From the above description of exemplary embodiments of the invention it is manifest that various techniques can be used for implementing the concepts of the present invention without departing from its scope. Moreover, while the invention has been described with specific reference to certain embodiments, a person of ordinary skill in the art would recognize that changes could be made in form and detail without departing from the spirit and the scope of the invention. For example, it is manifest that in one embodiment, the number of metal layers within substrates **302** and **402** may be modified without departing from the scope and spirit of the invention. The described exemplary embodiments are to be considered in all respects as illustrative and not restrictive. For example, in one embodiment, the final structure in FIG. **3**F can also be arrived at by other means, such as by using a limited flow dielectric, such as W. L. Gore Microlam 600 series dielectrics, which may be a composite containing a "B stage dielectric resin" in an inert matrix. The portions around substrate die pad **304** and heat spreader **310** can be removed before lamination. It is noted that conventional resin coated foils and prepregs (glass fabric impregnated with B stage resin) are not suitable for this purpose. The steps preceding lamination (shown in FIGS. **3**A through **3**D) would be similar. Also, the final structure shown in FIG. **3**F can be achieved without performing some of the intermediate plating steps, such as step **205**, in FIG. **2**. It should also be understood that the invention is not limited to the particular exemplary embodiments described herein, but is capable of many rearrangements, modifications, and substitutions without departing from the scope of the invention.

Thus, a semiconductor die package with increased thermal conduction has been described.

What is claimed is:

1. A structure comprising:

a multilayer substrate having a core and a core thickness, a top surface and a bottom surface;

a substrate die pad situated on said top surface of said substrate;

a heat spreader situated on said bottom surface of said substrate, said substrate further comprising a first metal cap, al least one buried via, and a second metal cap, said first metal cap situated below and thermally coupled to said substrate die pad, said at lest one buried via situated below said first metal cap and within said core, said second metal cap situated below said at least one buried via and thermally coupled to said heat spreader, said at least one buried via providing a connection between said substrate die pad and said heat spreader;

said at least one buried via having a length substantially corresponding to said core thickness.

2. The structure of claim **1**, wherein said substrate further comprises:

a first intermediate metal layer situated between and thermally coupling said first metal cap and said at least one buried via; and

a second intermediate metal layer situated between and thermally coupling said at least one buried via and said second metal cap.

3. The structure of claim **2**, wherein said substrate further comprises:

a third layer situated between said substrate die pad and said first intermediate metal layer, said first metal cap occupying a portion of said third layer; and

a fourth layer situated between said beat spreader and said second intermediate metal layer, said second metal cap occupying a portion of said fourth layer.

4. The structure of claim **3**, wherein at least a portion of each of said core, said third layer and said fourth layer further comprises a dielectric.

5. The structure of claim **1**, wherein said first and second metal caps comprise copper.

6. The structure of claim **1**, wherein a diameter of said at least one buried via is approximately 100–200 microns.

7. The structure of claim **1**, wherein a length of said at least one buried via is approximately 100–200 microns.

8. The structure of claim **1**, wherein an inner surface of said at least one buried via is plated with a metal barrel.

9. The structure of claim **1**, wherein a thickness of said metal barrel is approximately 15–50 microns.

10. A method for fabricating a structure for receiving a semiconductor die, said method comprising steps of:

fabricating a substrate having a core and a core thickness, a top surface and a bottom surface;

forming a substrate die pad on said top surface of said substrate;

forming a heat spreader on said bottom surface of said substrate;

forming at least one buried via in said core of said substrate;

forming a first metal cap situated below and thermally coupled to said substrate die pad, said first metal cap situated above said at least one buried via; and

forming a second metal cap situated below said at least one buried via, said at least one buried via providing a connection between said substrate die pad and said heat spreaders;

said at least one buried via formed with a length substantially corresponding to said core thickness.

11. The method of claim **10**, further comprising laminating over said first metal cap with a first laminating material comprising a first resin coated foil layer, thereby causing said first foil layer to directly contact said first metal cap.

12. The method of claim **11**, further comprising laminating over said second metal cap with a second laminating material comprising a second resin coated foil layer, thereby causing said second foil layer to directly contact said second metal cap.

13. The method of claim **10**, further comprising:

forming a first intermediate metal layer situated between and thermally coupling said first metal cap and said at least one buried via; and

forming a second intermediate metal layer situated between and thermally coupling said at least one buried via and said second metal cap.

14. The method of claim **10**, wherein said first and second metal caps comprise copper.

15. The method of claim **10**, further comprising plating an inner surface of said at least one via with a metal barrel.

16. A structure comprising:

a multilayer substrate having a core and a core thickness, a top surface and a bottom surface;

a substrate die pad situated on said top surface of said substrate;

a die fixed to said substrate die pad by an epoxy;

a heat spreader situated on said bottom surface of said substrate, said substrate further comprising a first metal cap, at least one buried via, and a second metal cap, said first metal cap situated below and thermally coupled to said substrate die pad, said at least one buried via situated below said first metal cap and within said core, said second metal cap situated below said at least one