	REVISION				
ECN	REV	DESCRIPTION	DATE	APPVD	
N/A	0	Created for AS9100	10/27/09	FRA	
3131	1	Added ITAR clause	02/17/10	RGD	
5843	2	Vendor certification	04/09/14	RGD	
7441	3	Updated to current business needs	09/26/17	DEP	
7536	4	Added Clause 560	12/21/17	DEP	
7963	5	Clarified need for lot traceability section 'L' and '160'	06/04/19	GRB	

## 1.0 SCOPE

This document is used to communicate standard and specialty quality requirements to SUNBURST vendors.

	APPROVALS:		SUNBURST ELECTRONICS INC.		
	PURCH. KB	DATE 11/06/09	420	WAY	
	ENG. RGD	11/05/09	TITLE	E QUALITY CLAUSES AND FLO DOWN REQUIREMENTS	
	MFG. JM	11/06/09	SIZE A	DWG. NO. REV DC1250	
	Q.C. FRA	8/29/09	SCALE	RELEASE DATE 11-13-09	SHEET 1 OF 16
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#### 2.0 **REQUIREMENTS**

**DC1250:** To be a supplier of Sunburst electronics you shall meet our requirements for Quality. Where applicable this document number is listed on purchase orders for the sole purpose of invoking the requirements of this document, "Quality Clauses and Flow Down Requirements". All Standard Quality Requirements listed apply. Special Quality Clauses listed apply only if listed on individual purchase orders.

# **3.0 STANDARD QUALITY REQUIREMENTS – Standard purchase order requirements (as applicable)**

- **A. Quality System:** You must have a documented quality system capable of meeting Sunburst Standard requirements and where certain clauses are called out you must be capable of meeting these requirements and agree to on-site assessments.
- **B.** Right of Access: You must allow review, analysis, and verification (on-site if necessary) of your quality management and inspection system, manufacturing process, and product by Sunburst, our customer, our customer's representative, or regulatory body.
- **C.** Advanced Product Quality Planning (APQP): As requested, you shall have resources available and capable of participating in APQP, including such efforts as Value Engineering/Value Analysis, Feasibility Reviews, FMEAs, Design Reviews, Prototype Production, and Initial Sample Approval/Production Part Approval Process.
- **D.** Material and Process Specifications: You shall produce Sunburst product to the specific material and process specifications referenced on the drawing, purchase order or other authorized documentation. If parts were manufactured to a prior drawing or specification revision, yet still meet all the requirements of the revised drawing or specification, you shall update the certifications per clause R to indicate such and ship as conforming product. Suppliers may only use alternate materials after submission and approval by Sunburst of a new first article.
- **E.** Conflicting Technical Requirements: In the event of conflicting technical requirements, the order of priority you should follow is the purchase order, the drawing, then the specification. You must bring all conflicting requirements to the attention of your Buyer as soon as possible.

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- **F. Supply Chain Management:** You must be willing to identify and manage your entire supply chain, which includes ongoing monitoring of sub-contractor quality and delivery performance. It is your responsibility to ensure that Sunburst requirements are met by all your subcontractors used in the entire manufacturing process.
- **G. Approved Sources:** Some special processes such as heat treatment, plating, NDT, etc. shall be performed by a Sunburst approved processor, Nadcap approved processor, or processor approved by Sunburst's Customer. This applies when clauses 110, and/or 120 appear on the purchase order.
- H. First Article Inspection Report Approval: For products manufactured to Sunburst or Sunburst's customer drawing requirements you shall perform First Article Inspection (FAI) of all drawing and specification requirements on a sample representative of the first production lot. Unless otherwise specified by clause 440 on the purchase order, the FAI shall be completed and submitted in accordance with AS9102 Form 3. You must complete and submit a new or updated FAI, including all certifications, if:
  - 1) This is a first time manufacture
  - 2) The part has not been manufactured in 2 years. Note that if there has been a lapse in delivery and not a lapse in production, a copy of the last full FAI report and all subsequent delta FAI reports may be submitted to Sunburst without re-performing the FAI, as long as all conditions for not requiring a new FAI are met.
  - 3) There is a revision to the Sunburst drawing or Sunburst customer drawing (per Sunb purchase order)
  - 4) There is a change in raw material used (use of an alternate material listed on the drawing).
  - 5) There is a change in tooling (new, replacement, or major modification) at your facility or at your sub-tier suppliers
  - 6) There is a change in manufacturing process, at your facility or at your sub-tier suppliers, which may affect form, fit, or function of the part
  - 7) There is a change in the plant of manufacture
  - 8) There is a change in source of manufacture, including sub-tier supplier

Suppliers shall submit the initial or updated FAI regardless if Special Quality Clause 270 is specified on the purchase order. Certifications are required to be submitted for initial FAI submission, changes to the plant of manufacture, and if the part has not been manufactured within two years. For all changes, certifications are only required to be submitted if the affected change is one for which Sunburst requires certification through any other DC1250 clauses.

Inspection methods identified on the FAI are the methods to be used by the supplier and Sunburst for sample and final inspection. Changes shall be approved by the re-evaluation and re-signing of the FAI by both the supplier and Sunburst.

If a functional gage has been specified and agreed upon as the operating inspection method, actual values are not required. Indicate on the FAI that the functional gage (including gage number) was used for the inspection.

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The FAI shall include the following (as a minimum):

- 1) All drawing notes
- 2) All drawing title block requirements
- 3) Actual high and low measurement values for each individual characteristic. For a drawing feature that indicates more than one location (i.e. "TYP" or "4X"), a measurement reading for each of the individual feature locations. Example: Drawing states "4X R .28/.23", the FAI shall show a measurement for each of the four feature locations.
- 4) Actual measured value for all basic dimensions used in any Geometric Dimensioning and Tolerancing (GD&T) requirement. For a True Position requirement of a multi-hole pattern, the measured position of each hole including the measured value of each basic dimension for each hole.
- 5) For any process accepted by certification the associated process certifications shall be submitted with the shipment.
- 6) Certifications are required for delta FAI with a 270 clause only if the feature for which the delta FAI is being completed is affected by a certification (i.e. special process or material change).
- 7) Ensure the FAI sample(s) and shipping container(s) are properly identified.
- 8) For classified parts (i.e., Flight Safety, Critical, Primary, Vital, or Critical Safety Item), the applicable part classification shall be indicated on each page of the FAI forms.
- I. Managing Change: You must notify the Sunburst buyer of any intended significant changes to your process, methods, material, or product and obtain our approval prior to implementation. You must also make this a condition to your entire supply chain. Samples and documentation may be required as part of the approval process.
- **J.** Material Obsolescence: You shall notify Sunburst 6 months prior to obsolescence of any material purchased by Sunburst within the last three years.
- K. Inspection: You must inspect product to the degree necessary to ensure compliance to all requirements. You must perform 100% inspection and/or use a recognized sampling plan (i.e. ANSI/ASQ Z1.4, ISO2859-1) Sampling plans shall utilize AQLs with zero defectives permitted in the sample. Suppliers shall comply with 100% inspection if specified by the Sunburst drawing, by clause 260, or another specification referenced on the drawing, DC1250 clause, or PO.

NOTE: Inspection methods identified on the FAI are the methods to be used by the supplier and Sunburst for sample and final inspection. Changes shall be approved by the re-evaluation and re-signing of the FAI by both the supplier and Sunburst.

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- **L. Traceability and Serialization:** If Required, you shall provide unique identification of product batch number, lot number, or, if required by the drawing, serial number. The batch, lot, and serial number, as applicable, shall be traceable to all raw material, manufacturing, and inspection records.
  - If raw material is supplied by Sunburst, you shall assure that parts supplied are traceable by lot number or serial number to the raw material heat code or Sunburst assigned traceability number.
  - If items supplied by Sunburst are serialized, you shall assure that traceability is maintained during processing.
  - If parts are serialized, you shall provide with each shipment a list of the serial numbers in the shipment (either on the packing slip or on an attached sheet).
- **M. Non-Conforming Product:** You must only ship product that meets all requirements, or obtain a written deviation prior to shipment of any non-conforming product. If the deviation is approved, you must make reference to the deviation on the shipping documents and attach a copy of the approved deviation. Final material acceptance will depend on the actual verification of the nonconformance and product approval at Sunburst. If you have reason to believe non-conforming material may have been inadvertently shipped, contact your Buyer immediately.
- **N.** Corrective Action: In the event of a non-conformance related to your product, you must develop a written corrective action report addressing the problem definition, containment action, root cause determination, corrective action plan/contingency actions, implementation timing, and system/practice/procedure changes to prevent recurrence. Written corrective action plans are required within 30 calendar days of the notification or as specified by Sunburst. Within 24 hours of being notified by Sunburst you shall:
  - Take containment action at your facilities and sub-tier facilities
  - Notify Sunburst of:
    - any other lots of the same Sunburst part number shipped to Sunburst or in transit to Sunburst since the non-conforming lot was manufactured
    - any other part numbers that may have been affected and their shipment dates and lot quantities.
  - Perform 100% inspection on all pieces prior to shipping to Sunburst until the corrective action is implemented. After the corrective action is implemented, the supplier shall perform 100% inspection on all lots until three acceptable consecutive lots are shipped. Sequential sampling or SPC may be used in lieu of 100% inspection. Sequential sampling includes the sampling of every X number of pieces during sequential manufacture, as long as all pieces are contained between the samples. If a nonconformance is detected, subsequent 100% inspection shall occur between the last accepted piece and the nonconforming piece detected.

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**O. Protection Requirements for In-Process, Shipment and Packaging:** You shall comply with all requirements for shipping, packaging and labeling. In the absence of specific requirements, suitable protection from corrosion, contamination and handling damage shall be provided during manufacturing, in-transit to and from your sub-tier processor(s) and during shipment to Sunburst. Metallic parts shall be protected against corrosion and/or damage, and non-metallic parts against deterioration, damage and/or contamination by other materials.

#### General Corrosion Control Requirements Throughout Processing:

- a) For machined metallic parts, do not allow water-soluble cutting fluid to sit (accumulate) and/or dry on any on surface (especially aluminum alloys) at any stage of the manufacturing process, in packaging, and so forth. This is a known cause of corrosion and shall always be avoided.
- b) Except for the time work is actually being carried out on a metallic part with a nonprotected surface, it shall be protected at all times by placement in a VCI bag except where a non-volatile, corrosion protecting oil is used as stated in Item 5 above. If bags are used with oil, they shall be non-porous plastic bags (not VCI bags). VCI bags shall be closed at all times when item(s) are in the VCI bag(s).
- c) Items are to be dry prior to placing in a VCI bag. Filtered air shall be used to blow of any excess coolant after machining.
- d) Unprotected surfaces of parts requiring cleaning to remove residue or contamination are to be alkaline cleaned or cleaned with a non-chlorinated solvent. Examples of non-chlorinated solvents are MEK and isopropyl alcohol.

### Protection Against Damage

Where not specified, containers used during manufacturing, in-transit to and from your subtier processor(s) and for shipment to Sunburst shall be selected using the following guidelines:

- a) The container/packaging selected shall not permit metal to metal contact
- b) Stacking of parts/assemblies within a container is only permissible for flat parts/assemblies and with adequate separation between parts/assemblies.
- c) Containers used during manufacturing shall have covering adequate to prevent contamination.
- d) Containers shall be sufficiently robust to withstand the shock loads of transportation with appropriate restraint for the parts. Shipments using an ocean liner or courier services will need additional shock load protection to prevent transit damage.
- e) Padding of internal areas of the containers shall be made with suitable materials and shall not cause corrosion.
- f) Parts that are plated and subsequently chromate treated are more sensitive to damage of the chromate. Drying time of the chromate beyond the minimum requirements may be required prior to handling and packaging. Special attention to the types of drying surfaces and packaging material is required at the processing facilities and throughout the chain of custody from processing to delivery to Sunburst.
- g) All packages shall be inspected for the absence of foreign objects (FOD) prior to sealing package.

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- **P. ESD Sensitive Items:** When packaging materials that are sensitive to damage from electrostatic discharge (ESD), you must use ESD protective containers or bags. Identify each container or bag with an ESD warning label.
- **Q.** Age Control: You must assure that any items provided which have shelf life limitations, have at least 5/6 of the shelf life remaining at time of shipment.
- **R.** Certification: All documents submitted shall accurately reflect the manufacturing and inspection processes of the supplier and their sub-tier suppliers. Unless clause 270 is stated on the purchase order and applies per the instructions listed in clause 270, you shall submit all applicable certifications (raw material, special process, etc.) and certified test reports for each shipment. Certifications shall be in English, or translated to English. Translations shall include the name, title, and signature of the authorized representative of the company making the translation. Certifications and certified test reports shall include the following information as applicable:
  - Name/address of facility that manufactured the material, or performed the process or test
  - Sunburst Purchase Order Number
  - Sunburst Part Number and Revision.
  - Sunburst Customer Part Number, revision and contract number, only when it appears on the purchase order or Sunburst Drawing
  - Process performed or material provided, including type/class/grade, as applicable
  - Specification number including revision level, along with any applicable amendments and deviations
  - Quantity accepted/rejected (for Certified Test Reports)
  - Quantity shipped
  - Date shipped
  - Name and/or title of authorized representative from the company that manufactured the material, or performed the process or test. For suppliers who utilize electronic signatures, the Quality Manager title is sufficient.
  - Unique traceability number (certification number, heat code number, batch number, melt number, etc.)
  - Part serial numbers, if applicable.
  - Statement certifying that articles covered by the certification are in compliance with the applicable purchase order, drawing and specification requirements.

Note: If clause 270 is invoked on the purchase order and this is not a First Article Inspection (FAI) shipment, certifications are not required.

For clauses 280 and 380, follow the instructions listed in those clauses for certification requirements.

**S. Records**: You shall maintain production and quality-related records for a minimum of ten years from date of shipment, unless a longer period is specified by a clause on the purchase order. If you are going out of business or no longer intend to manufacture the part, you shall contact Sunburst to obtain instructions with respect to records.

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- T. Rework and Repair: Rework and Repair are distinctly different processes.
  - Rework: A process where a non-conformance to the drawing, specification, or contract requirement can be made to conform, using processes equivalent to those originally used in the manufacturing of the product. Suppliers are not required to obtain approval to rework product unless specifically required.
  - Repair: A process that reduces but does not completely eliminate a non-conformance, or • when a process is used that is NOT equivalent to those originally used in the manufacturing of the product. Suppliers must obtain prior approval from Sunburst to perform repair work and to ship repaired product, due to the still nonconforming condition and/or the repair method used. Reworked/repaired parts shall be re-inspected using the same methods and equipment that originally identified the non-conformance, as well as re-inspection of any other features that may have been affected by the rework. For electronic items that require Acceptance Testing as part of their original quality requirements, the same Acceptance Testing will be required after rework/repair of the Items. When returning reworked/repaired parts to Sunburst, the shipping paperwork must identify that rework or repair was. If outside processes were required to be re-processed, the process certifications must also reflect the rework/repair status of the parts. In some instances, Sunburst may decide to rework or repair supplied product, in which case Sunburst will contact the supplier to discuss the costs of the rework and potential chargeback to the supplier.
- U. Counterfeit Part Prevention Electronics/Non-electrical standard parts:

Suppliers that are purchasing parts and materials for inclusion into a product or assemblies being delivered to Sunburst shall establish and maintain a system to prevent the purchase of counterfeit and/or substandard parts. The system shall ensure item traceability to the OCM/OEM records and these records shall be supplied to Sunburst upon request. When procurement is going to be made from an Independent Distributor/ Broker, Sunburst approval is required. Supplier shall have traceability for non-electrical standard parts (fasteners, nuts, washers, o'rings, etc.) and electronic component parts to the Original Component Manufacturer (OCM), Original Equipment Manufacturer (OEM), Authorized Aftermarket Manufacturer (AAM) or authorized distributor. Certification of product being purchased shall include name and location of all supply chain intermediaries from the original manufacturer to final source providing product.

If suspect/counterfeit parts are furnished under a purchase order and/or are found in any goods, the goods delivered hereunder and the items furnished will be impounded by Sunburst. The seller shall promptly replace such suspect/ counterfeit parts with parts that are acceptable to Sunburst. The seller shall be liable for all costs relating to the removal and replacement of said parts. Sunburst reserves all contractual rights and remedies to address grievances and detrimental impacts caused by suspect/counterfeit parts

<u>OCM=Original Component Manufacture/OEM = Original Equipment Manufacture</u> – The supply chain entity who designs and controls the manufacture of an item. The OCM/OEM warrants performance of the item to its published specifications

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<u>Franchised/Authorized Distributor</u> – A seller that has a contractual relationship with the OCM/OEM to buy, stock, re-package and sell its product lines. A Franchised/Authorized Distributor offers the OCM/OEM's full flow through warranty including failure analysis and corrective action support.

<u>Independent Distributor/Broker</u> – Any seller that does not have a contractual relationship with the OCM/OEM to stock and sell its products.

V. Conflict Minerals - Supplier agrees to make good faith, reasonable inquiries to ascertain whether any products provided to Sunburst (the "Product(s)") contain Conflict Minerals from Covered Countries, as those terms are defined by and consistent with the Securities and Exchange Commission's final rule on Conflict Minerals, 17 CFR Parts 240 and 249(b), promulgated pursuant to Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Rule").

Should Supplier identify a regulated Conflict Mineral in any Product(s), you will communicate this finding to Sunburst and will make all reasonable attempts to find an alternate source identified to be in compliance with the Rule requirements. Supplier agrees to certify and warrant that all Product(s) are Democratic Republic of the Congo ("DRC") Conflict Free, as defined by and consistent with the Rule. Supplier further agrees that they will continue to make good faith inquiries to determine whether any product(s) contain Conflict Minerals should their source of supply change or if the product(s) include recycled or scrap sources, as defined in the Rule. Supplier shall require its own subcontractors and suppliers (at any tier in the supply chain for Product(s)) to flow down this requirement. Supplier shall maintain records of their inquiry process and will provide these to Sunburst upon request. Supplier understands that Sunburst may utilize and disclose Conflict Minerals information provided by you in order to satisfy supply chain inquiries received by Sunburst.

Should Sunburst determine that any certification made by Supplier is inaccurate, incomplete or purposely misrepresented, Sunburst may terminate any affected Sunburst purchase order(s) or agreement as default by Supplier.

Note: The term "conflict mineral" is defined in Section 1502(e)(4) of the Act as (A) columbite-tantalite, also known as coltan (the metal ore from which tantalum is extracted); cassiterite (the metal ore from which tin is extracted); gold; wolframite (the metal ore from which tungsten is extracted); or their derivatives; or (B) any other mineral or its derivatives determined by the Secretary of State to be financing conflict in the Democratic Republic of the Congo or an adjoining country.

#### 4.0 CLAUSE REQUIREMENTS – applicable when specifically called out on Purchase Order

In addition to our Standard Purchase Order Terms and Conditions and Standard Quality Requirements, Special Quality Clauses may be invoked on individual Purchase Orders. Our Special Quality Clauses are:

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**100 - DC1250**: Where applicable this clause is listed on the purchase order for the sole purpose of invoking the requirements of this document, "Quality Clauses and Flow Down Requirements, DC1250". All Standard Purchase Order Terms and Conditions and Standard Quality Requirements listed above apply. Special Quality Clauses enlisted below apply only if listed on individual purchase orders. The website address to obtain the current released version of this document, "Standard Purchase Order Terms and Conditions". <u>www.sunb.tech</u>

**110 - Suburst Approved Vendors:** When a special process specification is listed in the purchasing documents you must use only Sunburst approved vendors. The approved vendors are listed in the purchasing documents; if none are listed then there is no requirement.

**120** - Nadcap Accredited Special Vendor: When the use of an approved special vendor is required you must only use a vendor who is Nadcap accredited for that process and provide the Nadcap accreditation on the process certification. Nadcap accreditation is only required for industry controlled special processes (i.e. MIL, AMS, ASTM, etc specifications). Nadcap accreditation is not required for special processes to customer specifications where the customer specifically approves the special processor or a special process to a Sunburst specification.

130 - Approval Req'd – Rework Method: You must submit your rework method for any reworkable non-conformances occurring on product against this purchase order to Sunburst for review and approval prior to starting rework. The technique sheet is to be electronically submitted. You must not make any changes to rework method after Sunburst approval has been granted without the prior written approval of Sunburst Quality.

**140 - Drop Shipment**: Sunburst furnished material (i.e.: castings, forgings, or raw stock) will be drop shipped to you under this purchase order. Upon receipt of the material, you shall assure that all test reports and certifications required by the applicable specifications have been received and that all requirements have been met. When shipping finished items to Sunburst, include these test reports and certifications with the shipment.

**150 - Sunburst Source Inspection:** Sunburst source inspection is required prior to shipment of any item on this purchase order. Contact the Sunburst Buyer a minimum of 5 days prior to the time the items will be ready for inspection.

**160 - Traceability and Serialization:** If product traceability is a requirement. You must provide unique identification of product batch number, lot number, or, if required by the drawing, serial number. The batch, lot, or serial number must be traceable to all raw material, manufacturing, and inspection records. If raw material is supplied by Sunburst, you must assure that parts supplied are traceable by lot number or serial number to the raw material heat code or Sunburst assigned traceability number. If items supplied by Sunburst are serialized, you must assure that traceability is maintained during processing. If parts are serialized, you must provide with each shipment a list of the serial numbers in the shipment (either on the packing slip or on an attached sheet).

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**170 - Sunburst Witness of Test:** Sunburst witness of functional testing of the items on this purchase order is required. Contact the Sunburst Buyer a minimum of 5 days prior to the time the items will be ready for testing.

**180 - Certification - UL (Underwriters Laboratory):** Submit certification with each shipment unless clause 270 is specified on the purchase order and 270 can be applied per the instructions as stated in 270. For classified parts (i.e., Flight Safety, Critical, Primary, Vital, or Critical Safety Item), the applicable part classification shall be indicated on each page of the certification.

**190 - Records:** You must maintain production and quality-related records for a minimum of ten years from date of shipment, unless a longer period is specified by a clause on the purchase order.

**200 - Customer Source Inspection:** First article inspection by Sunburst's customer is required prior to shipment from your plant to Sunburst. Contact your Sunburst buyer prior to the scheduled shipment date to arrange the customer inspection. Evidence of customer inspection approval must accompany the initial shipment to Sunburst.

**210 - Government Source Inspection:** Government source inspection is required prior to shipment of any item on this purchase order. Upon receipt of this purchase order, promptly furnish a copy of this purchase order to the Government Representative that normally services your facility and arrange for the source inspection. Contact the Sunburst Buyer immediately.

**220 - Non-U.S. Sources:** The part on this order is an FAA Parts Manufacturer Approval (PMA) part (or component thereof) and must not be manufactured outside the United States without prior approval of Sunburst Quality. If the part ordered is an assembly, then all components in the assembly shall not be manufactured outside the US. For FAA-PMA parts, a supplier in any jurisdiction outside the United States which would inhibit the FAA from evaluating the supplier shall not be used. This requirement does not apply to standard parts manufactured in compliance to an established U.S. Government or industry-accepted specification containing all necessary information to produce and conform the part. Examples include, but are not limited to National Aerospace (NAS), Air Force-Navy Aeronautical Standard (AN), Society of Automotive Engineers (SAE), SAE Aerospace Standard (AS), Military Standard (MS), etc. This requirement does not apply to the raw material used to manufacture the FAA-PMA parts.

**230 - Submit Supplier Inspection Checklist:** You must complete and submit your inspection checklist with each shipment. For each characteristic inspected, the inspection checklist shall indicate the characteristic, the quantity inspected, and the quantity accepted/rejected. Report the actual inspection results if required by the Sunburst drawing or purchase order.

**240 - Advanced Product Quality Planning (APQP):** As requested, you must have resources available and capable of participating in APQP, including such efforts as FMEAs, Prototype Production, and Initial Sample Approval.

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**250 - Capability Study and Gage R&R:** You must provide results of the Capability Study and the Gage Repeatability and Reproducibility (R&R) performed on the measurement for KEY Characteristics identified on the drawing. The results must be submitted with the initial FAI submittal or re-submittals. On-going results are to be provided with each shipment unless otherwise specified.

**260 - 100% Inspection Req'd:** You must perform 100% inspection of all parts and of all drawing characteristics and drawing notes.

**270 - Certifications - Maintain at Supplier:** When certification clauses are specified on the purchase order, certifications are to be submitted with the First Article Inspection (FAI) report only. After FAI approval, and unless otherwise specified, you must maintain all applicable certifications for subsequent shipments at your facility for the entire record retention period. Certifications shall be maintained so that they can be retrieved and submitted to Sunburst within the time frame requested.

**280 - Certification Req'd – Certificate of Conformance (C of C)**: All documents submitted shall accurately reflect the manufacturing and inspection processes of the supplier and their subtier suppliers. Unless clause 270 is stated on the purchase order and applies per the instructions listed in clause 270, you shall submit all applicable certifications (raw material, special process, etc.) and certified test reports for each shipment. Certifications shall be in English, or translated to English. Translations shall include the name, title, and signature of the authorized representative of the company making the translation. Certifications and certified test reports shall include the following information as applicable:

- Name/address of facility that manufactured the material, or performed the process or test
- Sunburst Purchase Order Number
- Sunburst Part Number and Revision.
- Sunburst Customer Part Number, revision and contract number, only when it appears on the purchase order or Sunburst Drawing
- Process performed or material provided, including type/class/grade, as applicable
- Specification number including revision level, along with any applicable amendments and deviations
- Quantity accepted/rejected (for Certified Test Reports)
- Quantity shipped
- Date shipped
- Name and/or title of authorized representative from the company that manufactured the material, or performed the process or test. For suppliers who utilize electronic signatures, the Quality Manager title is sufficient.
- Unique traceability number (certification number, heat code number, batch number, melt number, etc.)
- Part serial numbers, if applicable.
- Statement certifying that articles covered by the certification are in compliance with the applicable purchase order, drawing and specification requirements.

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Note: If both clause 270 is invoked on the purchase order and this is not a First Article Inspection (FAI) shipment, certifications are not required.

For clause 380 follow the instructions listed in that clause for certification requirements.

290 - Certification Req'd – Plating: Submit certification with each shipment.

**300 - Certification Req'd – Heat Treat:** Submit certification with each shipment. Certificate must include mechanical properties.

**310 - Certified Test Report – Hardness Testing:** Submit test report with each shipment. The test report must include the hardness test specification, high and low hardness values, and sample size.

320 - Certification Req'd – Chemical Process: Submit certification with each shipment.

**330 - Certification Req'd – Anodize:** Submit certification with each shipment.

340 - Certification Req'd – Shot Peen: Submit certification with each shipment.

350 - Certification Req'd – Painting/Coating: Submit certification with each shipment.

360 - Certification Req'd – Welding: Submit certification with each shipment.

**370 - Certification Req'd – Other:** Submit certification, as required per in the purchase order comments or drawing notes.

**380 - Certified Test Report - NonMetallic Mat'l:** Submit material test report with each shipment. Include actual results of all testing required by specification for each lot of material furnished. Suppliers of chemical materials must include expiration date and storage conditions (production date is optional).

**390 - Supplier Planning Approval Req'd:** Prior to the first shipment, you must submit your manufacturing and inspection planning and that of any subcontract source to the Sunburst Buyer for review and approval (freezing) by Sunburst and Sunburst's customer (if applicable). The planning is to be electronically submitted. All submitted planning is to be in English. As a minimum, the planning shall contain the following information:

- a. Supplier name and address.
- b. Revision History Record Sheet.
- c. A revision identifier (letter and/or date) for the planning.
- d. The Sunburst part number and Sunburst drawing revision letter.
- e. Reference to the customer part number (if applicable).
- f. The applicable classification for the part (i.e., PRIMARY, CRITICAL, VITAL, FLIGHT SAFETY, etc.) on each page of the planning.
- g. The material used including the applicable specification number.

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h. Sequential manufacturing, processing, test and inspection operations (including any sketches) for fabrication or processing of the part. Operations for outside processes must include the name and address of each supplier used. Your planning and that of any subcontract source is to be re-submitted as identified above for Sunburst and Sunburst customer (if applicable) for re-approval (freezing) prior to making any changes to the previously approved planning.

**400 - Approval Req'd – Control Plan:** You must submit your control plan to Sunburst for review and approval prior to starting production. The Control Plan is to be electronically submitted to the quality engineer who reviewed the requirements with you. You must not make any changes to the control plan after Sunburst approval has been granted without the prior written approval of Sunburst Quality. The control plan must identify in chronological order, each step in your manufacturing process, including the items checked, and the method, frequency, acceptance standard, responsibility and documentation for each check. The control plan should also include a process flow chart keyed to the control plan.

**410 - Approval Req'd – PFMEA:** You must submit your Process Failure Mode and Effect Analysis to Sunburst for review and approval prior to starting production. The PFMEA is to be electronically submitted to the quality engineer who reviewed the requirements with you. The PFMEA must identify potential failure modes and address their associated causes. It shall take into account all manufacturing operations, including individual components and assemblies. The PFMEA should also include a process flow chart keyed to the PFMEA.

**420 - Submit PPAP:** You shall submit a PPAP (Production Part Approval Process) in accordance with the AIAG PPAP Manual, or as otherwise specified by Sunburst, prior to shipment of production parts. Contact your Sunburst Sourcing representative for submittal requirements and/or required submission level.

**430 - Approval Req'd – Test Plan:** You must submit your functional test and acceptance plan to Sunburst for review and approval prior to starting testing. The test plan is to be electronically submitted. You must not make any changes to the test plan after Sunburst approval has been granted without the prior written approval of Sunburst Quality. Evidence of personnel qualification shall be available upon request when such qualification is a requirement (e.g., NDT).

**440 - First Article per AS9102 Req'd**: You shall submit a first article inspection (FAI) report and any subsequent update/partial inspection reports in accordance with the requirements of AS9102 prior to or with the first shipment of parts. All forms of the AS9102 are required to be submitted.

**450 - Record Retention - 15 Years:** You must retain all production and quality-related records for a period of 15 years from date of shipment.

**460 - Record Retention - 20 Years:** You must retain all production and quality-related records for a period of 20 years from date of shipment.

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**470 - Record Retention - 30 Years:** You must retain all production and quality-related records for a period of 30 years from date of shipment.

**480 - Record Retention - 25 Years:** You must retain all production and quality-related records for a period of 25 years from date of shipment.

**490 - Record Retention - 40 Years:** You must retain all production and quality-related records for a period of 40 years from date of shipment.

**500 - Record Retention - 50 Years:** You must retain all production and quality-related records for a period of 50 years from date of shipment.

**510 - ITAR Controlled:** Warning: This document and documents specified herein contain technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S. C. Sec 2751, Et seq) and ITAR 22 CFR 120-130 and is subject to the export restrictions provided therein. Violations of these export laws are subject to severe criminal penalties. Export of this document and documents specified herein are subject to U.S. export control laws and regulations. Recipients of this document and documents specified herein should abide by such laws and regulations, including country specific controls, and control on use. Vendors for ITAR controlled products will certify their compliance to ITAR regulations.

**520 - Country of Origin:** The Country of Origin shall be stated in English on the Packing List for each line item shipment. The words "Country of Origin" shall be specifically referenced with the name of the country. The packing list shall accompany the parts when shipped to Sunburst or when parts are drop shipped to a location noted on the purchase order by Sunburst.

**530 - AS5553 Counterfeit Electronic Parts**: Avoidance, Detection, Mitigation and Disposition: Supplier/Seller shall develop and implement a comprehensive counterfeit parts and assembly prevention control plan to prevent introduction of counterfeit parts and assemblies into items delivered to Sunburst. The plan shall comply with requirements of AS5553 Counterfeit Electronic Parts, Avoidance, Detection, Mitigation and Disposition. The program shall include a plan that describes methods to assure component parts and assemblies are procured only from OCM/OEM or a franchised/authorized distributor. The plan shall include a process for assuring integrity of procurements made from sources such as independent distributors, brokers or aftermarket sellers. Incorporation of components or assemblies purchased from a source other than the OCM/OEM or a Franchised/Authorized distributor requires Sunburst approval.

**OCM=Original Component Manufacture/OEM = Original Equipment Manufacture –** The supply chain entity who designs and controls the manufacture of an item. The OCM/OEM warrants performance of the item to its published specifications

**Franchised/Authorized Distributor** – A seller that has a contractual relationship with the OCM/OEM to buy, stock, re-package and sell its product lines. A Franchised/Authorized Distributor offers the OCM/OEM's full flow through warranty including failure analysis and corrective action support.

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**Independent Distributor/Broker** – Any seller that does not have a contractual relationship with the OCM/OEM to stock and sell its products.

**540 - Certification Req'd – REACH:** Submit certification indicating compliance with Regulation (EC) No 1907/2006 -. Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) unless clause 270 is specified on the purchase order and 270 can be applied per the instructions as stated in 270. Compliance indicates that all supplied components contain no Substances of Very High Concern (SVHC) in accordance with Regulation (EC) No 1907/2006. If certifying an assembly, all components must be compliant with REACH. REACH applies to all supplied material, including chemical substances.

**550** - Certification Req'd – RoHS: Submit certification indicating compliance to Directive 2011/65/EC, Restriction of Hazardous Substances (RoHS), unless clause 270 is specified on the purchase order and 270 can be applied per the instructions as stated in 270. RoHS restricts the use of the following six hazardous materials to the indicated levels: Lead (Pb) <0.1%, Mercury (Hg) <0.1%, Cadmium (Cd) <0.01%, Hexavalent Chromium (Cr VI) <0.1%, Polybrominated Diphenyl Ethers (PBDE) <0.1%. If certifying an assembly, all components shall be compliant with RoHS.

**560 - Basic Safeguarding of Covered Contractor Information Systems**: The Supplier/Seller's contractor information system shall safeguard any federal contract information provided by or generated for the Government that is not intended for public release. This applies to contract(s) to develop or deliver product(s) or service(s) to the Government, including commercial items. It does not apply to commercial off-the-shelf items (COTS). The Supplier/Seller must apply the minimum controls for safeguarding covered contractor information as outlined in FAR 52.204-21(b) which can be found in detail

at http://farsite.hill.af.mil/reghtml/regs/far2afmcfars/fardfars/far/52\_000.htm

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