



# CS-105 Calibration Substrate Key (table 1)

(all structures for GSG probes with 75 to 250 micrometer pitch)

Location #	Description	Coordinates (X, Y)
00	550 micrometer offset short	(-2350, -5278) from 41 for left probe
01	550 micrometer offset load	(9150, -5278) from 41 for right probe
10	6600 micrometer 50 Ohm coplanar line	(200, -4373) from 41 for left probe
20	125 micrometer offset 50 ohm loads (pair)	(-2263, -1600) from 31
30	200 micrometer 50 ohm coplanar line with connected grounds	(-1700, -2000) from 41
31	450 micrometer spacing alignment structure	(0, 0)
32	Right angle 50 Ohm coplanar line	(4232, -11510) from 90
33	Home 33	(3400, -2000) from 41
34	Home 33/34 (left probe on 33, right probe on 34)	(0, 0)
35	Home 33/35 (left probe on 33, right probe on 35)	(0, 0)
36	Home 33/36 (left probe on 33, right probe on 36)	(0, 0)
37	100 Ohm loads (pair)	(6800, -2000) from 41
38	25 Ohm loads (pair)	(8500, -2000) from 41
40	100 micrometer offset opens (pair)	(-1650, 2000) from 31
41	Home #1 150 micrometer spacing alignment structure	(0, 0)
42	100 micrometer offset shorts (pair)	(1650, 2000) from 31
43	Home #2 150 micrometer spacing alignment structure	(3400, 0) from 41
44	50 Ohm loads (pair)	(4950, 2000) from 31
45	Home #3 150 micrometer spacing alignment structure	(6800, 0) from 41
46	500 micrometer 50 Ohm coplanar line	(8250, 2000) from 31
50	shorting bar (left), open pads (right)	(-1700, 2000) from 41
51	Open pads (pair)	(0, 2000) from 41
52	Open pads (pair)	(1700, 2000) from 41
53	Open pads (pair)	(3400, 2000) from 41
54	Open pads (pair)	(5100, 2000) from 41
55	Open pads (pair)	(6800, 2000) from 41
56	Open pads (pair)	(8500, 2000) from 41
60	Open pads (left), shorting bar (right)	(-1700, 4000) from 41
61	Shorting bar (pair)	(0, 4000) from 41
62	Shorting bar (pair)	(1700, 4000) from 41
63	Shorting bar (pair)	(3400, 4000) from 41
64	Shorting bar (pair)	(5100, 4000) from 41
65	Shorting bar (pair)	(6800, 4000) from 41
66	Shorting bar (pair)	(8500, 4000) from 41
70	50 Ohm loads (pair)	(-1700, 6000) from 41
71	50 Ohm loads (pair)	(0, 6000) from 41
72	50 Ohm loads (pair)	(1700, 6000) from 41
73	50 Ohm loads (pair)	(3400, 6000) from 41
74	50 Ohm loads (pair)	(5100, 6000) from 41
75	50 Ohm loads (pair)	(6800, 6000) from 41
76	50 Ohm loads (pair)	(8500, 6000) from 41
80	200 micrometer 50 Ohm coplanar line	(-1700, 8000) from 41
81	200 micrometer 50 Ohm coplanar line	(0, 8000) from 41
82	200 micrometer 50 Ohm coplanar line	(1700, 8000) from 41
83	200 micrometer 50 Ohm coplanar line	(3400, 8000) from 41
84	200 micrometer 50 Ohm coplanar line	(5100, 8000) from 41
85	200 micrometer 50 Ohm coplanar line	(6800, 8000) from 41
86	200 micrometer 50 Ohm coplanar line	(8500, 8000) from 41
90	Right angle open pads (pair)	(0, 0)
91	Right angle 50 Ohm loads (pair)	(11775, 0) from 90
100	550 micrometer 50 Ohm coplanar line	(-3940, 12000) from 33/34
101	1000 micrometer 50 Ohm coplanar line	(-990, 12000) from 33/35
102	1500 micrometer 50 Ohm coplanar line	(2710, 12000) from 33/36
110	Right angle shorting bars (pair)	(0, 1500) from 90
111	Right angle 50 Ohm coplanar line	(11775, 1500) from 90