THALES

SUPPLIER QUALITY ASSURANCE PROVISIONS

Applicable Clauses of this attachment shall be referenced on the face of the Purchase Order document. Clauses specified on the face of the Purchase Order shall be thoroughly understood prior to the acceptance of the Purchase Order. Failure to meet the specified Clauses may result in rejection and return of material by Thales Defense & Security, Inc. (TDSI). If there is a conflict between a clause herein and a requirement contained within a TDSI drawing specified on the Purchase Order, the drawing requirement shall take precedence. Supplier shall flow down to the supply chain the applicable requirements.

A **Quality Management System (QMS) -** The supplier shall maintain a QMS that conforms to the current version of ISO 9001 as evidenced by current, accredited, third party QMS registration through members of the International Accreditation Forum (Reference IAF at: http://www.iaf.nu/) or an approved equivalent QMS approved by TDSI. Further, Seller's QMS shall flow down applicable quality and technical requirements, assure capability to produce items and assure adequate methods of assuring compliance. Further, Seller's QMS shall assure that its employees and subcontractors are aware of their contribution to product or service conformity, their contribution to product safety and the importance of ethical behavior. Seller shall require seller's suppliers to flow down and verify requirements for supplies/services they subcontract.

B **Inspection and Lot Tracking System –** The supplier shall perform sample inspection on the supplies provided. Said sample shall be taken on a stratified random basis from the defined lot. The defined lot shall be all parts produced since the previous defined lot and shall be limited to a single setup, production run or supplier delivery. A single defect or nonconformance from the sample shall cause the entire lot to be screened for that defect so as to assure the balance of the parts are free from such. Supplier shall assign a nonconformance tracking number to the rejection and record screening results and related root cause corrective action record if appropriate. ANSI/ASQ Z1.4-2003 shall be further used for the definition, presentation and inspection of lots. Unless otherwise accepted by TDSI, the minimum inspection sample plan shall be C=0 AQL 2.5 as defined in American Society for Quality H1331, ZERO ACCEPTANCE NUMBER SAMPLING PLANS.

The supplier shall maintain traceability to all raw material certificates/batches/heat numbers where specific raw materials are specified on Thales item specifications and delivered supplies must be traceable to the material certificate/batch number of the raw material used.

B1 **Traceability Level 1, Lot Marking, One to Many Sub lots -** The supplier shall permanently mark the delivered item with the production lot number or date code traceable back to the specific manufacturing lot number, sub lots, finishing/plating lots, purchased materials and all applicable inspection and test records. One or more sub lots may be used per manufacturing lot.

B2 **Traceability Level 2, Serial Number, One to Many Sub lots –** The supplier shall permanently mark the delivered item with a unique serial number traceable back to the specific manufacturing lot number, sub lots, finishing/plating lots, purchased materials, applicable inspection and test records. One or more sub lots may be used per manufacturing lot.

B3 **Traceability Level 3, Serial Number Marking, One to One Sub lots -** The supplier shall permanently mark the delivered item with a unique serial number traceable back to the specific manufacturing lot number, sub lots, finishing/plating lots, purchased materials, applicable inspection and test records. Only one sub lot for each process may be used to produce each unit. Traceability

shall be maintained to each component (manufacturer part number, supplier lot number, PO, receive date and CoC). All records shall be correlated to specific delivered serial numbers.

C **Government Source Inspection -** Government Source Inspection is required prior to shipment from your plant. Upon receipt of this Order promptly notify and furnish a copy to the Government representative normally servicing your plant so that Government Source Inspection can be planned. If a Government Representative does not service your plant, contact the nearest DCMC inspection office. If you cannot locate the DCMC office, the TDSI Buyer should be notified immediately.

D **Source Inspection –** TDSI Source Inspection is required prior to shipment from supplier to TDSI. Notify TDSI Buyer or TDSI Procurement Quality Engineer (PQE) ten (10) days in advance to permit scheduling of Source Inspection. There shall be no charge for source inspections. Source inspections do not relieve the supplier of responsibility for Final Inspection and/or Test, nor does it constitute final acceptance by TDSI. The Supplier shall provide all necessary inspection data, facilities, equipment and inspection/test personnel as necessary to enable product quality verification.

D1 **First Article Source Inspection -** Supplier shall request TDSI source inspection IAW QAP D for all First Article shipments.

E **Special Processes –** Processes that require validation in accordance with ISO9001 and which are used in the delivery of goods or services for this order shall be validated and revalidated in accordance with ISO9001. Examples include but are not limited to plating, painting, welding, soldering, heat treatment, brazing, wire termination crimping and any other process where the results are not obvious in the post processed part or material.

E1 **Special Process NADCAP –** All Special Processing (plating, heat treat, soldering, etc.) shall be National Aerospace and Defense Contractor Accreditation Program (NADCAP) certified.

E2 **Special Process VIR Approval –** Place of performance for all Special Processing (plating, heat treat, soldering, etc.) shall be approved by TDSI Supplier Quality Engineering for a period of time defined on the VIR IAW QAP Z.

F **TDSI / Customer Reservations -** TDSI reserves the right for TDSI, a representative of the Customer or a representative of regulatory agency to conduct surveillance of work operations on all items and/or constitute materials thereof at all levels of the supply chain that are being procured under this Purchase Order. There shall be no charge for these surveillance audits.

G **First Article Inspection & Place of Performance -** In advance of shipment, Supplier shall upload the FAI to the TDSI portal per instructions provided on OT16-008 FAI Cover Sheet.

Supplier shall not subcontract work requirements of this PO other than finishing (plating, paint, marking) without specific approval from THALES on a VIR. If QAP E2 is applied, subcontracting finishing requires TDSI preapproval. Supplier remains responsible for any work subcontracted. Supplier shall flow down to the supply chain the applicable requirements.

The First Article Inspection Report (FAIR) shall be provided when any of the following occur:

1 – First Time Shipment to TDSI.
2 – Two years since shipment to TDSI.

3 – Part revision change affecting form, fit or function.
4 – Supplier change including manufacturing source(s), process(es), inspection method(s), location of manufacture, tooling or materials, that can potentially affect form, fit, or function.
5 - A change in numerical control program or translation to another media that can potentially affect form, fit or function.
6. - A natural or man-made event, which may adversely affect the manufacturing process.

If a key characteristic is potentially affected by the event triggering a FAIR, a new capability study may be required. Consult directly with TDSI PQE for determination.

The first article report shall consist of detailed test and inspection results with all characteristics, specifications and drawing notes itemized. Parts from each tool cavity and alternate work center shall have representative parts inspected and/or tested. Material certifications, finish certificates, special process certificates, test data and any purchase order requirements shall be provided. Certificates of Compliance submitted with First Article data packages must list out each and every material and finish requirement and attest conformance to such (reference QAP AJ). Reference AS9102 for preferred format and content. Any charged FAI shall be in AS9102 format and contain all AS9102 content.

Any additional production without receiving TDSI First Piece Inspection Report approval shall be at Supplier's risk. Where a supplier sub-contracts all or a portion of the manufacturing process, the FA must clearly identify the process, the subcontract supplier and the VIR authorizing such subcontracting.

G1 **AS9102 First Article Approval Before Shipment** – All QAP G requirements apply. In addition, the FAR shall be AS9102 compliant inclusive of Certificate of Conformances for all COTS linked to Form 1 assembly listing. The FAR must be approved by TDSI in advance of shipment. Once the file is uploaded per QAP G, email your TDSI BUYER requesting FAR approval IAW QAP G1. Supply TDSI's FAR approval with the shipment.

H **Tooling Development and Approval –** Molds built to fabricate a TDSI part are subject to the following development and approval sequence: Kick-off Meeting, Tool Design Review, Tool Design Approval, Tool Fabrication, First Shot Review, QAP G First Article Inspection, Process Capability Study and QAP T PPQP Approval.

I **Test Data Submittal – All Shipments -** In advance of shipment, Supplier shall upload approved and passing Production Acceptance Test Records for each item to the TDSI portal TEST RECORD folder. TDSI Buyer or SQE to provide access. Record file names shall use the following file naming convention: SUPPLIER ABC, PO 123, PN 456 SN 789 where ABC is the supplier name, 123 is the TDSI Purchase order number, 456 is the TDSI part number, and 789 is the full and complete serial number. Serial number ranges are acceptable for files containing more than one serial number. Record on the C of C provided with the shipment that test records have been uploaded to the TDSI portal.

J **Test Data Approval Prior to Shipment** – Supplier must request and receive TDSI approval for each test record prior to shipment. Upload records per QAP I and then email buyer requesting record approval. Provide a copy of approval email with the shipment packing slip and C of C**.**

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K **Test Procedure Approval -** Acceptance Test Procedures to be used in the execution of this Purchase Order must be submitted to TDSI for approval prior to the commencement of any acceptance testing. Approval shall be obtained from TDSI for all revisions made to test procedures after initial approval. Initial and subsequent approvals must be on a VIR (ref QAP Z).

M **Certificate of Calibration -** A Certificate of Calibration traceable to NIST standards must be supplied for each item delivered on this order. Each certificate, as a minimum, shall identify each item by serial number, applicable standard(s) used, measured results, temperature and humidity, and any adjustments that were made. If the item is being recalibrated, the as received condition must be identified as passing or failing.

O **Shelf life (SL) and Use-By-Date (UBD) Labeling –** Materials shall be provided having at least 70% of original SL remaining. Documentation detailing the date of manufacture, recommended storage condition and SL expiration shall be provide. UBD labels shall be applied to each COTS part and to the most discrete package for items made to a PO listed DWG. UBD labels shall include TDSI PO #, TDSI part # and UBD. Where OEMs seal COTS parts in packaging such that the label cannot be applied directly to the part, a suitable quantity of labels shall be provided with the shipment so that TDSI may label the parts once the package is opened (e.g. 50 units would require 50 labels).

Q **Physical / Chemical Analysis -** Physical and / or Chemical analysis of raw material and applied finishes used in the manufacturing of parts and / or assemblies covered by this Purchase Order must accompany each shipment. A SDS is sufficient analysis for off the shelf chemicals.

R **O.E.M Lot Traceability -** Units supplied on this Purchase Order must have evidence of traceability to the Original Equipment Manufacturer (OEM) inspection and test records. All records substantiating traceability are to be retained and subject to review for a minimum period of ten (10) years.

S **Rubber Cure Data -** Certification must be supplied separate from Supplier's packing sheet but included with the material, specifying rubber cure date and durometer reading.

T **Product Process Quality Plan (PPQP) –**

1- Prior to production, Supplier shall request/receive TDSI approval for applicable PPQP packages which shall be organized and submitted electronically on a VIR per the requirements of OI16-006.
2- Supplier shall request TDSI source inspection on all First Article shipments. Source inspection shall audit the product and process to the PPQP and applicable PO QAPs.
3- Supplier shall process product in all regards IAW the approved TDSI PPQP.
4- Supplier shall provide advance notification and request for TDSI approval prior to implementing engineering or process changes.
5- Supplier shall notify TDSI of discovery or suspicion of nonconformance(s) that may materially affect the Goods delivered (or to be delivered) under this Purchase Order.
6- Supplier shall notify TDSI if Supplier or Supplier's sub-tier suppliers receive a U.S. Government Corrective Action Request (GCAR) related to goods, services, or systemic nonconformances provided or associated with this Purchase Order within five (5) working days of receipt.

T1 **Key Characteristic Cpk** - All DWG characteristics shall be measured on the first thirty units. Key Characteristics as identified by the DWG and remaining characteristics having a Cpk < 1.33 shall be

documented in a measurement/control plan approved by TDSI. The control plan shall list the Cpk for each characteristic.

Z **Vendor Information Request (VIR) -** Requests for requirement clarification, requests Waiver/ Deviation approval, and requests for QAP T PPQP approval/revision shall be submitted on TDSI VIR form (OT16-001) in advance of intended implementation. Formal disposition of the VIR must be obtained prior to shipment. A copy of the VIR must accompany each shipment or be referenced on supplied certificates of conformance.

AA **Calibration -** The Supplier shall maintain a calibration system in accordance with ISO/IEC 17025:2017 and ANSI/NCSL Z540.3.

AB **Electrical Component Packaging and Solderability -** All components supplied by the vendor shall be packaged in the manufacturer's original packaging unless TDSI specifically purchases a quantity less than a full OEM package amount. All repackaged components supplied on Tape and Reel shall comply with the packaging requirements from the manufacturer to prevent any damage, in accordance with EIA-481, and must be unidirectional in orientation for automated placement. Components intended for solder applications must meet coating durability requirements specified in ANSI/J-STD-002 category 3.

AC **ESD Protection -** The Supplier shall maintain, package, and ship material in accordance with the most current revision of ANSI/ESD S-20.20.

AD **Moisture Sensitive Devices (MSD) -** Integrated Circuits and other MSD devices provided on this Purchase Order must be supplied in the original, undisturbed O.E.M. packaging. Moisture sensitive device packaging shall be in accordance with IPC/JEDEC J-STD-033.

AE **Rigid Printed Circuit Boards (PCBs) –** PCBs shall comply with the fabrication, testing, and workmanship requirements of IPC-6012, Class 2 (Class 3 when specified on PCB DWG) and meet coating durability requirements specified in ANSI/J-STD-003 category 2. PCBs shall withstand processing as an IPC/JEDEC J-STD-033 MSD level 3 device and shall be labeled as "MSD level 3 (168hrs) Seal Date ___". Supplied and Supplier stored excess PCBs must be packaged and vacuum sealed in EIA583 type 1 moisture barrier bags (MBB) with humidity indicator cards and appropriate desiccant packs. Unless otherwise specified, no more than 10% of individual boards per pallet may contain X-outs. On pallets containing less than 10 boards, one (1) X-Out is permitted. A pallet is defined as the final array shipped to TDSI for component placement. X-out each nonconforming image and drill out its associated local and bad board Fiducials. Circuit continuity and insulation resistance testing is required on all product. Repairs are not allowed. Inspection records per lot shall clearly reflect lot identification, lot size, sample size and number of boards and coupons analyzed as well as attribute results for each characteristics. In addition, variable data (actual measurements) and microsection pictures shall be recorded on at least one board per lot. Product packaging labels shall list Part Number, Revision, Supplier, PO#, Lot Number, Date Code, Quantity and number of X-outs if applicable. Packages with X-outs shall not be commingled with boards not having X-outs.

AF **Flexible and Rigid-Flex Printed Circuits -** Flexible and Rigid-Flex Printed Circuits delivered on this Purchase Order shall comply with the fabrication, testing, and workmanship requirements of IPC-6013, Class 2 (Class 3 when specified on PCB DWG) and meet coating durability requirements specified in ANSI/J-STD-003 category 2. PCBs shall withstand processing as an IPC/JEDEC J-STD-033 MSD

level 3 device and shall be labeled as "MSD level 3 (168hrs) Seal Date ___". Supplier shall inspect flexible circuits in accordance with IPC 6013 class 2 sampling plans and inspect rigid flex in accordance with IPC 6013 class 3 sampling plans. Supplied and supplier stored excess product must be packaged and vacuum sealed in EIA583 type 1 moisture barrier bags with humidity indicator cards and appropriate desiccant packs. If inner bubble bags are used, they must be ESD compliant. Unless otherwise specified, no more than 5% of supplied images per shipment and no more than 20% of individual flexible circuits per pallet may contain X-outs. On pallets containing less than 5 boards, one (1) X-Out is permitted. A pallet is defined as the final array shipped to TDSI for component placement. X-out each nonconforming image and drill out its associated local and bad board Fiducials. Circuit continuity and insulation resistance testing is required on all products. Traceability markings are required. If space does not permit on the image, the traceability markings are required on the array. Repairs are not allowed. Inspection records per lot shall clearly reflect lot identification, lot size, sample size and number of boards and coupons analyzed as well as attribute results for each characteristics. In addition, variable data (actual measurements) and microsection pictures shall be recorded on at least one board per lot. Product packaging labels shall list Part Number, Revision, Supplier, PO#, Lot Number, Date Code, Quantity and number of X-outs if applicable. Packages with X-outs shall not be commingled with boards not having X-outs.

AG **Workmanship Class 2 -** Workmanship shall be in accordance with IPC-A-610 Class 2 unless otherwise documented on the drawing.

AJ **Certificate of Compliance , Record Retention and Counterfeit Part Avoidance-**

Certificate of Compliance (CofC) - Seller shall provide their CofC with each shipment listing out Supplier's name, Thales item number, Thales Purchase order number, quantity delivered, authorized VIRs (QAP Z), and OEM lot number/date code/serial number recorded on the product or product container by the OEM. Where more than one OEM lot number/date code/serial number are provided per shipment, each shall be listed on the CofC. Mixed date codes within component reels and trays are not allowed.

Further, for items procured to Thales DWG or SCDs the C of C shall contain Thales Item revision, Thales drawing revision, and a statement signed by a quality assurance representative certifying the product has been inspected and/or tested to the requirements of the purchase order and purchase order specified drawings and specifications. Certificates for PCB and cast or machined products shall include reference to the raw material lot numbers and finishing requirements specified within the governing TDSI documents.

Record Retention - All quality records including but not limited to material inspection and test data for this order shall be retained for at least ten (10) years and be made available to TDSI, a representative of the Customer, or a representative of regulatory agency for inspection upon request. Longer record retention periods specified by active contracts takes precedent.

Counterfeit Part Avoidance - All material supplied and components used for the delivery of this PO shall be acquired directly from the OCM, OCM Authorized (Franchised) Distributor or OCM Authorized aftermarket manufactures. Supplier shall provide documented supply chain traceability upon request. The buyer is under no obligation to return suspect or confirmed counterfeit product.

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AK **Cable Assembly Testing -** 100% of all multiconductor assemblies including all shielded assemblies shall be tested for continuity, shorts, Dielectric Withstanding Voltage (DWV) and Insulation resistance (IR) per IPC/WHMA-A-620 Class 2 (Class 3 when specified on DWG) except that continuity shall be class 3 (2 ohms or 1 ohm plus the resistance of wire whichever is greater).

AL **Cable and Wiring Harness Requirements and Acceptance -** Cable and Wiring Harness requirements and acceptance shall be in accordance with IPC/WHMA-A-620 Class 2 (Class 3 when specified DWG) except testing shall be in accordance with QAP AK unless specifically noted on the applicable DWG to test in accordance with other standards/specifications/thresholds.

AM **General Workmanship -** General workmanship shall be in accordance with MIL-HDBK-454, Requirement 9.

AR **Solder Workmanship Class 3 -** Solder workmanship shall be in accordance with IPC-A-610 Class 3.

AS **Soldering Program Requirements -** All items manufactured and delivered under this purchase order must meet the requirements for Soldered Electrical and Electronic Assemblies as defined in IPC/EIA J-STD-001 class 2.

AT **Software Configuration Management –** Supplier shall maintain a documented Software configuration management system to maintain version control and traceability of changes. TDSI acceptance of object code shall be subject to build verification and/or witnessed by TDSI. The supplier's configuration management capabilities necessary to rebuild an object from source shall be documented by the supplier. Source code shall be configuration managed in such a way that the supplier shall be able to revert to an earlier source code baseline. Each delivery of code shall be accompanied by software version document (OT16-007A) identifying known deficiencies and delivered functionality. The delivered code shall conform to industry standard best practices for coding standards. The Supplier shall have performed all software design, coding, test, debug, and integration on the target platform or one approved by TDSI. Each Delivery Acceptance Request shall be documented on a TDSI VIR (OT16-001) and a SW Acceptance Checklist (OT16-007B) showing compliance to contractual requirements. Any changes or modifications after acceptance of a configuration baseline shall be subject to review and approval by TDSI.

AU **RoHS Compliance and Declaration of Conformity –** Supplied parts shall be RoHS compliant as defined within EU Directive (2011/65/EU). Upon first shipment to TDSI or gap in shipment of more than one year, Supplier shall provide a signed Declaration of Conformity on supplier's letterhead certifying supplied PRODUCT COMPLIES WITH SUBSTANCE RESTRICTION REQUIREMENTS OF ROHS RECAST DIRECTIVE 2011/65/EU INCLUDING THE AMENDMENT TO ANNEX II DESCRIBED IN COMMISSION DELEGATED DIRECTIVE (EU) 2015.863. Supplier should be specific and attest that items do not contain, in excess of allowable limits, lead (Pb), mercury (Hg), hexavalent chromium (Cr(VI)), cadmium (Cd), polybrominated biphenyls (PBB), polybrominated diphenyl ether (PBDE) nor Bis (2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP). Record retention shall be ten years.

AV **Export Controls -** The Seller shall control the disclosure of, and access to, all technical data, information, hardware, and other items received under this Purchase Order in accordance with U.S. export control laws and regulations including, but not limited to, the International Traffic in Arms Regulations (ITAR, 22 CFR 120-130) and the Export Administration Regulations (EAR, 15 CFR Parts

730-774). The Seller shall indemnify the Buyer for all liabilities, penalties, losses, damages, costs and/or expenses that may be imposed on, or incurred by, the Buyer in connection with any violations of these export control laws and regulations by the Seller.

AW **Microelectronic Workmanship** - Substrate and hybrid microelectronic workmanship shall meet Mil-STD-883 method 2017 class H except where noted on the DWG. Hybrid microcircuits, multi-chip modules (MCM) and similar devices, shall meet class H performance requirements defined in MIL-PRF-38354.

AX **Immersion Silver Plating** - Printed Circuit Board shall meet the requirements and quality assurance provisions of IPC-4553A, Specification for Immersion Silver Plating for Printed Boards. PCBs shall comply with the fabrication, testing, and workmanship requirements of IPC-6012, Class 2. PCBs shall withstand processing as an IPC/JEDEC J-STD-033 MSD level 3 device and shall be labeled as "Package and Handle Per IPC-4553A, Immersion Silver Plating requirements - MSD level 3 (168hrs) Seal Date ___". Supplied and Supplier stored excess PCBs must be packaged and vacuum sealed in EIA583 type 1 moisture barrier bags (MBB). Unless otherwise specified, no more than 10% of individual boards per pallet may contain X-outs. On pallets containing less than 10 boards, one (1) X-Out is permitted. A pallet is defined as the final array shipped to TDSI for component placement. X-out each nonconforming image and drill out its associated local and bad board Fiducials. Circuit continuity and insulation resistance testing is required on all product. Repairs are not allowed. Inspection records per lot shall clearly reflect lot identification, lot size, sample size and number of boards and coupons analyzed as well as attribute results for each characteristics. In addition, variable data (actual measurements) and microsection pictures shall be recorded on at least one board per lot. Product packaging labels shall list Part Number, Revision, Supplier, PO#, Lot Number, Date Code, Quantity and number of X-outs if applicable. Packages with X-outs shall not be commingled with boards not having X-outs.

AY **FOD Prevention Program -** Supplier shall establish and maintain written FOD Prevention Program Practices to reduce FOD using National Aerospace Standard 412 (NAS412) and AS9146 (Foreign Object Damage (FOD) Prevention Program - Requirements for Aviation, Space, and Defense Organizations), as guidelines. The resulting FOD Prevention Program shall be proportional to the FOD susceptibility of the product(s). Controls shall include documented levels of FOD acceptance for the product and documented controls for associated tooling, test equipment and packing. The FOD Prevention Program Practices, written procedures, or policies developed by the Supplier shall be subject to review and audit by the TDSI and/or government representative(s) during **Surveillance** Audits (QAP F), PPQP phases (QAP T) and or during Source Inspection (QAP D and or T).

AZ **QAP AZ -TIER 3 PWB Requirements -** Supplier shall produce and supply product in accordance with Raytheon Missile document 61494 Revision J Dated Dec. 7, 2017, except all reference to Raytheon in document 61494 used for the purpose of contact and approval shall be made by the Supplier to TDSI on a VIR form as called out in TDSI QAP Z. Include QAP BA required C of A's with the VIR. Shipment authorization requests with supporting data shall be provided to TDSI with a QAP Z VIR form for disposition. Approved shipments shall be provided with the corresponding VIR.

Product packaging labels shall list Part Number, Revision, Supplier, PO#, Lot Number, Date Code, Panel Numbers and Quantity

Shipment authorization requests with supporting data shall be provided to TDSI with a QAP Z VIR form for disposition. Approved shipments shall be provided with the corresponding VIR. Product packaging labels shall list Part Number, Revision, Supplier, PO#, Lot Number, Date Code, Panel Numbers and Quantity.

BA **Certificate of Analysis and Coating Thickness -** Seller shall include with each shipment of parts/materials physical and chemical reports of analysis or tests conducted to assure raw materials delivered, or raw materials used in the parts delivered, conform to the specifications required by this purchase order. The raw material manufacturer's test report must state that the lot of material furnished has been tested, inspected, and found to be in compliance with the applicable material specifications. The test report will list the specifications, including revision numbers or letters, to which the material has been tested and/or inspected and the identification of the material lot to which it applies. Furthermore, the seller shall mark the test report with traceability information (such as a vendors work order number, lot, heat lot, and/or material control or batch number) which can be linked to the TDSI PO Number regardless of the origin of the paperwork, and the reports must contain the signature and title of an authorized representative of the agency performing the tests. Additionally for Raw material Metals, the chemical and physical test reports must indicate the country of origin / melt along with any processing certifications (plating, heat treating, welding etc.) identifiable with the material submitted. For Raw Material Rubber, the test report, at a minimum, shall indicate tensile strength, elongation, tear strength, specific gravity, and hardness.

Seller shall further furnish measured coating thickness where such thickness is specified directly on the TDSI Procurement referenced documents. Where ENIG, HASL, conformal coating, paint or hard coat anodize is specified, coating thickness shall always be furnished.

BB **PART AGE LIMIT -** All deliverable items shall be manufactured less than two (2) years prior to the date of receipt at TDSI and shall have a date code reflective of the date of manufacture. To clearly translate the date code to the date of manufacturing for age verification by TDSI, the supplier shall furnish suitable documentation explain the date code.

BC **BARCODE -** Barcode quality shall be certified as ISO/IEC 15415/15416 Grade C of better.

BD **LEADED (NON-RoHS) CRITERIA** - Supplied parts shall be Sn/Pb. RoHS compliant parts are prohibited.

BE **ML Condition** - Condition, package and label to ANSI-J-STD-020 MSL 3 and label with supplied UID label.

BF **Container Label -** Each Box , Gaylord, and/or Crate Shall Be Labeled With TDSI Part Number and Qty

BG **PCB Stack-up, Panaleization and Micro-Section Approval –** PCB stack-up, array panelization and coupon design shall be approved by TDSI before board fabrication. Each part and coupon strip shall have a unique marking (i.e. text or number) in etch or silk screen that can be used to identify its location in the panel once it is depanelized. A and B coupons shall be located on the panel per IPC-

2221 design criteria. From each production lot, in accordance with IPC-6012/6013, the supplier shall conduct micro-section analysis to the full sampling plan and characteristics defined in IPC-6012/6013. Inspection records per lot shall clearly reflect lot identification, lot size, sample size and number of boards and coupons analyzed as well as attribute results for each characteristics. In addition, variable data (actual measurements) and microsection pictures shall be recorded on at least one board per lot. After Vendor acceptance, coupons shall be sent to TDSI approved third party for independent review. Results of both Vendor and independent supplier shall be tendered to TDSI on a VIR requesting lot approval.

CC **Coating Cert -** Certificate of Conformance shall list coating material, material lot #/ expiration date and measured coating thickness IAW IPC-CC-830.

CH **REACH Certificate of Compliance –** Supplier shall provide a REACH Certificate of Compliance with each shipment attesting that SUPPLIED PARTS ARE REACH COMPLIANT AS DEFINED WITHIN EC1907/2006 FOR THE LATEST SVHC (SUBSTANCES OF VERY HIGH CONCERN). THE DELIVERED ITEM DOES NOT CONTAIN ANY SVHC IN EXCESS OF 0.1% BY WEIGHT.

RB **REBALL – RETERMINATION -** Maintain Lot Integrity. Do not mix or combine individual trays or reels. Re-Terminate with Sn63Pb37. Pre-Bake and Post Bake as needed. Return in same packaging. Do not cover existing container labeling. The following additional QAPs apply: A, B, E, F, Z and AJ.

U0	Do Not Buy
U1	T&Cs are from GDMS Quotation C8629 (reference Contract Letter KLL22-017 Rev 2/526259) dated 20 March 2023 & GDMS Domestic Terms of Sale Enclosure A.
U2	Construct and bolt the 608823-00 and/or 608825-00 to a custom metal frame using existing CCA mounting holds to prevent any bow or twist during transportation so as to prevent cracking of ceramic capacitor
U3	V04-30-0009 to include FAIR limited to 34009-0832-16-5TH1 Customer Product Spec 6204454
U4	368290-001-OSV, Upscreen to Industrial Spec IAW Mfg. Spec, Mark with Green Test Dot TAPE & REEL IAW ANSI/EIA-481. Testing to include-Idd, II, VOL, VOH, Tdp, Thz, Tzh, Tlz, Tzl @ hot and cold temperature per datasheet specifications
U5	No dents, dings, missing paint, scratches that can be seen in standard lighting at the distance of 3 feet in 30 seconds. Pack/Crate to TDSI Spec.
U6	DATE CODE H714DJ7 PROHIBITTED
U7	620024-001 - Date code must be after 2126 (year 21 week 26).
U8	EK656-OSV shall be IAW 1084552~U898UCD7100PWP SCREENING SOW
U9	368290-001-OSV, Upscreen to Industrial Spec IAW Mfg. Spec, Mark with Green Test Dot TAPE & REEL IAW ANSI/EIA-481. Testing to include-Idd, II, VOL, VOH, Tdp, Thz, Tzh, Tlz, Tzl @ hot and cold temperature per datasheet specifications
U10	Source of Supply Shall Be Thales ATM
U11	Chem Conversion Color Shall be Gold

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Revision History

Rev.	Author	Change Description
8	T. Maczis	Initial release using revision history table. Changes were made to enhance QAPs B, E, G, H, AE, AF and AJ.
9	T. Maczis	Added QAP AX and updated for name change to Thales Defense & Security (TDSI)
10	T. Maczis	Updated QAP AX
11	T. Maczis	Updated QAP AJ, AK, AL, AT
12	T. Maczis	Updated A, F, AG, AJ,
13	T. Maczis	Updated A, B, D, F, G, AJ and added B1 as well as T1
14	T. Maczis	Updated B1, B2, D, G, M, O, Q, R, AA, AJ, AK
15	T. Maczis	Added AY (FOD Prevention Program), removed place of performance from AJ as it applies to BTP and is in QAP G, added 2011/65/EU controls to AU and corrected typo in QAP O Shelf Life
16	T. Maczis	Updated (A) QMS for employee awareness, (F) for all levels of supply chain, (G) for electronic submittal, (AK, AJ) for record retention period and (AU) for RoHS periodic Declaration of Conformity
17	T. Maczis	Updated (G) FAI to be uploaded to TDSI Portal using OT16-008 Coversheet.
18	T. Maczis	Updated QAP I, J, K, O, R, Z, AG, AJ, AT
19	T. Maczis	Updated AJ, AU and added AZ, BA, BB, BC, RB
20	T. Maczis	Updated QAP AZ
21	T. Maczis	Added B2, B3, E1, E2, G1 and updated B1, G, R, AE, AF, AX, AA, AJ, AV, AZ
22	T. Maczis	Updated QAP AB
23	T. Maczis	Updated QAP T, Z and added QAP CH
24	T. Maczis	Updated QAP AE, AF, AL, AX, AY, AZ, BC, BF CHand added BD, BE, BF, BG