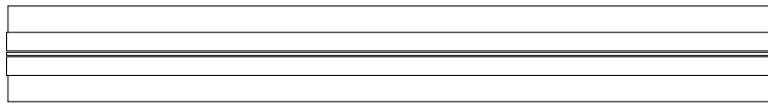


00 25 ohm

11 10 ohm



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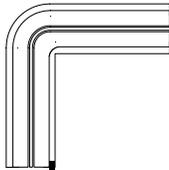
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GGB INDUSTRIES, INC. CS-115-r1 6/23/2021

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CS-115 Calibration Substrate Key (Table 1)

(all structures for GSG probes with 40 to 150 micrometer pitch)

Location #	Description	Coordinates (X,Y)
00	25 ohm loads (pair)	(-2000,-5450) from 41
01	100 ohm loads (pair)	(8800,-4800) from 41
10	6600 micrometer 50 ohm coplanar line	(150,-5186.5) from 41 for left probe
11	10 ohm loads (pair)	(-2000,-4800) from 41
20	273 micron offset short	(-2025,-3639) from 41
21	275 micron offset load	(8750,-3639) from 41 for right probe
22	62.5 micrometer offset 50 ohm loads (pair)	(-1981,-800) from 41
30	50 micrometer offset opens (pair)	(-1675,0) from 31
31	225 micrometer spacing alignment structure	(0,0)
32	50 micrometer offset shorts (pair)	(1675,0) from 31
33	50 ohm loads (pair)	(5025,0) form 31
34	250 micrometer 50 ohm coplanar line	(8375,0) from 31
35	right angle 50 ohm coplanar line	(8628,-11693) from 90
40	50 micrometer offset opens (pair)	(-1675,2000) from 31
41	150 micrometer spacing alignment structure #1	(0,0)
42	330 um alignment, left probe on 41, right probe on 42	(0,0)
43	550 um alignment, left probe on 41, right probe on 43	(0,0)
44	1000um alignment, left probe on 41, right probe on 44	(0,0)
45	50 micrometer offset shorts (pair)	(1675,2000) from 31
46	150 micrometer spacing alignment structure #2	(3400,0) from 41
47	50 ohm loads (pair)	(5025,2000) from 31
48	150 micrometer spacing alignment structure #3	(6800,0) from 41
49	250 micrometer 50 ohm coplanar line	(8375,2000) 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	175 micrometer 50 ohm coplanar line	(-1700,8000) from 41
81	175 micrometer 50 ohm coplanar line	(0,8000) from 41
82	175 micrometer 50 ohm coplanar line	(1700,8000) from 41
83	175 micrometer 50 ohm coplanar line	(3400,8000) from 41
84	175 micrometer 50 ohm coplanar line	(5100,8000) from 41
85	175 micrometer 50 ohm coplanar line	(6800,8000) from 41
86	175 micrometer 50 ohm coplanar line	(8500,8000) from 41
90	right angle open pads (pair)	(0,0)
91	right angle 50 ohm loads (pair)	(10987.5,0) from 90
100	355 micrometer 50 ohm coplanar line	(-527.5,10000) from 41/42
101	575 micrometer 50 ohm coplanar line	(2422.5,10000) from 41/43
102	1025 micrometer 50 ohm coplanar line	(6122.5,10000) from 41/44
110	right angle shorting bars (pair)	(0,750) from 90
111	right angle 50 ohm coplanar line	(9778,278) from 90