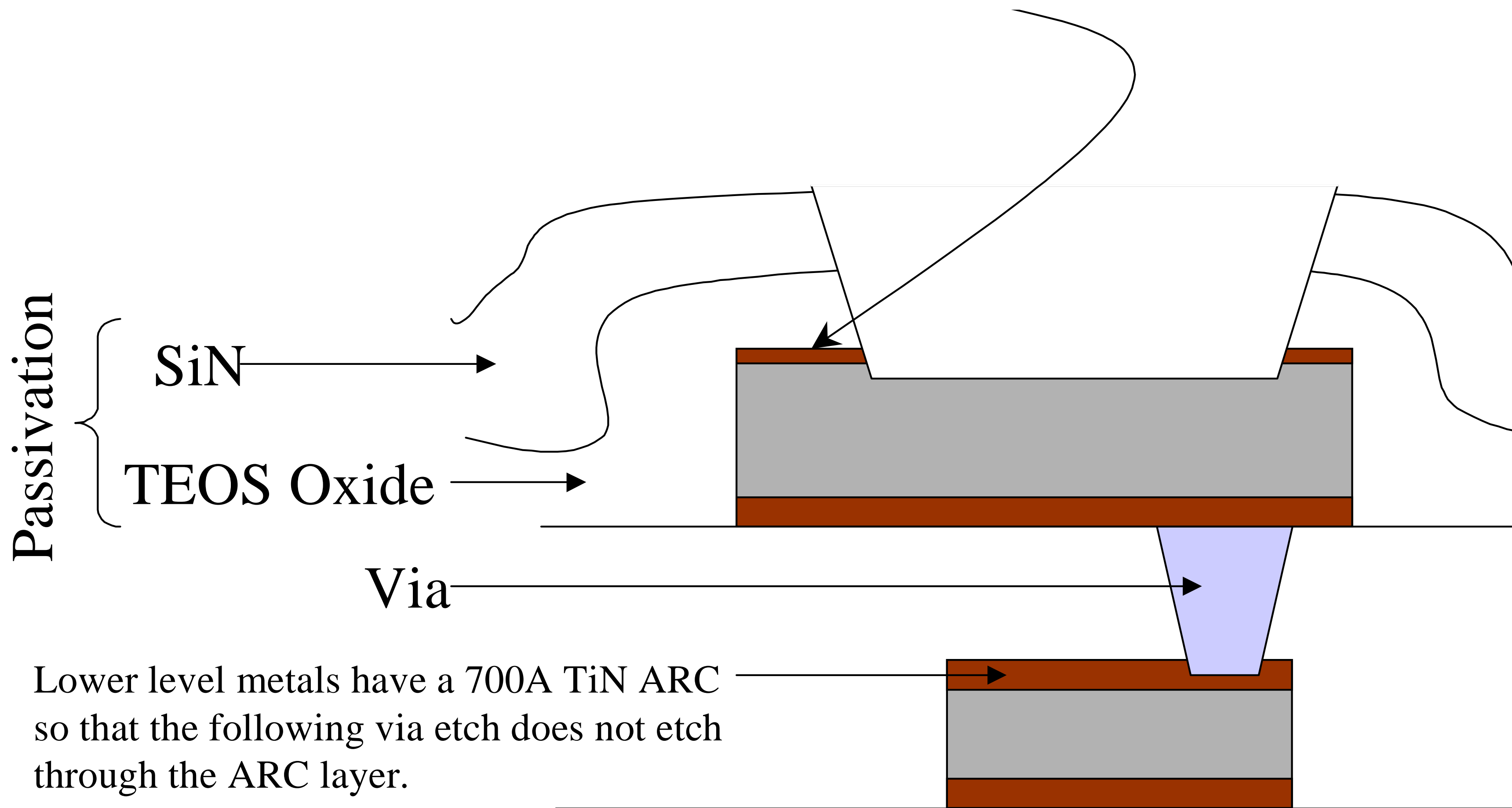
DAISY CHAIN PACKAGING DEVELOPMENT
PATTERNED WAFER PROCESS FLOW

TEOS-Dep
Met2-Dep
Met2-Mask
Met2-Etch
IMD2-Dep
IMD2-CMP
Via2-Mask
Via2-Etch
TTN3-Dep
W3-Dep
W3-CMP
Met3-Dep
Met3-Mask
Met3-Etch
Pass-Dep
Pad-Mask
Pad-Etch
Alloy

Basic Pad Schematic:

Not drawn to scale, for information purposes only.

Typically 300A Top Metal TiN ARC (Anti-reflective Coating) is used so that the pad etch etches through the thin TiN ARC layer leaving no TiN residue.



Lower level metals have a 700A TiN ARC so that the following via etch does not etch through the ARC layer.

Daisy Chain Packaging Process Development Test Patterned Wafer Products

A. Flip Chip

1. 6L Flip Chip
   - -LXA0406
   - -LXA0437
   - -LXA0447
   - -LXA0607

2. 4L Flip Chip
   - -LXA0514
   - -LXA0519
   - -LXA0520
   - -LXA0522
   - -LXA0525
   - -LXA0527
   - -LXA0634

B. Wire Bonding

- PBGA / EPBGA / EPBGA-M (2 Products)
- EPBGA-HP
- LBGA / mBGA
- TQFP & PQFP / PQUAD

A. Flip Chip

	DAISY DIE	BUMP PITCH	ARRAY SIZE	# PADS	PAD SIZE	DIE SIZE
6L Flip Chip	LXA0406	9mil	60x60	3599	96um	13.7mm x 13.7mm
	LXA0437	8mil	60x60	3599	96um	12.4mm x 12.4mm
	LXA0406	9mil	60x60	3599	96um	13.7mm x 13.7mm
	LXA0447	9mil	70x70	4899	96um	16.29mm x 16.21mm
	LXA0607	9mil	70x70	4899	96um	17.0mm x 17.0mm
4L Flip Chip	LXA0520	9mil	16x16	463	96um	6.7mmx 6.5mm
	LXA0522	9mil	20x20	671	96um	8.35mm x 9.18mm
	LXA0514	9mil	25x25	976	96um	10.05mm x 9.89mm
	LXA0525	9mil	31x31	1408	96um	12.0mm x 11.9mm
	LXA0519	9mil	37x37	1912	96um	14.15mm x 14.0mm
	LXA0634	9mil	42x42	2387	96um	15.8mm x 15.88mm
	LXA0527	9mil	46x46	2803	96um	17.0mm x 16.8mm

B. Wire Bonding

	mm		um			mm
PBGA/EPBGA/	45x45/					
EPBGA-M	40x40mm	DC	96um	1225	Double	14.96x15.11
	35x35mm	DC	96um	256	Single	9.27x9.11
EPBGA-HP	40X40mm	DC	96um	1100	Double	13.8x13.8
LBGA/mBGA	23x23/19x19/16x16/	DC	96um	804	6x Double	11x11
	15x15mm				(6 rows)	
TQFP & PQFP/	28x28mm	DC	96um	256	Single	9.27x9.11
PQUAD						
		DC= DaisyChain				