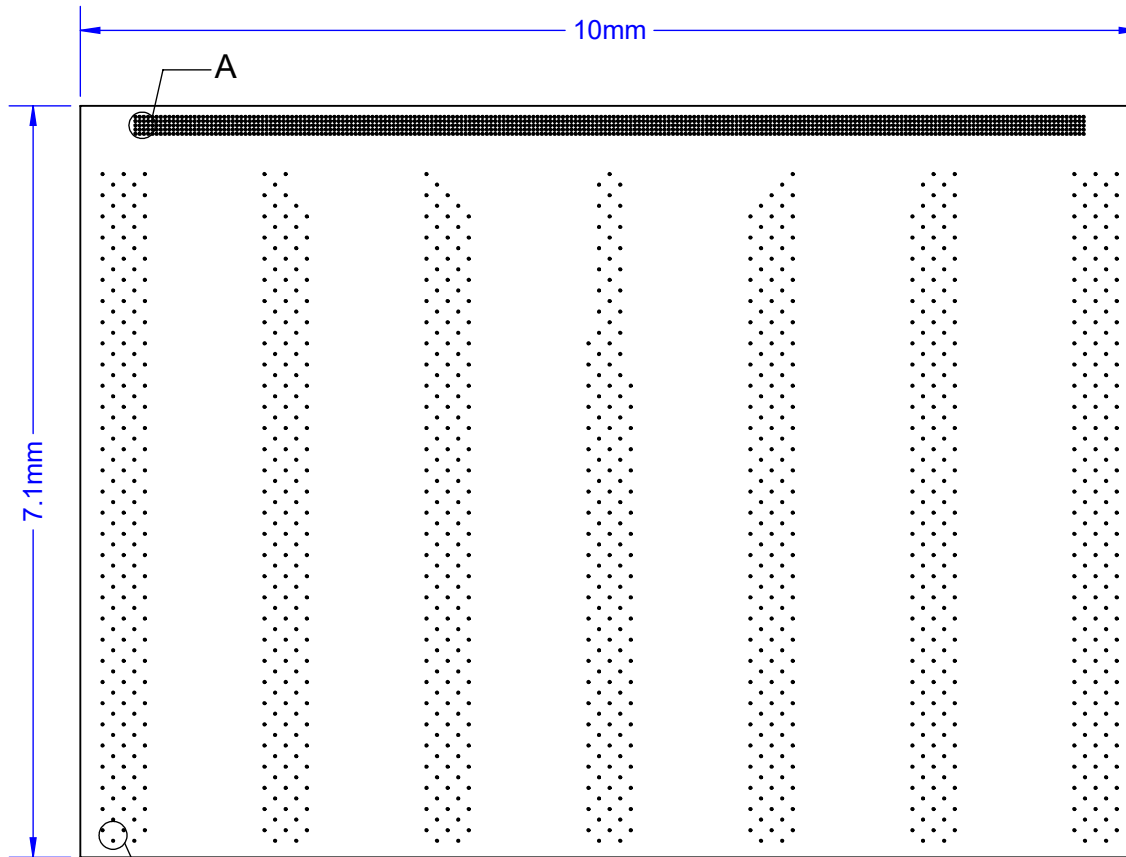
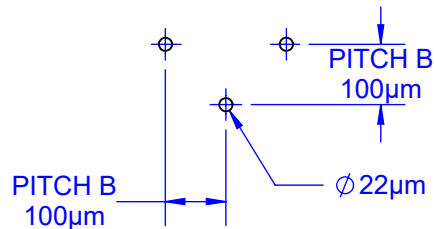
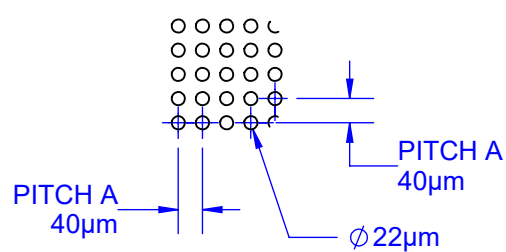


BUMP PATTERN

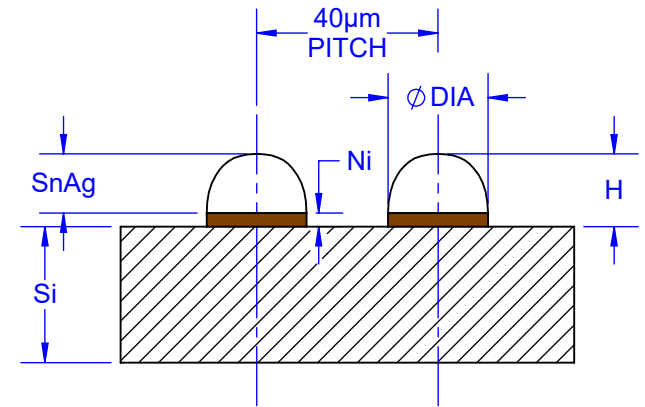


DETAIL A
TOP BUMP VIEW
SCALE 80 : 1

DETAIL B
TOP BUMP VIEW
SCALE 80 : 1



BUMP SECTION VIEW DETAIL A



BUMP DIMENSIONS TABLE		
H	BUMP HEIGHT	16µm
SnAg	SOLDER CAP	13µm
Ni	NICKEL	3µm
φ	DIAMETER	22µm
PITCH A	BUMP PITCH	40µm
PITCH B	BUMP PITCH	100µm

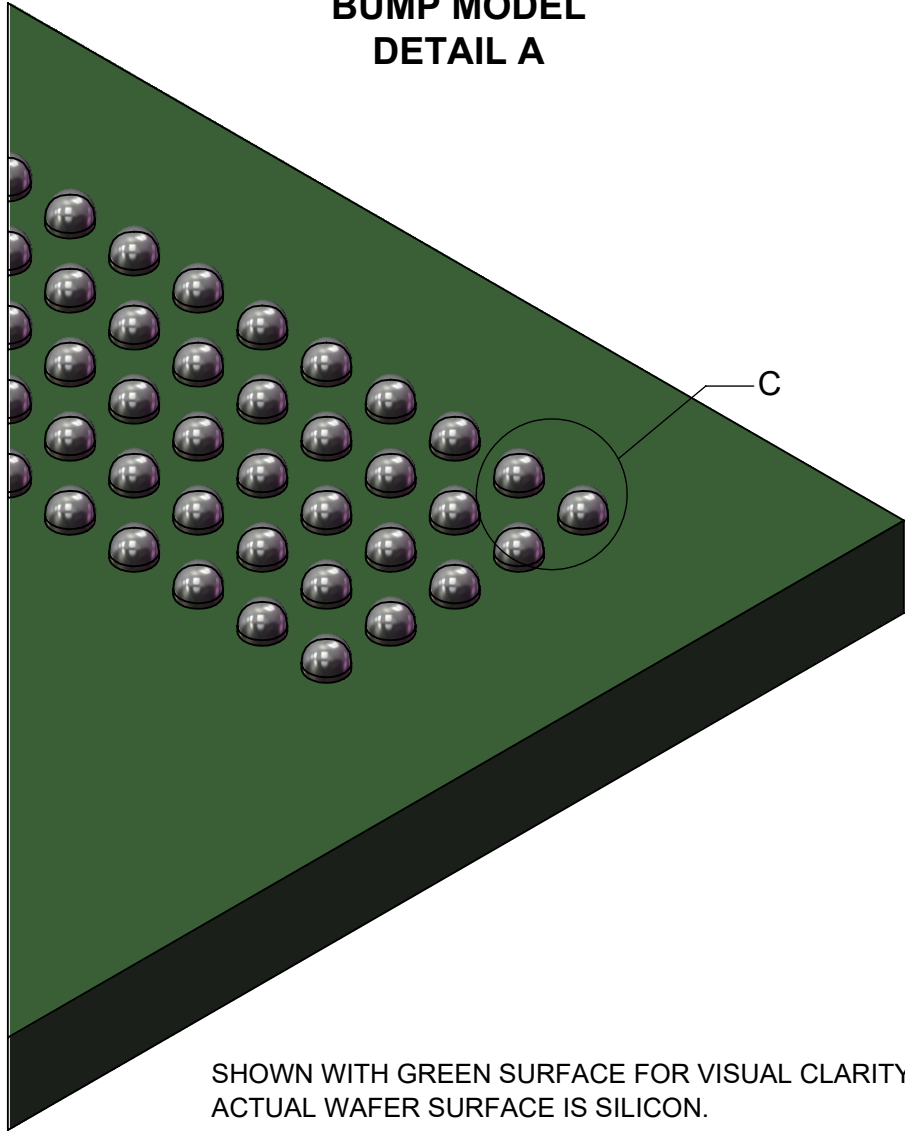
SOLDER CAP MATERIAL: Sn97.5 /Ag2.5

QUANTITY BUMPS		
DETAIL	SINGLE DIE	8" WAFER
A	1125	405,000
B	1088	391,680
TOTAL	2213	796,680

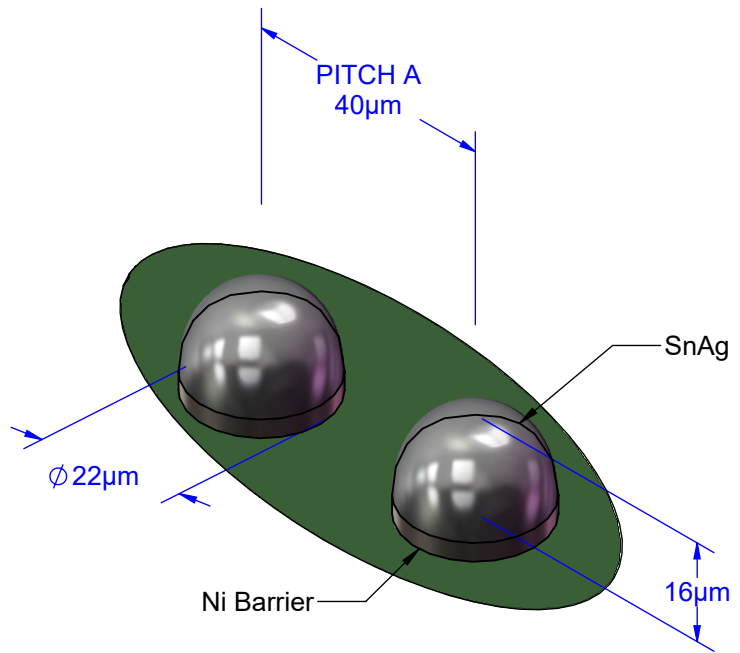
~360 CHIPS PER 8" (200mm) WAFER

APPROVALS	DATE				
DRAWN T. Au	6/11/2022				
ENG M. Hart	6/11/2022	TITLE FC2213 - PITCH 40um/100um MICRO BUMP 10x71.mm			
MFG		SCALE	SIZE	DRAWING NO.	REV
QA		14:1	A	313000	A
CUST		DO NOT SCALE DRAWING			SHEET 1 OF 6
REVISED					

**BUMP MODEL
DETAIL A**

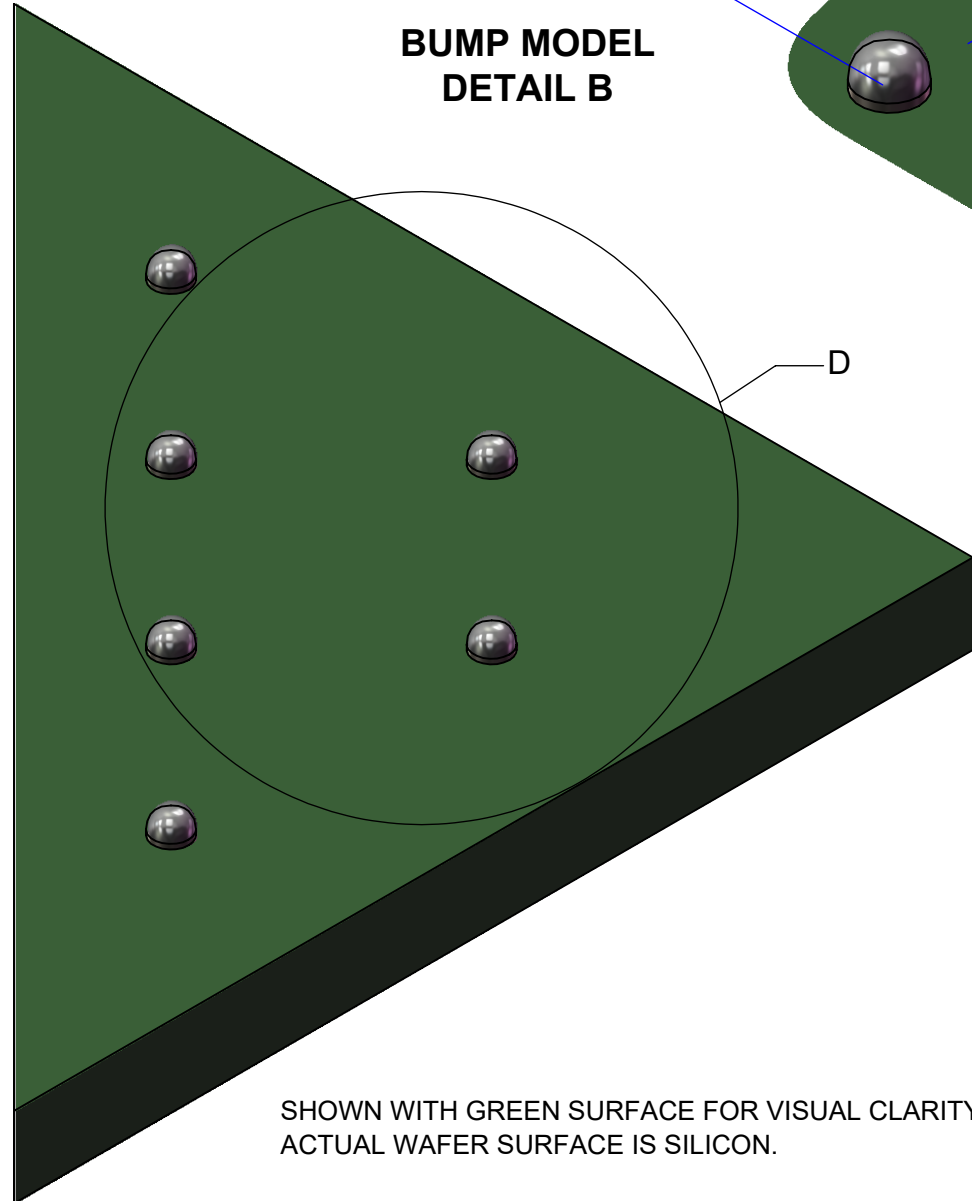


SHOWN WITH GREEN SURFACE FOR VISUAL CLARITY.
ACTUAL WAFER SURFACE IS SILICON.

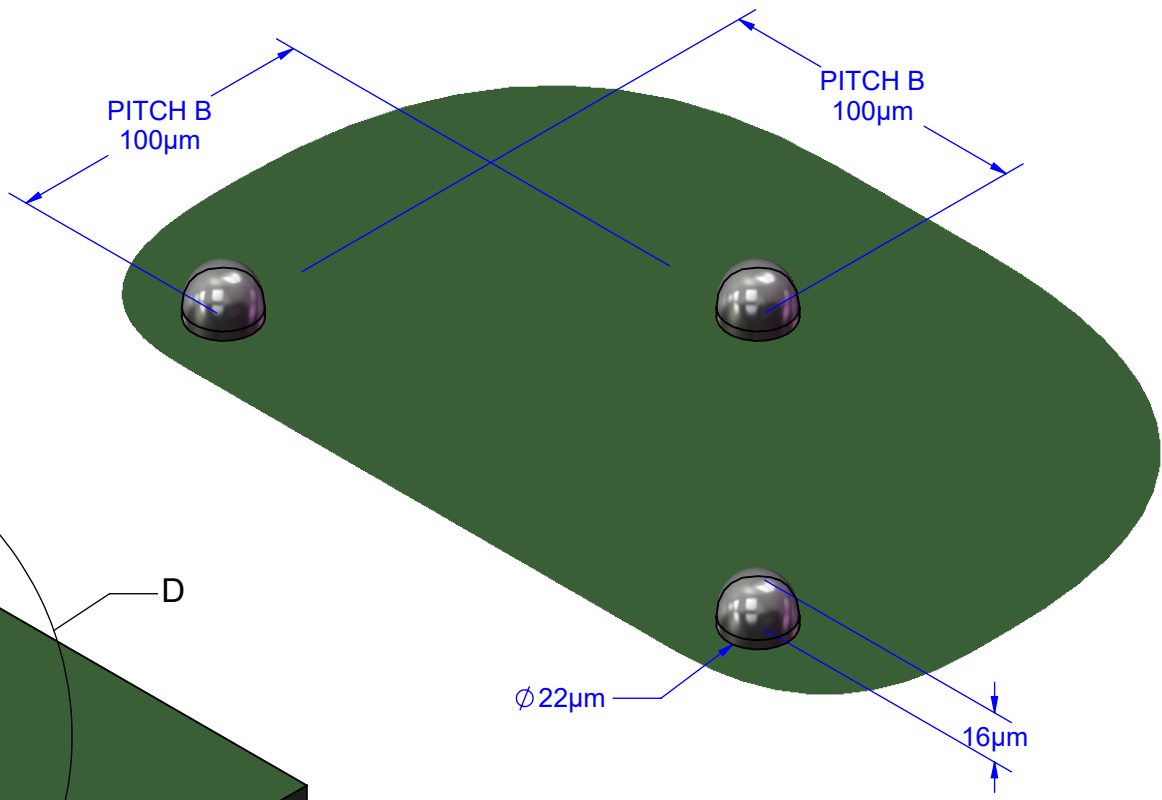


**DETAIL C
SCALE 1000 : 1**

TopLine[®]			
TITLE FC2213 - PITCH 40um/100um MICRO BUMP 10x71.mm			
SCALE 300:1	SIZE A	DRAWING NO. 313000	REV A
DO NOT SCALE DRAWING			SHEET 2 OF 6



**BUMP MODEL
DETAIL B**

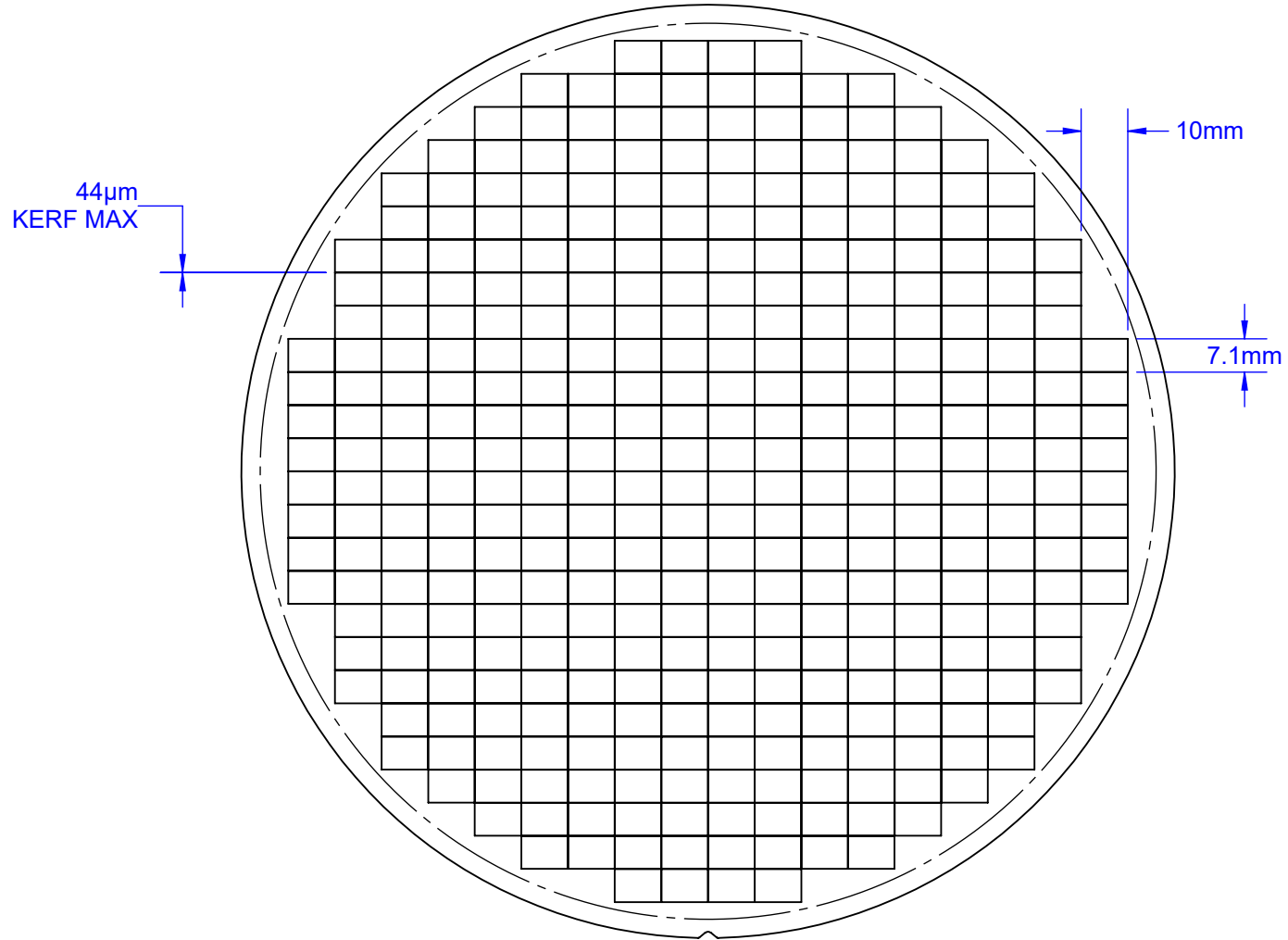


**DETAIL D
SCALE 500 : 1**

SHOWN WITH GREEN SURFACE FOR VISUAL CLARITY.
ACTUAL WAFER SURFACE IS SILICON.

TopLine[®]			
TITLE FC2213 - PITCH 40um/100um MICRO BUMP 10x71.mm			
SCALE 300:1	SIZE A	DRAWING NO. 313000	REV A
DO NOT SCALE DRAWING		SHEET 3 OF 6	

200mm WAFER DICING STREETS

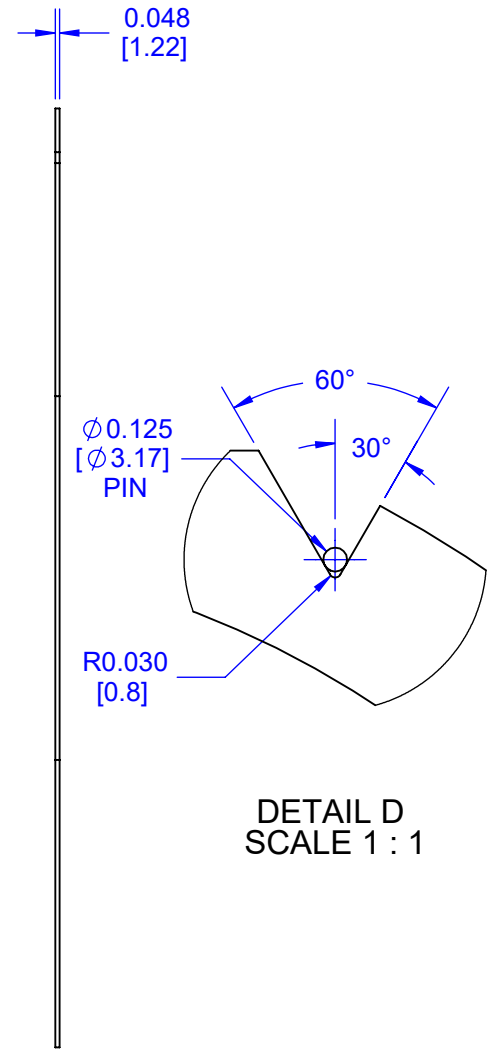
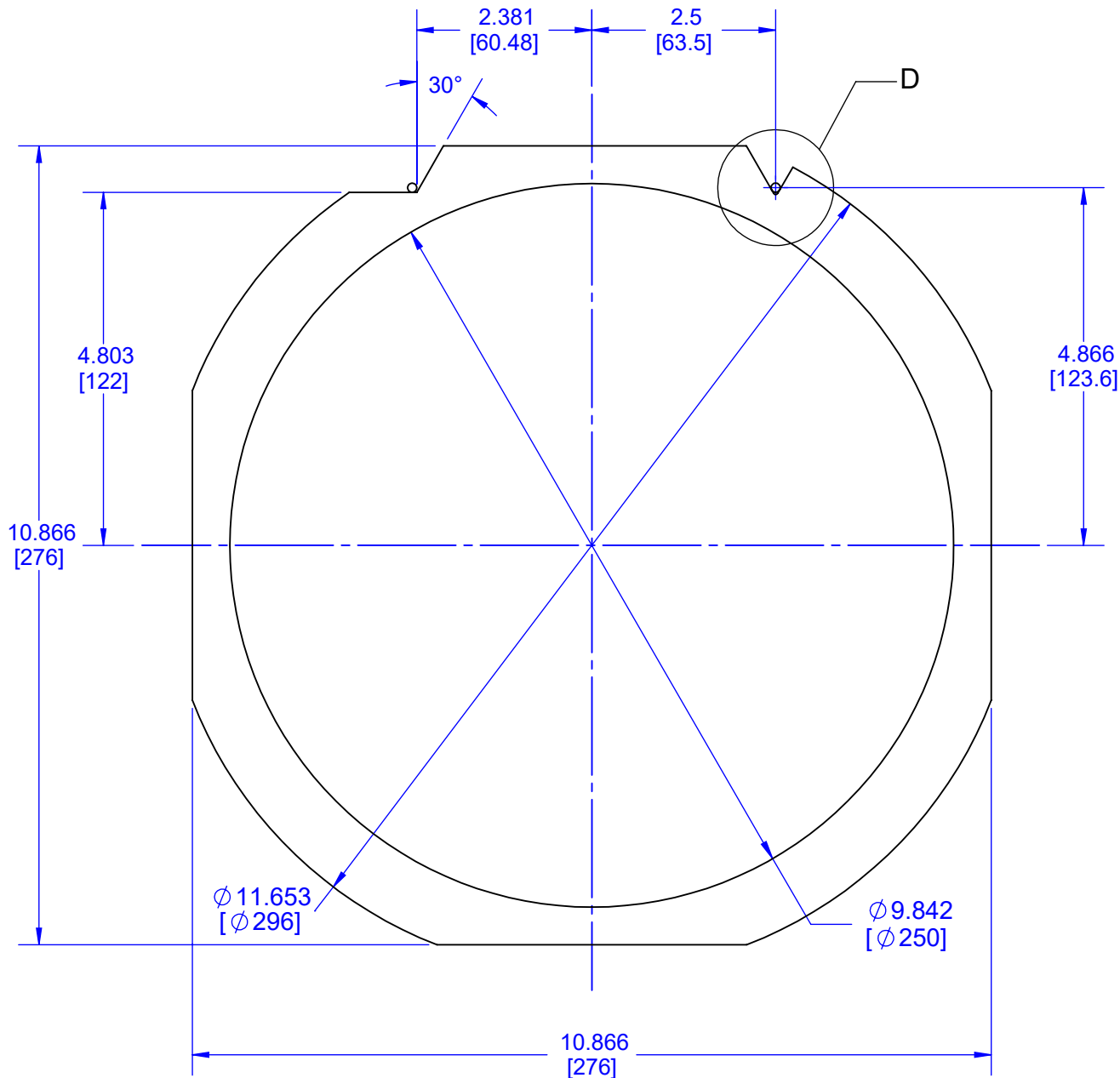


YIELD ~360 DIE

NOTES:

1. DISCO WAFER RING MDTFR200-4 or EQUAL
2. UV TAPE LINTEC Adwill D-174 or EQUAL
3. ASK ABOUT 300mm WAFER OPTION
4. REF SB-TEG01

TopLine[®]			
TITLE FC2213 - PITCH 40um/100um MICRO BUMP 10x71.mm			
SCALE 2:3	SIZE A	DRAWING NO. 313000	REV A
DO NOT SCALE DRAWING		SHEET 4 OF 6	



DETAIL D
SCALE 1 : 1

Notes: (Unless Otherwise Specified).

- 1) DIMENSIONS INCHES [MM].
- 2) MATERIAL: STAINLESS STEEL.
- 3) REFERENCE FF-108 (DISCO DTF-2-8-1).

TopLine®

TITLE FC2213 - PITCH 40um/100um
MICRO BUMP 10x71.mm

SCALE	SIZE	DRAWING NO.	REV
4.5:10	A	313000	A

DO NOT SCALE DRAWING

SHEET 5 OF 6

FCW

2K

10x7

C

40 - OPTION

- J

FLIP CHIP

FC = FLIP CHIP (DICED)
 FCW = UNSAWN 8" WAFER
 FCWN= SAWN WAFER ON RING

DIE SIZE

<u>CODE</u>	<u>MM</u>
10x7	10 X 7.1mm

DUAL PITCH

40 = 40µm
 100 = 100µm

BUMPS PER CHIP

<u>PITCH</u>	<u>ØDIA</u>	<u>BUMPS</u>	<u>ARRAY</u>
40µm	22µm	1125	DETAIL A
100µm	22µm	1088	DETAIL B
TOTAL		2213	

BUMP ALLOY

<u>MATL</u>	<u>HEIGHT</u>
Sn97.5 / Ag2.5	13µm
Ni	3µm
TOTAL	16µm

THICKNESS

<u>CODE</u>	<u>µm</u>	<u>MIL</u>
NONE	725µm	28.5 MIL
BG500	500µm	20 MIL
BG400	400µm	16 MIL
BG375	375µm	15 MIL
BG300	300µm	12 MIL
BG250	250µm	10 MIL
BG200	200µm	8 MIL
BG150	150µm	6 MIL
BG100	100µm	4 MIL

PACKAGING

UNSAWN WAFER

C = CASSETTE
 J = WAFER BOX

SAWN WAFER

UV = TAPE & RING
 G = GELPAK (16 pcs)
 T = 4" CHIP TRAY
 W= 2" CHIP TRAY

OTHER THICKNESS AVAILABLE

BUMPS PER 8" WAFER

<u>PITCH</u>	<u>ØDIA</u>	<u>BUMPS</u>	<u>ARRAY</u>
40um	22um	405,000	DETAIL A
100um	22um	391,000	DETAIL B
TOTAL		796,000	

BUMP ALLOY

200mm WAFER Sn97.5 / Ag2.5
 300mm WAFER Sn97.7 / Ag2.3

CIRCUIT:

ISOLATED BUMPS (NOT DAISY CHAIN)



TITLE FC2213 - PITCH 40um/100um
 MICRO BUMP 10x71.mm

SCALE NONE	SIZE A	DRAWING NO. 313000	REV A
---------------	-----------	-----------------------	----------

DO NOT SCALE DRAWING

SHEET 6 OF 6