

Applied Materials Italia Company Overview

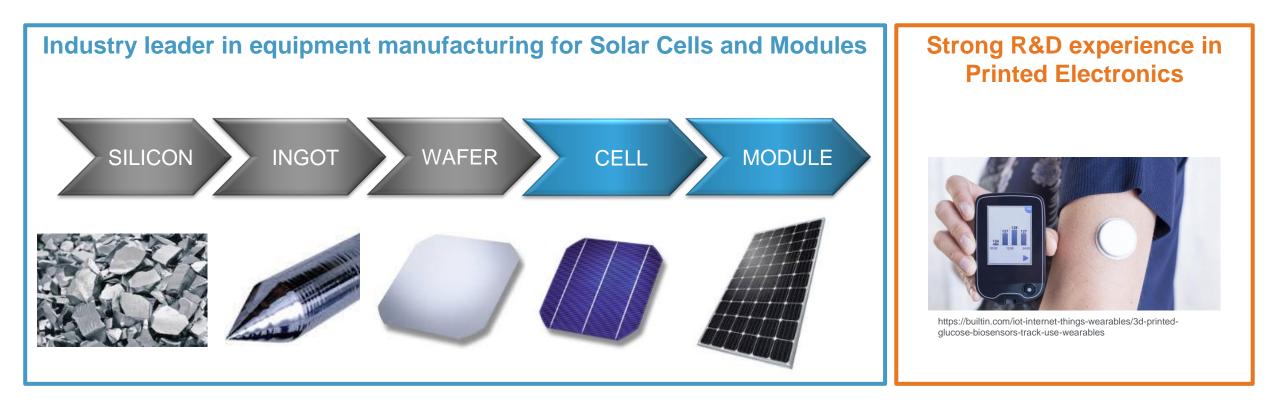
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EPIC workshop - Oct 12, 2020

Applied Materials Italia: Company Facts

Baccini company established in 1967

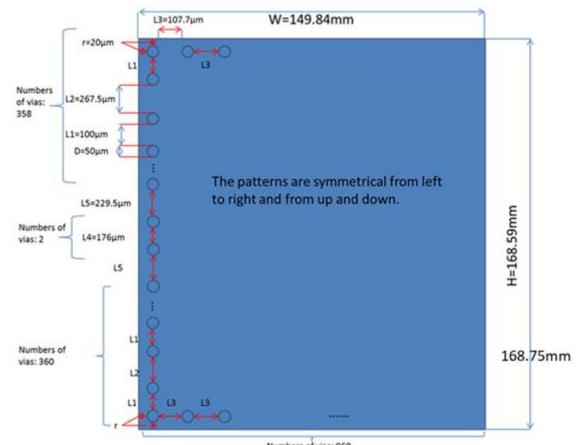
- Baccini pioneered automated screen printing lines for microelectronics and PV
 - Acquired by Applied Materials in 2008
 - Largest installed base in PV market: >2,000 systems worldwide



Glass drilling application requirement 1

General requirements	
Substrate length	150 - 300 mm
Substrate width	100 – 200 mm
Substrate thickness	0.5 - 1 mm
Vias diameter	40 – 100 um
Aspect ratio	5 to 10
Vias distance	100 - 300 um

Example (150 mm x 168.75 mm) with 3360 vias



Numbers of vias: 960



Glass drilling application requirement 2

Glass type	Corning SGW3
	Can also consider different glass type, need glass for display application
Initial thickness (µm)	500
Substrate size	square 160mmx160mm
Taper angle	the sidewalls of the holes will have a taper angle of $\sim 1-2^{\circ}$
Pattern (multiple holes)	 number of holes 52, diameter 100um; number of holes 26 diameter 80um; number of holes 26 diameter 60um; number of holes 26 diameter 40um 4 holes 700um at the corners (as fiducial)
Other requirements	Possibility to have different wettability between holes and surface, as known it's possible to increase the hydrophobicity of the glass surface, can we increase somehow the wettability inside vias only?



