ϕ 0.40

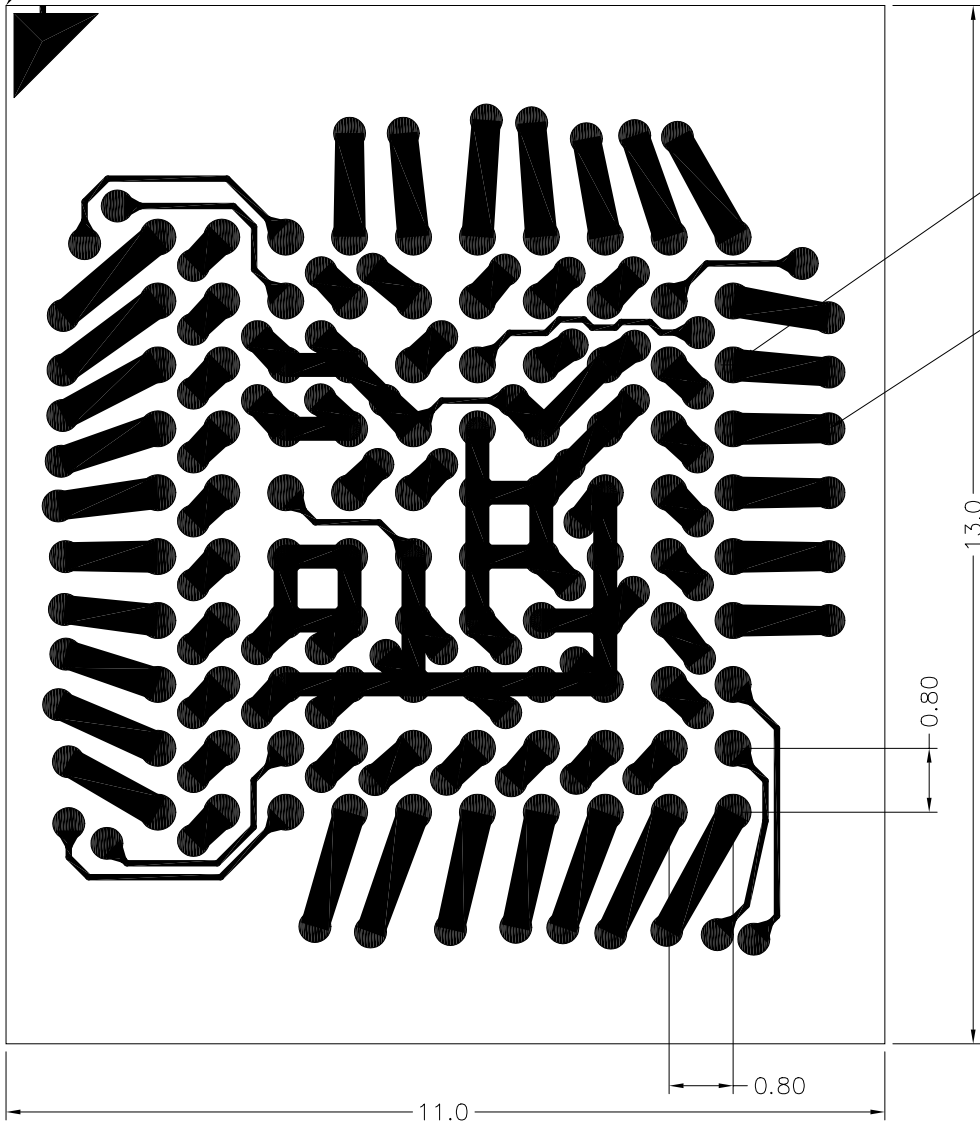


PATTERN LAYER 1 - TOP
PKG TOP VIEW

DIMENSIONAL UNIT: MM		DATE: 10/23/'02		DRAWN: MJ BAIK		TITLE: FBGA 11.0X13.0MM 100 BALL 0.80MM BALL PITCH, 2 LAYER 3X3 MATRIX 36UNITS WIDE SUBSTRATE DESIGN					
SCALE: 10:1		UNTOLERANCED DIMENSIONS		ENGINEER: MJ BAIK							
PROJECTION		INCH		MILLIMETER						CHECKED: DS SEO	
UNLESS SPECIFIED		.XX : N/A .XXX : ±0.001 .XXXX : N/A		.X : ±0.1 .XX : ±0.05 .XXX : ±0.03 ANGLE : ±1°						APPROVED: -	
Signetics Korea				CAD FILE: EEV-FLB11132		DRAWING NUMBER: EEV-FLB11132			REV. -	SHEET: 4 OF 6	

REV.	DESCRIPTION	DATE	ENG	APPROVAL
-	GENERATION		MJ BAIK	

A1 BALL PAD CORNER



BALL PAD DIA:Ø0.45

VIA PAD DIA: Ø0.40

13.0

0.80

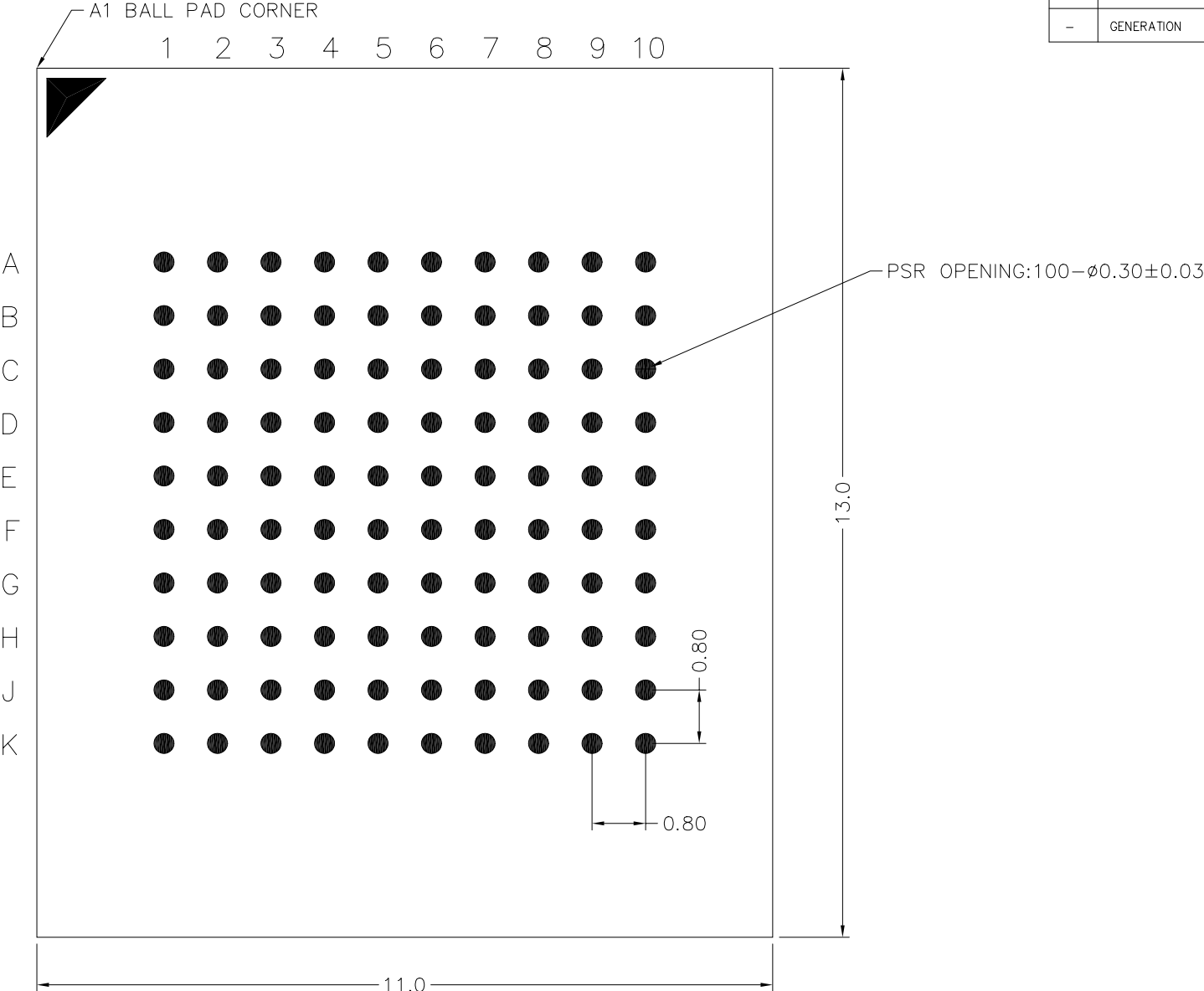
0.80

11.0

PATTERN LAYER 2 – BOTTOM
PKG TOP VIEW

DIMENSIONAL UNIT:	MM	DATE:	10/23/'02	DRAWN:	MJ BAIK	TITLE: FBGA 11.0X13.0MM 100 BALL 0.80MM BALL PITCH, 2 LAYER 3X3 MATRIX 36UNITS WIDE SUBSTRATE DESIGN			
SCALE:	10:1	UNTOLERANCED DIMENSIONS		ENGINEER:	MJ BAIK				
PROJECTION		INCH	MILLIMETER	CHECKED:	DS SEO				
UNLESS SPECIFIED		.XX : N/A .XXX : ±0.001 .XXXX : N/A	.X : ±0.1 .XX : ±0.05 .XXX : ±0.03	APPROVED:	-				
		ANGLE : ±1°							
Signetics Korea				CAD FILE:	EEV-FLB11132	DRAWING NUMBER:	EEV-FLB11132	REV.	SHEET:
								-	5 OF 6

REV.	DESCRIPTION	DATE	ENG	APPROVAL
-	GENERATION		MJ BAIK	



SOLDER MASK LAYER 2 – BOTTOM
PKG TOP VIEW

DIMENSIONAL UNIT: MM		DATE: 10/23/'02	DRAWN: MJ BAIK	TITLE: FBGA 11.0X13.0MM 100 BALL 0.80MM BALL PITCH, 2 LAYER 3X3 MATRIX 36UNITS WIDE SUBSTRATE DESIGN		
SCALE: 10:1		UNTOLERANCED DIMENSIONS	ENGINEER: MJ BAIK			
PROJECTION UNLESS SPECIFIED		INCH MILLIMETER .XX : N/A .XXX : ±0.001 .XXXX : N/A ANGLE : ±1° .X : ±0.1 .XX : ±0.05 .XXX : ±0.03	CHECKED: DS SEO			
			APPROVED: -			
CAD FILE: EEV-FLB11132			DRAWING NUMBER: EEV-FLB11132		REV: -	SHEET: 6 OF 6
Signetics Korea						