

CLAIMS

1. A system, comprising:
 - a cavity defined by conductive walls;
 - a printed circuit board (PCB) within the cavity; and
 - shorting posts extending into the cavity to suppress higher order modes generated by operation of the PCB.
2. The system according to claim 1, further including a first ground plane layer under the PCB.
3. The system according to claim 2, further including a second ground plane layer over the PCB, wherein the walls and the first and second ground planes surround the PCB.
4. The system according to claim 1, wherein the shorting posts comprise solder reflow components.
5. The system according to claim 1, wherein the shorting posts comprise a series of ball stacks generated from a wire using wire bond equipment.
6. The system according to claim 1, wherein the shorting posts provide over 30db mode suppression compared to no shorting posts.
7. The system according to claim 1, wherein the shorting posts form a least one edge wall about a perimeter of unit cells of the cavity.
8. The system according to claim 7, wherein at least one of the edge walls includes a gap in which shorting posts are not located.
9. The system according to claim 8, further including a shorting post proximate a center of a respective one of the unit cells.
10. The system according to claim 1, wherein at least some of the shorting posts are located to address point-to-point coupling due to reactive fields.

11. The system according to claim 1, further including ICs on the PCB and at least some of the shorting posts provide a generally circular formation about the ICs in the cavity.
12. The system according to claim 11, wherein at least some of the shorting posts are located inside the generally circular formation to reduce coupling between unit cells of the cavity.
13. The system according to claim 11, wherein shorting posts are spaced from each by about a wavelength of operation for the PCB divided by about five.
14. A method, comprising:
 - employing a cavity defined by conductive walls;
 - employing a printed circuit board (PCB) within the cavity; and
 - employing shorting posts extending into the cavity to suppress higher order modes generated by operation of the PCB.
15. The method according to claim 14, further including employing a first ground plane layer under the PCB.
16. The method according to claim 15, further including a second ground plane layer over the PCB, wherein the walls and the first and second ground planes surround the PCB.
17. The method according to claim 14, wherein the shorting posts comprise solder reflow components.
18. The method according to claim 14, wherein the shorting posts comprise a series of ball stacks generated from a wire using wire bond equipment.
19. The method according to claim 14, wherein the shorting posts provide over 30db mode suppression compared to no shorting posts.

20. The method according to claim 14, wherein the shorting posts form a least one edge wall about a perimeter of unit cells of the cavity.