CLAIMS

1. A printed circuit board (PCB) including:

a) an upper surface having one or more ~~electrical~~ PCB terminals thereon, ~~said~~each PCB terminal adapted for connection to one of one or more ~~corresponding~~ components at a component terminal of each of the one or more ~~electrical~~ components;~~, and~~

b) ~~further including~~ one or more platforms ~~fabricated thereon, said platforms being~~ located adjacent to corresponding component terminals, ~~said~~

(i) wherein each platform~~s being adapted to~~ support~~s~~ ~~an~~ one of the one or more ~~electrical~~ component~~s thereupon, such that~~;

(ii) wherein a portion of ~~the~~ each component overhangs ~~said~~a corresponding platform;~~ above said corresponding PCB terminal.2. A PCB as claimed in claim 1~~

c) ~~wherein said PCB includes~~ a substrate;~~ and~~

d) a masking layer~~ formed thereon~~, ~~said~~the platforms being fabricated on ~~said~~the masking layer, wherein the masking layer has a greater surface area than the platforms; and

e) a solder layer for each component, each component resting on a corresponding platform,

(i) wherein the solder layer is between:

(1) an underside of the overhang portion of the component includes a component terminal of the component; and

(2) a corresponding PCB terminal; and

(iii) wherein an air gap is disposed between the solder layer and the platform adjacent the solder layer.

~~3. A PCB as claimed in claim 1 or 2 wherein the underside of the overhang portion has a corresponding electrical terminal to said PCB terminal.~~

~~4. A PCB as claimed in claim 1 including one or more components attached to the PCB, via location on respective platform(s), such that the platforms are sandwiched between said component and said PCB, and a solder layer is provided between underside of the overhang and the PCB surface, so connecting the PCB terminal and corresponding component terminal.~~

2. The PCB of claim 1, wherein each platform has only one component on the platform.

3. The PCB of claim 2, wherein each platform is in the shape of a planar rectangular layer with a thickness up to 1mm.

4. The PCB of claim 3,

wherein the masking layer includes three rectangular masking layers;

wherein the first and second rectangular masking layers are located along two opposite ends of the PCB and cover the full length of the PCB;

wherein the third rectangular masking layer is located across the middle of the PCB and connects the first and rectangular masking layers; and

wherein the PCB has a single platform located on top of the third masking layer.

5. A printed circuit board (PCB) having one or more ~~electrical~~ PCB terminals located on an upper surface ~~thereof~~, ~~and~~ the PCB including:

a) one or more ~~component~~ platforms ~~fabricated thereon~~, ~~said~~the platforms being located adjacent to the one or more ~~electrical~~ PCB terminals;~~, and further including~~

b) one or more components located on the ~~said corresponding~~ platforms such that a portion of ~~said~~the component overhangs ~~said~~the platform;~~, and~~

(i) wherein ~~the~~ an underside of the overhang portion of the component includes a~~n~~ component e~~lectrical~~ terminal~~,~~; and

(ii) wherein the the overhang portion of the component is positioned substantially above ~~said~~the corresponding PCB ~~electrical~~ terminal;~~.~~

~~6. A PCB as claimed in claim 5 including~~

c) a solder layer provided between the underside of the overhang portion of the component and the PCB ~~surface~~terminal, the solder layer~~, so~~ connecting the PCB terminal and corresponding component terminal;~~.7. A PCB as claimed in claim 5 or 6 including comprises~~

d) a substrate; and

e) a masking layer ~~layered thereon~~ on the substrate,

(i) wherein ~~said~~the platforms ~~being~~ are provided on ~~said~~the masking layer,

(ii) wherein the masking layer has a greater surface area than the platforms; and

(iii) wherein an air gap is disposed between the solder layer and the platform adjacent the solder layer.

~~8. A PCB as claimed in claims 5 to 7 wherein said platform is substantially flat and planar.~~

~~9. A PCB as claimed in any previous claim wherein said platform thickness is between 0 and 1mm.~~

6. The PCB of claim 5, wherein each platform has only one component on the platform.

7. The PCB of claim 6, wherein each platform is in the shape of a planar rectangular layer with a thickness up to 1mm.

8. The PCB of claim 7,

wherein the masking layer includes three rectangular masking layers;

wherein the first and second rectangular masking layers are located along two opposite ends of the PCB and cover the full length of the PCB;

wherein the third rectangular masking layer is located across the middle of the PCB and connects the first and rectangular masking layers; and

wherein the PCB has a single platform located on top of the third masking layer.

~~10~~9. A method of fabricating a printed circuit board (PCB) comprising:

a) providing a substrate having one or more PCB ~~electrical~~ terminals fabricated on the upper surface thereof adapted for ~~electrical~~ connection to corresponding component terminals on one or more components;

b) fabricating one or more platforms onto ~~said~~the PCB upper surface, adjacent to the one or more PCB ~~electrical~~ terminals;

c) adding the one or more components onto corresponding platforms, such that a portion of ~~said~~each component overhangs ~~said~~the platform and rests above a corresponding PCB ~~electrical~~ terminal, ~~said~~the overhang portion including a component ~~electrical~~ terminal on its underside, wherein each platform has only one component connected; and

d) forming a solder or weld connection between ~~said~~each PCB ~~electrical~~ terminal and corresponding component terminal, wherein a gap between the solder or weld connection and the platform is filled with air.

~~11. A method as claimed in claim where in step c) the component terminal lies substantially above said corresponding PCB terminal.~~