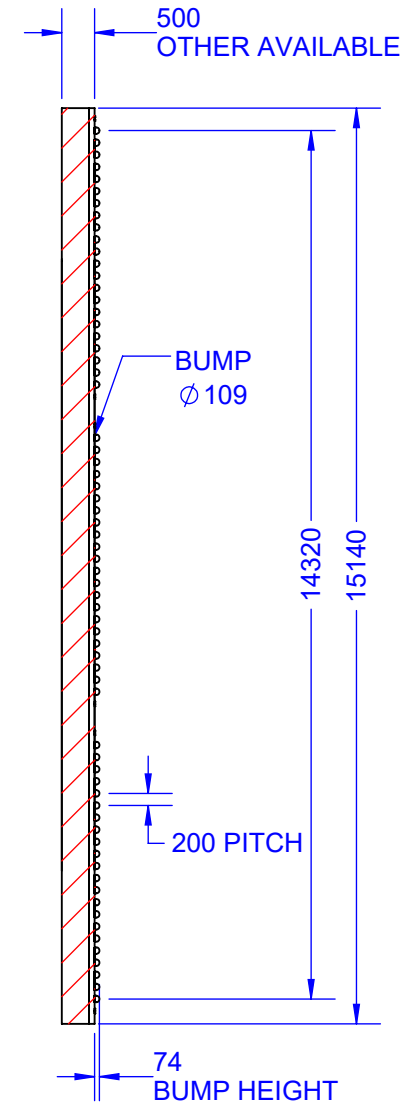
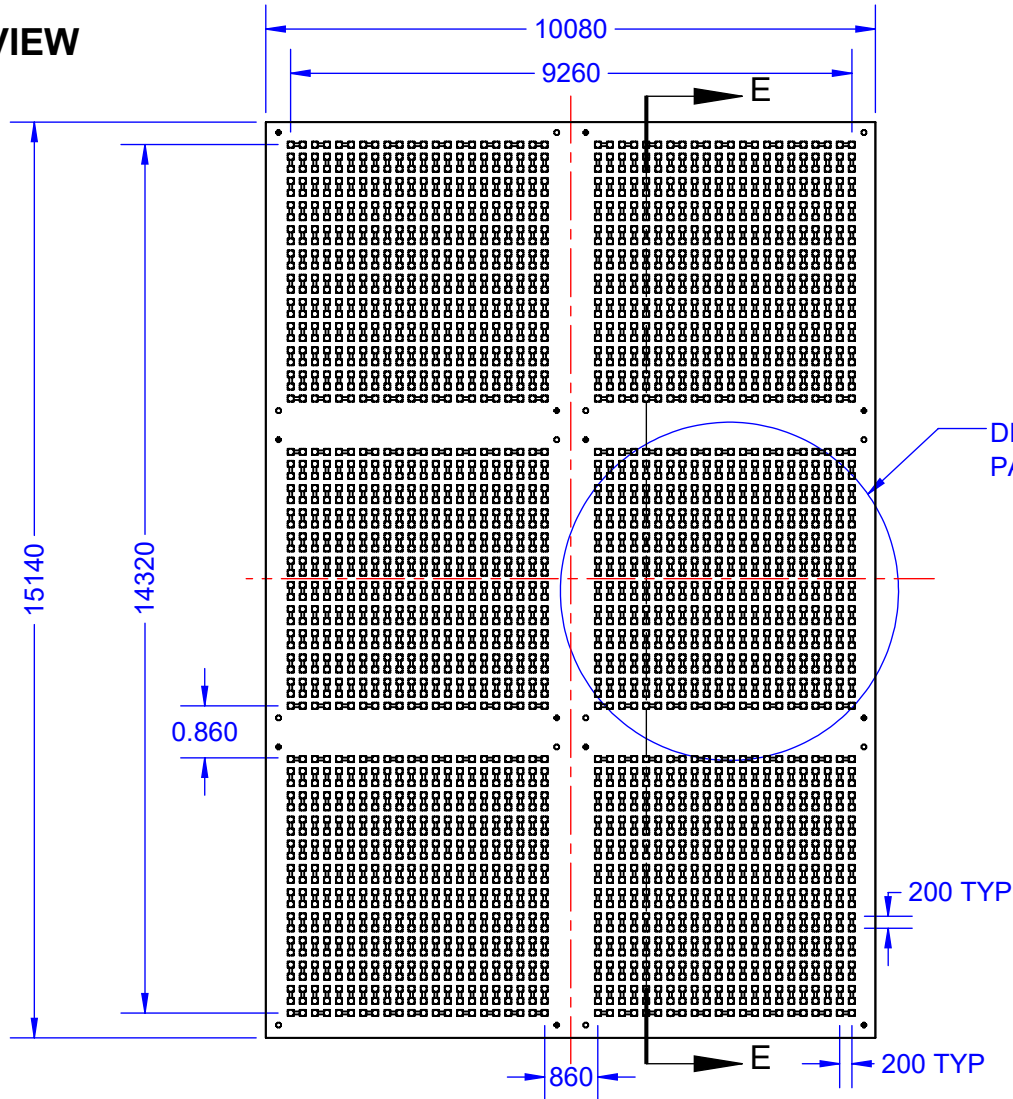
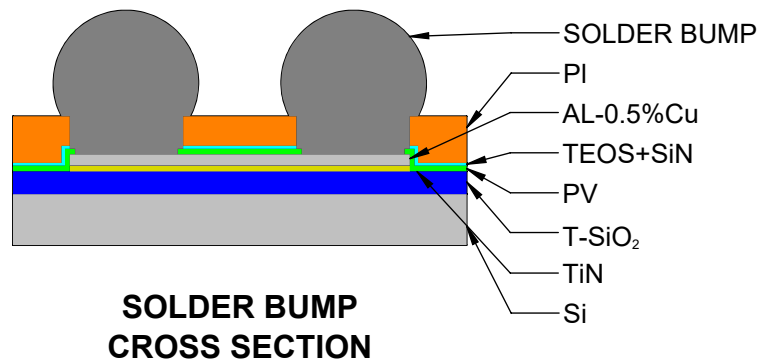


# BUMP VIEW



SECTION E-E  
SCALE 8 : 1



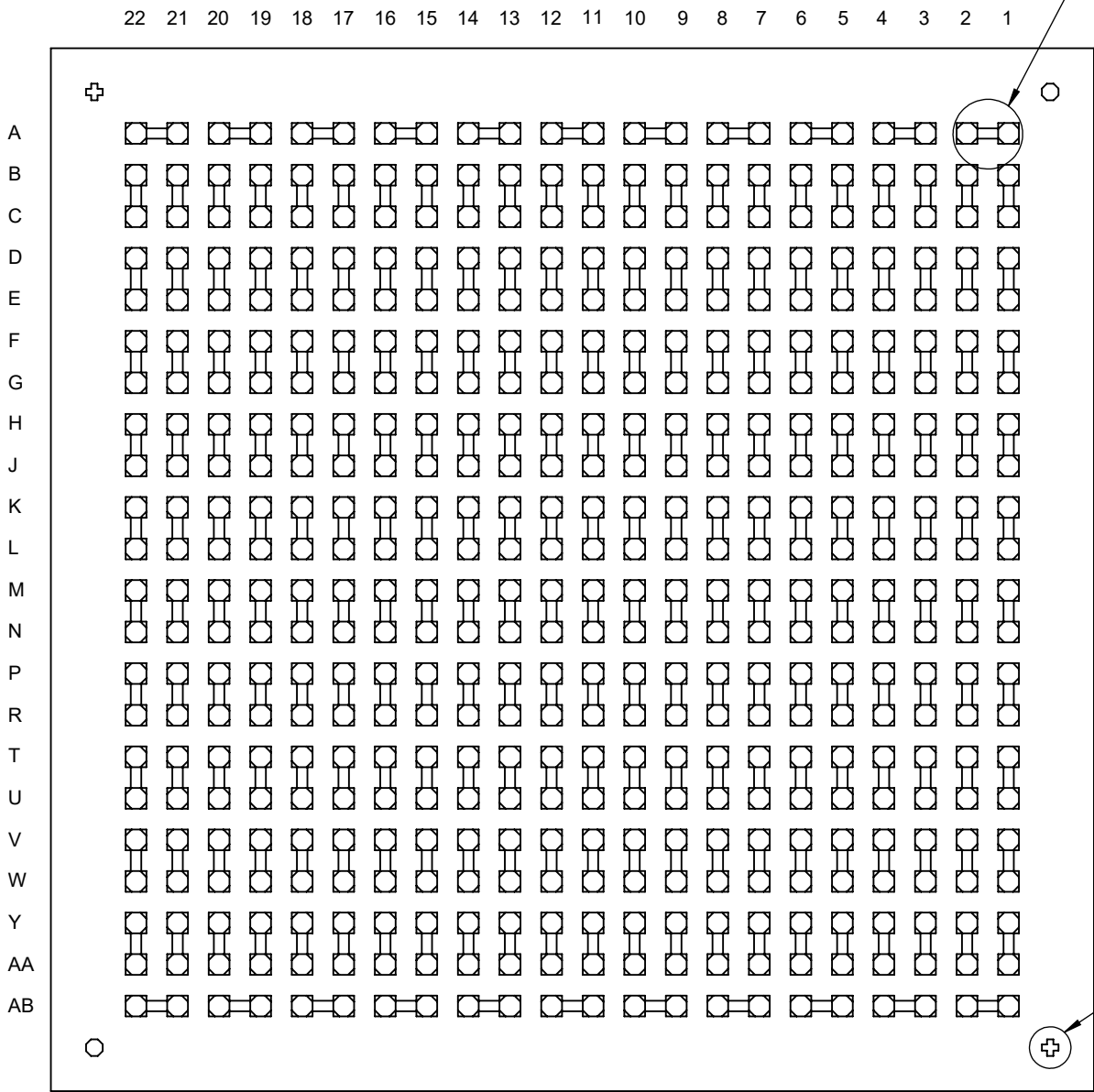
SOLDER BUMP  
CROSS SECTION

NOTES: (UNLES OTHERWISE SPECIFIED)

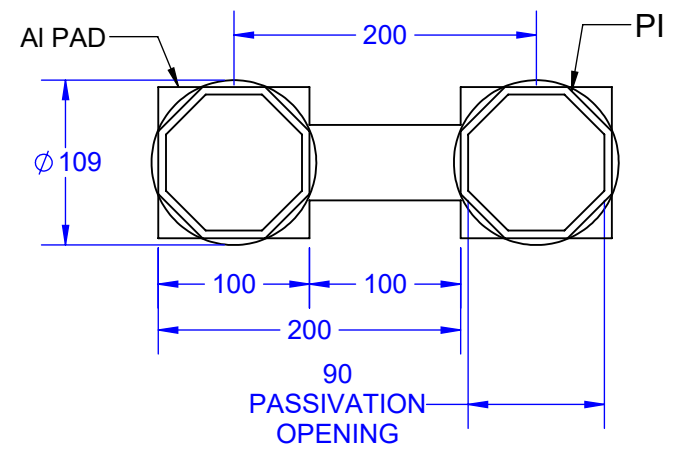
- 1) DIMENSIONS:  $\mu\text{m}$  (MICRON).
- 2) WAFER SIZE:  $\phi 200$  mm (8-INCH).
- 3) BUMP ALLOY: SAC305.
- 4) BUMP HEIGHT:  $74\mu\text{m}$ .
- 5) BUMP DIAMETER:  $109\mu\text{m}$ .

<b>TopLine</b>			
TITLE FC2904G10x15C-DC DAISY CHAIN BUMPED DIE			
SCALE 12:1	SIZE A	DRAWING NO. 172904	REV A
DO NOT SCALE DRAWING			SHEET 1 OF 7

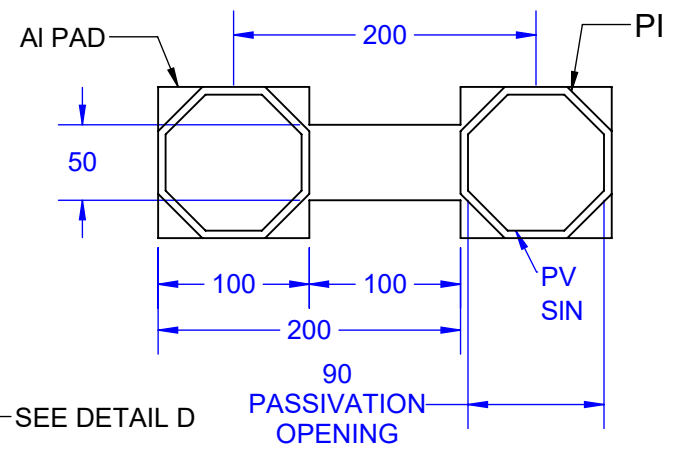
### DETAIL B



### DETAIL C SOLDER BUMP PAD SCALE = 200:1



### PASSIVATION OPENING SCALE = 200:1

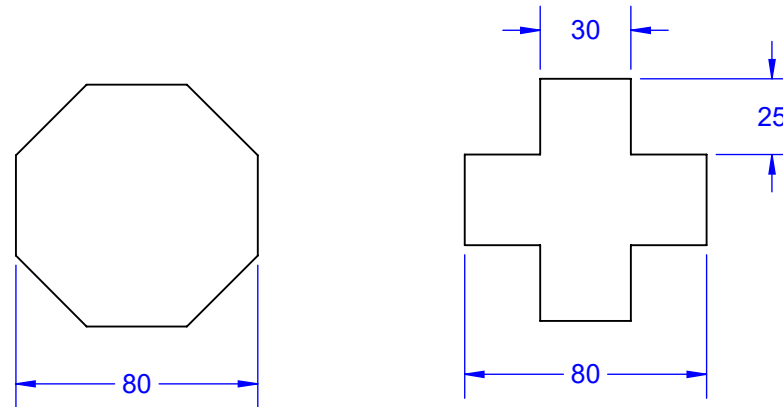


NOTES: (UNLES OTHERWISE SPECIFIED)

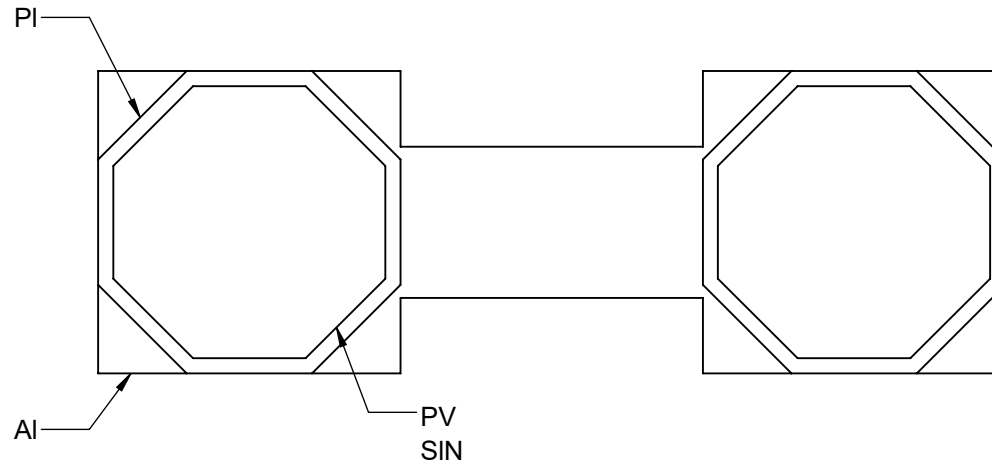
- 1) DIMENSIONS:  $\mu\text{m}$  (MICRON).
- 2) FC2904 = 6X FC484 (SEE DETAIL A).

<b>TopLine</b>			
TITLE FC2904G10x15C-DC DAISY CHAIN BUMPED DIE			
SCALE 30:1	SIZE A	DRAWING NO. 172904	REV A
DO NOT SCALE DRAWING			SHEET 2 OF 7

## DETAIL "D" FIDUCIAL



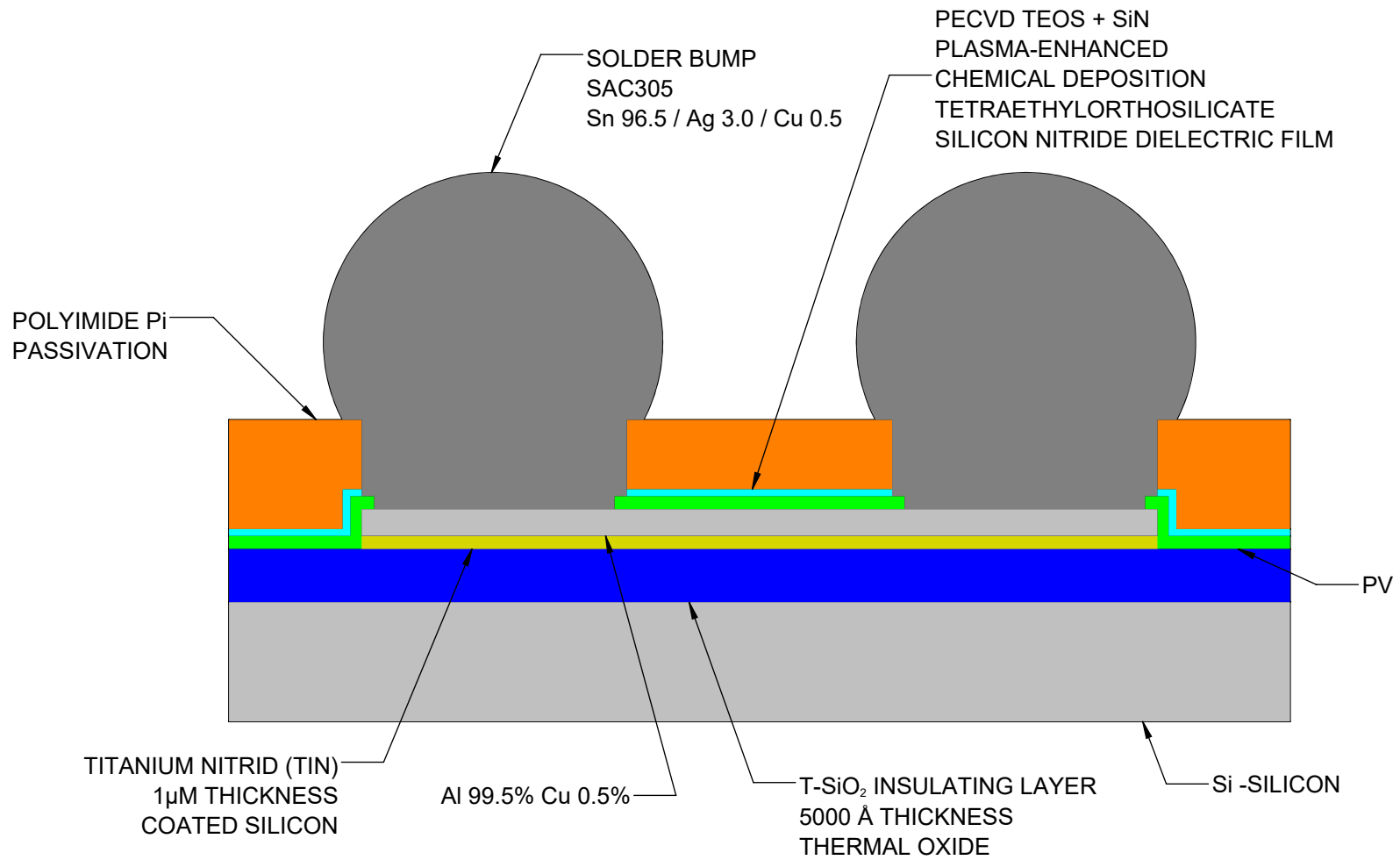
## UBM PAD DETAIL



NOTES: (UNLES OTHERWISE SPECIFIED)  
1) DIMENSIONS:  $\mu\text{m}$  (MICRON).

<b>TopLine<sup>®</sup></b>			
TITLE    FC2904G10x15C-DC DAISY CHAIN BUMPED DIE			
SCALE 400:1	SIZE A	DRAWING NO. 172904	REV A
DO NOT SCALE DRAWING		SHEET 3 OF 7	

DIMENSIONS  $\mu\text{m}$



**TopLine**<sup>®</sup>

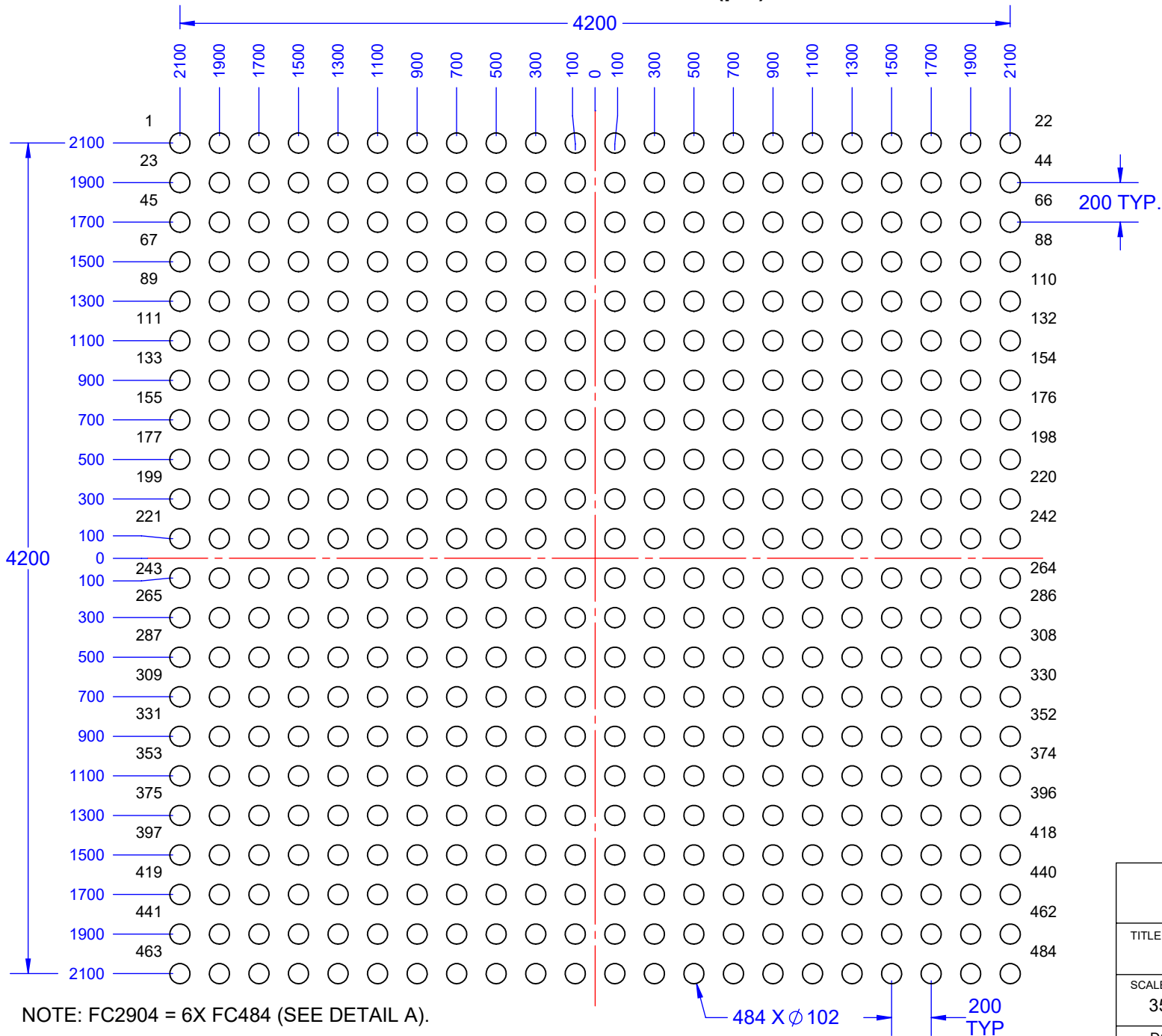
TITLE FC2904G10x15C-DC  
DAISY CHAIN BUMPED DIE

SCALE	SIZE	DRAWING NO.	REV
400:1	A	172904	A

DO NOT SCALE DRAWING

SHEET 4 OF 7

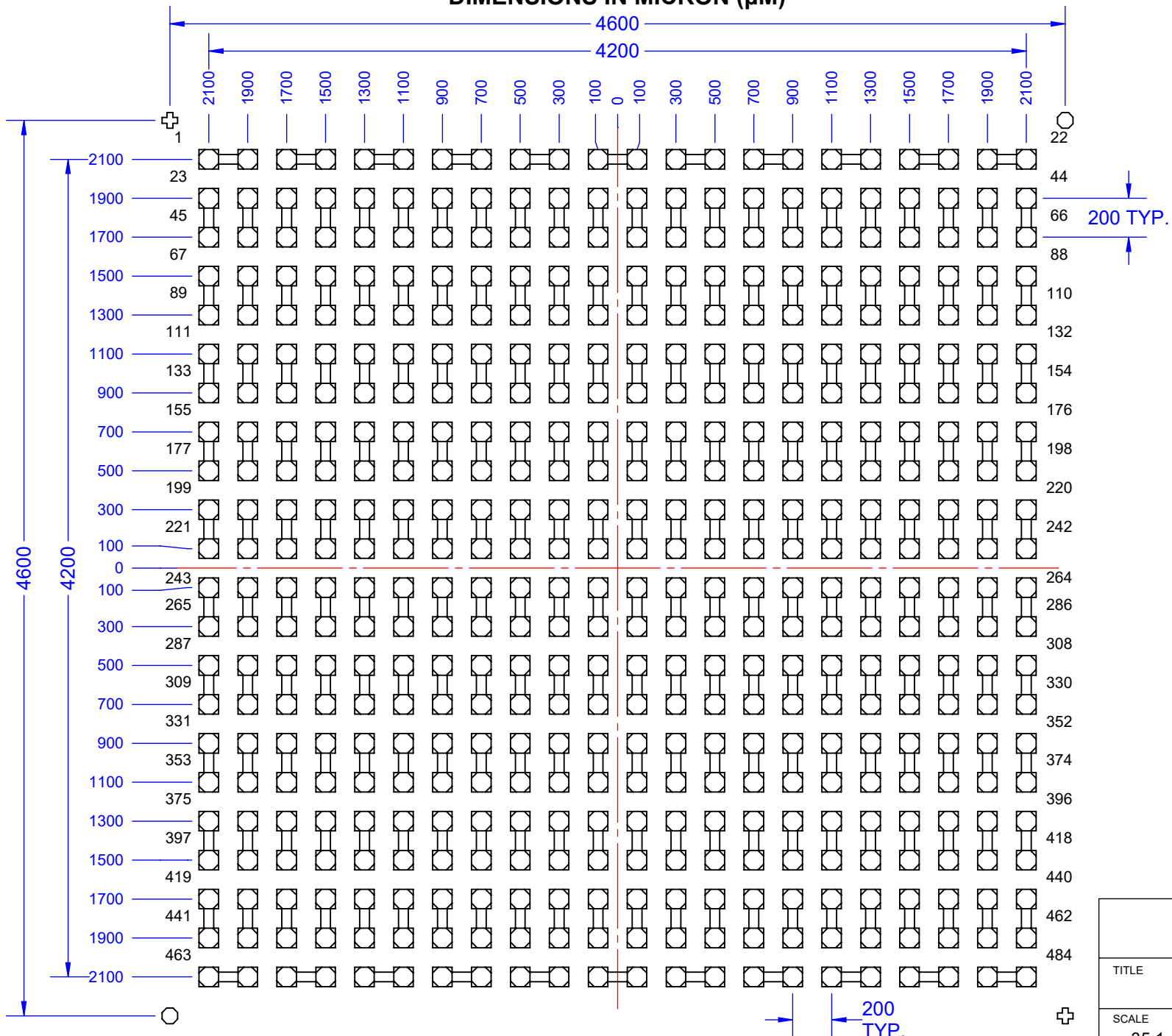
**PAD LOCATION  
SHOWN BUMP VIEW  
DIMENSIONS IN MICRON ( $\mu\text{M}$ )**



NOTE: FC2904 = 6X FC484 (SEE DETAIL A).

<b>TopLine<sup>®</sup></b>			
TITLE FC2904G10x15C-DC DAISY CHAIN BUMPED DIE			
SCALE 35:1	SIZE A	DRAWING NO. 172904	REV A
DO NOT SCALE DRAWING		SHEET 5 OF 7	

**PAD LOCATION  
DIMENSIONS IN MICRON (μM)**



NOTE: FC2904 = 6X FC484 (SEE DETAIL A)

<b>TopLine®</b>			
TITLE FC2904G10x15C-DC DAISY CHAIN BUMPED DIE			
SCALE 35:1	SIZE A	DRAWING NO. 172904	REV A
DO NOT SCALE DRAWING			SHEET 6 OF 7

# PART NUMBERING SYSTEM

**FC**

**2904**

**G**

**10x15**

**C**

**200**

**- OPTION -**

**DC**

**- PACKAGING**

## FLIP CHIP

FC = STANDARD FLIP CHIP  
 FCW = BUMPED WAFER\*  
 FCN = BUMPLESS CHIP  
 FCWN = BUMPLESS WAFER\*

\*200MM WAFER

## NUMBER OF BUMPS

BUMP	CHIPS
484	1X
1936	4X
2904	6X
4356	9X
7744	16X

## BUMP DIAMETER

DIAMETER  $\phi$  109  $\mu$ m  
 HEIGHT 74  $\mu$ m

## DIE SIZE

BUMP	SIZE
484	5 x 5 mm
1936	10 x 10 mm
2904	10 x 15 mm
4356	15 x 15 mm
7744	20 x 20 mm

## PAD MATERIAL

C = SAC BUMP  
 A = AI PAD (BUMPESS)  
 G = GOLD PAD (BUMPLESS)

## BUMP PITCH

$\mu$ M

## DIE THINNING

CODE	$\mu$ M	MIL
NONE	500	20
BG400	400	16
BG350	350	14
BG300	300	12
BG250	250	10
BG200	200	8

OTHER THICKNESS  
 AVAILABLE

## DAISY CHAIN

## OPTIONS

BLANK = TRAY (STANDARD)

BUMP	TRAY	QTY
484	2-INCH	36 PCS
1936	4-INCH	49 PCS
2904	4-INCH	24 PCS
4356	4-INCH	25 PCS
7744	4-INCH	9 PCS

## WAFER FORMAT

C = CASSETTE  
 UV = UV TAPE  
     WAFER RING  
 NT = NON UV TAPE  
     WAFER RING  
 GP = GEL-PAK

**TopLine**

TITLE FC2904G10x15C-DC  
 DAISY CHAIN BUMPED DIE

SCALE	SIZE	DRAWING NO.	REV
NONE	A	172904	A