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Thank you for your interest in the services I offer. I hope this letter addresses any questions you may have.

I offer a complete Printed Circuit Board Design Service, including:

- ☞ Computer Drawn Schematics.
- ☞ Error free netlist PCB design.
- ☞ Single Sided, Double Sided, Multi-layered, PTH and SMD.
- ☞ Design revisions, down scaling, or upgrading artworks from obsolete software packages.
- ☞ Supply of prototype PCBs and components.
- ☞ Co-ordination with PCB manufactures / component suppliers.
- ☞ Technical Writing Service.

I have fifteen years experience designing PCBs, and have used several software different packages. However I now specialise in the PROTEL for WINDOWS packages. I currently use PROTEL 98 and 99SE for PCB design work.

I have a background in hardware design; both analogue and digital design; as well as software experience. A large amount of this involved facets of industrial measurement and control. I have designed PCBs for a wide range of fields, including: High End Audio; Low Level Signal Control; Stand-Alone Micro-Controllers; Automotive; High Density SMD Digital PCBs; RF Transmitters and Receivers; Home Automation, etc. I have designed everything from simple SS boards, to 6 layer high-density SMD boards. My customers tell me that I have a good mechanical aptitude that they find a real asset.

Security of designs is always a concern in the electronics field. To this end prefer not to become involved in actual hardware design, as this could constitute a conflict of interest. I will not discuss any other customer's work. I am however willing to advice / discuss matters directly pertaining to the PCB Design or process, and make recommendations pertaining to a particular PCB design. (E.g. source suitable components). Having a design background I always try to understand the design, and sometimes finding oversights / alternatives in designs. I also have the services of several very competent Electronic Design Engineers at my disposal, should a design service be required.

I have been closely involved with attaining ISO9001 accreditation for several companies, and have done a lot of research into the European CE Directives and the Aus/NZ C-tick. My PCBs are designed to comply with CE safety standards, and with IPC-D-275 PCB Design Standards. All PCBs are designed with minimising EMC radiation and susceptibility in mind.

I prefer to work on a flat hourly charge-out. I recognise that this requires a lot of trust from both parties, but I feel I am very fair, and usually charge less than time actually spent. However, if required, I will supply a full contract price, with conditions.

I am able to intervene at any stage of the design stage. However, to maintain the highest certainty in the final product, I prefer to draw my own schematics in Protel. Completed PCBs files are supplied in any format preferred: single, panelled, postscript, Gerber, film work, etc; or physical PCBs if wished. All completed designs are supplied with a comprehensive set of drawings and reports if required.

Please contact me if you have any further queries. I would be happy to discuss your requirements, and maybe show you samples of some of my work.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'M. W. Richardson', with a stylized flourish at the end.

M. W. Richardson. (Mike)

**COMPLETE PCB DESIGN CONSULTANCY SERVICE.**