




Quickfilter[™]
Technologies

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The design and manufacture of mixed-signal integrated circuits for
signal conditioning and digital signal processing / filtering.

Quality Manual

 Quickfilter Technologies, Inc.	Quality Manual		
Doc. No. QFP40001	Rev. No. 2	Effective Date March 8, 2010	Page 2 of 22

Quality Commitment

All employees of Quickfilter Technologies Inc. are dedicated to providing products and services that meet or exceed our customer's requirements and expectations. The quality system described in this manual provides the structure for all levels in the company to work as a team in meeting these goals in an orderly and consistent way. As managers, we personally affirm our commitment to lead our organizations in attaining exemplary customer satisfaction.

President and CEO

Vice President Operations

Vice President Sales and Marketing


Chief Financial Officer

Chief Technical Officer




TABLE OF CONTENTS

Description	Section	Page
Scope and Exclusions	1.0	4
Normative Reference	2.0	4
Terms and Definitions	3.0	4
Quality Management System	4.0	5
General Requirements	4.1	5
General Documentation Requirements	4.2	5
Control of Documents	4.3	5
Control of Quality Records	4.4	6
Management Responsibility	5.0	6
Management Commitment	5.1	6
Customer Focus	5.2	7
Quality Policy	5.3	7
Quality Planning	5.4	7
Responsibility, Authority, and Communication	5.5	8
Management Review	5.6	8
Resource Management	6.0	9
Provision of Resources	6.1	9
Human Resources	6.2	9
Infrastructure	6.3	10
Work Environment	6.4	10
Product Realization	7.0	10
Planning of Product Realization	7.1	10
Customer Related Processes	7.2	11
Design Control	7.3	11
Purchasing	7.4	13
Process Control	7.5	13
Control of Monitoring and Measuring Devices	7.6	15
Measurement, Analysis and Improvement	8.0	15
General	8.1	15
Monitoring and Measurement	8.2	16
Control of Non-Conforming Product	8.3	16
Analysis of Data	8.4	17
Improvement	8.5	17
Revision Log		

 Quickfilter Technologies, Inc.		Quality Manual	
Doc. No. QFP40001	Rev. No. 2	Effective Date March 8, 2010	Page 4 of 22

1. SCOPE

- 1.1. The Quickfilter Technologies Quality Manual provides general policies and procedures for designing, manufacturing, packaging, testing, storing, and distributing internally designed products and/or services to insure total customer satisfaction. The Quality Manual is the controlling quality document for **Quickfilter Technologies Inc.**, located at 1024 S. Greenville Ave Suite 100, Allen, TX 75002
- 1.2. Quickfilter Technologies Inc. provides superior products and services to solve problems in solid state filter design using unique signal processing capabilities. Products consist of semiconductor devices, board level development kits, and filter design software.
 - 1.2.1. Quickfilter products are semiconductor devices manufactured by approved suppliers. As a "Fabless Semiconductor Manufacturer", the quality policies and procedures are written to emphasize supplier control for production operations.
 - 1.2.2. The board level products are development kits manufactured by subcontractors. These products are used by Quickfilter customers in a development environment. The quality policies and procedures are written to emphasize supplier control for board production operations.
 - 1.2.3. The filter design software is embedded within the development board product. As such, the quality policies and procedures for production apply to ensuring that the software is delivered accurately and in proper format to the customer.
 - 1.2.4. Quickfilter's suppliers are responsible to Quickfilter for the quality of the products and services supplied to Quickfilter. However, Quickfilter is ultimately responsible to its customers for the quality of the final product and is responsible for ensuring total customer satisfaction.
- 1.3. The Quality Management System is unique to Quickfilter Technologies and is patterned to meet the applicable requirements of ISO 9001:2008.
- 1.4. Exclusions
 - 1.4.1. The Quickfilter Technologies' Quality Management System is relevant to the nature of our organization and products, and to customer and regulatory requirements. Requirements of ISO 9001:2008 standard that do not apply are excluded from the scope of our quality system.
 - 1.4.2. The Management Representative, the Vice President of Operations, is responsible for identifying those requirements of ISO 9001:2008 that do not apply to our products and services.

 Quickfilter Technologies, Inc.		Quality Manual	
Doc. No. QFP40001	Rev. No. 2	Effective Date March 8, 2010	Page 5 of 22

2. NORMATIVE REFERENCE

2.1. ISO 9001:2008 Quality Management System – Requirements.

3. TERMS AND DEFINITIONS

- 3.1. Applicable – related to this quality management system or any referenced standard.
- 3.2. Appropriate – reasonable.
- 3.3. Documented – written or recorded electronically.
- 3.4. Product – end result of a process. This includes both Silicon product and Software product.
- 3.5. Shall – must.
- 3.6. Suitable – reasonable for intended purpose.


4. QUALITY MANAGEMENT SYSTEM

4.1. General Requirements

- 4.1.1. The processes needed for the quality management system and their application are noted in QFP54001, “Product and Quality Planning”.
- 4.1.2. Using ISO 9000 as a guideline, suppliers that are capable of providing acceptable manufacturing services per QFP74002, “Supplier Assessment and Approval” are determined.
- 4.1.3. The availability of resources and information necessary to support the operation and monitoring of these processes is ensured per QFP61001, “Resource Management and Training”.
- 4.1.4. These processes are monitored, measured, and analyzed to improve customer satisfaction, and streamline operations per QFP82002, “Internal Quality Audits” and QFP85001, “Continuous Improvement and Statistical Techniques”.
- 4.1.5. Necessary actions to achieve planned results and continual improvement of these processes is implemented per QFP85001, “Continuous Improvement and Statistical Techniques”, and QFP85002, “Corrective and Preventive Action”.

4.2. General Documentation Requirements


4.2.1. Documents defining the Quality System are grouped into 4 categories of hierarchy per QFP42001, “Quality System Documentation”. The Quickfilter Technologies Quality Manual, this document, is the top-tier or Level 1 document. Policies and procedures defined in Standard Operating Procedures (SOP’s), Controlled Forms and other supporting documentation are level 2. Documents derived from using the SOP’s and Forms are Level 3. Product History Records for the most part maintained by approved suppliers are level 4. Before any new document is incorporated into the Quality System the applicability and consistency with ISO9001 is determined.

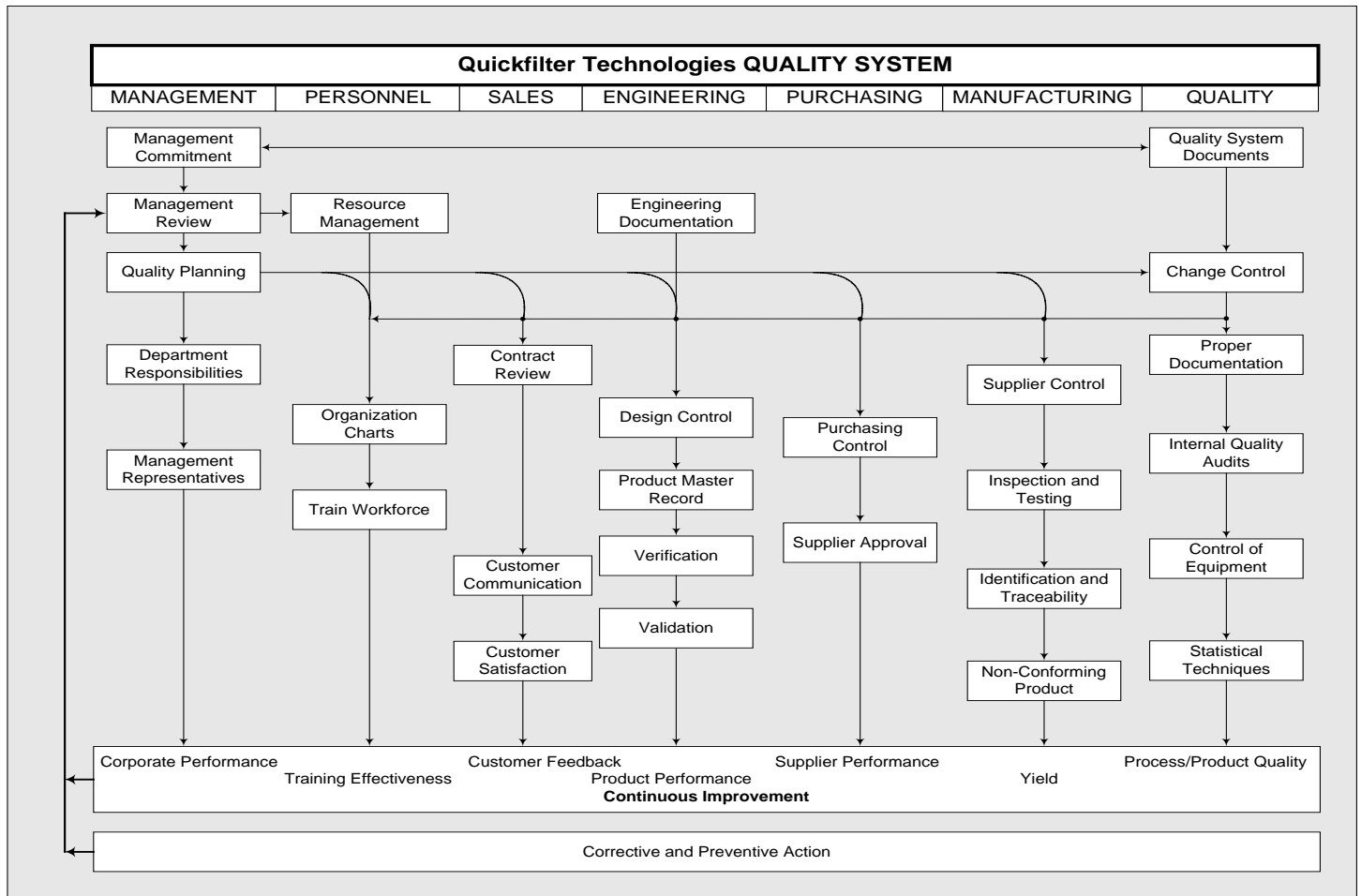
 Quickfilter Technologies, Inc.	Quality Manual		
Doc. No. QFP40001	Rev. No. 2	Effective Date March 8, 2010	Page 6 of 22

4.2.2. Quality Manual

Quickfilter has established and maintains a Quality Manual (QFP40001) that includes the following:


- a) The scope of this Quality Management System.
- b) Reference to the documented procedures established for the quality management system
- c) A description of the interaction between the processes of the quality management system is detailed below

 Quickfilter Technologies, Inc.		Quality Manual	
Doc. No. QFP40001	Rev. No. 2	Effective Date March 8, 2010	Page 7 of 22



4.2.3. Control of Documents

- 4.2.3.1. All applicable documents and data such as Standard Operating Procedures (SOP's), Forms, Product Master Records (PMR) that specify how a product is built are controlled per QFP42002, "Processing of Controlled documents".
- 4.2.3.2. All applicable documents are reviewed for adequacy and approved prior to issue per QFP42002, "Processing of Controlled documents". Once approved and issued the Controlled Documents are listed for reference in the Master Document List (MDL).
- 4.2.3.3. Current Controlled Document revisions and the MDL are posted on the centralized computer server system and are readily available to all employees. Printed copies are checked for currency against this master list before use. Key users of a specific document are notified of revision changes as they occur. A Master Document List is maintained.

 Quickfilter Technologies, Inc.		Quality Manual	
Doc. No. QFP40001	Rev. No. 2	Effective Date March 8, 2010	Page 8 of 22

4.2.3.4. Proper record keeping is ensured per QFP42003, "Document Creation and Change".

4.2.4. Control of Quality Records

4.2.4.1. The specifications or SOP's that define the Quality System require a variety of records be created and maintained. These SOP's and the associated forms are controlled per QFP42002, Processing Controlled Documents and QFP42003, Document Creation and Change. The system records include:

Organizational Charts

Design Review Meeting Minutes

Approved Supplier List (ASL)

Product Master Record

Product History Records

Process / Product Validation Reports

Equipment Calibration Records

Complaint Records

Recall Records

Internal Audit Records

Training Records

Records will be legible, readily identifiable and retrievable

5. MANAGEMENT RESPONSIBILITY

5.1. Management Commitment

5.1.1. **Quickfilter Technologies** management defines, develops and implements the quality management system per QFP51001, "Management Commitment".

5.1.2. Employees at all levels within the organization must understand the goals and objectives of the Quickfilter Technologies Quality Management System.

5.1.3. Periodic staff / departmental meetings are conducted to discuss the importance of the following:

5.1.4. Customer requirements.



5.1.5. Quality objectives.

5.1.6. Statutory, legal, and regulatory requirements.

5.1.7. Continuous improvement goals.

5.2. Customer Focus

5.2.1. Customer requirements are determined and fulfilled per QFP82001, "Customer Satisfaction and RMA" and QFP85001, "Continuous Improvement and Statistical Techniques".

5.3. Quality Policy

Quickfilter will maintain a quality management system to meet the requirements of the ISO 9001:2008 standard;

Quickfilter will continually improve the effectiveness of the quality management system;

The management team will periodically review the performance of the quality management system and our quality objectives.

This quality policy is regularly communicated to all employees and reviewed by the Management Team for its continuing suitability;


Our employees will recognize Quickfilter Technologies, LLC as the best company to work for;

We will maintain a profitable operation to establish our competitive position in the market and reward all of our shareholders.

Signed _____

Date _____

President

 Quickfilter Technologies, Inc.		Quality Manual	
Doc. No. QFP40001	Rev. No. 2	Effective Date March 8, 2010	Page 10 of 22

5.4. Quality Planning

- 5.4.1. When a new product, project, or contract is evaluated for adoption into the Quality System, the appropriate staff members meet to define and document how the requirements for quality will be met per QFP54001, "Product and Quality Planning".
- 5.4.1.1. Information Technology: determine the necessary computer hardware, software, and applications.
- 5.4.1.2. Documentation: review adequacy of engineering drawings, Bills of Material (BOM's), Standard Operating Procedures (SOPs), and other manufacturing documents.
- 5.4.1.3. Suppliers: as applicable, review manufacturing supplier capability to meet customer requirements. This includes reviewing adequacy of process, measuring and test equipment and inspection methods, and availability of capacity.
- 5.4.1.4. Human resources: review adequacy and availability of staff with the appropriate skills for the job/tasks to be performed.
- 5.4.1.5. Follow-up: determine what follow-up actions, if any, are necessary to meet or ensure that the requirements of the product, project, or contract are met.
- 5.4.2. Products are developed and built using documented purposeful procedures. This documentation ensures that the product is built and shipped as it was designed and provides for change in an orderly manner.


5.5. Responsibility, Authority and Communication

5.5.1. Responsibility and Authority

- 5.5.1.1. Quickfilter Technologies defines the responsibilities and authorities of staff at all levels per QFP55001, "Organization".
- 5.5.1.2. The interrelation of staff at all levels is defined per QFP55001, "Organization".
- 5.5.1.3. Each department such as Quality Assurance and Manufacturing, Product Groups, Sales, and Marketing is responsible for updating their department responsibilities, as the organizational structure of the company changes. These responsibilities and authorities and their interrelation are communicated at all levels periodically.

5.5.2. Management Representative

- 5.5.2.1. Quality and customer satisfaction are the responsibility of everyone in the organization. However, to insure consistent communication internally and externally of Quickfilter's quality goals, to insure smooth implementation of the quality system, and to help promote awareness of customer requirements

 Quickfilter Technologies, Inc.		Quality Manual	
Doc. No. QFP40001	Rev. No. 2	Effective Date March 8, 2010	Page 11 of 22

throughout the organization, the Vice President of Operations is designated as the Management Representative per QFP55001, "Organization".

5.5.2.2. The Management Representative is authorized and responsible for:

5.5.2.2.1. Ensuring the quality management system is implemented, maintained and continually improved.

5.5.2.2.2. Promoting awareness of customer requirements throughout the organization.

5.5.2.2.3. Reporting to the top management on the performance of the quality system, including needs for improvement.

5.5.2.2.4. Coordinating communication with external parties on matters relating to the quality system.

5.5.3. Internal Communication

5.5.3.1. The effectiveness of the Quality Management System is periodically communicated to staff via Staff/Departmental and Management Review meetings per QFP51001, "Management Commitment".

5.6. Management Review

5.6.1. The overall state of the Quality Management System is reviewed quarterly per QFP51001, Management Commitment. At a minimum, Management reviews and analyzes the following data to ensure the continuing suitability, adequacy and effectiveness of the System:

5.6.1.1. Product Back Order trends per QFP72001, "Contract Review and Acceptance".

5.6.1.2. Customer Satisfaction trends and issues per QFP82001, "Customer Satisfaction and RMA".

5.6.1.3. Results of internal quality audits per QFP82002, "Internal Quality Audits".


5.6.1.4. Process performance and product conformity per QFP83001, "Control of Non-conforming Products and Product Recall".

5.6.1.5. Evaluation of new product requirements per QFP54001, "Product and Quality Planning".

5.6.1.6. Recommendations for improvement per QFP85001, "Continuous Improvement and Statistical Techniques".

5.6.1.7. Status of corrective and preventive action per QFP85002, "Corrective and Preventive Action".

5.6.2. All decisions and actions made in the Management Review shall be recorded.

 Quickfilter Technologies, Inc.		Quality Manual	
Doc. No. QFP40001	Rev. No. 2	Effective Date March 8, 2010	Page 12 of 22

6. Resource Management

6.1. The resources needed to implement and maintain the Quality Management System per Q54001, "Product and Quality Planning" are determined and provided by Management.

6.2. Human Resources

6.2.1. Competent personnel are hired. Personnel competencies are based on appropriate education, training, skills, and experience. Records of education, training, skills, and experience of all staff are maintained. Human resources are administered per QFP61001, "Resource Management and Training".

6.2.2. Competence, Awareness, and Training

6.2.2.1. The necessary competencies for personnel who affect quality are determined, translated into essential job duties, and described in Job Descriptions.

6.2.2.2. Employee-training needs are defined via Job Descriptions. Training for all personnel is documented per QFP61001, "Resource Management and Training".

6.2.2.3. On-the-job training is provided and periodically evaluated per QFP61001, "Resource Management and Training".

6.2.2.4. The relevance and importance of each employee's activities and how they contribute to quality objectives is periodically communicated.

6.3. Infrastructure

6.3.1. Buildings, workspace, equipment, and support services are provided and maintained as needed to achieve conformity to product and service requirements, per QFP54001, "Product and Quality Planning".

6.4. Work Environment


6.4.1. The work environment is managed in accordance with all general health and safety requirements, employee agreements, and laws and regulations per QFP61001, "Resource Management and Training".

7. Product Realization.

7.1. Planning of Product Realization

7.1.1. There is a documented system that requires products be defined, developed, and manufactured in a deliberate way to meet the Quality and Performance objectives set both by Quickfilter Technologies and the customer.

7.1.2. Quality objectives for products and services are first defined at the beginning of the product development cycle based on inputs from the customer and

 Quickfilter Technologies, Inc.		Quality Manual	
Doc. No. QFP40001	Rev. No. 2	Effective Date March 8, 2010	Page 13 of 22

development team that includes engineering and manufacturing. These objectives are further refined as the product design progresses. Once the product is deemed ready for production, controlled documents are created which define exactly how the product is to be manufactured to meet the design specification.

7.1.3. For Silicon and Board Products:

7.1.3.1. Manufacturing is accomplished through use of contract suppliers. The suppliers are approved through auditing and validation procedures. Only suppliers that can be shown to have sufficient process controls, inspections, and testing to ensure shipped product meets specification are approved. See QFP74002, "Supplier Assessment and Approval".

7.1.3.2. Before production approval can be granted each product is characterized and reliability tested as appropriate to ensure that the product is production worthy and can be reasonably expected to operate properly over its expected lifetime. See QFP75006, "IC Design Validation".

7.1.4. For Software Products: Software products consist of one or more modules built to perform a specific function or functions as specified by the customer. The final product is checked to ensure it meets the customer intention per S75008, "Software Product Verification and Validation" before shipment.

7.2. Customer Related Process

7.2.1. Determination of Requirements Related to the Product.

7.2.1.1. For product requirements specified by the customer (custom products), appropriate departments (QA, Sales, Group Engineering, Manufacturing, Purchasing) review the requirements. The team also reviews requirements not specified by the customer and the company's capacity and capability to meet all applicable requirements before an order is taken.


7.2.1.2. For catalog products (products with no customer unique requirements), product characteristics, packaging, and support are determined and reviewed in the process of designing or developing the product per QFP73001, "IC Development and Design Control" and QFP73002 "Software Development and Design Control".

7.2.2. Review of Requirements Related to the Product (Contract Review).

7.2.2.1. All customer orders are reviewed to ensure that products and services can be provided in an efficient and accurate manner per QFP72001, "Contract Review and Acceptance". Those orders that become back-orders shall have the highest priority in order to fulfill customer commitments.

7.2.2.2. When amendments to contracts are made, the customers and appropriate internal departments are notified of the changes, and as appropriate, review and approve the changes before mutually agreeing to the amendment.

7.2.3. Customer Communication

 Quickfilter Technologies, Inc.		Quality Manual	
Doc. No. QFP40001	Rev. No. 2	Effective Date March 8, 2010	Page 14 of 22

7.2.3.1. Customer feedback and complaints are processed per QFP82001, "Customer Satisfaction and RMA". Periodically, a complaint trend analysis is prepared and submitted to management for review. The complaint trend analysis includes:

7.2.3.1.1. Product Performance: The product in some way does not perform to customer's expectation, or to any level of performance conveyed to the customer verbally or by printed labeling.

7.2.3.1.2. Product Reliability: The failure rate or service adjustment rate of the product is greater than the customer's expectation.

7.3. **Design Control**. The key documents which specify and control the design process are QFP73001, "IC Development and Design" for Silicon Products and QFP73002 "Software Development and Design" for software products.

7.3.1. Design and Development Planning

7.3.1.1. Based on product experience and customer input the management team including members from the group technologies, marketing and sales, manufacturing, human resources and finance conceive of products that will potentially meet the company and customer goals. Product summaries, which list basic specifications, staffing and other resources needed, manufacturing requirements, and return on investment are prepared. The staff then selects which products to support within the company capabilities.


7.3.1.2. Once the products are selected the Management team assigns the product design and development to the appropriate Group technology (Silicon or Software) business. The core business then forms a design and development team of sufficient qualified personnel and resources. Technical interfaces are also defined.

7.3.2. Design and Development Inputs

7.3.2.1. After being tasked by the core business manager, the design and development team then proceeds in a controlled manner as prescribed in QFP73001, "IC Development and Design Control" and QFP73002, "Software Development and Design Control".

7.3.2.2. The team identifies, documents, and reviews product design input requirements for adequacy and compliance with pertinent industry standards and regulatory requirements. Incomplete, ambiguous, or conflicting requirements are resolved prior to design initiation. The first meeting of the team is the Project Kickoff meeting.

7.3.3. Design and Development Output

 Quickfilter Technologies, Inc.		Quality Manual	
Doc. No. QFP40001	Rev. No. 2	Effective Date March 8, 2010	Page 15 of 22

7.3.3.1. Design output is documented in terms of requirements that can be verified. At this stage, the design output reviews contain, at least, the following:

7.3.3.1.1. How the design input requirements are met.

7.3.3.1.2. References the acceptance criteria.

7.3.3.1.3. Identifies crucial design characteristics related to safe and proper functioning of the product.

7.3.3.1.4. Reviews and approves design output documents before release. The key document is the PMR (Product Master Record) which defines exactly how the product is to manufactured, and labeled.

7.3.4. Design and Development Review

7.3.4.1. Formal reviews of design results are conducted and documented at appropriate intervals. At the Final Design Review stage the Silicon product design is released for manufacturing of the first lot.

7.3.5. Design and Development Verification

7.3.5.1. Design verification to ensure that the design output meets the design input requirements at appropriate stages of design is performed and documented per QFP75005, "IC Design Verification" and QFP75003, "Software Product Verification and Validation".

7.3.6. Design and Development Validation

7.3.6.1. To ensure the Product conforms to defined customer requirements, design validation is conducted per QFP75006, "IC Design Validation" and QFP75003, "Software Product Verification and Validation".


7.3.6.2. Once the validation is complete and any outstanding action items are resolved, the product is released for full production and shipment.

7.3.7. Design and Development Changes

7.3.7.1. The design control procedures allow an evolutionary process where the product specifications and requirements may change as the design and development team learns more about the design needs or the market changes. Changes are documented.

7.3.7.2. Following product verification the product specific specifications become controlled documents and any changes require documentation, review, and approval by appropriate personnel before implementation per Q42003, "Document Creation and Change".

7.4. Purchasing

 Quickfilter Technologies, Inc.		Quality Manual	
Doc. No. QFP40001	Rev. No. 2	Effective Date March 8, 2010	Page 16 of 22

7.4.1. Purchasing Process

7.4.1.1. Purchased parts and services are reviewed to ensure that established specifications are met per QFP74001, "Purchasing".

7.4.1.2. Quickfilter Technologies evaluates and selects suppliers on the basis of their ability to meet their own internal requirements, our end customer's requirements, and the requirements imposed by this quality system per QFP74002, "Supplier Assessment and Approval". The Approved Supplier's List (ASL) lists the only suppliers allowed to manufacturer production released product.

7.4.2. Purchasing Information

7.4.2.1. Purchasing documents describe the components or services ordered, and the requirements for approval of components and/or services. The purchase records are reviewed and approved prior to release.

7.4.3. Verification of Purchased Services

7.4.3.1. Product is manufactured by approved suppliers to Quickfilter Technologies' specification. Suppliers are approved using QFP74002, "Supplier Assessment and Approval". Also, see "Process Control" in the following paragraph.

7.5. Process Control

7.5.1. Control of Production

7.5.1.1. Silicon Product: As product is manufactured using approved suppliers, process control is ensured through product specifications, audits, product monitors, and review of ongoing product specific manufacturing line data. This includes the following checks:


7.5.1.1.1. Supplier production processes and equipment are properly monitored and controlled.

7.5.1.1.2. Supplier production processes and equipment are properly approved and validated.

7.5.1.1.3. Supplier has adequate methods to convert Quickfilter Technologies' requirements into controlled internal documented instructions. Product specific requirements are specified to the supplier using the Product Master Record per QFP73002, "Product Master Record".

7.5.1.1.4. Manufacturing instructions are described in adequate procedures and Engineering Drawings.

7.5.1.1.5. Ongoing production documentation is sufficient to meet Quickfilter Technologies' minimum information and tracking requirements per

 Quickfilter Technologies, Inc.		Quality Manual	
Doc. No. QFP40001	Rev. No. 2	Effective Date March 8, 2010	Page 17 of 22

QFP75001, "Product Identification, Traceability, and Labeling" and to provide historical lot data.

7.5.1.1.6. Supplier has controls in place to only ship products that have passed required inspections and tests per specific Quickfilter Technologies' instruction and the supplier's internal requirements.

7.5.1.1.7. Supplier has adequate controls to handle, store, package for shipping, and deliver products per Quickfilter Technologies' direction.

7.5.1.1.8. Supplier's personnel training and qualification are properly documented.

7.5.1.2. Software Product: as software product is a singular product, the design and development process, QFP73002, "Software Development and Design Control", controls the single production build.

7.5.1.3. Validation of Production and Service

7.5.1.4. Products, production and service operations and processes are validated per QFP75006, "Silicon Product Validation", and QFP75003, "Software Product Verification and Validation".

7.5.2. Product Identification and Traceability

7.5.2.1. Silicon Product is marked to provide identification and traceability. This branding per QFP75001, "Product Identification, Traceability, and Labeling" identifies the product type and provides traceability to the wafer fabrication lot number and the assembly workweek of manufacture.

7.5.2.2. Software product is assigned a product and revision number per QFP75001, "Product Identification, Traceability, and Labeling".


7.5.3. Customer Property

Quickfilter will exercise care with customer property, including intellectual property, while it is under Quickfilter's control. It will be identified and protected and if lost or damaged Quickfilter will inform the customer and maintain record.

7.6. Control of Monitoring and Measuring Equipment

7.6.1. Monitoring and measuring equipment and software are controlled for any in-house equipment that is used in product design, product validation and verification, product monitoring, and product returns evaluation. Equipment is calibrated, maintained and used within established tolerances per QFP76001, "Control of Monitoring and Measuring Equipment".

7.6.2. Valid equipment measurement is ensured by:

 Quickfilter Technologies, Inc.		Quality Manual	
Doc. No. QFP40001	Rev. No. 2	Effective Date March 8, 2010	Page 18 of 22

7.6.2.1. Determining appropriate measurements to be made and the accuracy required for the inspection, measuring, and test equipment.

7.6.2.2. Calibrating such equipment according to NIST traceable standards. This requirement includes tagging to indicate calibration status, maintenance of calibration records, and procedures to assess the impact on product when the equipment is found to be out of tolerance.

7.6.2.3. Ensuring that the environmental conditions are suitable for the tests being carried out.

7.6.2.4. Ensuring that the handling, preservation, and storage of such equipment are done in a manner such that the accuracy and fitness for use is maintained.

8. Measurement, Analysis and Improvement

8.1. General

8.1.1. Quickfilter Technologies plans and implements the measurement, analysis and improvement operations to verify whether quality activities comply with planned arrangements and determines the effectiveness of the Quality System per the following:

8.1.1.1. QFP82001, "Customer Satisfaction and RMA".

8.1.1.2. QFP82002, "Internal Quality Audits"

8.2. Monitoring and Measurement

8.2.1. Customer satisfaction

8.2.1.1. Customer satisfaction is the ultimate measure of success. Customer satisfaction is determined, monitored, and measured by various methods per QFP82001, "Customer Satisfaction and RMA". The following are some of the methods by which customer satisfaction is determined:

8.2.1.1.1. Unsolicited customer satisfaction and feedback.

8.2.1.1.2. Awards and recognitions.


8.2.1.1.3. Product returns.

8.2.1.1.4. Warranty claims.

8.2.1.1.5. Repeat customers.

8.2.1.1.6. Market share.

8.2.1.1.7. Customer satisfaction surveys.

 Quickfilter Technologies, Inc.		Quality Manual	
Doc. No. QFP40001	Rev. No. 2	Effective Date March 8, 2010	Page 19 of 22

8.2.1.2. Customer Satisfaction trend analyses are prepared periodically and reported at the quarterly Management Review meetings.

8.2.2. Internal Quality Systems Audit

8.2.2.1. Internal quality audits per QFP82002, "Internal Quality Audits" to verify whether quality activities comply with product realization planning and to determine the effectiveness of the Quality Management System are planned and implemented.

8.2.2.2. Qualified **and impartial** managers who do not have direct responsibility for the activities being audited carry out audits. All audit procedures and results are composed and maintained internally.

8.2.2.3. The results of the audits are shared with the company Senior Management Staff and personnel responsible for the area audited. Timely corrective action on the deficiencies found during the audit is taken.

8.2.3. Monitoring and Measurement of Processes: The performance of our internal Quality Management System methods and process are monitored and measured to determine the effectiveness of the quality goals and compliance to documented requirements per QFP82002, "Internal Quality Audits".

8.2.4. Monitoring and Measurement of Product:

8.2.4.1. Silicon Product is manufactured by approved suppliers. Device and lot data from these suppliers is periodically reviewed to ensure that product yield expectations and intended datasheet and customer requirements are satisfied per QFP74002, "Supplier Assessment and Control"


8.2.4.2. Software Product is produced within Quickfilter Technologies. Outgoing shipments of the data are verified to the product database per QFP75003, "Software Product Verification and Validation".

8.3. Control of Non-conforming Product

8.3.1. Quickfilter Technologies ensures products or components that do not conform to specified requirements are prevented from unintended use or installation.

8.3.2. Documentation of product non-conformance includes identification, evaluation, and disposition. The responsibility for review and the authority for the disposition of non-conforming product is defined per QFP83001, "Control of Non-conforming Product and Product Recall"

8.3.2.1. For in-process Silicon Product: Suppliers are required to quarantine and notify us of any non-conforming product. Disposition of the product is then the responsibility of Quickfilter Technologies. After evaluation of the product in collaboration with these suppliers a documented disposition decision per QFP83001, "Control of Non-conforming Product and Product Recall" will be made. Under no circumstance will product not meeting the customer's requirements be shipped.

 Quickfilter Technologies, Inc.		Quality Manual	
Doc. No. QFP40001	Rev. No. 2	Effective Date March 8, 2010	Page 20 of 22

8.3.2.2. For previously shipped Silicon and Software Product: When notified by a customer of a potential non-conformance of a product or service, an analysis will be made and documented in collaboration with the customer to determine the extent of non-conformance. If the product is found to be in non-conformance to agreed-to specifications, the product will be recalled and processed per QFP83001, "Control of Non-conforming Product and Product Recall".

8.3.3. The following may be performed on non-conforming products or lots to bring them into compliance with customer requirements:

8.3.3.1. Rework non-conforming products to meet applicable specifications.

8.3.3.2. Evaluate non-conforming product for alternate applications.

8.3.3.3. Reject or scrap non-conforming products or components.

8.3.4. All reworked products and components are re-inspected to ensure that agreed to specifications are met.

8.4. Analysis of Data

8.4.1. Using statistical techniques per QFP85001, "Continuous Improvement and Statistical Techniques", on-line Silicon Product electrical and mechanical data are routinely analyzed to improve yields, reliability, and future designs.

8.5. Improvement

8.5.1. Continuous Improvement

8.5.1.1. Continuous improvement applies to every task performed by every employee of Quickfilter Technologies.

8.5.1.2. Quickfilter Technologies continuously improves its methods, tasks and operations per S85001, "Continuous Improvement and Statistical Techniques".


8.5.1.3. At the beginning of each calendar year, the management team (President/CEO, Quality Assurance and Manufacturing, Administration, Sales/Marketing, Group Businesses) sets Goals and Objectives for improvement during the following year. The goals are documented in the Yearly Quality Improvement plan. The plan includes setting goals in the following areas:

8.5.1.3.1. Reduction of quality related defects for finished products and services.

8.5.1.3.2. Improvement of products and services cycle time.

8.5.1.3.3. Reduction of the number of product and service complaints.

8.5.1.3.4. Reduction of the number of product and service backorders.

 Quickfilter Technologies, Inc.		Quality Manual	
Doc. No. QFP40001	Rev. No. 2	Effective Date March 8, 2010	Page 21 of 22

8.5.1.3.5. Reduction of in-process, and finished product inventory levels.

8.5.1.3.6. Product yield improvement.

8.5.1.4. Status and modification of the goals and objectives for improving the operations embodied in the Yearly Quality Improvement plan are reviewed periodically during Management Review meetings.

8.5.1.5. Quickfilter Technologies encourages personnel at all levels to provide ideas for improving products, processes, systems, productivity, and the work environment per QFP85001, "Continuous Improvement and Statistical Techniques" and QFP54001, Product and Quality Planning.

8.5.2. Corrective Action

8.5.2.1. Documented procedures for implementing effective corrective and preventive action per QFP85002, "Corrective and Preventive Action". The corrective action process uses the so-called "8D" process to ensure proper identification of root causes and assurance that the subsequent corrective action was sufficient to prevent reoccurrence. Corrective action procedures are maintained and include the following:

8.5.2.1.1. Effective handling of customer complaints and reports of product non-conformity.

8.5.2.1.2. Investigating the cause of non-conformities relating to products, processes, and the quality system.

8.5.2.1.3. Determining the corrective action needed to eliminate the cause of non-conformity.

8.5.2.1.4. Applying controls to ensure that corrective action is taken and that it is reviewed for effectiveness

8.5.3. Preventive Action


8.5.3.1. Preventive action procedures include the following:

8.5.3.1.1. Use of appropriate sources of information to detect, analyze, and eliminate potential causes of the non-conformity.

8.5.3.1.2. Determining the steps needed to deal with any problems requiring preventive action.

8.5.3.1.3. Initiating preventive action and applying controls to ensure that it is effective.

8.5.3.1.4. Ensuring that relevant information on actions taken, including changes to procedures, is submitted for management review.

 Quickfilter Technologies, Inc.		Quality Manual	
Doc. No. QFP40001	Rev. No. 2	Effective Date March 8, 2010	Page 22 of 22

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