

Title: SKYWATER SUPPLIERS QUALITY REQUIREMENTS

1. PURPOSE/SCOPE

1.1 Purpose

1.1.1 The purpose of this document is to identify quality provisions that SkyWater Suppliers and SkyWater will apply to develop a successful partnership and to conform with standards and comply with regulations. This agreement will be used on Purchase Orders (POs) by SkyWater facilities using this document.

1.2 Scope

1.2.1 This procedure applies to all SkyWater sites and their Suppliers of materials/parts and services. It is intended to communicate Supplier quality requirements to SkyWater Suppliers.

1.2.2 SkyWater sites are: SkyWater Technology, SkyWater Florida, and affiliates.

1.2.3 Definitions:

1.2.3.1 **Supplier:** Companies, manufacturers, vendors and contractors that sell and provide materials, products or services to SkyWater.

1.2.3.1.1 Refer to Provisions 003 through 025 in this document.

1.2.3.2 **Approved Suppliers:** Suppliers that are identified by SkyWater based on the materials and services provided to go through a qualification process and to be included into the Approved Supplier List (ASL). Examples of Approved Suppliers are Suppliers of targets, gases, chemical, quartzware, pellets, wafers, outsource wafer service and wafer processing services.

1.2.3.2.1 Refer to Provisions 001 through 025 in this document.

2. RESPONSIBILITIES

2.1 SkyWater QA and Purchasing is responsible for updating and revising the provisions listed in these requirements as needed and as part of the SkyWater Quality Management System.


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3. REFERENCED DOCUMENTS: SkyWater Internal Use Only

3.1 [Referenced Documents \(DMS\)](#)

CTRL-Click (click if PDF) on the above link to access the Document Management System (DMS) details page for the spec. Then click on the “Reference Documents”  button to bring up the list of referenced documents.

4. MATERIALS: N/A

5. EQUIPMENT: N/A

6. SAFETY: N/A

7. CRITICAL REQUIREMENTS SUMMARY:

7.1 Quality Provisions Structure

7.1.1 SkyWater’s quality requirements to its Suppliers are listed as provisions. This agreement is identified on all POs. When a Supplier accepts the Purchase Order, they are expected to comply with all the Quality Provisions listed. If a Supplier cannot meet the Quality Provision or feels that it is not applicable, they must contact SkyWater to resolve the issue before accepting the Purchase Order.

8. OPERATING PROCEDURES AND RESPONSIBILITIES

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8.1 Provision 001 – Quality Management System:

8.1.1 Approved Suppliers are required to maintain a certification to ISO9001 by a third-party certification body accredited registrar. The Supplier shall notify SkyWater of any changes to the QMS, i.e. certification status, facility relocation, additions of new sites.

8.1.2 The Supplier shall ensure that personnel doing work under the organization's control are aware of their contribution to product or service conformity, their contribution to product safety and the importance of ethical behavior.

8.1.2.1 The organization shall determine the requirements for the products and services including consideration of personal and product safety. The

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organization shall plan, implement, and control the Quality Management System processes needed to assure product safety during the entire product life cycle, as appropriate to the organization and the product.

8.1.3 The Quality Management System shall also detail strategies for the response to and the recovery from a broad spectrum of potential threats. Furthermore, the Quality Management System shall demonstrate the competence of the Supplier in the following fields:

- 1) Quality risk-based thinking management;
- 2) Business continuity plans;
- 3) Pandemic/Disaster recovery plan;
- 4) Financial Risk Solvency.

8.1.4 The Supplier shall at all times remain solely responsible for the implementation and adequacy of their Quality Management System.

8.2 Provision 002 – Approved Supplier of Materials, Parts and Services:

8.2.1 Material Requirements for Approved Suppliers are included on POs.

8.2.1.1 SkyWater will provide the identification of relevant technical data (e.g., specifications, drawings, process requirements, work instructions) as part of the Material Requirements to the Suppliers during the qualification process.

8.2.1.2 To assure and establish product quality, SkyWater may require specifics in personnel competence, including any required qualifications.

8.2.2 Suppliers are responsible for ensuring the compliance of materials used to manufacture parts supplied to SkyWater.

8.2.3 Approved Suppliers shall have a program to prevent the use of counterfeit parts.

8.2.4 Counterfeit Material/Parts:

8.2.4.1 Counterfeit work means work that is or contains unlawful or unauthorized reproductions, substitutions, or alterations that have been knowingly mismarked, misidentified, or otherwise misrepresented to be authentic, and unmodified from the original manufacturer, or a source with the

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express written authority of the original manufacturer or current design activity, including an authorized aftermarket manufacturer.

- 8.2.4.2 Approved Suppliers agree and shall ensure that counterfeit parts are not delivered to SkyWater. The intentional or unintentional use, incorporation, or delivery of counterfeit parts is strictly prohibited. This includes parts being provided either as an end item deliverable or as a component/subcomponent of an end item deliverable under this agreement.
- 8.2.4.3 Approved Suppliers shall flow down the counterfeit prevention requirements to their Suppliers.
- 8.2.4.4 If a Supplier believes they may have discovered counterfeit materials, they are to quarantine and contact SkyWater as well as the source from which they obtained the products, and make their concerns known. Upon identification of counterfeit material, the Supplier shall:
- Identify part(s) as nonconforming,
 - Not return the parts but quarantine them.
- 8.2.4.5 Any suspected or confirmed counterfeit parts delivered to SkyWater are considered non-conforming material. These will not be returned to the Supplier.
- 8.2.4.6 Approved Suppliers shall immediately notify SkyWater in writing if Supplier or sub-tier Supplier cannot purchase or acquire authentic components, subcomponents, parts, material, and supplies directly from the OEM.

8.2.5 Certificate of Compliance, or Conformance (CofC), Certificate of Analysis (CofA):

The Approved Supplier shall submit with each shipment either on their packing list, or attachments, a certificate of conformance/compliance or analysis which shall be dated and signed, stating that the materials and services provided to SkyWater are in conformance with the applicable requirements of the PO, drawings, specifications, and Material Requirements.

Suppliers of Gas, Chemicals, and Wafers must email CofAs, CofCs to Buyers and Stores IQA prior to or upon shipment. Supporting

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documentation of the results in the CofC/CofA must be on file and be made available to SkyWater, its customer(s), Government Representatives, and/or any other regulatory or statutory agency upon request.

Certification must include the following:

- 1) The Supplier's full name and address;
- 2) SkyWater PO number;
- 3) SkyWater part number, revision, and as applicable, serial numbers;
- 4) SkyWater material requirement specification number, including the revision number;
- 5) PO quantity;
- 6) Quantity shipped;
- 7) Lot / Date Code;
- 8) Name of lower-tier Supplier and description of service provided (if applicable);
- 9) Authorized signature and date.

8.2.5.1 An example of an acceptable statement of Certificate of compliance/conformance is as follows: "This is to certify that all items noted are in conformance with the contract, drawings, specifications, and other applicable documentation, and that all process certifications, chemical and physical test reports are on file and are available for review by SkyWater". Unless specifically required per purchased order, the Supplier's lower-tier Supplier/processor CofCs shall be made available to SkyWater, SkyWater customer(s), authorized Government Representative, or any other regulatory or statutory agency upon request.

8.2.5.2 Statements on certification documents must be positive and unqualified. Words such as "To the best of our knowledge" or "We believe the information contained herein is true" are not acceptable.

8.3 Provision 003 – Identification, Preservation, Packaging, and Packing:

8.3.1 Each packing list shall include, as a minimum, the following information:

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- 1) SkyWater Part number;
- 2) Supplier Part Number;
- 3) PO number;
- 4) Quantity;
- 5) Supplier/Manufacturer's identification.

8.3.2 SkyWater maintains specific requirements based on the type of the materials provided/supplied and these requirements are communicated to the Suppliers and listed on the POs, as needed.

8.3.3 It is the Supplier's responsibility to package their product using methods that meet DOT requirements and ensure materials are delivered without being damaged during the shipping process.

8.4 Provision 004 – Measuring & Test Equipment:

8.4.1 Supplier shall test, inspect, and verify that the materials, parts or services provided meet SkyWater requirements. This can include the production (in process) tests, inspections, or verifications.

8.4.2 It is the Supplier's responsibility to ensure all equipment used to test, inspect, and verify SkyWater supplied parts are maintained, calibrated and traceable to the National Institute of Standards and Technology (NIST) requirements.

8.4.3 The calibration system used by the Supplier must be in accordance with ISO 17025, General Requirements for the Competence of Testing and Calibration Laboratories.

8.5 Provision 005 – Shelf Life/Expiration Date:

8.5.1 SkyWater will have specific shelf-life requirements based on the type of the materials provided/supplied and these requirements will be communicated to the Suppliers in the material governing specs.

8.5.2 The expiration dates shall be clearly recorded on the packaging and shipping documents. As a minimum, the material or documentation shall contain the following information:

- 1) Part Number;

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- 2) Part Name;
- 3) Manufacturer Name;
- 4) Unit of Measure;
- 5) Lot/Batch Number;
- 6) Shelf-Life Exp. Date;
- 7) Manufacture Date.

8.6 Provision 006 – Temperature Sensitive Material:

- 8.6.1 For temperature sensitive material, the Supplier must identify each shipment of temperature sensitive material with the manufacture date, storage temperature and recommended shelf life.
- 8.6.2 In addition to the normal identification requirements of name, type, size, lot/date code, and quantity identification, special handling conditions must also be recorded on the shipping document, such as temperature requirements for transport.

8.7 Provision 007 – Notification of Non-conformances Responsibility:

- 8.7.1 The Supplier shall inform SkyWater immediately when there is a reason to suspect that products previously supplied to SkyWater may not be in accordance with SkyWater drawing(s), specification, or purchase order requirements.
- 8.7.2 The Supplier shall promptly inform SkyWater of any circumstance related to materials, manufacturing, processing, processes, methods, equipment, design, etc. which may make a product susceptible to premature failure or otherwise place the safe operation of that product at risk.
- 8.7.3 The notification shall describe the nature of the discovered anomaly, its applicability to SkyWater part number(s), quantities affected and the probable impact to the proper function/performance of the item supplied.
- 8.7.4 The Supplier shall not ship nonconforming products, materials, parts, or services to SkyWater. If the Supplier deems the nonconforming product acceptable, approval from SkyWater is required for disposition and shipping.

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- 8.7.5 Any nonconformance on such final deliverable product, processes, or service to the purchase order, SkyWater drawings, SkyWater specifications or applicable documents must be submitted to SkyWater for approval prior to usage or shipment, unless otherwise documented on SkyWater's Purchase Order.
- 8.7.6 The Supplier is responsible for notifying SkyWater if they have received any corrective actions from the government or regulatory agencies within 30 days.
- 8.7.7 SkyWater reserves the right to reject an entire lot if any defects are detected at SkyWater.
- 8.8 Provision 008 – Control of Direct and Lower-Tier Supplier:**
- 8.8.1 The Supplier is responsible for the quality of all sub-tier products.
- ***
- 8.8.2 The Supplier shall flow-down all applicable SkyWater purchase order requirements.
- 8.8.3 The Supplier shall control and monitor their external providers' performance.
- 8.9 Provision 009 – Supplier Corrective Action Request:**
- 8.9.1 A Supplier Corrective Action Request (SCAR) will be issued by SkyWater to the Supplier when corrective action is required. Upon notification of the SCAR, the Supplier shall take immediate containment action.
- 8.9.2 The Supplier shall complete the analysis of cause and propose corrective action within SkyWater's instructions and response time.
- 8.10 Provision 010 – Parts Substitution:**
- 8.10.1 The Supplier shall not deliver substitute parts for the part specified on the purchase order unless SkyWater and/or SkyWater customers have approved the substitution in writing as evidenced by a formally released SkyWater alternate parts document, other record, or instruction.
- 8.11 Provision 011 – Obsolete Parts:**

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8.11.1 The Supplier shall notify SkyWater of any End of Life, Obsolescence or Form, Fit, or Function issues for ten (15) years beyond the acceptance date of the PO.

8.12 Provision 012 – Safety Data Sheet (SDS):

8.12.1 Operational Safety and Health Administration (OSHA) Global Harmonized System (GHS) (formerly MSDS and label requirements): each purchased product shipment shall contain appropriate hazard and precautionary information using Safety Data Sheets (formerly MSDS), and labels shall be in accordance with GHS requirements.

8.13 Provision 013 – Right of Access:

8.13.1 During the fulfillment of the order, SkyWater, SkyWater customers, and/or a regulatory or statutory agency including Government Representatives, reserve the right to attend, review, and participate in the Supplier's quality management system and associated manufacturing processes including inspection and testing of any work related to this agreement.

8.13.2 SkyWater, SkyWater customers, and/or regulatory or statutory authorities shall be afforded the right to verify at the Supplier's premises (or Supplier's subcontracting premises) that the Supplier's product conforms to all specified requirements.

8.13.3 Supplier will permit, and require its subcontractors to permit, SkyWater, its direct or indirect customers, their respective representatives, and any government representatives, to witness and inspect Products or Services and any or all stages of their production or testing at any time at the facilities of the Supplier or any of its subcontractors.

8.14 Provision 014 – Government, SkyWater, or Customer Property:

8.14.1 When applicable, property supplied by SkyWater, its customer(s), and/or the Government to be incorporated into the Supplier's finished product shall be inspected upon receipt. The Supplier shall protect, safeguard, and maintain the property throughout the manufacturing process or life cycle.

8.14.2 When the property is lost, damaged, or otherwise found to be unsuitable for use, the Supplier shall report this to SkyWater and retain documented information on what has occurred.

8.15 Provision 015 – Notification of Changes:

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8.15.1 The Supplier shall provide written notification to SkyWater prior to implementing the changes listed below:

- 1) Manufacturing process, products, and/or services;
- 2) Critical raw material;
- 3) Manufacturing locations;
- 4) Changes of external providers;
- 5) Quality Management System;
- 6) Machinery & Equipment changes.

The Supplier is responsible to communicate this requirement to direct and all its sub-tier Suppliers. To submit change requests, contact your SkyWater buyer. Suppliers are encouraged to submit change requests to improve quality, reliability, and process capability, as well as reducing costs and lead-times. No major changes shall be made without SkyWater approval.

8.15.2 The Supplier must notify SkyWater 90 days prior to making any changes in the manufacturing process, changing the manufacturing locations, or any critical raw material changes for products supplied.

8.16 Provision 016 – Drop-shipped Parts and Material:

8.16.1 When the Supplier is requested by SkyWater to drop-ship parts or material to a location other than SkyWater, they will include a copy of the purchase order along with all required data and certifications specified by the purchase order's Quality Assurance Codes (QAC's / QC's). The Supplier will also send electronic copies of the packing slip and tracking information to SkyWater at the time of shipment. The Supplier will ensure source inspection is performed or a waiver for such inspection is received from SkyWater Quality prior to shipment if the purchase order contains a Quality Condition requiring source inspection.

8.16.2 The receiving organization of drop-shipped material will notify SkyWater when parts and materials are received. The receiver will also verify the appropriate type and quantity of materials and ensure such materials are undamaged by shipping and handling. The receiver will immediately notify SkyWater of any problems or concerns with received materials.

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8.17 Provision 017 – Requirements for Interaction with External Providers:

8.17.1 SkyWater reserves the right to identify the requirements for interaction with SkyWater’s external providers including:

- 1) The use of interactive documentation;
- 2) The use of email or other means agreed in writing;
- 3) Documented confirmation methods of all verbal interaction.

8.17.2 In addition to the other requirements listed in this document, Suppliers shall hold all information received from SkyWater with confidence and no-third-party request for information will be authorized unless approved, in writing, by SkyWater.

8.18 Provision 018 – Supplier Control and Monitoring:

8.18.1 SkyWater has established Approved Supplier performance monitoring criteria, contingency risk assessment and a development process for its Suppliers of products and services to assess Supplier performance relative to the organization’s expectations. The criteria used are quality, delivery/lead time, ease of doing business, cost, support, and risk assessments.

8.19 Provision 019 – Supplier Audits for Verification and Validation:

8.19.1 SkyWater and its customers reserve the right to conduct audits at Supplier locations, remote audits, or off-site review audits in order to verify and validate Supplier’s compliance with SkyWater’s requirements.

8.19.2 Communication about the Supplier audit will be initiated by SkyWater and done in accordance with the SkyWater audit procedures.

8.19.3 Each auditing party shall be entitled to visit the Supplier’s premises during normal business hours and inspect methods of manufacturing and related quality assurance systems, provided that SkyWater shall comply with the Supplier’s reasonable safety and security requirements and policies prescribed for such premises.

8.19.4 The Supplier may adequately protect its business know-how during the audits and shall not be required to furnish any confidential information of any other customer of the Supplier.

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8.19.5 Deficiencies identified by an Auditing Party and agreed upon by both parties during an audit shall be corrected within a reasonable period by the Supplier. The corrective actions planned by Supplier, and upon SkyWater's request, the status of their performance shall be communicated by the Supplier to SkyWater.

8.20 Provision 020 – Controls for Design and Development:

8.20.1 SkyWater requires Suppliers to establish, implement and maintain controls to the design and development process to ensure that:

- 1) The results to be achieved are defined;
- 2) Reviews are conducted to evaluate the ability of the results of design and development to meet requirements;
- 3) Verification activities are conducted to ensure that the resulting products and services meet the requirements for the specified application of intended use;
- 4) Any necessary actions are taken on problems determined during the reviews, or verification and validation activities;
- 5) Documented information of these activities is retained;

8.21 Provision 021 – Special Requirements, Key Characteristics and Critical Items:

8.21.1 SkyWater identifies key characteristics as product or process characteristics that are considered to have a significant impact on the form, fit or function of the part and/or influence customer perception of the end product. Any critical to quality characteristics identified by SkyWater are to be considered key characteristics and communicated to Supplier and Approved Supplier.

8.21.2 Key characteristics shall be identified on relevant control plans and manufacturing process documentation.

8.21.3 On key characteristics where statistical process control (SPC) has or will be applied, the Supplier shall complete a process capability study for each key characteristic.

8.22 Provision 022 – Statistical Process Control for Product Acceptance:

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- 8.22.1 When necessary, the Suppliers shall use Statistical Process Control (SPC) techniques as a preferred methodology to ensure production quality, conformity, and product acceptance.
- 8.22.2 SPC shall be used to measure, analyze, and eliminate sources of variations detrimental to product quality. SPC shall be administered by the Supplier in areas of highest potential benefit and/or on Critical Characteristics flowed down in drawings.
- 8.22.3 When necessary, as part of Statistical Process Control (SPC) techniques, the Supplier shall implement related instructions for product acceptance.
- 8.23 Provision 023 – Samples and Qualification:**
- 8.23.1 In some cases, SkyWater Suppliers will need to provide test specimens and samples for design, inspection/verification, investigation, or auditing.
- 8.23.2 In addition to this, the Supplier may be requested to provide qualification test reports as specified.
- 8.23.3 Samples shipped must have a large sticker or label identifying the container as a "Sample" or "Qualification".
- 8.23.4 Certain requirements for samples based on the types of the materials provided/supplied are communicated to the Suppliers and listed on the POs as needed.
- 8.23.5 Documents must not include the SkyWater specific part number to avoid misidentification as a production part.
- 8.24 Provision 024 – Use of Designated or Approved External Providers:**
- 8.24.1 SkyWater is committed to quality and therefore requires the use of customer-designed or approved External Providers, including process sources.
- 8.24.2 Suppliers are required to use only approved External Providers or otherwise customer-designated Suppliers.
- 8.30.3 It is the responsibility of the Supplier to review all identified quality provisions and ensure compliance and the flow down of applicable requirements, including customer requirements (most current revision). When there is any confusion or conflict between identified clauses or other

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SkyWater documentation, then it is the Supplier's responsibility to contact SkyWater to resolve those issues prior to initiating work.

8.25 Provision 025 – Retention of Documented Information, Quality Records and Disposition:

8.25.1 Unless otherwise specified on the Purchase Order, the latest specification revision effective during the time the lot of raw materials or parts was manufactured or processed shall apply. In the event that a document has been superseded, the latest revision of the superseding document shall apply.

8.25.2 All records related to the manufacturing, testing, test reports, inspection reports (receiving, in-process and final inspection), and verification of parts supplied to a SkyWater PO shall be maintained for a minimum of ten (15) years from delivery and final payment, unless otherwise specified by SkyWater. These records shall be accessible, upon request, to SkyWater, SkyWater customers, or to regulatory and statutory authorities.

8.25.3 All records shall remain legible, readily identifiable and retrievable. Changes to a record shall remain identifiable.

8.25.4 These records will be made available to SkyWater, its customers, or regulatory agency upon request at any time.

9. QUALITY REQUIREMENTS: N/A

10. RECORDS: SkyWater Internal Use Only

10.1 Storage location and retention period for Document Control records is specified in procedure 00-00064 – Record Retention Policy and Procedures

10.2 Document History

[Document History Query](#)

To access the document revision history, CTRL-click (click if PDF document) on the above link to bring up the web query page and enter the spec number in the dialog box and click on submit.

11. PREVENTIVE MAINTENANCE: N/A

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12. POSTING SHEETS/FORMS/APPENDIX: N/A

Appendix A

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