



Micron Quality Manual



MICRON QUALITY MANUAL

“World-class quality is paramount to our customers and a core expectation for our team. From maintaining quality certifications to stringent standards in our products and processes, I expect every team member to be passionate about doing things well, the right way.”

Sanjay Mehrotra

President and Chief Executive Officer

Table of contents

1	Organization identity	5
1.1	Vision	5
1.2	Mission	5
1.3	Values	5
1.4	Quality policy	5
1.4.1	Quality vision	5
1.4.2	Quality mission	5
1.5	The foundations of global quality	6
2	Company overview	6
2.1	Products and services	6
2.2	Company footprint	8
2.3	Commitment to corporate responsibility	8
2.4	Product compliance	9
2.5	Business continuity	9
2.6	Micron patents	9
3	Customer focus	10
3.1	Customer trust	10
3.2	Commitment to customer satisfaction	10
3.3	Customer requirements	10
3.4	Customer support	10
4	Quality overview	12
4.1	Process approach	12
4.2	Quality mindset	12
4.3	Shift left principle	13
4.4	Management and team member responsibilities	13
4.5	Traceability	13
5	Quality Management System (QMS) framework	14
5.1	Context of the Organization (CoO)	14
5.1.1	Risk-based thinking	14
5.2	Scope of QMS	15
5.3	ISO/IATF certification	16
5.4	Quality audits	16
5.4.1	Internal audit	16
5.4.2	External (certification, customer) audits	17
5.4.3	Second-party audits (subcon/supplier)	17
5.5	Product safety	18
5.6	QMS hierarchy	19
5.7	Overview of QMS map	19
5.8	Micron QMS processes	20

Table of contents

Figures

Figure 1-1	
Foundations of global quality	6
Figure 2-1	
Company footprint	8
Figure 5-1	
Context of the Organization	14
Figure 5-2	
Micron QMS Plan Do Check Act (PDCA) infographic	15
Figure 5-3	
Internal audit program	17
Figure 5-4	
Micron QMS documentation hierarchy	19
Figure 5-5	
QMS map	19

Tables

Table 1-1	
Micron values	5

At Micron, we know that today’s world-class quality performance is tomorrow’s average. That is why we are on a continuous journey to improve Micron’s quality management system. Our passion and mindset are to achieve world-class quality in all that we do.

1 Organization identity

1.1 Vision

Transforming how the world uses information to enrich life *for all*.

1.2 Mission

Be a global leader in memory and storage solutions.

1.3 Values

<p>People</p> <p>We care about each other.</p>	<p>Innovation</p> <p>We develop solutions that shape the world’s future.</p>	<p>Tenacity</p> <p>Nothing shakes our resolve.</p>	<p>Collaboration</p> <p>We work as one team.</p>	<p>Customer focus</p> <p>We win by knowing our customers.</p>
---	---	---	---	--

Table 1-1: Micron values

1.4 Quality policy

Micron Technology provides best-in-class products and services that meet or exceed customer, statutory and regulatory requirements.

Our team members are committed to achieving total quality excellence, building on Micron’s three quality foundations: customer-focused quality, continuous internal quality improvements and igniting a passion for quality.

1.4.1 Quality vision

Making Micron the customer’s first choice for quality.

1.4.2 Quality mission

Lead and inspire world-class quality through effective and efficient quality systems and services that deliver industry-leading products of choice.

1.5 The foundations of global quality

Quality at Micron means the commitment to provide customers with best-in-class products, services and support that is continuously being enhanced.

Quality objectives at Micron are built on these three foundations from the quality policy:

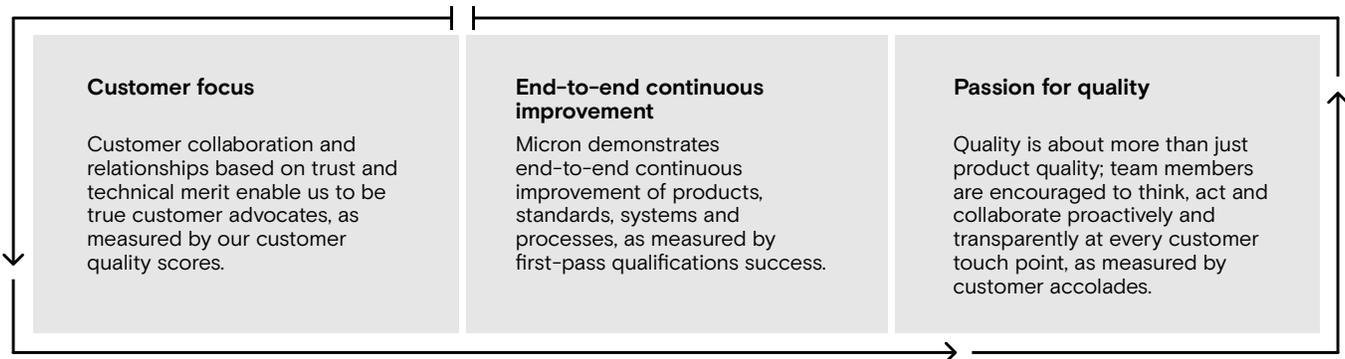


Figure 1-1 : Foundations of global quality

2 Company Overview

2.1 Products and services

Our rich portfolio of products and solutions addresses critical needs in many different markets. Our approach to product development allows us to maintain laser focus on products designed for specific market needs. In addition, we run and manage our own supply chain, providing greater flexibility and efficiency to deliver these products to a wide range of markets. Our legacy of partnership and collaboration gives us unique insight and the ability to address our customers' needs.

As the leader in innovative memory solutions, Micron is helping the world make sense of data by delivering technology that is transforming how the world uses information to enrich life *for all*. Through our global brands — Micron and Crucial — we offer the industry's broadest portfolio. We are the only company manufacturing today's major memory and storage technologies: DRAM, NAND, and NOR technology.

In DRAM products, Micron is leading the industry in new technologies leveraging our 1-alpha and 1-beta nanometer process nodes. This includes top quality low power (LPDDR5) and high bandwidth (DDR5, DDR4) memory products that serve mobile, datacenter, and automotive applications. Micron's DRAM portfolio also includes GDDR6, GDDR6X, and HBM memory that enable the highest speed customer applications and usage needs.

In flash memory, Micron leads the industry in technology transitions to higher layer counts and capacity. Micron also leads the industry in 4-bits per cell NAND, complemented by our innovative CMOS under array technology. We shipped the world's smallest 1 Tb 3D NAND die. We delivered the first SSDs to market based on QLC NAND. And our innovative CMOS under array (CUA) NAND architecture enables higher capacity in smaller spaces.



MICRON QUALITY MANUAL

“Quality is determined at the intersection of development and manufacturing. Deep collaboration with our customers is the central tenet of our philosophy. By understanding their needs, we can then align our development, manufacturing and quality teams’ efforts to provide products that exceed our customers’ expectations.”

Manish Bhatia

EVP, Global Operations

2.2 Company footprint

Our global network of manufacturing, technology and business centers of excellence plays a key role in our strength. Our global footprint not only allows us to benefit from scale while streamlining processes and operations, but it also brings together some of the world’s brightest talent to work on our most advanced

memory technologies. We help drive our customers’ innovation and success by being where our customers need us. Through our globally distributed network of supply chain, operations sales offices and customer labs, we deliver comprehensive collaboration, support and quality throughout the product life cycle.

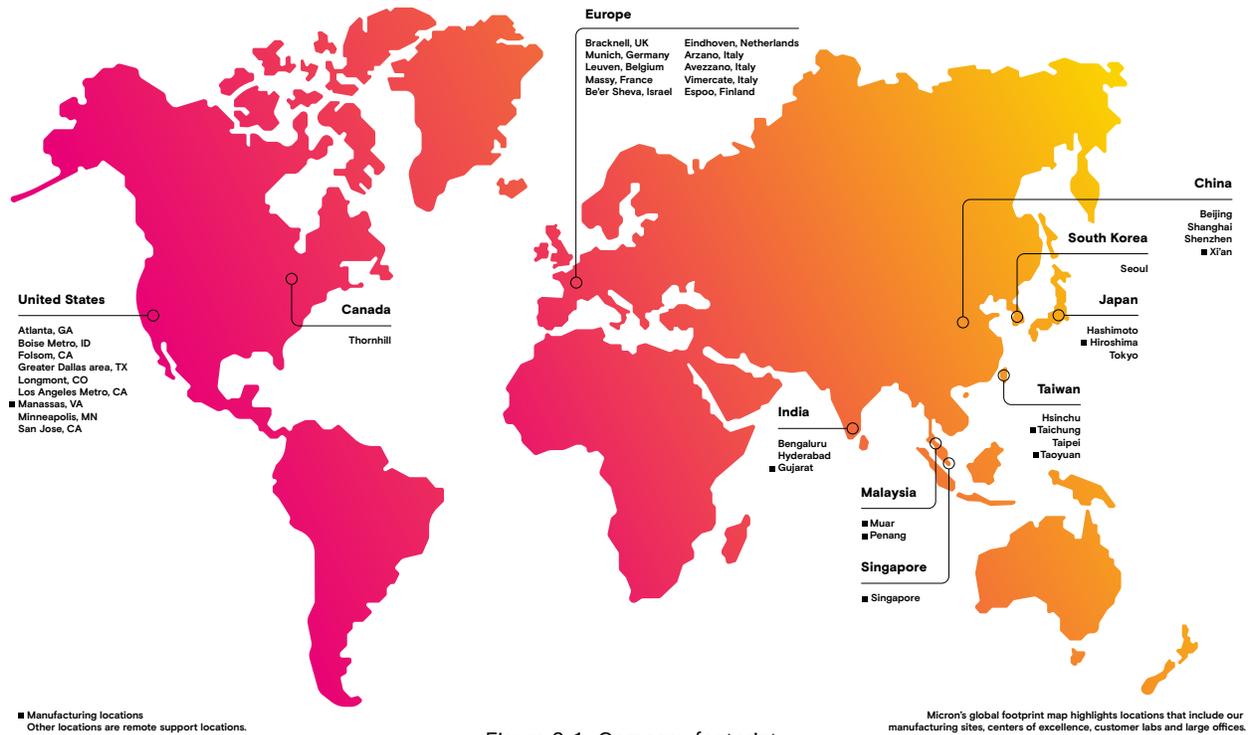


Figure 2-1 : Company footprint

2.3 Commitment to corporate responsibility

The quality of Micron’s interactions with and reputation among our stakeholders, including our team members, customers, investors, communities, governments, and suppliers, is just as important as the quality of our products to the achievement of our vision and mission. Our day-to-day operations would not be possible without Micron team members’ commitment to conducting business with uncompromising integrity and professionalism. The company takes a proactive approach to environmental stewardship; occupational health, safety and team member well-being; a diverse and inclusive culture; and high-quality supply chain and product standards.

The behavior of individual team members significantly affects Micron’s success. All team members are expected to know and follow Micron’s Code of Business Conduct and Ethics and the basic legal concepts relevant to their roles. All team members earn and maintain their certifications on Micron’s policies through compliance training courses that emphasize the Code of Conduct.

Team members also have 24/7 access to a Compliance Hotline, which is an anonymous option managed by a contracted third party, where they can report a concern or ask a question clarifying the Code of Conduct.

Micron’s commitment to our people and the global communities that we are part of is an essential part of operating with integrity:

- We cultivate a diverse and inclusive culture, which continues to attract and retain the best and the brightest. We believe our best innovations spring from our team members’ diverse experiences, perspectives and backgrounds.
- We transform the communities where our team members live and work through our philanthropy and people, supported by the Micron Gives program, our nonprofit foundation for giving to foster good. Our grants, programs and volunteers focus on promoting science and engineering education and addressing basic human needs.
- Finally, our operations, sourcing practices and products have a significant effect on people, our planet and our customers’ sustainability performance. We consistently work to improve the impact of our supply chains, operations and products in the areas of human rights, economic well-being, climate change, water and chemicals management, energy efficiency, recycling and more. This includes allocating about \$1 billion in capital expenditures by 2028 to improve the environmental performance of our operations.

To download Micron’s sustainability report, refer to this [link](#).

To download Micron’s diversity, equality, and inclusion report, refer to this [link](#).

2.4 Product compliance

Adherence to statutory and regulatory requirements ensures that Micron products can be sold in global markets. Micron is committed to compliance with the relevant and applicable laws and regulations in each country into which Micron delivers products. Micron products are designed and tested to meet applicable worldwide standards for electromagnetic compatibility, material compliance and product safety when used for their intended purpose. Micron’s product documentation includes all applicable conformance marks. Micron maintains necessary documentation regarding conformance marks, which is available on request. In addition, Micron requires all suppliers to adhere to applicable statutory and

regulatory requirements and provide documentation demonstrating conformance. Requirements and processes for demonstrating conformance are detailed in Micron’s product content specification and Micron’s supplier requirements standard.

To download Micron’s product content specification, refer to this [link](#).

To download Micron’s supplier requirements standard, refer to this [link](#).

2.5 Business continuity

To recover adequately from business disruptions and ensure restoration of critical processes, Micron has developed and maintains business continuity plans and actively pursues the rapid recovery of operations. Disruptions to operations are inherent in our business activities and, if not addressed in a timely and organized manner, can have serious repercussions to Micron’s reputation, operations, finances and customer satisfaction.

To access the Micron business continuity information, refer to this [link](#).

2.6 Micron patents

Micron has driven some of the world’s most exciting innovations. It all started in 1978 as a four-person semiconductor design company in Boise, Idaho. We broke ground on our first fabrication plant by 1980 and introduced the world’s smallest 256K DRAM just a few years later. Through our journey of industry firsts and technology leadership, we have earned our status as a recognized global leader in memory and storage solutions. Along the way, Micron has contributed to more than 55,500 patents and we continue to drive technology innovation that is transforming how the world uses information to enrich life *for all*.

3 Customer focus

3.1 Customer trust

At Micron, we realize that addressing the challenges of today’s digital landscape requires steadfast commitment to protecting the trust relationship we have with our customers. We face the unpredictability and the constant threat to cybersecurity by leveraging the industry standard NIST (National Institute of Standards and Technology) Cybersecurity framework; ensuring our workforce is trained and ready for any kind of disruption. We provide transparency about our privacy practices and ensure our customers understand the choices they have regarding their privacy rights and personal information.

To access the Micron Trust Center, refer to this [link](#).

3.2 Commitment to customer satisfaction

Our future is built on continuous innovation and continuous improvement of our processes, products and services for more efficient day-to-day operations.

For Micron, quality is as important as our ability to innovate. We ensure that Micron is recognized as a sought-after supplier, renowned for the quality of our memory products and services. Our overall quality management system (QMS) confirms that we have organized processes that undergo continuous improvement to meet our customers’ agreed upon requirements. We take a proactive approach to high-quality product standards, and our award-winning efforts have been recognized internationally.

3.3 Customer requirements

Micron is focused on customer requirements and providing traceability of those agreed-upon requirements. Requirements are parsed and routed to a specific owner for defining, capturing, engineering, managing and leveraging requirements. This allows us to understand each product in terms of evolving customer requirements, enabling us to build the voice of the customer directly into our product life-cycle and leading to requirements-driven design for memory components and systems and other critical quality engineering initiatives. The scope of customer requirements includes technical, commercial, product and manufacturing requirements, among others.

3.4 Customer support

Micron has a robust global post-sales support network that provides timely, high-quality customer support. Our Customer Quality Experience and Field Applications Engineering teams are agile product-mapped teams with deep technical expertise across the company’s robust product portfolio. Their objectives are to:

- Consistently be the customer’s first choice
- Surpass quality expectations
- Use Micron’s world-class quality systems
- Deliver an exceptional customer quality experience
- Perform VOC management (Voice of Customer)
- Conduct the customer audit



MICRON QUALITY MANUAL

“A quality mindset is everyone’s responsibility. Best-In-Class quality products require strong connectivity through quality management processes beginning at product concept, design, manufacturing, and post-sales support, effectively connecting each step, function, and team member. This end-to-end approach provides a world class customer experience, upholding and strengthening Micron’s brand.”

Hiro Fukuto

Corporate Vice President, Global Quality

4 Quality overview

4.1 Process approach

All companies must move information from customers, suppliers, key stakeholders and interested parties into the company so it can be digested and transformed. The transformation is not just into the products, services and support that companies provide. It is transformed into financial reports, performance reviews, job descriptions, maintenance requests, charity information, legal briefs and the list goes on. Running a world-class business means that you need world-class business processes.

Micron knows how critical business processes are to employee, customer, stakeholder and shareholder success. At Micron, our process approach goes beyond ensuring the right information gets to the right people at the right time. We know that processes run as an interconnected system and must be properly and continually described, managed and improved. In Micron, effective business process management includes:

- Identifying, understanding and managing interrelated processes as a system
- Defining success criteria for the process inputs and outputs
- Monitoring performance metrics against expected outcomes
- Ensuring that processes are adequately resourced and managed
- Examining the health of our processes through periodic process reviews and process maturity assessments
- Continually improving and re-engineering our processes through workshops and forums to share best practices and enable process owner interaction

Through these efforts, we can create value for our customers, ensure the quality of the information that moves throughout the company, and deliver more effective and efficient results aligned to company objectives.

4.2 Quality mindset

Quality mindset is a core requirement for all Micron team members. A good quality mindset means that our team members' beliefs and behaviors are organized around the principles of defect and variation elimination. This mindset guides how we make decisions because we know that the decisions our team members make eventually affect Micron's goods and services and the people who use them. The goal is a continual quality mindset journey with an emphasis on the thoughts, behaviors and actions needed to meet the requirements of our most demanding customers. Micron's quality mindset is important to the company's success because:

- Micron's commitment to quality enables us to meet or exceed our customer, statutory and regulatory relevant/accepted requirements
- Quality is everyone's responsibility
- Our collective quality mindset, actions and behaviors protect Micron's brand

Micron has been using external sources to benchmark the company's quality culture since 2014. We use these data points to identify opportunities for improving our culture of quality and to compare our performance against that of other companies. Our performance on the survey demonstrates the continuous evolution and deepening of Micron's culture of quality and quality mindset.

4.3 Shift left principle

A cornerstone of Micron’s approach to quality is the shift left principle, a quality concept anchored in anticipation, prevention and early detection of issues or potential vulnerabilities. Shift left applies to all stages of development, design, manufacturing and testing, taking into account customer requirements as well as administrative and other support functions.

There are four degrees of shift left:

1. **Contain the issue:** react to an already occurring problem — a last line of defense to prevent escape to the customer
2. **Control the issue:** take steps to prevent a potential problem — find the problem when it happens
3. **Control the source:** put measures in place to prevent the source from causing any further problems — control input parameters to prevent problems from occurring
4. **Eliminate the source:** remove or design out the cause of the problem — ideal state is where problems are designed out

Every Micron team member aspires to have a proactive quality mindset and to do things right the first time. We reach out collaboratively to partner with each other and proactively find solutions, building in quality right from the beginning of our value chain. Each of us works to set the example of proactive quality on teams and across the company.

4.4 Management and team member responsibilities

At Micron, quality is every team member’s responsibility, from upper management to engineer, operators, technicians and nontechnical staff.

We understand that a good quality mindset means that our beliefs and behaviors are organized around the principles of defect and variation elimination, and this mindset drives how we make decisions. It is a responsibility taken seriously by every one of our core functions.

Micron designs, develops, manufactures and tests our products to exceed customer expectations. To do this, our systems and processes are designed to foster and promote proactive rather than reactive thinking and behaviors.

Our customers demand that we deliver high-quality products at a faster pace, which means doing things right as early as possible. Delivering quality at a fast pace starts early in the development lifecycle. To deliver quality products to manufacturing, we build sufficient margins into the process flow and test for

structural, electrical and reliability specifications. Our team, at every step of the design, development and manufacturing continuum, takes input from customers on prior nodes to incorporate fixes and solutions that lead to continuous improvement.

Meanwhile, our administrative and support teams work hard to ensure the best possible customer experience by providing our global teams with high-quality support and ensuring tasks like shipping labels, change notifications and materials planning are all done right the first time.

4.5 Traceability

To ensure our ability to quickly and efficiently analyze and contain quality events (internally identified or raised by a customer), it is critical that traceability is enabled throughout the manufacturing, logistics and qualification processes.

While this naturally applies to batch- and component-level traceability, the concept is extended to subcomponents and raw materials where feasible. Aspects of manufacturing where traceability is expected include the timing of key processing and activities, tooling used on the product in question, key personnel/operators involved in the operation, and subcomponent- and material-level details.

5 QMS framework

5.1 Context of the Organization (CoO)

Micron is committed to defining its position in the marketplace and understanding how relevant factors arising from legal, technological, social, economic, environmental, cultural and market issues influence the company’s ability to achieve the intended results of the quality management system (QMS).

These issues are addressed in the same fashion as opportunities and risks relative to our context, with the business plan being heavily oriented toward opportunity definition – markets, competitive factors

and product and technology response. Risks to these plans are further evaluated via structured activities.

At the site level, the site-specific CoO may be developed based on a review and understanding of the corporate CoO, combined with site-specific interested parties and local applicable statutory and regulatory requirements, to assess risks that could affect each site’s objectives, interested parties or products.

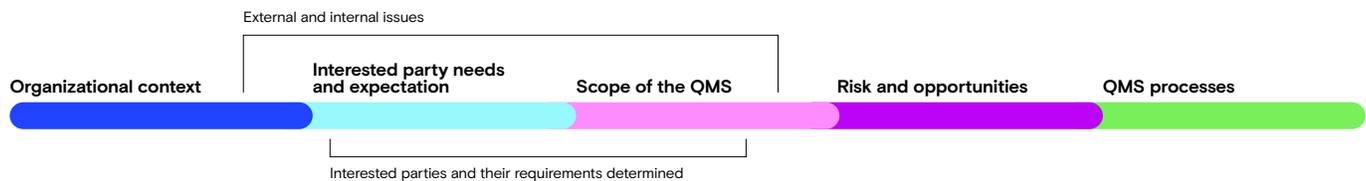


Figure 5-1 : Context of the Organization

5.1.1 Risk-based thinking

Micron promotes the use of risk-based thinking as required by the industry standard to ensure the suitability of the QMS to achieve its intended results.

The Micron risk-based thinking (RBT) program is a holistic approach to risk management that is aligned to the requirements and guidance of the international standards. The RBT program is designed to cultivate an organizational mindset, which will ensure that we plan and implement actions to address risks and opportunities to meet the needs and expectations of our interested parties and protect our company objectives. We believe that risk-based thinking is a continuous approach to the identification, mitigation and management of process risk, and that it is essential to the sustainability and continual improvement of our quality management system.

Micron’s Quality Management Office (QMO) has an assigned team that oversees the RBT program, which includes targeted training, a software tool for risk management and a dedicated program manager. The RBT training ensures that team members involved in QMS process management are aware of:

- The requirements and guidance of the international standards
- The levels at which we manage risk and opportunity at Micron
- The stages of our risk and opportunity management process
- The responsibilities for managing process risks and opportunities
- The software tool and its use and functionality

5.2 Scope of QMS

Micron’s quality management system was developed and is improving to meet customer, regulatory and statutory requirements, and is designed to continually improve the quality of products. To promote the benefits of QMS within the company and align with standards recognized by our customers, Micron’s QMS complies with the requirements of the ISO 9001:2015 and IATF 16949:2016 standards.

Micron subscribes to the ISO 9001 certification with the application of IATF16949 in compliance with the rules set forth by both the accreditation of the International Accreditation Forum (IAF) and the International Automotive Task Force (IATF).

Micron’s QMS scope includes:

- Design, manufacturing, testing, support and sale of semiconductor products
- The needs and requirements of the following interested parties:
 - Suppliers of technology, key materials and equipment
 - Customers and markets
 - Team members, including subcontractors and temporary team members

- Control of outsourced QMS processes or activities within those processes (such as manufacturing contractors, portions of development and others)
- Customer requirements, customer-specific requirements (CSRs) and product-specific requirements (PSRs), which have been communicated by the customer, managed by Micron as defined in Section 3.3 in this Quality Manual and stored in a central database
- Legal requirements pertaining to provision of products and services to Micron’s customers and the operation of manufacturing, delivery and supporting processes
- Policies from corporate responsibility-related processes that pertain to the QMS

The PDCA (plan, do, check, act) cycle is applied to all processes and the QMS as a whole. The figure below shows Micron’s PDCA cycle, based on ISO 9001:2015, clauses 4 to 10.

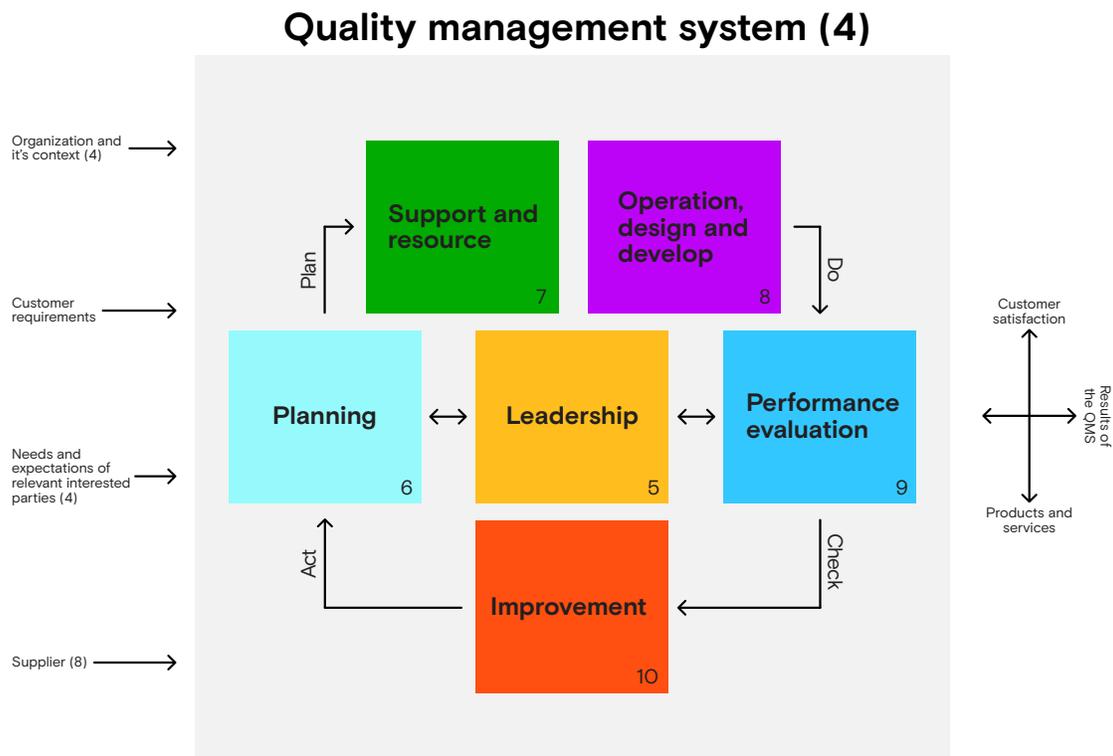


Figure 5-2 : Micron QMS PDCA Infographic

5.3 ISO/IATF certification

Our future is built on continuous innovation and our day-to-day operations are characterized by the continuous improvement of our processes, products and services. For Micron, quality is as important as our ability to innovate. We strive to ensure that Micron is recognized as a sought-after supplier renowned for the quality of our memory products.

Our overall QMS helps ensure that we have organized processes that undergo continuous improvement to meet our agreed-upon customers' requirements. We take a proactive approach to high-quality product standards, and our award-winning efforts have been recognized by the achievement of the ISO 9001:2015 and IATF 16949:2016 certifications.

Micron achieved the ISO 9001 certification in 1994 and has kept the QMS certified to the most recent available version of the standard. Micron has also achieved the QMS certification for the automotive standard industry, first with ISO/TS 16949 and more recently with IATF 16949:2016. Micron maintains an enterprise registration system that encourages central coordination and control across its sites and operations for 9001, as well as a corporate scheme certification for the automotive certification.

To download Micron QMS certificates, refer to [this link](#).

5.4 Quality audits

Micron considers internal and external quality audits an essential component for helping to ensure effective conformity of the QMS and continual improvement of QMS process operations and controls. The year 2020 and Covid19 brought many changes to Micron's audit program. A key learning was that the remote audit tool has value in the right circumstances. Micron worked on integrating remote audits into our core audit program as another tool to help maximize the value we get from a world class audit program.

5.4.1 Internal audit

To evaluate and continually improve the Micron QMS and products, periodic and unscheduled audits are performed to:

- Measure the effectiveness of the Micron QMS in meeting specified quality objectives and in enabling consistent, repeatable and reliable products and associated services across the Micron network

- Ensure compliance with internal and external requirements (international and industry standards, as well as statutory, regulatory and customer requirements)
- Add value to Micron by supporting the accomplishment of objectives and enforcing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes
- Facilitate and guide system-level process owners to develop and mature business processes by testing the applicability and integrity of established processes
- Support management in evaluating performance across organizational functions, sites, technology and processes to enable continual improvement of Micron's QMS
- Aid problem-solving and team member empowerment

Micron has established and maintains a comprehensive internal audit program covering system-level processes, manufacturing processes and product audits. The internal audit schedule is based on the status and importance of the process to be audited. Yearly risk assessments are based on performance data. Company and leadership objectives and priorities are used to determine the frequency and intensity of the audits.

Internal audits are carried out by independent organizations from the processes being audited and by professional and competent personnel.



Figure 5-3 : Internal audit program

As Micron has a global QMS applicable to all sites, Micron’s approach to system-level process audits is to start where the process is headquartered and then continue at all locations where the process is either locally managed or performed.

Consolidated findings by system-level processes allow:

- Implementing systematic solutions to address the deficiencies across the whole Micron network
- Enabling Micron to be seen by customers as a single supplier despite the multiple sites
- Leveraging the best practices at one site to improve overall performance for the system-level process

The results of the internal audits are recorded and brought to the attention of the team members who are responsible for the audited area. The management personnel responsible for the area being audited ensure that any necessary actions are taken without undue delay to correct any identified nonconformities, including their causes, and to prevent the problems from reoccurring.

Periodically, the audit results are reviewed at the management level. Comprehensive product and manufacturing process audit results are brought to the proper level of management to identify further opportunities for improvement.

In addition to periodic audits, Micron has unplanned and special audits to focus on specific areas identified for improvement by management.

5.4.2 External (certification, customer) audits

Micron considers external audits, either from a customer or certification body, a valuable tool to learn, improve and grow. External audits give Micron an independent view of the QMS, identification of possible risks and opportunities for improvement.

Micron welcomes added value feedback from external [certification, customer] audits and includes them as part of the management review and as input for improvement of the QMS.

External audits are also seen as an instrument to prove to stakeholders the validity of the Micron QMS and provide confidence in Micron’s ability to produce parts that meet and exceed their requirements.

5.4.3 Second-party audits (subcon/supplier)

Audits of Micron suppliers and subcontractors help us ensure that the supplies we receive meet Micron’s strict quality requirements. We know collaborative, proactive and transparent partnerships with suppliers are critical to long-term success. We also have a Supplier Award, as well as a robust Supplier Improvement Program.

Supplier audits are used for:

- Supplier risk assessment
- Supplier monitoring
- Supplier QMS development
- Product audits
- Process audits

5.5 Product safety

Micron’s automotive memory products are designed to provide quality, process margin, package capability and the expanded temperature range required for automotive applications. Micron is following the road map to ISO 26262 compliance. As with the functionality of all memory components, semiconductor products are subject to inherent limitations and failure rates. Therefore, it remains the customer’s responsibility to determine whether and how to use such products in the customer’s applications and to ensure that the failure of memory products or their functionality does not result in unsafe conditions. Micron’s customers who use Micron memory products in safety-related automotive applications are responsible to ensure that these products are appropriate for such applications and that their failure doesn’t threaten the safety of any end user.

Micron has several types of scenarios for products in the automotive supply chain that customers may be designing into functional safety applications:

- **Commercial off-the-shelf (COTS) quality managed-grade products:** Such products are “as is” with no plans for additional automotive customer service support.
- **COTS products with customer safety analysis support:** Such products are also Quality Management grade (QM-grade) and used in automotive functional safety applications. However, these products are increasingly being placed by customers into automotive safety applications, expanding customers’ need for functional safety support. Based on factors like customer requests, end application adoption, and potential market penetration or size, Micron might provide support above and beyond IATF 16949 requirements to help customers with their system-level safety analysis. An example of this is Micron’s provision of Failure in Time (FIT) and Failure modes, Effects, and Diagnostic Analysis (FMEDA) analysis support and safety application notes.

- **Automotive Safety Integrity Level (ASIL) compliant products:** Certain products within Micron’s automotive portfolio may be developed in compliance with industry ISO 26262 standards. Some aspects of the ISO 26262 standard are based on automotive state-of-the-art development practices which have the objective of prevention or control of product development defects and adherence to these functional safety standards are additionally conducive towards product design quality. Micron publishes the level of ISO 26262 compliance, such as ASIL B or D systematic development compliance.

Note: Subject to datasheets and Micron terms and conditions for use

5.6 QMS hierarchy

- **Identity of the organization** is determined by Micron characteristics, based on its mission, vision, values and culture
- **QMS governance** defines what we do at Micron to comply with the QMS structure and requirements
- **Operational guidance** defines the rules, methods, and tools we use to accomplish Micron’s objectives
- **Operational control** defines in varying levels of details the how and who for execution at the activity and site level
- **Evidence and traceability** is data supporting the existence or actuality of something and may be obtained through observation, measurement, test or other means

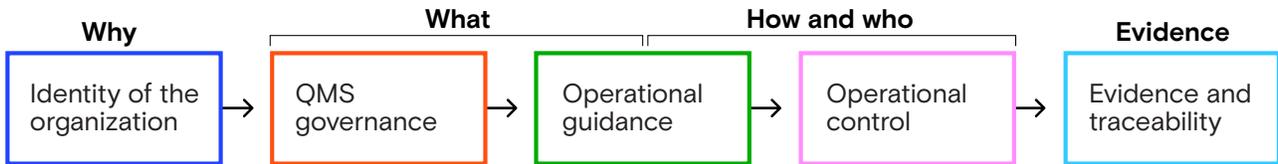


Figure 5-4 : Overview of Micron QMS Documentation Hierarchy

5.7 Overview of QMS map

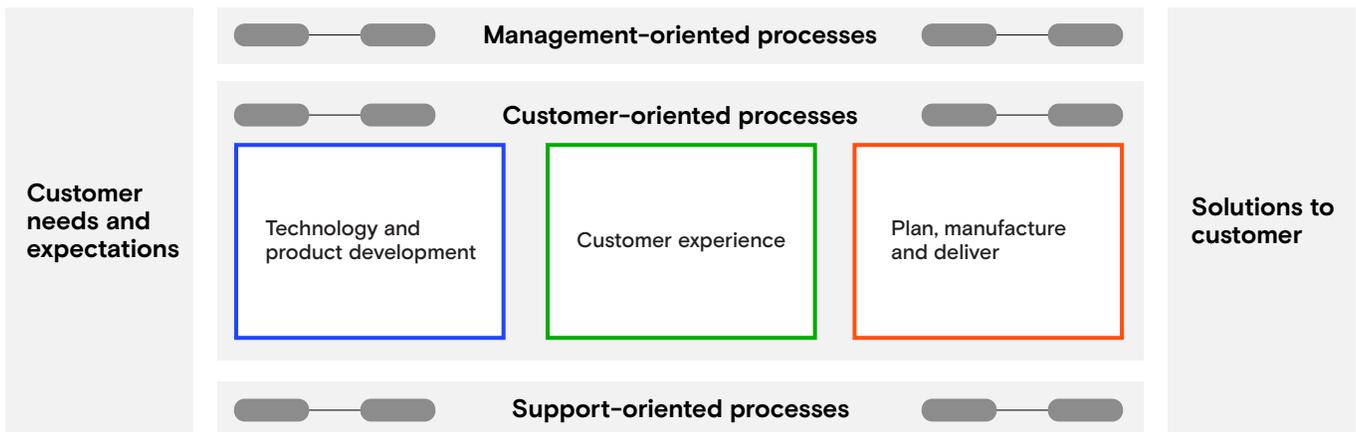


Figure 5-5 : QMS Map

5.8 Micron QMS processes

Management-oriented processes

Management-oriented processes (MOPs) are aimed at ensuring that all processes are documented, measured and reviewed by management teams to ensure alignment to Micron’s key priorities and corporate goals.

Customer-oriented processes

Customer-oriented processes (COPs) are aimed at encompassing product realization activities and ensuring that agreed-upon customer requirements are captured, understood and translated into product and services as needed by the customer.

Support-oriented processes

Support-oriented processes (SOPs) are aimed at ensuring the efficiency of customer-oriented processes.

Manufacturing execution

Micron identifies the requirement to outsource any process, or part thereof, that affects conformity with the stated requirements. When outsourcing a process, Micron identifies control criteria such as performance specifications, supplier selection criteria, process control monitors, supplier assessments and supplier performance reviews.

The controls identified enhance Micron’s capacity to effectively manage its supply chain.

The controls adopted are influenced by potential effects of outsourcing on meeting customer or stakeholder requirements, and by the degree to which control of the process is shared.

All applicable statutory and regulatory requirements and special product and process characteristics are cascaded to suppliers as they apply.



MICRON QUALITY MANUAL

“Quality in Micron is the result of a collective mindset that recognizes that every process, every action, every decision creates how people perceive the Micron brand. We are Micron quality.”

Bill Lechten

Sr. Director, Quality Management Office

Disclaimers:

All information contained in this document is provided on an “AS IS” basis, WITHOUT WARRANTIES OF ANY KIND, and is intended as a reference document only. MICRON TECHNOLOGY, INC., AND ITS SUBSIDIARIES AND AFFILIATES (COLLECTIVELY, “MICRON”) ASSUME NO RESPONSIBILITY FOR ANY CONSEQUENCES related to the use of or reliance upon this document. This document does not grant any warranties and does not amend, modify or supplement any warranties that may apply to your purchase or use of any Micron product under any separate agreement between you and the seller of such product.

All information contained herein remains the sole and exclusive property of Micron. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Micron reserves the right to update the document and its content from time to time, without notice, but makes no commitment to do so. All brand names, trademarks and registered trademarks belong to their respective owners.

MICRON ASSUMES NO LIABILITY WHATSOEVER AND DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY ARISING OUT OF OR RELATED TO THE INFORMATION CONTAINED HEREIN AND YOUR PURCHASE, APPLICATION AND/OR USE OF MICRON PRODUCTS INCLUDING WARRANTIES RELATED TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY OR NON-INFRINGEMENT.

MICRON PRODUCTS ARE NOT AUTHORIZED FOR USE IN CRITICAL APPLICATIONS, DEVICES OR SYSTEMS WITHOUT THE EXPRESS WRITTEN APPROVAL OF THE BUSINESS UNIT AND QUALITY VICE PRESIDENTS OF MICRON. CRITICAL APPLICATIONS, DEVICES OR SYSTEMS ARE THOSE IN WHICH FAILURE OF THE MICRON PRODUCT COULD RESULT, DIRECTLY OR INDIRECTLY, IN DEATH, PERSONAL INJURY OR SEVERE PROPERTY OR ENVIRONMENTAL DAMAGE.

Copyright © 2024 Micron technology Inc. All rights reserved.