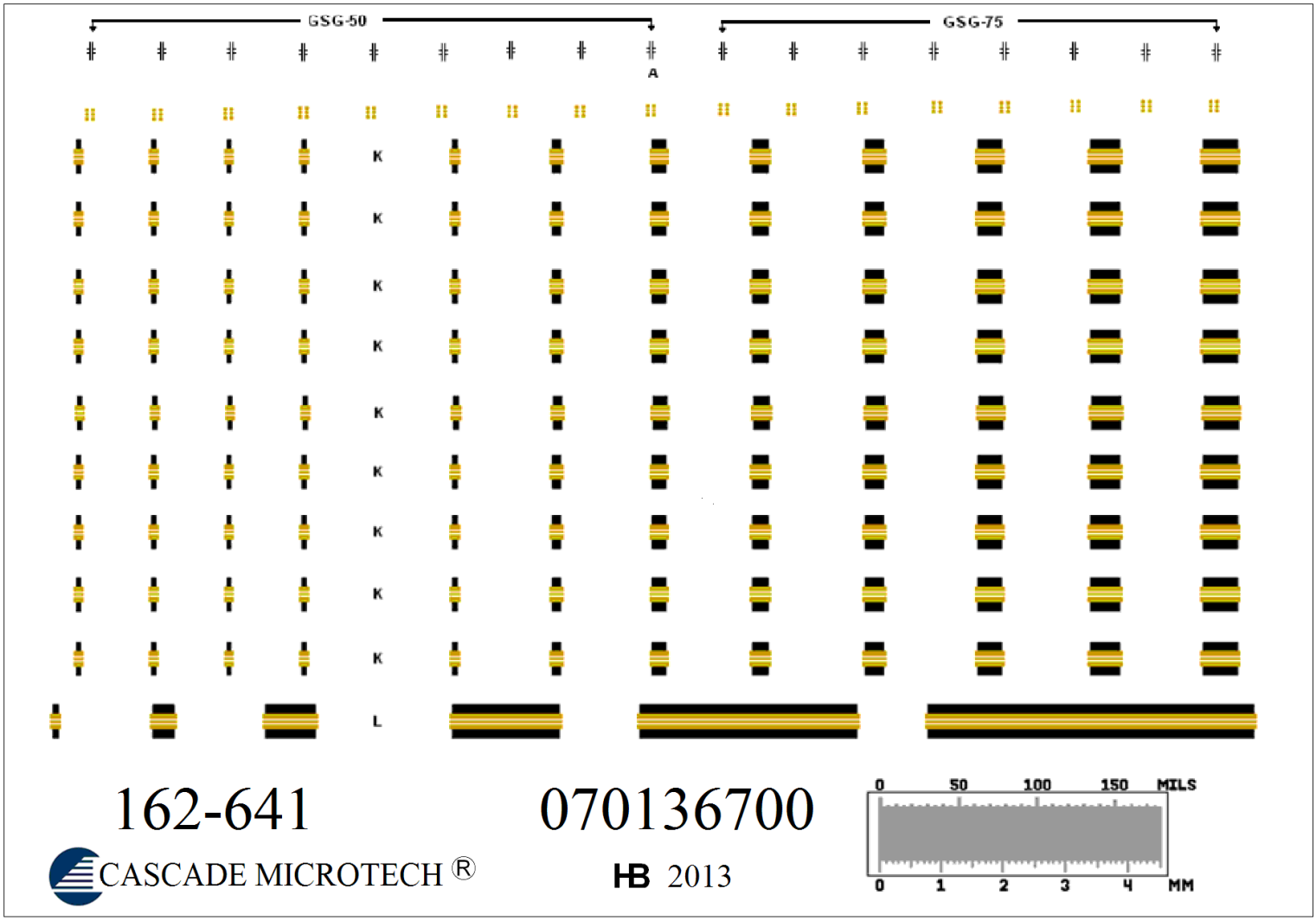
Cascade
Impedance Standard SubstrateMap

P/N: 162-641

Independent Verification Standards

Pitch: **50 µm - 75 µm**

Configuration: **GSG**



Key to Map

Key to the 162-641 Map

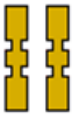
Substrate specifications: Material: Alumina; Thickness: 10 mils (254 um); Dielectric constant: 9.9

Verification Lines		
ID	**ps**	**um**
K1	0.5	137
K2	0.5	137
K3	0.5	137
K4	0.5	137
K5	1.1	217
K6	1.4	252
K7	1.9	317
K8	2.3	367
K9	2.7	422
K10	3.2	487
K11	3.8	572
K12	4.5	657

ID	**ps**	**um**
L1	1	202
L2	3	452
L3	7	902
L4	14	1802
L5	27	3502
L6	40	5252

65 um

Alignment Marks



Short

Note: ISS must be mounted on absorber material (such as ISS Holder PN 116-344) during Verification.

Verification Line delays are based on an overtravel (downward movement of probe after initial touchdown on the substrate) of 25-50 µ for Infinity style probes. This amount of overtravel can be set before verification on the Independent Verification Standard (IVS) usi the alignment marks (allows precise setting of probe separation and overtravel). Figure 1 shows that initial contact with the edge of t probe tips should be made at reference plane X. The desired overtravel and thus skate (forward movement of probe tips after initi contact with substrate) is then achieved by adjusting the Z height on the positioner to move the edge of the probe tips to reference plar Y. This can also be seen from the photographic images shown in Figure 2. Probe separation will need to be adjusted in the x-axis befo verification on different line lengths.

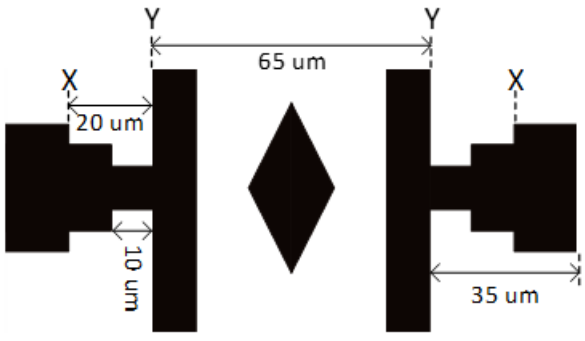


Figure 1: Alignment marks

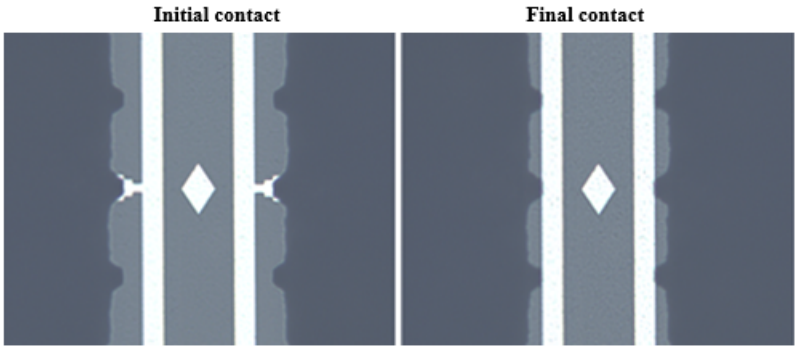


Figure 2: Images showing correct alignment and placement of probe tips of Infinity style probes

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