

PCB Design

What can we offer to you

Fixed Quotation Based on a quotation. Fineline QPI gives you a quotation for making a PCB design based on the circuit diagram you supply. Very good option in case you have a fixed budget and a well described project or lay-out.

At Your Location Based on the number of hours worked. Fineline QPI comes to you and our PCB designers sit beside your developers so that they can work together to realise the optimum solution.

Fineline Design Center

Based on the number of hours worked. The Fineline QPI PCB design specialist works from the Fineline QPI PCB Design

One More Thing

Fineline QPI can also arrange the manufacturing and delivery of the printed circuit boards. Not just the Gerber files.

The Fineline PCB designers have access to extensive libraries with thousands of footprints and additional component information, all of which is IPC-7351 compliant. This helps to speed up the design process, reduce the chance of errors and, as such, results in a better

Overview of the PCB-Design programs in use

Fineline QPI can make the design in your preferred program. The Fineline QPI PCB Designers are trained using more PCB Design programs.

PCB-Design package		
Zuken Cadstar		
Cadence Allegro		
Cadence Orcad	•	
Mentor Graphics Pads XE-ARS Suite		
Mentor Graphics Expedition	•	
Mentor Graphics DX Designer		
Altium Designer	•	

quality product. The names of the components in the Fineline OPI library are such that an assembly company using the BoM (Bill of Materials) of the design can order the components directly. A specification overview is given for each component.

The Fineline QPI Advantage

- Fineline has many years of experience with PCB Design
- Fineline can make the design in the program of your choice
- Fineline can offer to do a specific task of the PCB Design only
- up to: take your idea sketch and turn it in a working PCB
- High quality standards, professional approach
- Professional archiving of your valuable design data

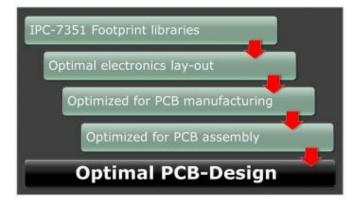
- Sound lay-out but also a sound design of the PCB
- Lay-out designs in Altium and other design programs at fixed cost
- Experience with cost effective simple designs
- Experience with complex HF and Mixed Signal designs
- Designs are according IPC rules, easy transfer to an EMS company
- In case preferred Fineline QPI can take care of the supply of the PCB

Fineline OPI

Fineline QPI has many years of experience in the field of the PCB design of the most diverse types of products. Fineline QPI PCB design specialists are not only experienced in using a wide range of PCB design software packages, they also have a lot of experience with the issues of EMC and Signal Integrity. They have a lot of know-how when it comes to production processes and the requirements that a design must satisfy for optimum manufacturability and ease of assembly. This is know-how that the designers use to guarantee you the quality that you're accustomed to from Fineline QPI. A Pre DfM check guarantees optimal producibility.

Good quality PCB designs are essential for realising reliable electronic circuits. Good footprints form the basis for this. The Fineline QPI PCB designer has access to the extensive Fineline libraries with components that are compliant with IPC-7351 Generic Requirements for Surface Mount Design.

All Fineline QPI PCB designers are trained to use the lay-out packages they work with and have a lot of experience with PCB design, but also with issues like EMC and SI.





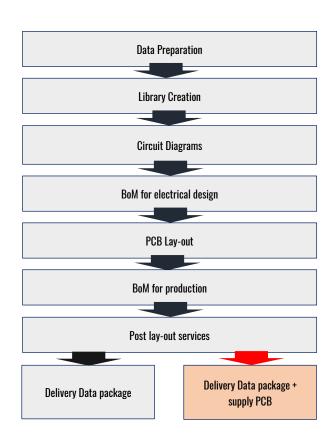
PCB Design

Latest techniques

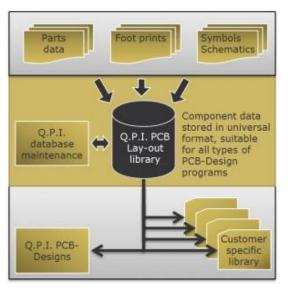
The construction of a printed circuit board and the way in which it is manufactured are essential for guaranteeing reliable electronic circuits. The Fineline QPI PCB designers are familiar with the latest PCB manufacturing techniques and production options, so that an extremely reliable product can be guaranteed. If there are very specific questions, the PCB designer can consult with Fineline's printed circuit board developers. And, of course, while designing the PCB, assembly aspects are taken into consideration such as the optimum component placement, the location and number of fiducials and the use of solder dams.

PCB Design Process Flow

To realize an idea into a ready PCB a number of process steps have to be taken. From the moment a sketch of the electrical design is available Fineline QPI can support the complete creation process of the PCB. If only for a part of the creation process support is needed, also in that case Fineline QPI can be your partner. As an example diagrams are designed and library is complete. In that case Fineline QPI can very efficiently make the lay-out in the PCB design package of your choice. Particular in this phase of the design process optimal lay-out of ground layers and signal lines/layers can make the difference between an average design and an excellent design. At this stage also the design should be optimized for manufacturing, at this stage you can benefit fully of the manufacturing PCB knowledge of the Fineline QPI PCB Designer.



The component library



The IPC-7351 compliant component libraries that were developed by Fineline QPI are based on a centralised Fineline QPI parts management system that connects the schematic, the PCB design, the BoM and the logistics. The electrical symbols are defined in accordance with the IEC 60617 standard. Using this library, containing more than 25.000 components has simplified the communications between all those involved from the design phase right up to and including the production phase. This also applies to the organisation of customer support for a product. The library is constantly fed with new parts information. Contact Fineline QPI for further information.

Name	Value	Г
1-0 Description	Aluminum Electrolytic Capacitors- FP	Г
1-1 Man	PAN	Г
1-2 Ordering Code Manufacturer	EEEFP1H221AP	
1-4 Manufacturer code case	G10	
1-5 Size LxWTxH or DxH	D10.0x12.00	
1-6 Pin Mapping	PN	
1-7 IPC Package	CAPAE1030X1020X430Y210C930N	
1-7-1 Alternate Package Name		Г
1-8 Build from	Footprint Expert	Г
2-1-0 Type (cap)	CAPP	Г
2-1-1 Value (cap)	2200	Г
2-1-2 Voltage (cap)	50V0	
2-1-3 Tolerance (cap)	20T	
2-1-4 Dielectricum (cap)	ALU	г
2-1-5 Case (cap)	ELCAP-G10	
2-1-6 Series (cap)	FP	Г
2-1-7 Optional (cap)		г
2-1-8 Alt Value (cap)	220uF	г
2-1-9 Alt Voltage (cap)	50V	г
2-1-9-1 Alt Tolerance (cap)	20%	Г
3-1 Symbol name	CAPP_02_01_A	
3-2 Hetero name		Г
4-0 Initial Date	2013-01-15	Г
4-1 Lead free (PBF) (RoHs)	PBF RoHs	Г
4-2 No Of Electrical Pins	2	
4-3 Stem	c	г