E3

D2

—A—

—E1—

—D—

E1

⚠10

⚠15 A2

—C— ⚠14

D

⊕ | ⌀0.13(0.005)Ⓜ | C | AⓈ

—E—

ALL DIMENSIONS IN
MILLIMETERS(INCHES)

△ SEE NOTES

E

PRINCIPAL DATUMS AND DIMENSIONS

b(3X)

$\oplus$ | 0.10(0.004) | Ⓛ | C | E1

2.54(0.100) △11
ALL SPACES

ØP △16

$\oplus$ | Ø 0.10(0.004) Ⓛ | C | DⓈ-EⓈ | AⓈ

D3 △5

$\oplus$ | 0.13(0.005) Ⓛ | C | AⓈ

h

k

△3 A3

A   A1

D4 △5
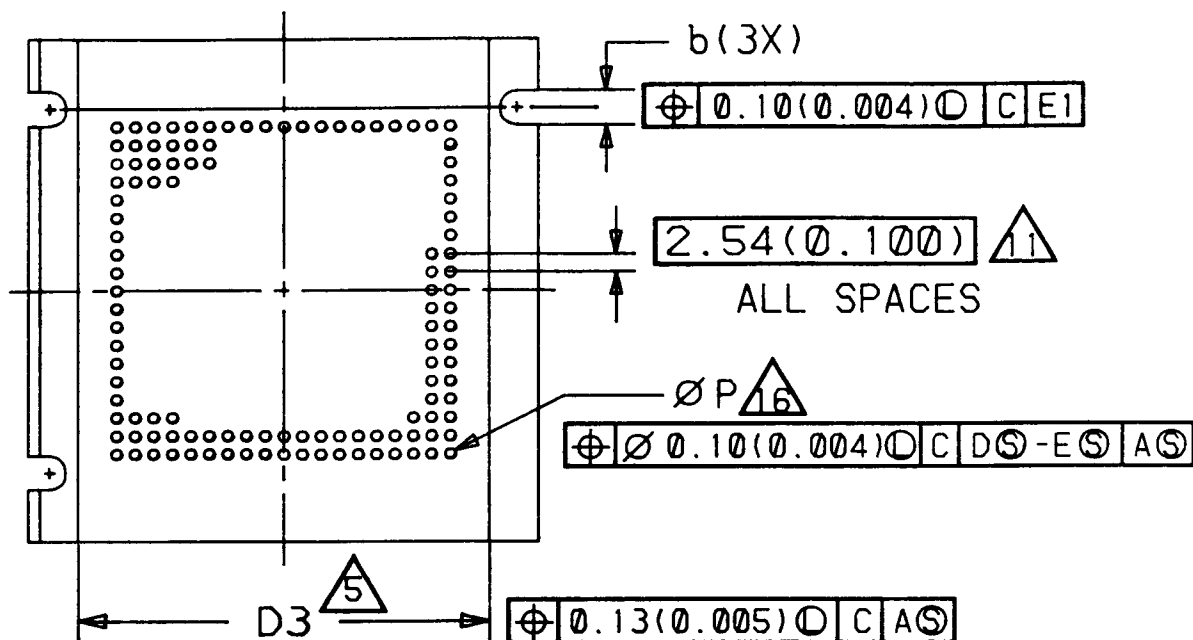
▱ | 0.13(0.005) | (2X)
⊥ | 0.25(0.010) | C

ALL DIMENSIONS IN
MILLIMETERS(INCHES)

△ SEE NOTES

△5 E4

t(4X) △5
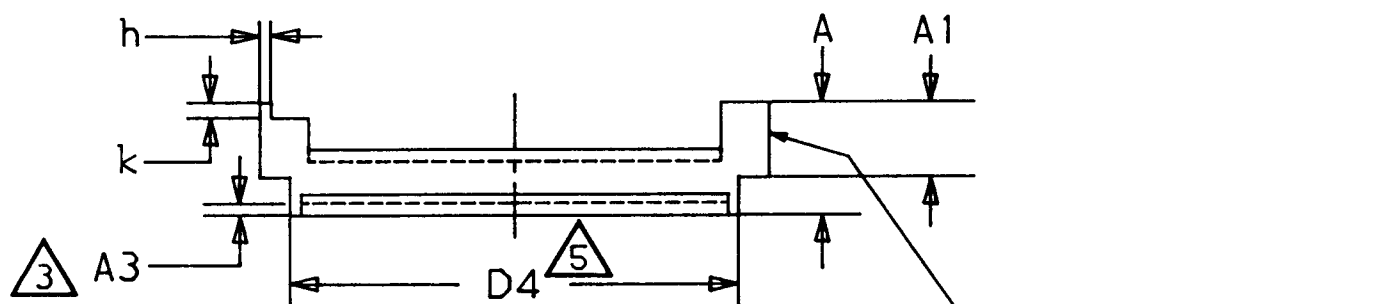
s(4X) △4

| JEDEC SOLID STATE PRODUCT OUTLINE | .100" CENTER PGA CARRIER FAMILY | ISSUE A | DATE 10-87 | CO-007 | SHEET 2 of 8 |
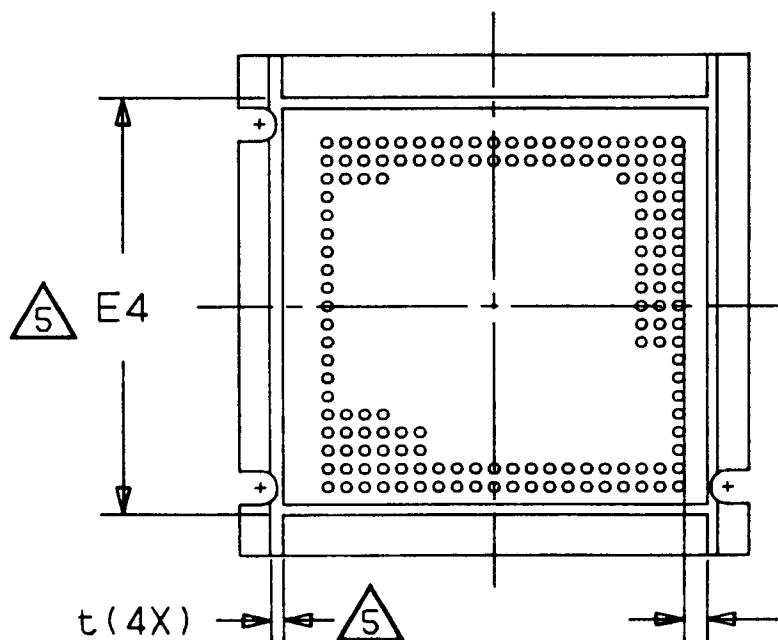
OPTION A: Constant Pin/Hole Location △11

△13 N1-1 SPACES ————— N1 SPACES △12

2.54(0.100)

N1-1 SPACES △13

△18 E5

N1 SPACES △12

ALL DIMENSIONS IN
MILLIMETERS(INCHES)

2.54(0.100)

—A—

△ SEE NOTES

OPTION B: Constant Package Centering △11

—A—

E6 △9

△18 E5

E7 △9

△9 D7

D6 △9
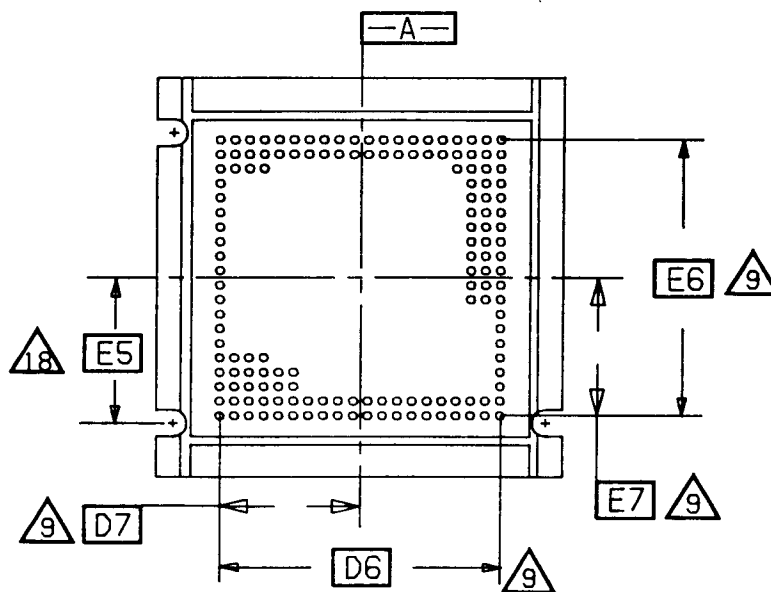
△ SEE APPLICATION NOTE ON PAGE 8

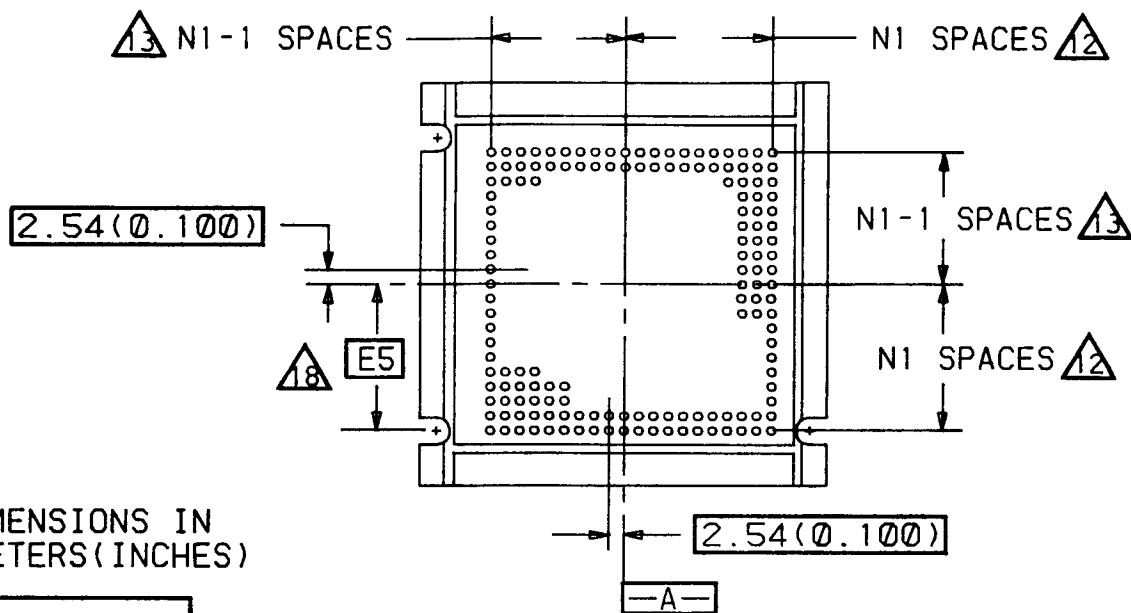| JEDEC SOLID STATE PRODUCT OUTLINE	.100" CENTER PGA CARRIER FAMILY	ISSUE A	DATE 10-87	CO-007	SHEET 3 of 8

S Y M B O L	VARIATIONS						(DIMENSIONS IN INCHES)						
	AA		N O T E	AB		N O T E			N O T E			N O T E	
	MIN	MAX		MIN	MAX		MIN	MAX		MIN	MAX		
A	.555	.565		.585	.595								
A1	.285	.295		.355	.365								
A2	.305	----	15	.335	----	15							
A3	.005	.020	3	.005	.020	3							
b	.188	.192		.188	.192								
D	1.995	2.005		2.745	2.755								
D2	1.758	1.762		2.377	2.383								
D3	1.695	1.745	5	2.295	2.345	5							
D4	1.700	1.740	5	2.330	2.400	5							
D6	XXX	BSC	9	XXX	BSC	9							
E	1.995	2.005		2.745	2.755								
E1	1.250 BSC		10	2.000 BSC		10							
E3	.375 BSC			.375 BSC									
E4	1.605	2.005	5	2.270	2.755	5							
E5	.625 BSC		18	1.000 BSC		18							
E6	XXX	BSC	9	XXX	BSC	9							
h	.060	.090		.060	.090								
k	.060	.090		.060	.090								
s	.100	----	4	.100	----	4							
t	.040	.100	5	.040	.100	5							
M	----	15	7	----	20	7							
N	----	225	8	----	400	8							
P	.025	.028	16	.025	.028	16							
	OPTION A		11	OPTION A		11							
NOTE	1,2,6,19			1,2,6,19									
REF	10-247												
ISSUE	A												JPW

JEDEC SOLID STATE PRODUCT OUTLINE	.100" CENTER PGA CARRIER FAMILY	ISSUE A	DATE 10-87	CO-007	SHEET 4 of 8

SYMBOL	VARIATIONS (DIMENSIONS IN MILLIMETERS)													
	AA		NOTE	AB		NOTE			NOTE			NOTE
	MIN	MAX		MIN	MAX		MIN	MAX		MIN	MAX	
A	14.10	14.35		14.86	15.11							
A1	7.24	7.49		9.02	9.27							
A2	7.75	----	15	8.51	----	15						
A3	.13	.50	3	.13	.50	3						
b	4.78	4.87		4.78	4.87							
D	50.68	50.92		69.73	69.97							
D2	44.66	44.75		60.38	60.52							
D3	43.06	44.32	5	58.30	59.56	5						
D4	43.18	44.19	5	59.19	60.96	5						
D6	XXX	BSC	9	XXX	BSC	9						
E	50.68	50.92		69.73	69.97							
E1	31.75 BSC		10	50.80 BSC		10						
E3	9.52 BSC			9.52 BSC								
E4	40.77	50.92	5	57.66	69.97	5						
E5	15.88 BSC		18	25.40 BSC		18						
E6	XXX	BSC	9	XXX	BSC	9						
h	1.53	2.28		1.53	2.28							
k	1.53	2.28		1.53	2.28							
s	2.54	----	4	2.54	----	4						
t	1.02	2.54	5	1.02	2.54	5						
M	----	15	7	----	20	7						
N	----	225	8	----	400	8						
P	0.64	0.71	16	0.64	0.71	16						
	OPTION A		11	OPTION A		11						
NOTE	1.2.6.19			1.2.6.19								
REF	10-247											
ISSUE	A											

| JEDEC SOLID STATE PRODUCT OUTLINE | .100" CENTER PGA CARRIER FAMILY | ISSUE A | DATE 10-87 | CO-007 | SHEET 5 of 8 |

S Y M B O L	VARIATIONS (DIMENSIONS IN INCHES)													
	BA		N O T E	BB		N O T E			N O T E			N O T E
	MIN	MAX		MIN	MAX		MIN	MAX		MIN	MAX	
A	.555	.565		.585	.595							
A1	.285	.295		.355	.365							
A2	.305	----	15	.335	----	15						
A3	.005	.020	3	.005	.020	3						
b	.188	.192		.188	.192							
D	1.995	2.005		2.745	2.755							
D2	1.758	1.762		2.377	2.383							
D3	1.695	1.745	5	2.295	2.345	5						
D4	1.700	1.740	5	2.330	2.400	5						
D6	XXX	BSC	9	XXX	BSC	9						
E	1.995	2.005		2.745	2.755							
E1	1.250 BSC		10	2.000 BSC		10						
E3	.375 BSC			.375 BSC								
E4	1.605	2.005	5	2.270	2.755	5						
E5	.625 BSC		18	1.000 BSC		18						
E6	XXX	BSC	9	XXX	BSC	9						
h	.060	.090		.060	.090							
k	.060	.090		.060	.090							
s	.100	----	4	.100	----	4						
t	.040	.100	5	.040	.100	5						
M	----	15	7	----	20	7						
N	----	225	8	----	400	8						
P	.025	.028	16	.025	.028	16						
	OPTION B		11	OPTION B		11						
NOTE	1,2,6,19			1,2,6,19									
REF	10-247												
ISSUE	A												

| JEDEC SOLID STATE PRODUCT OUTLINE | .100" CENTER PGA CARRIER FAMILY | ISSUE A | DATE 10-87 | CO-007 | SHEET 6 of 8 |

SYMBOL	VARIATIONS (DIMENSIONS IN MILLIMETERS)												
	BA		NOTE	BB		NOTE			NOTE			NOTE	
	MIN	MAX		MIN	MAX		MIN	MAX		MIN	MAX		
A	14.10	14.35		14.86	15.11								
A1	7.24	7.49		9.02	9.27								
A2	7.75	----	15	8.51	----	15							
A3	.13	.50	3	.13	.50	3							
b	4.78	4.87		4.78	4.87								
D	50.68	50.92		69.73	69.97								
D2	44.66	44.75		60.38	60.52								
D3	43.06	44.32	5	58.30	59.56	5							
D4	43.18	44.19	5	59.19	60.96	5							
D6	XXX	BSC	9	XXX	BSC	9							
E	50.68	50.92		69.73	69.97								
E1	31.75 BSC		10	50.80 BSC		10							
E3	9.52 BSC			9.52 BSC									
E4	40.77	50.92	5	57.66	69.97	5							
E5	15.88 BSC		18	25.40 BSC		18							
E6	XXX	BSC	9	XXX	BSC	9							
h	1.53	2.28		1.53	2.28								
k	1.53	2.28		1.53	2.28								
s	2.54	----	4	2.54	----	4							
t	1.02	2.54	5	1.02	2.54	5							
M	----	15	7	----	20	7							
N	----	225	8	----	400	8							
P	0.64	0.71	16	0.64	0.71	16							
	OPTION B		11	OPTION B		11							
NOTE	1.2.6.19			1.2.6.19									
REF	10-247												
ISSUE	A												

JEDEC SOLID STATE PRODUCT OUTLINE	.100" CENTER PGA CARRIER FAMILY	ISSUE A	DATE 10-87	CO-007	SHEET 7 of 8

APPLICATION NOTE FOR PINHOLE LOCATION OPTIONS

The difference between Options A and B is the method for locating the matrix of pinholes for insertion of a PGA package.

Option A defines a constant pinhole location for any size PGA pin matrix regardless of odd or even type. The body centerlines of a PGA with an even pin matrix will be offset by .050" from the centerlines of the carrier. The advantage to this option is that test handlers and contactor sets can be used for either odd or even configurations. The disadvantage is that other operations (eg. mark or heatsink attachment) must be able to accommodate this offset.

Option B defines a constant package location for any size PGA pin matrix regardless of odd or even type. The body of an inserted PGA is always centered in the carrier but the location of the array of pinholes will be different for odd and even configurations. The advantages and disadvantages are the reverse of those for Option A: test handlers must be able to accommodate the different arrays with unique contactors for odd and even types.

NOTES:

1   Dimensioning per ANSI Y14.5M-1982.
2   Refer to MO symbol list.
△3 Dimension "A3" represents the pin tip clearance for a fully inserted PGA package.
△4 Dimension "s" is the clearance between the bottom rails and the outer rows of pins of an inserted package.
△5 Tapers and inserts for nesting of carriers are allowed if the basic dimensio is satisfied.
6   19 X 19 and 20 X 20 matrix sizes are shown for illustration only.
7   "M" is the maximum pin matrix size allowed for this variation.
8   "N" is the maximum pin count allowed for this variation.
△9 Dimension D6 and E6 are equal to (# of holes/side - 1) X .100".
     Dimension D7 is equal to 1/2 of D6; E7 is equal to 1/2 of E6.
△10 The third slot is used for polarization only.
△11 The array of holes must be oriented in conformance with either Option A or B as defined in the variation tables.
△12 For even-numbered pin matrix sizes, "N1" is equal to 1/2 the number of holes per side.
     For odd-numbered pin matrix sizes, "N1" is equal to 1/2 the number of spaces per side.
△13 "N1-1" applies to even-numbered matrix sizes only.
△14 -C- is the seating plane of the carrier. Relief for lids on cavity-down PGA packages may be used where appropriate.
△15 Dimension "A2" represents the height clearance for a fully inserted PGA package.
△16 Relief holes for PGA package standoffs may be added where appropriate.
△17 Exposed pin length must be .060" minimum.
△18 Dimension E5 is 1/2 of dimension E1.
19 Controlling Dimension: INCHES.

| JEDEC SOLID STATE PRODUCT OUTLINE | .100" CENTER PGA CARRIER FAMILY | ISSUE A | DATE 10-87 | CO-007 | SHEET 8 of 8 |