CLAIMS:

1. A method ~~of fabricating a interconnect waveguide~~ comprising:

providing a ceramic powder and polymer binder slurry,

forming ~~the~~ a interconnect waveguide from the slurry, and

connecting a plurality of IC components with the formed interconnect waveguide on a PCB.

2. The method in claim 1 further comprising forming a film from the slurry.

3. The method in claim 2 further comprising curing the film.

4. The method in claim 3 further comprising punching the waveguide from the cured film.

5. The method in any of the preceding claims wherein the ceramic powder is Strontium Titanate or Titanium Dioxide and the polymer binder is Poly-Tetra-Fluoro-Ethylene, Poly-Styrene or Poly-Propylene.

6. A ~~interconnect waveguide~~ PCB produced according to the method of any one of the preceding claims.

7. ~~An~~A PCB comprising:

one or more interconnect waveguides comprising a ceramic powder and polymer binder composite, and

a plurality of IC components connected by the one or more interconnect waveguides.

8. The ~~interconnect waveguide~~ PCB in claim 7 wherein the dielectric constant of the composite is above 10 at between 1 to 10 GHz.

9. The ~~interconnect waveguide~~ PCB in claim 7 or 8 wherein the dielectric loss tangent of the composite is below 0.005 at between 1 to 10 GHz.

10. The ~~interconnect waveguide~~ PCB in any one of claims 7 to 9 wherein the ceramic powder is Strontium Titanate or Titanium Dioxide and the polymer binder is Poly-Tetra-Fluoro-Ethylene, Poly-Styrene or Poly-Propylene.

11. The ~~interconnect waveguide~~ PCB in claim 8 wherein the dielectric constant is in the range 50 to 300 at between 1 to 10 GHz.

12. The ~~interconnect waveguide~~ PCB in claim 9 wherein the dielectric loss tangent is below 0.001 at between 1 to 10 GHz.

~~13. A PCB comprising a plurality of IC components connected by one or more interconnect waveguides according to any one of the preceding claims.~~

~~14.~~13. The ~~interconnect waveguide~~ PCB in any one of claims 7 to 12 wherein the interconnect waveguide is in the shape of a narrow strip with multiple bends.

~~15.~~14. The ~~interconnect waveguide~~ PCB in any one of claims 7 to 12 wherein the interconnect waveguide is in a Z shape.