

Roadmap

Properties	2012 ¹	2013	2014 ²	2015	2016 ³	2018	2020
Line/Space [µm]	25/30	25/25	20/25	20/20	10/10	10/10	7/7
Etching tolerance [µm]	±10	±10	±8	±8	±4	±4	±3
Layer/Layer tolerances [µm]	±25	±25	±20	±20	±15	±15	±10
Min. Annular ring [µm] DL/ML	50/100	50/100	50/75	50/75	30/50	30/50	25/40
Soldermask Position [µm]	±50	±50	±30	±25	±25	±20	±20
Milling/Layer tolerance [µm]	±40	±40	±40	±35	±35	±35	±35
Min. Hole Size [µm] Laser/Mechanical	50/76	50/76	50/76	25/50	20/50	20/50	20/50
Min. Material thickness [µm] Flex/Rigid	12.5/50	12.5/50	12.5/50	12.5/-	10/-	10/-	7/-
Min. Copper Thickness [µm]	5	5	3	3	2	2	1
Degree of Automation	65 %	70 %	75 %	80 %	85 %	90 %	95 %

¹ New Multilayer Bonding line,

² New Etching line

³ New waver technology liquid resist, vakuum deposit copper

