

CML QUALITY POLICY - BEYOND INDUSTRY STANDARDS



INTRODUCTION

Basically all PCB suppliers/manufacturers have individual quality policies based on internal standards. These policies dictate how the corporate culture of quality is formed. There are differences in how these policies are interpreted and in what way they are implemented into daily life across the entire organization. CML believes that high quality standards drive us to continuously improve current processes as well as cost optimization.

A quality policy is just the starting point in implementing a well-defined quality system. In accordance with ISO 9001, all business development processes must be accurately defined and the quality of the processes measured.

A Key process Performance Indicator “KPI” must be implemented and tracked. For processes which cannot be assessed with KPI, the performance is unknown. Therefore, the question occurs, what value does such a process add?

At first, our process landscape should be lean. It has to be focused on securing and improving the quality of our products, whilst taking our customer’s needs into account.

The employees inherit a crucial role in producing and ensuring the quality of all products.

CORPORATE POLICY OF CML

OUR MISSION



Our mission describes why we exist besides making money and what we are deeply passionate about. We are in the ‘connection business’ because the products and solutions we offer to our customers help create connections within their products.

Reliability of these connections is absolutely crucial and providing more reliable connections than anyone else is our competitive advantage. The concept of ‘Reliable Connections’ is not limited to our products and solutions but extends to the human level as well.

We care about building reliable connections with each other, with our customers and suppliers and with society at large. We passionately care about making the world a more connected place for everyone’s benefit.

OUR GUIDELINES

- Our products abide by the highest quality standards in order to meet the needs and demands of our customers.
- Every staff member contributes to achieving our quality objectives. It is therefore the responsibility of every employee to work to the best of his ability, thereby ensuring quality products. Anyone who recognizes a quality or an environmental risk must consult with their superiors immediately.
- Suggestions for process improvements are encouraged.
- The implementation of our quality objectives is continuously monitored and revised when necessary.
- The skills and commitment of individual employees are the greatest assets of CML. The quality of our work and our global mindset contributes to our success. Motivated employees coupled with an optimal working environment are essential for the quality of our products and services.
- Error prevention takes priority over troubleshooting: therefore a “zero-defect strategy” is implemented.
- Even though the quality of our products is highly dependent on the quality of our suppliers and materials, we control the quality in the partner production sites and even have our own staff on-site to aid with implementation.
- The needs of our customers are the focus of our operations. We are flexible, react quickly and provide the best possible service.
- From the implementation of customer-specific needs to solving problems with new products, we are the contact window. For these challenging tasks, we provide our employees with an innovative climate and appropriate premises.
- We maintain long-term partnerships with our customers and suppliers based on fairness.
- We operate on a global scale and have business partners all over the world
- We are attempting to align economic concerns with ecological concerns, in order to meet the needs of the company and simultaneously not compromise the development of generations to come. Ergo we focus on sustainable development.
- We act in accordance with our corporate values. Of course, all our actions comply with the relevant laws and regulations.

OUR VALUES

Trust

Trust is at the core of who we are and what we do. It means that we do our utmost to be trustworthy through deep care for each individual as well as through being highly competent.

Teamwork

To work as ONE TEAM across our organization is essential for our success. This means for us that we engage in productive and positive teamwork and realize the importance to be connected and efficient at the same time, even if we are in disagreement.

Responsibility

To sustain successful growth, everyone in the organization needs to continuously improve. This means that everyone needs to embrace challenges and proactively take responsibility and ownership for their performance and development.

Respect

As a global player, we work with a large degree of diversity. Respect means for us that we appreciate and even celebrate differences. Even in emotional situations, we will never forget to remain respectful of the other party.

CML GROUP ORGANIZATION

CML has a KPI management system in place which includes all business processes and challenges as well as the whole management team and we invite all employees world-wide to participate.

This KPI management system drives all activities regarding our own Internal Quality System, our Supplier Management System and our Business Relationship Management.

Based on more than 10 years of business experience with PCB manufacturers in China, we are familiar with the importance of personal presence in related manufacturing sites. The main task here is “proactivity”.

CML’s philosophy is to build strong and lasting relationships with our partners and share our experience and knowledge regarding quality systems and PCB manufacturing management systems.

We can improve our overall performance by sharing our knowledge with our production partners. This is a mutually beneficial strategy. By adopting quality policies, our production partners can extend their capabilities to meet automotive quality standards. Concordantly, CML’s capabilities and quality of products increase.

Therefore our CML China team, consisting of quality engineers, a technical engineering team, and a quality assurance team, work closely with our partners to ensure a reliable supply chain.

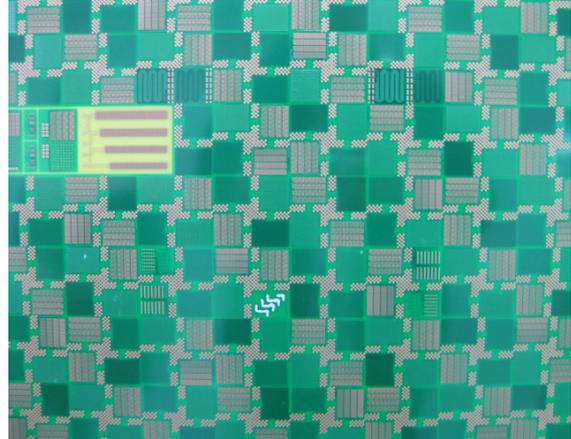
QA & TECHNICAL STRUCTURE ASIA

The quality assurance at CML is implemented across all company branches and also manufacturers.

- CML only works with qualified manufacturing sites. The qualification process is part of our Supplier Management System.
- All of our factories are certified in accordance with ISO 9 001 / ISO 14 001 / TS 16949.
- CML performs random internal audits by using an internal ISO TS 16949 audit questionnaire.
- A reliable project evaluation of relevant documents and customer specifications with our factory capabilities ensures the base foundation for high product quality and reliability.
- CML ensures that all relevant issues are identified and clarified in advance, and finally confirmed with our customer before continuing with production.
- Our CML production site engineers support factories before the project is released into production.
- A systematic initial sample check in partner factories is comprised of finished PCBs and related supporting documents.
- Our on-site engineers review the quality results on a monthly basis.
- Based on our KPI targets, we hold quarterly management meetings, in order to review the results regarding the confirmed quality targets and drive the improvement progress.

PROCESS RELIABILITY / CAPABILITY BENCHMARK

- CML joined the IPC PCQR² database and runs specific IPC test boards in our factories.



IPC Test Board

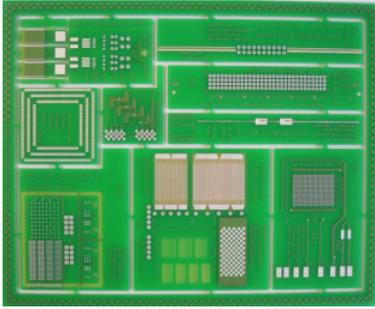
- The test boards have to be produced in accordance with defined conditions and are tested and analyzed in an IPC lab in the USA. Each IPC PCQR subscriber receives their own detailed test batch report as well as an individual material and production line performance result and a detailed benchmark against all other IPC PCQR subscribers.
- The benchmark report possessed by CML has important information regarding process strengths and weaknesses which contributes to our continuous improvement program.
- A major goal is to improve our product reliability with systematic methods on standardized test boards.

CML RELIABILITY TEST LABORATORY

- How does one become an expert on PCB manufacturing processes and PCB materials?
- In order to fulfill higher automotive expectations, we set up our own reliability test lab in China, to run our own different standard reliability test programs.
- In addition to that, CML has the capability to run solid material investigations by simulating PCB lifecycles under different environmental conditions.



CML also creates its own standard test panel designs which are used for our reliability test cycles.



The reliability cycle tests give us many sufficient and representative results regarding manufacturing sites capability as well as base material reliability performances. All these results and experiences are part of our technical support for all of our customers.

THE BOTTOM LINE

Quality policy is much more than a slogan or an ISO certificate. It's a top down approach throughout the entire company's organization which includes every single employee and process. Our vision and values guide us to our goal.

Beyond the process landscape, CML works pro-actively with its partners. The global CML QA organization ensures a sustainable supply chain quality. Our on-site engineers support our manufacturing sites in case of a new project development as well as the running business itself. CML's supplier management ensures stable and reliable partners and that CML will be fit for further customer needs, such as additional capacity or different PCB technologies. Our KPI management indicates at an early stage, if we are moving towards our set goals. We are benchmarking our manufacturing sites as an IPC PCQR subscriber to continuously verify our production site capability and quality performance. In addition, CML uses its own standard test pattern for systematic evaluations of new base materials, new production equipment and to internally qualify potential new suppliers. Our own CML reliability lab enables us to perform detailed material studies.