What is claimed is:

1. A method of manufacture of an integrated circuit packaging system comprising:

forming a package paddle;

forming a lead adjacent the package paddle, the lead having :

(a) a lead overhang protruding from the lead, the lead overhang having:

an overhang top, an overhang bottom, and an overhang non-horizontal side between the overhang top and the overhang bottom,

wherein the overhang bottom width is greater than the overhang top width such that the lead overhang includes the overhang non-horizontal side tapering from the overhang top to the overhang bottom;

(b) a lead middle having:

a middle top, a middle bottom, and a middle non-horizontal side having a curvature, the middle non-horizontal side between the middle top and the middle bottom,

wherein the middle top and the overhang bottom are co-planar,

wherein the middle bottom width is greater than the middle top width such that the lead middle includes the middle non-horizontal side curving from the middle top to the middle bottom; and

(c) a lead lower having:

a lead ridge, a lower bottom, and a lower non-horizontal side between the lead ridge and the lower bottom,

wherein the lead ridge and the middle bottom are co-planar,

wherein the lead ridge width is greater than the lower bottom width such that the lead lower includes the lower non-horizontal side tapering from the lead ridge to the lower bottom, and

wherein the lead ridge width is greater than the overhang bottom width; ~~a lead overhang protruding from a lead non-horizontal side and a lead ridge protruding from the lead non-horizontal side;~~

mounting an integrated circuit over the package paddle;

connecting an electrical connector to the lead and the integrated circuit; and

forming an encapsulation over the integrated circuit, the lead, and the package paddle, the encapsulation under the lead overhang.

2. The method as claimed in claim 1 wherein forming the package paddle includes forming the package paddle having a paddle overhang bottom side of a paddle overhang coplanar with ~~a~~the ~~lead~~ overhang bottom ~~side~~ of the lead overhang.

3. The method as claimed in claim 1 wherein forming the package paddle includes forming the package paddle having a paddle ridge below a paddle overhang.

4. The method as claimed in claim 1 ~~wherein forming the lead includes~~ further comprising: forming ~~the lead having~~ a lead top conductive layer directly on the lead overhang.

~~5. The method as claimed in claim 1 wherein forming the lead includes forming the lead having a lead body top side and the lead overhang at the lead body top side.~~

~~6.~~5. A method of manufacture of an integrated circuit packaging system comprising:

forming a package paddle;

forming a lead adjacent the package paddle, the lead having:

(a) a lead overhang protruding from the lead, the lead overhang having:

an overhang top, an overhang bottom, and an overhang non-horizontal side between the overhang top and the overhang bottom,

wherein the overhang bottom width is greater than the overhang top width such that the lead overhang includes the overhang non-horizontal side tapering from the overhang top to the overhang bottom;

(b) a lead middle having:

a middle top, a middle bottom, and a middle non-horizontal side having a curvature, the middle non-horizontal side between the middle top and the middle bottom,

wherein the middle top and the overhang bottom are co-planar,

wherein the middle bottom width is greater than the middle top width such that the lead middle includes the middle non-horizontal side curving from the middle top to the middle bottom; and

(c) a lead lower having: a lead ridge, a lower bottom and a lower non-horizontal side between the lead ridge and the lower bottom,

wherein the lead ridge and the middle bottom are co-planar,

wherein the lead ridge width is greater than the lower bottom width such that the lead lower includes the lower non-horizontal side tapering from the lead ridge to the lower bottom, and

wherein the lead ridge width is greater than the overhang bottom width; ~~a lead overhang protruding from a lead non-horizontal side and a lead ridge protruding from the lead non-horizontal side;~~

mounting an integrated circuit over the package paddle;

connecting an electrical connector to the lead and the integrated circuit; and

forming an encapsulation over the integrated circuit, the lead, and the package paddle, the encapsulation under the lead overhang and exposing ~~a lead~~the lower non-horizontal side of the lead lower.

~~7.~~6. The method as claimed in claim ~~6~~5, further comprising: ~~wherein forming the lead includes~~ forming ~~the~~ a lead top ~~having a lead top~~ conductive layer directly on a portion of ~~the~~a ~~lead~~ overhang non-horizontal side of the lead overhang.

~~8.~~7. The method as claimed in claim ~~6~~5, further comprising ~~wherein~~: forming ~~the lead includes forming~~ a lead top conductive layer directly on~~having~~ the lead overhang.

~~9.~~8. The method as claimed in claim ~~6~~7 wherein forming the ~~lead includes forming a~~ lead top conductive layer includes forming the lead top conductive layer having a width smaller than a width of the middle bottom of the lead middle~~a lead body~~.

~~10.~~9. The method as claimed in claim ~~6~~7 wherein forming the ~~lead includes forming a~~ lead top conductive layer includes forming the lead top conductive layer having a width larger than a width of the middle top of the~~a~~ lead ~~body~~middle.

~~11.~~10. An integrated circuit packaging system comprising:

a package paddle;

a lead adjacent the package paddle, the lead having:

(a) a lead overhang protruding from the lead, the lead overhang having:

an overhang top, an overhang bottom, and an overhang non-horizontal side between the overhang top and the overhang bottom,

wherein the overhang bottom width is greater than the overhang top width such that the lead overhang includes the overhang non-horizontal side tapering from the overhang top to the overhang bottom;

(b) a lead middle having:

a middle top, a middle bottom, and a middle non-horizontal side having a curvature, the middle non-horizontal side between the middle top and the middle bottom,

wherein the middle top and the overhang bottom are co-planar,

wherein the middle bottom width is greater than the middle top width such that the lead middle includes the middle non-horizontal side curving from the middle top, to the middle bottom; and

(c) a lead lower having:

a lead ridge, a lower bottom, and a lower non-horizontal side between the lead ridge and the lower bottom,

wherein the lead ridge and the middle bottom are co-planar,

wherein the lead ridge width is greater than the lower bottom width such that the lead lower includes the lower non-horizontal side tapering from the lead ridge to the lower bottom, and

wherein the lead ridge width is greater than the overhang bottom width;

~~a lead overhang protruding from a lead non horizontal side and a lead ridge protruding from the lead non horizontal side;~~

an integrated circuit over the package paddle;

an electrical connector connected to the lead and the integrated circuit; and

an encapsulation over the integrated circuit, the lead, and the package paddle, the encapsulation under the lead overhang.

~~12.~~11. The system as claimed in claim 1~~1~~0 wherein the package paddle includes a paddle overhang bottom side of a paddle overhang coplanar with ~~a~~the lead overhang bottom ~~side~~ of the lead overhang.

~~13.~~12. The system as claimed in claim 1~~1~~0 wherein the package paddle includes a paddle ridge below a paddle overhang.

~~14. The system as claimed in claim 11 wherein the lead includes a lead top conductive layer directly on the lead overhang.~~

~~15. The system as claimed in claim 11 wherein the lead includes a lead body top side and the lead overhang at the lead body top side.~~

13. ~~16~~The system as claimed in claim 1~~1~~0 wherein the encapsulation exposes ~~a~~the ~~lead~~ lower non-horizontal side of the lead lower.

~~17~~14. The system as claimed in claim 1~~6~~3, further comprising: ~~wherein the lead includes~~ a lead top conductive layer directly on a portion of ~~a lead~~ the overhang non-horizontal side of the lead overhang.

~~18~~. 15. The system as claimed in claim 1~~6~~3, further comprising: ~~wherein the lead includes~~ a lead top conductive layer ~~having~~directly on the lead overhang.

~~19~~16. The system as claimed in claim 1~~6~~5 wherein the ~~lead includes a~~ lead top conductive layer ~~having~~has a width that is smaller than a width of ~~a lead body~~ the middle bottom of the lead middle.

~~20~~17.The system as claimed in claim 1~~6~~5 wherein the ~~lead~~ lead top conductive layer has a width that is larger than a width of the middle top of the lead middle ~~includes a lead top conductive layer having a width larger than a width of a lead body~~.