

**PERICOM SEMICONDUCTOR CORPORATION
DOCUMENT CONTROL SPECIFICATION**

REV.	DCN NO.	DATE	REVISION HISTORY	APPROVED BY	DATE
--	0125	11/01/96	Initiate Specification.	<i>Ed.Mello</i>	01/20/94
A	0294	07/11/94	Completely revise specification, add criteria of ISO-9001.	<i>Ed.Mello</i>	08/12/94
B	0431	12/30/94	Updated per UL Assessment Audit findings.	<i>Ed.Mello</i>	01/16/95
C	0455	01/30/95	General update of spec and Table of Contents to reflect specific ISO-9001: 1994 (E) clause titles.	<i>Ed.Mello</i>	02/16/95
D	0523	03/31/95	General update, revise Table of Contents to reflect specific ISO-9001: 1994 (E) clause titles.	<i>Ed.Mello</i>	04/01/95
E	1644	07/10/97	Update to current practice, several editorial changes.	<i>Ed.Mello</i>	11/04/97
F	5013	02/28/03	Complete revision to meet ISO-9000/2000 requirements	<i>Ed.Mello</i>	03/28/03
G	06-0723	08/03/06	Update spec to latest procedures and incorporate SaRonix FCP.	<i>Ed.Mello</i>	09/14/06
H	08-0266	06/26/08	Revised org chart to move package eng and facilities to Operations; add a dotted line above Operations and Quality and a connecting line between the two departments; revised flowchart (page 17) to add the rep/distributor procedure for F/A.	<i>B. Conway</i>	07/08/08
J	09-0052	08/27/09	Complete revision to meet ISO-9000/2008 requirements; replace Ingenius with EasyFlow GP system.	<i>R. Aman</i>	09/08/09

APPROVED DOCUMENT CHANGE NOTICE (DCN) ON FILE IN DOCUMENT CONTROL

TITLE OF SPECIFICATION: PERICOM QUALITY SYSTEM POLICY MANUAL	SPECIFICATION NO.: QA-1000
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1.0 TITLE: QUALITY SYSTEMS POLICY MANUAL

2.0 PURPOSE/SCOPE: To provide an overview of Pericom Semiconductor Corp.'s (PSC) Quality System, Quality Policy, and compliance to the criteria of ISO9001. This Quality System Policy Manual applies to all Integrated Circuit and Frequency Control (SaRonix) products designed and manufactured by and for Pericom Semiconductor Corp.

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4.0 **QUALITY MANAGEMENT SYSTEM:**

Pericom Semiconductor Corp.(PSC) supports the Quality Systems and Management concepts of the ISO-9000 series of international standards for Quality. A Quality Policy (*Appendix B*) has been established as the basis of our commitment to maintain a world-class quality supplier status. Adhering to this policy is required for *all* employees, as Quality is not the responsibility of any one person or group; it is shared by each employee.

4.1 **General requirements:** PSC has established and documented a Quality Management System and manages the following processes in accordance with the requirements of ISO9001.

- 4.1.1 Determine the processes needed to apply the Quality Management System throughout the company.
- 4.1.2 Determine the sequence and interaction of these processes.
- 4.1.3 Determine criteria and methods to ensure effective operation and control of these processes.
- 4.1.4 Ensure resource availability and information necessary to support the operation and monitoring of these processes.
- 4.1.5 Monitor, measure where applicable and analyze these processes.
- 4.1.6 Implement actions necessary to achieve planned results and continual improvement of these processes.
- 4.1.7 When Pericom outsources any process that affects product conformity requirements, PSC will manage and control such processes through its approved subcontractors/vendors.

4.2 **Documentation requirements:**

4.2.1 *PSC Quality Management System documentation includes:*

- 4.2.1.1 Quality Policy and Quality Objectives
- 4.2.1.2 Quality Policy Manual
- 4.2.1.3 Procedures and records required by ISO9001
- 4.2.1.4 Documents, including records needed to ensure the effective operation and control of processes
- 4.2.1.5 Records required by ISO9001 and the above documents

4.2.2 *This Quality Policy Manual includes:*

- 4.2.2.1 PSC Quality Management System scope, covering all ISO9001 requirements.
- 4.2.2.2 The documented procedures for the Quality System, or references to them.
- 4.2.2.3 A description of the interaction between processes of the Quality Management System.
- 4.2.2.4 Quality Policy Manual control
 - 4.2.2.4.1 This Quality Policy Manual is issued by Document Control after review and approval by the Management Representative and approval by the President.
 - 4.2.2.4.2 Any revision of this document should be approved and issued as a controlled document per PSC QA-1400, Document Control System.

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4.2.3 *Control of Documents* (PSC specification QA-1400, Document Control System)

4.2.3.1 General: Document Control has established a documented procedure to define the control of documents used in the design, manufacturing, testing and qualification of PSC products. It covers all PSC documents that relate to the requirement of ISO9001, as well as documents of external origin such as industry standards and supplier and customer drawings.

4.2.3.2 Document Approval and Issue:

4.2.3.2.1 All specifications and forms documented to cover design, manufacturing, testing, inspection, qualification, and handling of PSC products shall be maintained and controlled by PSC Document Control, in accordance with QA-1400 and it's referenced procedures.

4.2.3.2.2 Initial approval of specification documents is obtained through use of a documented change notice through the EasyFlow GP Approval software system.

4.2.3.2.3 Soft copies of all released documents may be viewed on a workstation or PC through the EasyFlow GP system.

4.2.3.3 Document Changes:

4.2.3.3.1 PSC specifications are initiated, revised, and obsoleted through the EasyFlow GP Approval software.

4.2.3.3.2 Any PSC employee may initiate or revise specifications since control is exercised through the approval of the affected groups.

4.2.3.3.3 Released specifications can only be revised by a formal change notice and no unauthorized, handwritten changes are allowed (except by Document Control personnel, or if specifically allowed by Document Control when designated to do so by Quality management).

4.2.3.4 External Origin Documents:

4.2.3.4.1 Customer supplied documents may be maintained by Marketing, Inside Sales or Customer Service, as applicable.

4.2.3.4.2 Industry standards and subcontractor documents shall be maintained by PSC Document Control, as needed.

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4.2.4 *Control of records* (PSC specification QA-1410, Maintenance & Control of Records)

- 4.2.4.1 Lot history data and traceability documentation for each lot processed shall be maintained in a computerized or hard copy archive file by Operations for no less than 3 years.
- 4.2.4.2 Qualification and Reliability Monitor test results and summaries shall be maintained in a computerized or hard copy archive by the applicable Engineering group for no less than 3 years.
- 4.2.4.3 Revisions of Document Control specifications and the change notices that authorize them shall be maintained on file for no less than 3 years.
- 4.2.4.4 All records shall be reviewed for legibility and then stored in a suitable environment (within PSC or a nearby facility) to prevent damage or deterioration and to prevent loss.
- 4.2.4.5 Where mutually agreed to by contract, quality records will be made available for customer evaluation and review only within PSC's facilities or at the applicable subcontractor's facility.

5.0 *MANAGEMENT RESPONSIBILITY:*

5.1 Management commitment: PSC has implemented a Quality Management System that is continuously maintained for effectiveness, and to enable process improvements in accordance with the requirements of ISO9001, and all other statutory or regulatory requirements as appropriate. Check with Raul if need to include items in the clause

5.2 Customer focus:

- 5.2.1 PSC has established, implemented and maintains documented procedures for contract review and for the coordination of related activities.
- 5.2.2 It is the responsibility of PSC's Inside Sales/Customer Service departments to review all contract offerings.
- 5.2.3 Customer quotations, inquiries, orders and contracts are reviewed to ensure customer requirements are adequately defined and documented.
- 5.2.4 Any changes or amendments to contracts are reviewed according to PSC spec SA-1000.

5.3 Quality Policy:

- 5.3.1 PSC defines and documents its Policy for Quality, which provides the overall objectives for an effective Quality Management System. The Quality Policy shall continue to be relevant to company goals *and* the expectations of our customers.
- 5.3.2 PSC is a provider of semiconductor and frequency control products and services, with sales in various world markets. (*See Appendix A, PSC Quality Policy.*)
- 5.3.3 PSC's employees and management are committed to assuring that this policy is implemented, understood and maintained at all levels of the organization.

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5.4 Planning:

- 5.4.1 *Quality objectives:* PSC senior management establishes the next fiscal year objectives at the end of every fiscal year. Any Quality objectives that may be defined shall be measurable and consistent with the Quality Policy. It is approved by PSC Management and reviewed at management review meetings as needed.
- 5.4.2 *Quality management system planning:*
 - 5.4.2.1 Quality planning is done when establishing or changing the quality management system, quality policy, quality objectives, company organization, market, etc.
 - 5.4.2.2 Top management shall ensure the Quality planning is carried out in order to meet the quality system requirement. Quality planning shall include quality objectives, resources needed, regular review and improvement.

5.5 Responsibility, authority and communication:

- 5.5.1 *Responsibility and authority:* PSC top management defines and documents the responsibility, authority, and interrelation of personnel who manage, perform, and verify work that may affect quality. PSC's general organization chart is shown in Appendix B. The PSC responsibility matrix for the quality system elements described in this manual is shown in Appendix C. PSC department responsibilities are documented by the HR department.
 - 5.5.1.1 Those personnel with responsibility for calibration, inspection, testing and internal quality audits will be trained as needed and certified for their applicable job responsibilities; records of such training shall be documented as appropriate.
- 5.5.2 *Management Representative (MR):* The Director of Quality Systems has been designated by PSC top management as responsible for ISO9000 Program Management, to ensure all requirements are understood, implemented and maintained. Irrespective of other responsibilities, the MR shall have responsibility and authority that includes:
 - 5.5.2.1 Ensuring that processes needed for the Quality Management System are established, implemented, and maintained.
 - 5.5.2.2 Reporting the performance of the Quality Management System to top management when necessary, and any need for improvement.
 - 5.5.2.3 Ensuring the promotion of customer requirements awareness throughout the company.
 - 5.5.2.4 Liaison with external parties on matters relating to the Quality Management System.
- 5.5.3 *Internal communication:*
 - 5.5.3.1 Top management shall ensure that appropriate communication processes are established at different functions and levels within PSC, and that communication takes place regarding the effectiveness of the quality management system, including quality requirements, quality objectives and implementation.
 - 5.5.3.2 Communication takes place within PSC by means of periodic reports, regular meetings, special meetings, notice board postings, daily e-mail correspondence, etc.

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5.6 Management Review:

- 5.6.1 *General:* PSC general management and department managers shall review the Quality System annually, at a minimum, to ensure its continuing suitability, adequacy and effectiveness in satisfying the requirements of this Quality Manual, the Quality Policy, and Quality objectives. Records of management reviews shall be maintained and retained by the Director of Quality Systems (QA-1002)
- 5.6.2 *Review input:* The input to management review shall include information on:
- 5.6.2.1 Results of audits;
 - 5.6.2.2 Customer feedback;
 - 5.6.2.3 Process performance and product conformity;
 - 5.6.2.4 Status of preventive and corrective actions;
 - 5.6.2.5 Follow-up actions from previous management reviews;
 - 5.6.2.6 Changes that could affect the quality management system;
 - 5.6.2.7 Recommendations for improvement.
- 5.6.3 *Review output:* The output from the Management Review shall include, as applicable, any decisions and related actions taken to.
- 5.6.3.1 Improve effectiveness of the quality management system and its processes;
 - 5.6.3.2 Improve product related to customer requirements;
 - 5.6.3.3 Personnel, equipment and material resource needs.

6.0 RESOURCE MANAGEMENT:

6.0 Provision of resources:

- 6.0.1 PSC management is responsible to ensure that adequate resource and personnel are available to implement and maintain the quality management system and continually improve its effectiveness and to enhance customer satisfaction by meeting customer requirement.

6.1 Human resources:

- 6.1.1 The HR Department is responsible to assist in the recruiting and selection of new employees based on appropriate education, training, skills and experience per each department request; and to ensure personnel performing work affecting product quality are competent.
- 6.1.2 Competence, training and awareness
- 6.1.2.1 PSC has established and maintains documented procedures to identify and provide necessary training for all personnel performing activities affecting quality.
 - 6.1.2.2 Personnel performing specific assigned tasks shall be qualified based on appropriate education, training, and/or experience, as required.
 - 6.1.2.3 Appropriate records of training shall be maintained, and retained.
 - 6.1.2.4 Training effectiveness shall be periodically evaluated.

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6.1.2.5 Ensure that people are aware of the importance of their work and how they contribute to the fulfillment of objectives

6.2 Infrastructure:

6.2.1 PSC management is responsible to ensure that adequate infrastructure, including building, workspace and process equipment and supporting services.

6.2.2 Each department shall maintain the necessary infrastructure to properly maintain PSC's facilities.

6.2.3 The Facilities department is responsible for maintenance and repair of day-to-day power, air conditioning, printers, telephones, etc; and MIS is responsible for computer, e-mail and Internet connection support.

6.3 Work environment: PSC ensures and manages the necessary work environment needed to achieve conformity to product requirements, including the safety of each employee.

7.0 *PRODUCT REALIZATION*

7.1 Planning of Product Realization: PSC documents the planning of Product Realization, so that all processes are controlled to meet specified requirements. The planning includes:

7.1.1 Quality objectives and requirements for the product;

7.1.2 The need to establish processes, documents, and provide resources specific to the product;

7.1.3 Required verification, validation, monitoring, measurement, inspection and test activities, and the criteria for product acceptance;

7.1.4 Records needed to provide evidence that the realization processes and resulting product meet specified requirements.

7.2 Customer-related process:

7.2.1 *PSC determines the requirements related to the products including:*

7.2.1.1 Customer specified requirements, including delivery and post-delivery requirements.

7.2.1.2 Requirements not stated by the customer but necessary for specified or intended use.

7.2.1.3 Statutory and regulatory requirements applicable to the product.

7.2.1.4 Any additional requirements considered necessary by PSC.

7.2.2 *PSC reviews the requirements related to the products including:*

7.2.2.1 Inside Sales, Customer Service, Product Marketing, Engineering, Operations and Quality will review as needed the requirements related to products prior to customer commitment, to ensure PSC has the ability to meet the defined requirements.

7.2.2.2 The results of the review and actions arising from it shall be recorded (by paper or electronically) and maintained on file by the responsible department.

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7.2.2.3 When customer requirements are changed, Inside Sales/Customer Service shall ensure that relevant documents are amended and affected personnel are made aware of the changed requirements.

7.2.3 Customer communication:

7.2.3.1 Sales and/or Marketing will provide product information to customers, including inquiry, contracts or order handling.

7.2.3.2 Inside Sales/Customer Service will handle any customer complaint issues, together with the responsible department. The latter shall analyze and implement any necessary corrective and preventive actions in order to avoid their recurrence.

7.2.3.3 Customer Service shall perform an annual Customer Satisfaction evaluation that will be documented and maintained on file for a minimum of three years.

7.3 Design and development:

7.3.1 Design and development planning (PSC Specification DR-1000 for IC, QSP-6 for FCP):

7.3.1.1 Design departments have been designated by PSC management to design and develop those products that have been identified by PSC management, Product Marketing and Sales as meeting the needs of the market to which PSC is selling.

7.3.1.2 Design establishes a plan and schedule for the design and qualification of products that management monitors. Any additional equipment or personnel required shall be identified.

7.3.1.3 Design also coordinates with Applications Engineering, Product Engineering, Product Marketing, Operations, and Quality, to insure all aspects of product design and qualification are covered.

7.3.2 Design and development inputs:

7.3.2.1 Information for design and redesign of products is obtained from Marketing. Marketing initiates a Product Proposal, including a business proposal and initial product specification, to top management.

7.3.2.2 Marketing coordinates a feasibility study, obtaining information from Product and Application Engineering, Manufacturing, Quality, etc., as necessary.

7.3.2.3 Marketing sends a Project Approval form to top management for approval after completing the feasibility study and getting all related approvals.

7.3.3 Design and development outputs:

7.3.3.1 The results of design input planning, review, and completion shall be identified, documented and reviewed for adequacy by the responsible management.

7.3.3.2 Design documentation shall cover applicable requirements, calculations, analysis, expected results, and throughput timing.

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7.3.3.3 Design output meets all initial design input requirements, indicate acceptance criteria, and identify any characteristics of the design that are crucial to manufacturing and functionality of the product.

7.3.4 *Design and development review:*

7.3.4.1 Each new design or re-design is reviewed by the appropriate managers and responsible Engineers; documentation and approvals of the review are maintained on file.

7.3.5 *Design and Development Verification:*

7.3.5.1 Design, assisted by Product Engineering, shall use appropriate engineering tools such as design simulation, comparing a new design with a similar proven design, undertaking special tests, review of design documentation, etc., as part of design verification review.

7.3.5.2 The design verification is performed to ensure that the design output meets the Design Input requirements.

7.3.6 *Design and Development Validation:*

7.3.6.1 All PSC manufacturing subcontract suppliers are reviewed and approved by the applicable Engineering groups, and approved by Quality and/or the applicable Engineering groups prior to production release.

7.3.6.2 Product Qualification testing may be performed per QA-1800 for IC products, or QAP-081 for FCP products, if so designated by Quality management.

7.3.6.3 Pre-Production review is done per TS-2150, Product Characterization and Release, before release of new or revised products to production.

7.3.6.4 If failures or discrepancies are found as a part of the design validation qualification, corrective actions are taken by the responsible groups. Conditional release must be approved by top management.

7.3.7 *Control of design and development changes:*

7.3.7.1 Redesign during the initial design stages is documented, reviewed and approved through form FR-0059.

7.3.7.2 All changes to a qualified product design because of Product Specification changes, process or yield enhancements, etc., must be reviewed for approval prior to production release.

7.3.7.3 Product Specification initiation and changes are reviewed and approved by the applicable departments.

7.3.7.4 When applicable, customers will be notified of changes that affect a product's form, fit, function or Quality/Reliability, as defined by QA-1420, Pericom Product Change Notification (PCN)

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7.4 Purchasing:

7.4.1 Purchasing process (Pericom Specification MP-1000):

- 7.4.1.1 PSC establishes and maintains documented procedures to ensure that purchased products and services conform to specified requirements.
- 7.4.1.2 PSC evaluates and selects key suppliers based on their ability to meet PSC's requirements including Quality System requirements.
- 7.4.1.3 PSC establishes and maintains quality records of approved key suppliers, and retains those records for a minimum of three years.

7.4.2 Purchasing information: The department purchasing materials or services, and affected departments shall review and approve purchasing documents for adequacy of specified requirements prior to release. Purchasing information shall contain clear descriptions of the product or service ordered, including where applicable:

- 7.4.2.1 Requirements for approval of product, procedures, processes and equipment.
- 7.4.2.2 Requirements for qualification of personnel.
- 7.4.2.3 Quality management system requirements.

7.4.3 Verification of purchased product:

- 7.4.3.1 PSC establishes and implements the inspection for ensuring that purchased product meets specified purchase requirements.
- 7.4.3.2 Where purchased products or services are verified by PSC at the supplier's premises, verification arrangements, and the method of release shall be specified in the purchasing documents.

7.5 Production and Service Provisions:

7.5.1 Control of production and service provision:

- 7.5.1.1 Manufacturing processes and equipment shall be maintained, controlled and approved by each applicable subcontractor; process/equipment changes shall be documented, and PSC notified of any modification that could affect the fit, form, function or Quality/Reliability of the product.
- 7.5.1.2 Processes controlled within PSC includes the following, as applicable:
 - 7.5.1.2.1 Documented specifications defining the characteristics of the products.
 - 7.5.1.2.2 Use of suitable work instructions, as necessary.
 - 7.5.1.2.3 Use of suitable equipment.
 - 7.5.1.2.4 Suitable maintenance/calibration of monitoring and measuring equipment.
 - 7.5.1.2.5 Implement monitoring and measurement for critical process parameters and product characteristics.
 - 7.5.1.2.6 Implement activities of release, delivery and post-delivery.

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7.5.2 *Validation of processes for production and service provision:*

- 7.5.2.1 When specified by an acknowledged customer purchase order and specification, special process flows that differ from PSC's standard processing flow shall be documented; and the product manufactured, tested and accepted in accordance with customer requirements.
- 7.5.2.2 Special flows may include a unique product design, wafer fabrication, packaging, electrical testing, inspection, or acceptance requirement.
- 7.5.2.3 Operations, Quality, Engineering and/or Design shall approve all special processing prior to the start of product manufacturing.

7.5.3 *Identification and Traceability:*

7.5.3.1 Product Marking Identification:

- 7.5.3.1.1 PSC and SaRonix devices are identified with a unique part number and manufacturing date code. Exceptions: a special customer mark requirement, or where specifically omitted due to package size.
- 7.5.3.1.2 The PSC or SaRonix logo shall be marked on each device unless a customer specifically requests deletion, or omitted due to package size.

7.5.3.2 Product Traceability Paperwork:

- 7.5.3.2.1 Lot travelers shall contain lot number traceability and be maintained from the time of manufacturing until shipment to customers.
- 7.5.3.2.2 PSC lot numbers provides traceability back to wafer lot numbers and assembly lot numbers.

7.5.4 *Customer Property:*

- 7.5.4.1 PSC will prepare suitable documentation to handle customer material and products should it become necessary. PSC standard procedures shall be utilized if the customer does not specify requirements.
- 7.5.4.2 Customer controlled documents will be controlled by PSC Document Control.
- 7.5.4.3 If any customer products are lost, damaged or otherwise found to be unsuitable for use, this shall be reported to the customer and records maintained.

7.5.5 *Preservation of product:*

- 7.5.5.1 General: PSC follows general standard handling practices used throughout the industry, to the level required for the types of products manufactured by Pericom.
- 7.5.5.2 Handling:
 - 7.5.5.2.1 Because of PSC's advanced design and technologies, all products shall be considered sensitive to static discharge and handled accordingly.

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7.5.5.2.2 Products are handled and stored using conductive or static dissipative materials.

7.5.5.2.3 Controls are in place to insure that all personnel who handle material have proper ground straps, or conductive shoes, or shoe straps.

7.5.5.2.4 Conductive wrist/shoe straps, conductive/static dissipative shoes, static dissipative table tops, shelving, etc. that product may contact, are monitored on a periodic basis to insure grounding is effective.

7.5.5.3 Packaging: Product shall be packed in containers designed to prevent device exposure to excessive moisture, mechanical damage, and ESD voltage damage.

7.5.5.4 Storage:

7.5.5.4.1 Product is stored on suitable shelves within static shielded bags and boxes with appropriate labels that identify the product status.

7.5.5.4.2 Each specific shelving area is identified.

7.5.5.4.3 Temperature and humidity is controlled in all work areas where product is tested or handled outside of its ESD protective packaging.

7.5.5.5 Preservation: No special methods to preserve PSC products are required.

7.6 Control of monitoring and measuring equipment

7.6.1 Control Procedure: Equipment used to test or inspect production material shall bear a calibration sticker denoting the date calibrated and the next date due.

7.6.2 Operators or Inspectors utilizing calibrated equipment shall verify prior to start of work that their equipment is within the calibration cycle.

7.6.3 The calibration schedule is maintained by Quality Engineering.

7.6.4 Calibration of equipment not performed in-house shall be accomplished by an outside vendor who has been approved by Quality.

7.6.5 The recall system shall also be maintained by the approved vendor(s) (or by in-house control), and each department responsible for calibratable equipment shall insure that their equipment is recalibrated prior to the calibration expiration date.

7.6.6 If, after recalibration, an out of tolerance condition is noted that may affect product quality, PSC Quality notifies any affected customer so that disposition of the product can be made.

8.0 MEASUREMENT, ANALYSIS AND IMPROVEMENT

8.1 General: PSC plans and implements the monitoring, measurement, analysis and improvement processes needed to demonstrate and ensure the conformity of the product, quality management system and continually improve the effectiveness of the quality management system.

8.2 Monitoring and measurement:

8.2.1 *Customer satisfaction*: PSC's Inside Sales/Customer Service department is responsible to monitor customer satisfaction by an annual questionnaire per SA-1001. According to the

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results, corrective and preventive actions requests may be sent to the responsible departments for any items needing improvement or correction.

8.2.2 *Internal audits (PSC spec QA-1600, Internal Audit Program):* The purpose of internal audits is to verify compliance to the quality system policies/procedures defined in this manual, and to determine the effectiveness of the quality system. Internal audits shall ensure:

8.2.2.1 Audits are scheduled on a current status (at least once a year) and importance of activity

8.2.2.2 Independence of auditors from activity being audited

8.2.2.3 Recording of audit results

8.2.2.4 Audit results are brought to the attention of management responsible for the audited area

8.2.2.5 Root cause and corrective action identification plan will be established within 10 working days.

8.2.2.6 Timely corrective action is taken by management responsible for the area audited.

8.2.2.7 Follow-up audit activities will be done to verify and record the implementation and effectiveness of corrective action taken.

8.2.2.8 Suitable working environment shall be considered as part of the internal audit process, including, but not limited to, adequacy and implementation of procedures for cleanliness of work areas, ESD controls, and proper handling of material and products.

8.2.3 *Monitoring and measurement of processes:* PSC identifies, plans, and ensures that production processes directly affecting product quality are done under controlled conditions. Corrective and preventive action is taken to ensure the conformity of the products and continual improvement.

8.2.4 *Monitoring and measurement of product:*

8.2.4.1 *Incoming inspection:* All PSC IC and FCP products are received and inspected by IQC, including the quantity, visual, paperwork, etc. Indirect materials are inspected by the corresponding department.

8.2.4.2 *FQA electrical test:* performed after 100% electrical test per TS-3000, unless otherwise permitted by customer or Quality. Acceptance criteria are per the Product Spec.

8.2.4.3 *QA visual inspection:* is performed before packing in accordance with MP-1280, unless otherwise permitted by customer or Quality.

8.2.4.4 *Final shipment inspection:* performed after packing per MP-1252, unless otherwise permitted by customer or Quality.

8.3 Control of nonconforming product: (PSC spec QA-1010, Material Review Board):

8.3.1 Nonconforming materials or products are segregated from the rest of the lots and held at the designated HOLD area to ensure that no mixing occurs.

8.3.2 If it is determined that material cannot be reworked or rescreened to conform to PSC and/or the customer specification, an MRB (Material Review Board) form per QA-1010 is to be initiated.

8.3.3 PSC may handle nonconforming material in the following ways:

8.3.3.1 Take action to eliminate any detected and confirmed nonconformity;

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- 8.3.3.2 Authorize its use, release or acceptance after management approval and, where applicable, by the customer;
- 8.3.3.3 Take necessary action to prevent its use in the original intended application;
- 8.3.3.4 Re-verification to be done after rework, rescreen or other actions taken.

8.4 Analysis of data:

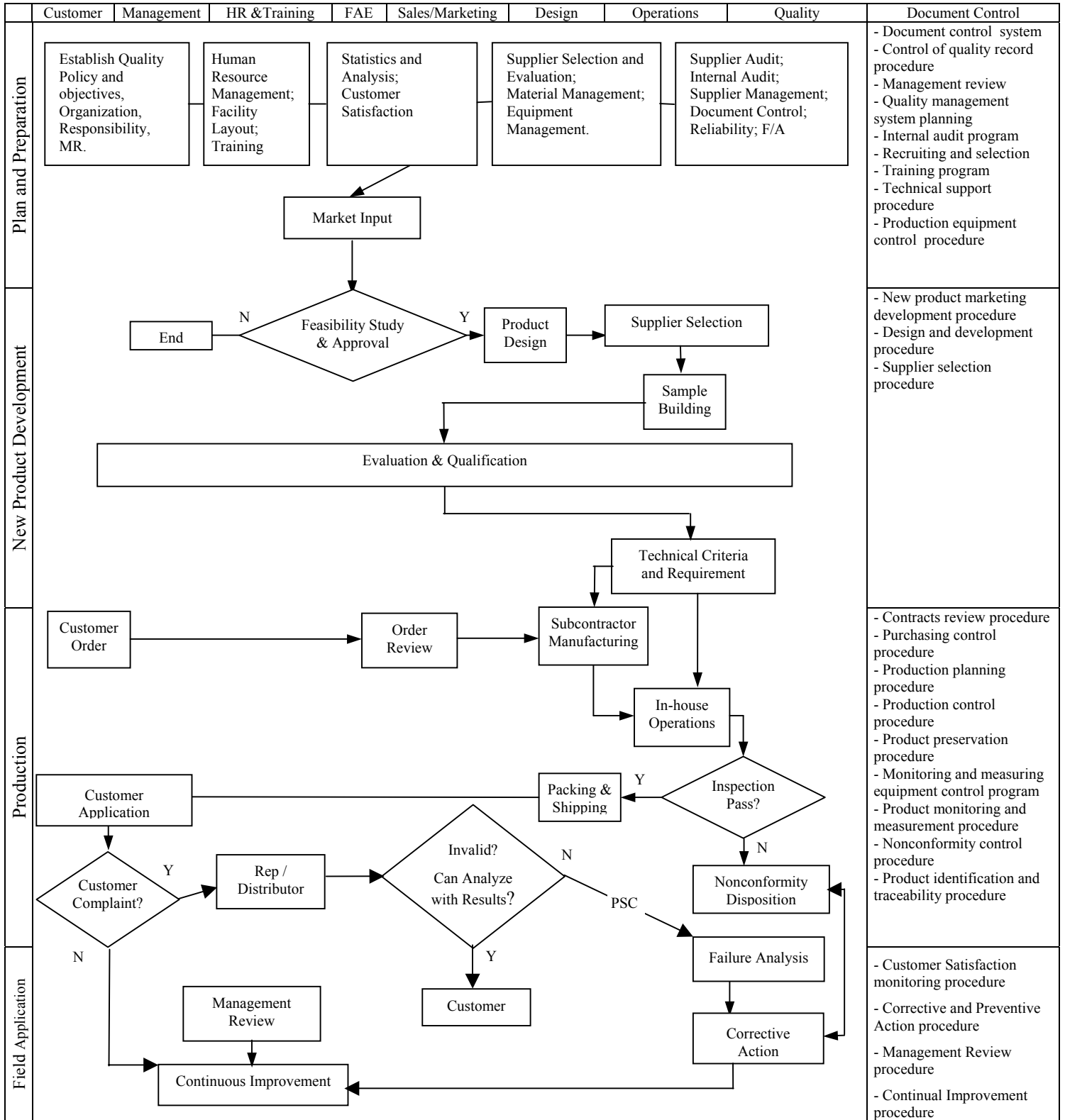
- 8.4.1 PSC Quality and management collects for review and analysis the appropriate data from the process of performing Incoming Material Inspection, Testing, Visual Inspection, Packing and Shipping Inspections, Customer Satisfaction, etc. Appropriate actions will be taken as required by the results of that analysis and review.

8.5 Improvement:

- 8.5.1 Continual Improvement: PSC works on an on-going basis to improve the effectiveness of its Quality Management System through management review of: Quality Policy, quality objectives, audit results, analysis of data, corrective and preventive actions, etc. Any improvements will be documented as part of Management Review, and by electronic communication (e-mail).
- 8.5.2 Corrective and Preventative action (PSC specification QA-1020, Corrective Action Request): PSC establishes, implements and maintains documented procedures to initiate corrective and preventive actions for conditions adverse to quality.
 - 8.5.2.1 Corrective action procedures define the requirements for:
 - 8.5.2.1.1 Reviewing nonconformities (including customer complaints);
 - 8.5.2.1.2 Determining causes of nonconformities;
 - 8.5.2.1.3 Evaluating the need for action to ensure that nonconformities do not recur;
 - 8.5.2.1.4 Determining and implementing the action needed;
 - 8.5.2.1.5 Records of the results of action implemented;
 - 8.5.2.1.6 Review of corrective action implemented.
 - 8.5.2.2 Preventive action procedures define the requirements for:
 - 8.5.2.3 Determining potential nonconformities and their causes;
 - 8.5.2.4 Evaluating the need for action to prevent occurrence of nonconformities;
 - 8.5.2.5 Determining and implementing the action needed;
 - 8.5.2.6 Records of the results of action implemented;
 - 8.5.2.7 Review of the effectiveness of the preventive action implemented.

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Appendix A GENERAL QUALITY MANAGEMENT SYSTEM FLOW



Appendix B

QUALITY POLICY

Pericom will deliver products and services that conform to customer requirements. We shall perform each job correctly the first time, emphasizing constant improvement in the quality of our work.

“*Pericom will deliver...*” - delivery, not just intentions, is one of the essential measures of Pericom’s commitment to deliver a quality product to customers.

“*... products and services ...*” - quality performance is not limited to physical products; sending a letter without spelling errors, or promptly and politely answering a telephone are services which demand our best quality.

“*... that conform to customer requirements.*” - a clear understanding of all requirements are needed *before* one can deliver quality products or services. This also signifies mutual agreement, with clear, two-way communications, which applies to customers within as well as outside the company. The entire Pericom team understands that each customer has a set of requirements and expectations that must be met.

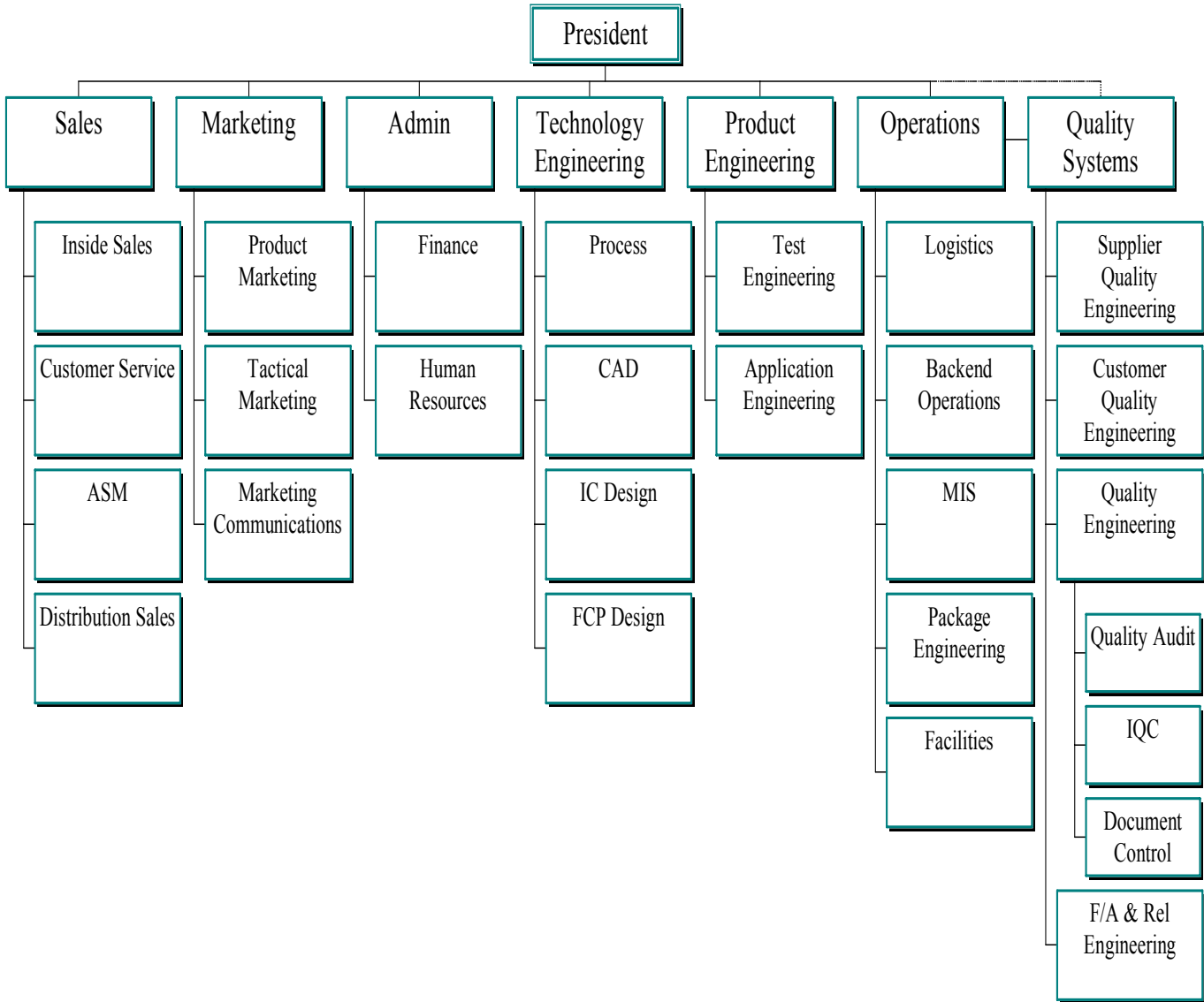
“*We shall perform each job correctly the first time,*” - doing jobs correctly the first time means meeting agreements, that quality improvement measures are driven to determine the source of defects and preventing those defects from reoccurring. The continual *process* of preventing defects will drive down the costs that our customer's and we experience, because costs associated with rework, redesign, etc., are dollars taken from being price competitive.

“*...emphasizing constant improvement in the quality of our work.*” - each employee shall strive to find better, faster, more economical ways to perform their job, to ensure that quality continues to improve along with cost effectiveness.

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Appendix C

PSC GENERAL ORGANIZATION CHART



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Appendix D
Quality System Responsibility Breakdown

ISO9001	Department Contents	Management	MR	Quality	Inside Sales/ Customer Service	HR	Marketing	Design	Operations	Engineering	MIS
		4.0	Quality Management System								
4.1	General Requirements	▲	□	▲	▲	▲	▲	▲	▲	▲	▲
4.2	Documentation requirements										
4.2.1	General	▲	□	▲	▲	▲	▲	▲	▲	▲	▲
4.2.2	Quality manual	▲	□	▲	▲	▲	▲	▲	▲	▲	▲
4.2.3	Control of documents	▲	▲	□	▲	▲	▲	▲	▲	▲	▲
4.2.4	Control of records	▲	▲	□	▲	▲	▲	▲	▲	▲	▲
5.0	Management Responsibility										
5.1	Management commitment	□	▲	▲	▲	▲	▲	▲	▲	▲	▲
5.2	Customer focus	□	▲	▲	▲	▲	▲	▲	▲	▲	▲
5.3	Quality policy	□	▲	▲	▲	▲	▲	▲	▲	▲	▲
5.4	Planning	▲	□	▲	▲	▲	▲	▲	▲	▲	▲
5.4.1	Quality objectives	□	□	▲	▲	▲	▲	▲	▲	▲	▲
5.4.2	Quality management system planning	□	□	▲	▲	▲	▲	▲	▲	▲	▲
5.5	Responsibility, authority and communication	□	▲	▲	▲	▲	▲	▲	▲	▲	▲
5.6	Management review	□	▲	▲	▲	▲	▲	▲	▲	▲	▲
6.0	Resource management										
6.1	Provision of resources	□	▲	▲	▲	▲	▲	▲	▲	▲	▲
6.2	Human resources	▲	▲	▲	▲	□	▲	▲	▲	▲	▲
6.3	Infrastructure	▲	▲	▲	▲	□	▲	▲	□	▲	□
6.4	Work environment	▲	▲	▲	▲	▲	▲	▲	□	▲	▲
7.0	Product realization										
7.1	Planning of product realization	▲	▲	▲	▲	▲	▲	□	□	▲	▲
7.2	Customer-related processes	▲	▲	▲	□	▲	□	▲	▲	▲	▲
7.3	Design and development	▲	▲	▲	▲	▲	▲	□	▲	▲	▲
7.4	Purchasing	▲	▲	▲	▲	▲	▲	▲	□	▲	▲
7.5	Production and service provision										
7.5.1	Control of production and service provision	▲	▲	▲	▲	▲	▲	▲	□	□	▲
7.5.2	Validation of production and service provision processes	▲	▲	▲	▲	▲	▲	▲	□	▲	▲
7.5.3	Identification and traceability	▲	▲	▲	▲	▲	▲	▲	□	▲	▲
7.5.4	Customer property										
7.5.5	Preservation of product	▲	▲	▲	▲	▲	▲	▲	□	▲	▲
7.6	Control of monitoring and measuring equipment	▲	▲	▲	▲	▲	▲	▲	□	▲	▲

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ISO9001-	Department Contents	Management	MR	Quality	Inside Sales/ Customer Service	HR	Marketing	Design	Operations	Engineering	MIS
		8.0	<i>Measurement, analysis and improvement</i>								
8.1	<i>General</i>	▲	□	▲	▲	▲	▲	▲	▲	▲	▲
8.2	<i>Monitoring and measurement</i>										
8.2.1	Customer satisfaction	▲	▲	▲	□	▲	▲	▲	▲	▲	▲
8.2.2	Internal audit	▲	□	▲	▲	▲	▲	▲	▲	▲	▲
8.2.3	Monitoring and measurement of processes	▲	□	□	▲	▲	▲	▲	▲	▲	▲
8.2.4	Monitoring and measurement of product	▲	▲	□	▲	▲	▲	▲	▲	▲	▲
8.3	<i>Control of nonconforming product</i>	▲	▲	□	▲	▲	▲	▲	▲	▲	▲
8.4	<i>Analysis of data</i>	▲	□	▲	▲	▲	▲	▲	▲	▲	▲
8.5	<i>Improvement</i>										
8.5.1	Continual improvement	▲	□	▲	▲	▲	▲	▲	▲	▲	▲
8.5.2	Corrective action	▲	▲	□	▲	▲	▲	▲	▲	▲	▲
8.5.3	Preventive action	▲	▲	□	▲	▲	▲	▲	▲	▲	▲

□ Responsible Dept.

▲ Affected Dept.

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**Appendix E
KEY PSC PROCEDURE MASTER LIST**

S/N	PSC SPEC#	PROCEDURE TITLE
1	DR-1000	General Design Requirements for Pericom Products
2	HR-1101	Pericom Personnel Hiring Process
3	MA-1251	Pericom Date Code Mark System (Product Identification And Traceability)
4	MP-1000	General Purchase Order Requirements
5	MP-1001	Planning and Logistics Department Structure
6	QA-1002	Management Review
7	QA-1010	Material Review Board (MRB) Procedure [Nonconformity Control]
8	QA-1020	Corrective Action Request (CAR)
9	QA-1050	Pericom Employee Training Guidelines
10	QA-1200	Equipment Calibration Control System
11	QA-1300	ESD Control Program (Product Preservation)
12	QA-1400	Document Control System
13	QA-1410	Maintenance and Control of Records
14	QA-1435	Product Release Requirements
15	QA-1550	Supplier Selection Procedure
16	QA-1600	Internal Quality Audit Program
17	QA-1800	Pericom Product Reliability Qualification and Monitoring Program
18	QAP-081	Frequency Control Products Qualification (FCP)
19	QSP-6	Design Review (FCP)
20	SCD-20	Finished Product Quality Requirements (FCP)
21	SA-1000	Customer Service General Operating Procedure (includes Contract Review)
22	SA-1001	Customer Satisfaction Procedure
23	TS-2150	Product Characterization and Release