

# PURCHASING QUALITY REQUIREMENTS

All requirements imposed upon the supplier are indicated on the Purchase Order by the QR Number (QR-xx) below.

### QR-01 QUALITY MANAGEMENT SYSTEM

Supplier shall provide and maintain an inspection and quality management system that is in conformance with ANSI/ISO/ASQ 9001, AS 9100, or an equivalent system. Key/Critical suppliers (Wafer Fabrication, Assembly, Calibration Service, Reliability Testing, and Failure Analysis Labs) shall have a quality management system that is documented in a quality manual. Copies of the latest revision level manuals shall be delivered to HOLT for review upon request. The Key/Critical suppliers shall have completed and returned the HOLT Supplier Assessment Survey.

### QR-02 QUALITY INSPECTION SYSTEM

Supplier shall provide and maintain an effective Quality Inspection System acceptable to HOLT. This system shall produce repeatable and consistent quality levels. All supplies and services specified in the procurement document shall be subject to appropriate control of quality as necessary for compliance with referenced drawings and specifications. Records of all inspections, tests, and other verifiable documentation of quality shall be complete and available for HOLT review for a minimum period of ten (10) years.

### QR-03 CALIBRATION

Supplier shall maintain calibration for all inspection, measuring, and test equipment traceable to an international or national measurement standard. Calibration to be traceable to an ISO17025 and ANSI/NCSL Z540.3 or Accredited Lab or Calibration performed by OEM must provide a Certificate of Calibration that is traceable to NIST.

### QR-04 CERTIFICATE OF CONFORMANCE

Supplier shall submit, with each shipment of material, a statement on the Supplier's letterhead which certifies the following: "Supplier certifies that the product referenced has been manufactured, tested and inspected to Supplier's quality standards in accordance with the requirements of the purchase order and all applicable specifications referenced therein. Specific production details pertaining to this order are on file and available for review." Mandatory information required on the C of C: HOLT Part Number, Purchase Order Number, Manufacturing Lot Number and Date Code (if applicable), and Quantity.

## QR-05 NON CONFORMING PRODUCT

Any product not meeting the specified requirements must be declared 'non-conforming product'. Prior to the shipment of 'nonconforming product' to HOLT, HOLT must have received from the supplier, a written notification detailing the scope of the nonconformance and issued a written specification waiver to the supplier. Additionally, the supplier will notify HOLT of any nonconforming product (including latent defects) already delivered to HOLT. Notification shall be immediate via email and followed by a written report to HOLT.

#### QR-06 RIGHTS TO AUDITS AND ACCESS

HOLT's Quality representatives may perform audits and maintain surveillance of the Supplier's facility to ensure compliance with the Quality Control System. HOLT reserves the right to use ANSI Z1.4, or equivalent sampling plans for acceptance or rejection of items. Upon request, the Right of Access by HOLT, their customer, and regulatory authorities to all facilities involved in the order and to all applicable records is required.

#### QR-07 CHANGE CONTROL

Supplier shall provide notification in writing to HOLT of significant product, process, and/or sub-tier supplier changes, manufacturing location changes, and quality organization changes. Suppliers are required to notify HOLT promptly of any changes of fit, form, function, safety or reliability and obtain approvals prior to manufacture and delivery.

#### QR-08 FLOW DOWN

Supplier must flow down to sub-tier suppliers the applicable requirements in the supplier's purchasing documents.

### QR-09 OBSOLESCENCE

Suppliers are required to notify HOLT, a minimum of 6 months prior to obsolescence, if a part listed on this order or any of its material components are planned for obsolescence by you or your sub-tier suppliers.

# QR-10 TRAINING

The supplier shall guarantee that the personnel making and inspecting the parts are qualified to perform these tasks. Training records and experience information shall be made available upon request.

## QR-11 LOT TRACEABILITY

All items on this order are subject to traceability at the Supplier's facility, which is defined as the ability to trace the history, application, use, and location of an individual item or characteristic lot of items through the systematic assignment, recording, and correlation of control identification numbers. All items within the lot and all associated documentation (test reports, certifications, etc.) shall be identified with the lot traceability number unless otherwise specified in the procurement document.



# QR-12 PREPARATION FOR DELIVERY AND PRESERVATION

Parts shall be packaged in suitable containers to prevent damage to individual parts which would affect their quality or reliability. Cushioning, packaging, and wrapping shall be of no static generating, noncorrosive, and non-shedding material of sufficient quality and strength to ensure safe and clean arrival of parts. For Electronic Parts: items shall be shipped in electrostatic dissipative packaging and labeled as Electrostatic Discharge (ESD) sensitive items.

# QR-13 CORRECTIVE ACTION REQUESTS

When a quality problem exists with the Supplier's items, HOLT may forward a Corrective Action Request to the Supplier. Corrective Action Requests require timely responses and must include the following information: analysis of the root cause of the problem, statement of the action taken to prevent recurrence, and affectivity of the action.

## QR-14 ESD REQUIREMENTS

Electrostatic discharge protection shall be incorporated into manufacturing and shipping to comply with the requirements of HOLT. All inner containers and wrapping shall be static dissipative, conducive, or static shielding of sufficient quality and strength to ensure safe and clean arrival of parts. Note that provisions of QR-12 are also required to be met.

# QR-15 ENVIRONMENT HEALTH AND SAFETY

HOLT's Environment Health and Safety (EH&S) concerns are a joint effort between HOLT INTEGRATED CIRCUITS and its Suppliers. HOLT requires suppliers provide safe working conditions for all employees, customers, and contractors and adhere to all applicable national, regional, state, and local laws and regulations governing EH&S.

### QR-16 CONFLICT MINERALS

Supplier shall not use any conflict minerals as defined under Section 1502 of the U.S. Dodd-Frank Act. Suppliers are expected to ensure that parts and products supplied to Buyer are Democratic Republic of the Congo or an adjoining country (DRC) conflict-free (do not contain metals derived from "conflict minerals"; columbite-tantalite (tantalum), cassiterite (tin), gold, wolframite (tungsten), or their derivatives such that they directly or indirectly finance or benefit armed groups through mining or mineral trading in the DRC). The CFSI Conflict Minerals Reporting Template shall be completed upon request.

### QR-17 REACH

For suppliers providing material in the assembly of integrated circuits, they must comply with the legislative framework outlined by the European Commission regarding the Regulation, Evaluation, Authorization, and Restriction of Chemicals (REACH) passed June 2007. REACH requires the disclosure of chemicals and hazardous substances that may have a negative impact on health and/or the environment. Supplier must provide information regarding the use of these chemicals and substances, as defined in the legislation, in any product supplied to HOLT.

# QR-18 COUNTERFEIT ELECTRONIC PART PREVENTION

Supplier shall maintain a method of item traceability that ensures tracking of the supply chain back to the original manufacturer of the material with original Certificate of Conformance. A Counterfeit Electronic Part Prevention program must be in place with a documented policy or procedure. Upon request, Suppliers providing services must make available to HOLT, their policy related to their Counterfeit Electronic Part Prevention program.

# QR-19 FOREIGN OBJECT DEBRIS/DAMAGE (FOD)

Suppler shall maintain appropriate housekeeping practices to assure timely removal of residue/debris generated during manufacturing operations, tasks, or storage. Supplier shall maintain good housekeeping and a Foreign Object Debris/Damage (FOD) prevention program, to preclude introduction of foreign objects or damage from foreign debris to any deliverable item. Supplier shall determine if sensitive areas that have a high probability for introduction of foreign objects should have special emphasis controls in place for the manufacturing environment.

#### QR-20 MATERIAL CERTIFICATION

Supplier shall submit, with each shipment, a certification as to the material content and/or assay. Chemicals must be accompanied by a Certificate of Analysis and a Material Safety Data Sheet.

## QR-21 EXPORT ISSUES

Supplier understands that Holt is subject to regulation by agencies of the United States Government, including the U.S. Department of Commerce, which prohibits export or diversion of certain products and technology to certain countries. Supplier represents and warrants that it will not directly, or indirectly, export, re-export, or transship products, technology, or software in violation of any applicable U.S. Export control laws, regulations, or any other applicable export control laws of any country having jurisdiction over the parties or this transaction(s). Supplier further warrants that it will comply in all respects with the export ad re-export restrictions set forth in the export license (if necessary) for every product shipped to Holt. Supplier shall take all actions which may be reasonably necessary to assure that no third parties contravene such United States laws or regulations.

#### QR-22 EMPLOYEE AWARENESS

Supplier understands that they need to ensure that persons are aware of their contribution to product or service conformity; their contribution to product safety; and the importance of ethical behavior.