



AXON Supplier Quality Manual

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1 PURPOSE, APPLICABILITY, RELATED DOCUMENTS

1.1 Purpose

1.1.1 This document specifies the general quality requirements for Suppliers who provide materials and products directly to AXON for the manufacture of AXON product. The requirements specified in this document are intended to compliment the Supplier's own Quality Management System.

1.2 Applicability

- 1.2.1 This document and the requirements herein apply to all components, modules, and system level products regardless of whether they are meant to be built into a final assembly or to be shipped as spare or replacement parts.
- 1.2.2 In the event of a conflict between this document and the requirements set forth in contractual documents (e.g. Supplier Agreement, Purchase Order and its Terms and Conditions) or in a product specific document (e.g. engineering drawing/specification), the order of precedence shall be as follows: Contractual documents, Product specific documents, AXON Supplier Quality Manual.

1.3 Related Documents

All documentation (FAIR/PPAP, SIR, Root Cause, Correct Action) shall be submitted to Axon in English, unless an exception is granted by Axon Quality, prior to submission

The following documents are incorporated by reference into this document. The latest version of each document shall be used.

Applications/ Document #	Application/ Document Title
Arena	SIR (Supplier Information Request)
Arena	Barcode Specification for PCBA's
Arena	Pack Standard for AXON Products
Arena	FAIR/PPAP Tool Kit
https://www.axon.com/qa-docs	AXON Transportation Routing Directive
	Cosmetic Inspection Criteria
	Pre-Shipment Audit

2 REQUIREMENTS

2.1 General Requirements

This revision of the AXON Supplier Quality Manual (SQM) supersedes and replaces all previous versions. Compliance with this document is mandatory unless a specific requirement is formally waived or modified through AXON's approved Deviation process in Arena.

No exception or deviation from these requirements is permitted without prior written authorization from AXON.

Any requested exception to a requirement in this document shall:

- Be documented in the "Exceptions to SQM Requirements Compliance Acknowledgement" section.
- Include supporting rationale.
- Be formally reviewed and approved by AXON.

Suppliers shall provide written acknowledgement of compliance to this document within thirty (30) days of initial receipt by completing and signing the "Supplier Quality Manual Compliance Acknowledgement" form.

If exceptions are identified, Suppliers shall:

- Clearly document each exception.
- Provide corrective action plans with defined timelines.
- Obtain written acceptance from AXON.

As applicable, Suppliers shall flow down the relevant requirements of this SQM to their sub-tier suppliers, including AXON-directed suppliers.

2.1.1 Right of Access

In accordance with the AXON Supplier Agreement, the Supplier shall provide AXON personnel reasonable access to production facilities, systems, processes, records, and associated sub-tier suppliers within forty-eight (48) hours of notification and mutual agreement.

Right of access includes, but is not limited to:

- Production processes
- Quality management systems
- Inspection and test records
- AXON-owned property
- Work-in-process and finished goods
- Sub-tier supplier operations supporting AXON product

Approval of product by AXON does not relieve the Supplier of full responsibility for product conformity.

2.2 Management Systems

2.2.1 Quality Management System (QMS)

Supplier shall establish, implement, and maintain a documented Quality Management System (QMS) that is certified to a nationally or internationally recognized standard, such as, ISO9001, IATF16949, ISO13485, AS9100, or other AXON-approved equivalent

The Supplier's QMS shall ensure consistent compliance with AXON engineering specifications, Purchase Order requirements, Applicable regulatory requirements, and this Supplier Quality Manual (SQM)

Certification shall be maintained in good standing. Suppliers shall notify AXON within five (5) business days of any change in certification status, including suspension, withdrawal, or scope modification.

AXON reserves the right to conduct risk-based supplier audits to verify compliance with this Supplier Quality Manual, contractual requirements, and applicable regulatory standards.

2.2.2 Information Security and Data Protection

Where Supplier has access to AXON confidential information, customer data, product data, or network-connected systems, Supplier shall implement appropriate information security controls to protect such data from unauthorized access, disclosure, alteration, or loss.

Supplier shall:

- Restrict access to AXON data to authorized personnel
- Maintain documented access control procedures
- Protect data from malware, unauthorized intrusion, or cyber threats
- Promptly notify AXON of any data breach or cybersecurity incident that may impact AXON products or information
- Comply with applicable data protection and privacy regulations

Upon request, Supplier shall provide summary documentation describing its information security controls.

2.2.3 Quality Objectives and Targets

Supplier shall establish measurable quality objectives related to AXON products and performance, including but not limited to:

- First Pass Yield (FPY),
- DPPM performance,
- On-time delivery,
- Corrective action responsiveness,
- Continuous improvement initiatives.

Quality objectives shall be monitored, reviewed periodically, and supported by documented improvement plans where targets are not achieved.

2.2.4 Quality Tools and Risk Management

Supplier shall implement appropriate quality tools and risk management methodologies to ensure process control and product conformity.

These tools may include, but are not limited to:

- Design and Process Failure Mode and Effects Analysis (D/PFMEA)
- Control Plans
- Measurement System Analysis (MSA), including GR&R
- Statistical Process Control (SPC)
- Error-proofing (Poka-Yoke)
- Production Part Approval Process (PPAP)
- Corrective and Preventive Action systems
- Statistical analysis software (e.g., Minitab or equivalent)

PFMEA and Control Plans shall be reviewed periodically and updated when:

- Process changes occur
- Engineering changes are implemented
- Corrective actions are initiated
- Significant quality issues are identified

Annual PPAP submissions, where required by AXON, shall be incorporated into the Supplier's quality planning system.

2.3 Supplier Corrective / Preventive Action Process (SCAR)

Supplier shall establish and maintain a documented, closed-loop Corrective and Preventive Action (CAPA) system to:

- Investigate product and process discrepancies
- Identify verified root cause(s)
- Implement corrective and preventive actions
- Verify effectiveness of implemented actions
- Prevent recurrence

Corrective action methodology shall follow a structured problem-solving approach (e.g., 8D or equivalent).

2.3.1 Response Time Requirements

Supplier response to an AXON-issued SCAR shall meet the following requirements:

- ≤ 24 hours: Acknowledge receipt of SCAR using Arena notification or AXON-designated communication method.
- ≤ 48 hours: Submit documented containment plan to prevent further shipment of nonconforming product.
- ≤ 10 business days: Submit complete Root Cause Analysis (RCA) and defined corrective/preventive action plan.
- ≤ 15 business days: Submit Corrective Action Plan with timeline for implementation.
- ≤ 90 business days: Implement corrective and preventive actions unless otherwise approved in writing by AXON Supplier Quality Engineering (SQE).

Requests for timeline extensions must be submitted in writing and approved by AXON SQE prior to expiration of the original due date.

2.3.2 Supporting Documentation

Supplier shall provide objective evidence supporting corrective action closure, including but not limited to:

- Completed 8D (or equivalent) report
- Updated PFMEA and Control Plan
- Revised work instructions or procedures
- Training records (if applicable)
- Test data or validation results
- Process capability data (where applicable)

Corrective action shall not be considered closed until effectiveness has been verified and accepted by AXON.

2.3.3 Escalation and Containment

If nonconforming product is shipped to AXON or its customers, Supplier shall:

- Immediately notify AXON
- Initiate containment of all suspect material (in-house, in transit, at sub-tier suppliers)
- Provide traceability details including:
 - Purchase Order number
 - Lot number
 - Serial number (if applicable)
 - Shipment number
 - Production dates

Supplier shall cooperate fully with containment, sorting, recall, or field corrective action efforts as required.

Failure to respond or repeated recurrence of similar issues may result in supplier escalation, increased inspection, cost recovery, or removal from Approved Vendor List (AVL).

2.3.4 Supplier Performance Escalation

When performance issues persist, corrective actions are ineffective, or required response timelines are not met, AXON may initiate supplier performance escalation measures.

Escalation actions may include, but are not limited to:

Level 1 – Increased Oversight

- Increased inspection frequency
- Mandatory containment
- Formal performance review

Level 2 – Formal Corrective Action Review

- Executive-level review meeting
- Required corrective action plan with defined milestones
- Temporary new business hold (if applicable)

Level 3 – Probationary Status

- Supplier placed on conditional approval status
- Mandatory performance monitoring
- Risk-based audit

Level 4 – Disqualification

- Removal from Approved Vendor List (AVL)
- Termination of new business awards

2.4 Nonconforming Material

2.4.1 Control of Nonconforming Material

Supplier shall establish and maintain a documented process for the identification, segregation, evaluation, disposition, and control of nonconforming material.

The process shall clearly define:

- Responsibility for review and disposition
- Authority levels for approval
- Documentation requirements
- Re-verification requirements after rework

Nonconforming material shall be:

- Clearly identified and labeled
- Physically segregated from conforming material
- Securely controlled to prevent unintended use

Material dispositioned as scrap shall be permanently marked or physically rendered unusable prior to disposal.

Records of nonconformities and resulting actions shall be maintained in accordance with Section 2.6 (Records Retention).

2.4.2 Nonconforming Material Discovered After Shipment

If nonconforming material is identified after shipment to AXON or AXON's customer, Supplier shall:

- Immediately notify AXON
- Initiate containment activities
- Provide traceability information
- Cooperate in determining impact

Supplier shall be responsible for all costs associated with nonconforming product determined to be the Supplier's responsibility, including but not limited to:

- Sorting
- Rework
- Repair
- Replacement
- Freight
- Field containment
- Administrative processing

2.4.3 Supplier Response to Nonconforming Material Reports (NCMR) and RMA

Supplier shall respond to AXON-issued Nonconforming Material Reports (NCMRs) in accordance with the following Turnaround Time (TAT) requirements:

- ≤ 24 hours: Acknowledge receipt of the NCMR.
- ≤ 48 hours: Provide initial containment plan and disposition instruction.
- ≤ 5 business days: Provide RMA number (if return is required) or written authorization for scrap, rework, or alternate disposition.
- ≤ 10 business days: Arrange return shipment, replacement material, or credit issuance unless otherwise agreed in writing by AXON.

Failure to respond within the defined timelines may result in AXON dispositioning material at the Supplier's expense.

Supplier shall provide clear RMA instructions, including Carrier, Billing method, and Packaging requirements

Repeated failure to meet response timelines may result in escalation, chargeback, increased inspection, or AVL impact.

2.4.4 Product Rework

Supplier shall establish documented procedures for controlled rework activities, including:

- Detailed work instructions or rework process flow
- Updated Control Plan and PFMEA, where applicable
- Identification and marking of reworked product
- Inclusion of applicable Deviation, NCMR, or SCAR reference number on packaging

Reworked product shall undergo complete inspection and verification to ensure compliance with all applicable requirements.

Rework procedures and disposition authority shall be clearly defined.

Rework shall not be performed without prior AXON approval where required.

2.4.5 Service and Warranty Material

Returned service and warranty material shall be controlled in accordance with the same requirements as production nonconforming material.

Returned material shall:

- Not be mixed with new production
- Not be reintroduced into production without written AXON authorization
- Be processed only by trained and qualified personnel

All applicable controls including ESD protection, calibration, preventive maintenance, operator training, and documented procedures shall apply.

2.5 Quality Performance Reporting

Supplier shall provide periodic performance reports to AXON, as defined by AXON Supplier Quality Engineering, demonstrating compliance with product, process, and management system requirements.

Reports shall be submitted in the format and frequency defined by AXON.

2.5.1 Performance Metrics

Performance reporting shall include, but is not limited to:

- First Pass Yield (FPY) performance
- Defective Parts Per Million (DPPM) performance
- Customer complaints and corrective action status
- CTQ capability (Cpk) summary and improvement plans
- Production volume
- On-time delivery performance (if requested)

Where performance targets are not achieved, Supplier shall provide:

- Pareto analysis of top issues
- Root cause analysis (if applicable)
- Defined corrective and preventive action plan
- Timeline for improvement

2.5.2 Continuous Improvement

Supplier shall demonstrate ongoing continuous improvement initiatives, which may include:

- Six Sigma projects
- Error-proofing (Poka-Yoke) implementation
- Process optimization initiatives
- Yield improvement projects
- Scrap reduction programs

Improvement initiatives shall be supported by measurable results.

2.5.3 Change Implementation Tracking

Supplier shall maintain and provide, upon request:

- ECO implementation tracking
- Deviation tracking
- Open corrective action status
- Supplier scorecard results and improvement plans
- Sub-tier supplier performance monitoring

Supplier shall proactively address identified performance gaps and provide documented improvement plans when requested by AXON.

2.6 Records Retention

Supplier shall maintain production and quality records for a minimum of three (3) years beyond the life of the product, unless otherwise specified by contractual or regulatory requirements.

The retention period begins upon formal notification of product obsolescence by AXON.

Records shall be legible, readily retrievable, protected against loss, damage, or deterioration, and all records shall be maintained in a controlled environment (electronic or hard copy)

Electronic records shall be backed up and protected from unauthorized modification.

2.6.1 Types of Records

The following records shall be maintained, at a minimum:

Procurement Records

- Purchase Orders
- Receiving documentation
- Supplier qualification and monitoring records
- Incoming Quality Control (IQC) inspection records
- Supplier corrective action records

Production Records

- Configuration and traceability records
- Training records
- Preventive maintenance records
- Rework and repair records
- AXON customer property logs

Quality Records

- Inspection data
- Test results
- Process control data (SPC)
- Calibration records
- Nonconforming material records
- Defect and yield data
- Customer complaint records
- Corrective action records

Returned Product Records such as Return Material Authorizations (RMA), Repair history, and Warranty investigation records

Supplier shall make applicable records available to AXON upon request within a reasonable timeframe. Disposal of records at the end of the retention period shall be performed in a manner that protects AXON proprietary and confidential information.

2.7 Document Management Requirements

Supplier shall establish and maintain a documented document control system to ensure that only current and approved technical data is available at the point of use.

The document control system shall include controls for:

- Document approval prior to release
- Periodic review and update
- Revision identification and traceability
- Controlled distribution
- Prevention of unintended use of obsolete documents

Obsolete documents shall be promptly removed from points of use or clearly identified to prevent misuse.

2.7.1 Revision Control

Supplier shall be responsible for obtaining and using the correct revision level of technical data as specified on the AXON Purchase Order.

Manufacturing to an older revision than specified on the Purchase Order is prohibited unless:

- Authorized in writing by AXON
- Approved through an ECO or Deviation process

Supplier shall have a defined process to:

- Review engineering changes
- Assess impact to process, tooling, and documentation
- Implement approved revisions in a controlled manner

Upon implementation of engineering changes, Supplier shall notify AXON when required.

2.7.2 Document Control Audit

Supplier shall conduct periodic internal audits (minimum annually) to verify adequate control of:

- Drawings
- Specifications
- Datasets
- Software revisions (where applicable)
- Work instructions
- Engineering change implementation

Audit records shall be maintained and made available to AXON upon request.

2.8 Engineering Data (Drawings, BOMs, Specifications, Software, and Data)

Supplier shall manufacture and supply product that conforms to all applicable AXON engineering data, including but not limited to, Bills of Material (BOM), 2D drawings, CAD models, Part Specifications, Software requirements (where applicable), other associated engineering documentation.

Supplier's internal engineering documentation shall not conflict with AXON product specifications.

2.8.1 Control of AXON Engineering Data

All AXON-supplied engineering data shall be properly controlled, protected from unauthorized modification, accessible only at the latest approved revision, and removed from use when obsolete.

Supplier shall ensure that only the revision specified on the AXON Purchase Order is used at the time manufacturing begins.

Use of an older revision than specified on the Purchase Order is prohibited unless formally authorized in writing by AXON through an approved ECO or Deviation.

2.8.2 Change Control and Approval

All change control requirements are governed by Section 2.9 Supplier Change Management. Supplier shall not implement changes without compliance with Section 2.9.

2.8.3 Incorporation of Revisions

When engineering changes are approved, Supplier shall:

- Implement changes in a controlled manner
- Verify process capability remains acceptable
- Update PFMEA, Control Plans, and work instructions as applicable
- Maintain traceability to revision implementation date

Supplier shall ensure no mixed-revision product is shipped unless explicitly authorized by AXON.

2.8.4 Software and Firmware Security Controls

Where Supplier develops, modifies, programs, or manages software or firmware incorporated into AXON products, Supplier shall implement documented cybersecurity and configuration controls to protect product integrity and prevent unauthorized access or modification. At a minimum, Supplier shall:

- Maintain formal version control and configuration management for all software and firmware releases
- Restrict access to source code, programming tools, and build environments to authorized personnel only
- Implement access authentication and change authorization controls
- Protect software and firmware from unauthorized alteration, malware, or tampering
- Maintain secure backup and recovery of software source code and build artifacts
- Maintain traceability between released versions and validation records
- Notify AXON of any cybersecurity vulnerability that may affect delivered products

Changes to software or firmware shall comply with Section 2.9 Supplier Change Management.

2.8.5 Artificial Intelligence (AI) Use in Product or Process Control

Where Supplier utilizes artificial intelligence (AI), machine learning, or automated decision-making systems in product design, manufacturing processes, inspection, testing, or firmware/software development related to AXON products, Supplier shall:

- Validate AI-generated outputs prior to production release
- Maintain human oversight and approval of AI-driven decisions affecting product quality or compliance
- Ensure traceability of AI-generated configurations, test parameters, or design changes
- Comply with Section 2.9 Supplier Change Management for any AI-driven modifications

AI utilization shall not replace required validation, capability studies, or formal approval processes defined in this SQM.

2.9 Supplier Change Management

Supplier shall establish and maintain a documented Change Management process to control changes that may affect product quality, performance, compliance, or supply continuity.

The Change Management process shall apply to, but is not limited to, changes involving, Product design, Bill of Material (BOM), Materials or components, Sub-tier suppliers, Tooling (replacement, relocation, refurbishment, or modification), Manufacturing location, Manufacturing process methods, Inspection or test methods, Software or firmware, Production rate or capacity.

2.9.1 Approval Requirements

Supplier shall not implement any change affecting Form, fit, or function, Reliability or safety, Regulatory compliance, Manufacturability or scalability, Supply continuity without prior written approval from AXON. All proposed changes shall be submitted through the Supplier Information Request (SIR) or Engineering Change Order (ECO) process, as applicable.

Each submission shall include:

- Description of the proposed change
- Risk assessment (including impact to CTQs, process capability, and regulatory requirements)
- Validation and verification plan
- Implementation timeline
- Containment plan (if applicable)

Change implementation shall not proceed until formal written approval is received from AXON.

2.9.2 Change Classification

Supplier shall classify all proposed changes based on potential risk to product quality, performance, compliance, and supply continuity. Classification shall be documented in the SIR or ECO submission.

- Minor Change

A change that does not affect form, fit, function, CTQs, safety, regulatory compliance, material composition, manufacturing location, or process capability. Notification through SIR is required. Validation requirements shall be determined by AXON.

- Major Change

A change that may affect manufacturing processes, tooling, equipment, inspection methods, sub-tier suppliers, or production rate. Major Changes require documented risk assessment, defined validation plan, and written AXON approval prior to implementation.

- Critical Change

A change that may affect form, fit, function, CTQs, reliability, safety, regulatory compliance, software/firmware behavior, or supply continuity. Critical Changes require formal SIR or ECO submission, comprehensive validation, and written AXON approval prior to implementation.

AXON reserves the right to reclassify any proposed change based on risk assessment.

2.9.3 Advance Notification

Supplier shall provide advance written notification to AXON for any proposed change that may impact Product performance, Cost, Delivery schedule, and Production capacity. Failure to provide advance notification may result in corrective action or supplier escalation.

2.9.4 Emergency Changes

In the event of an emergency change required to prevent production interruption, safety risk, or regulatory non-compliance. The change shall be documented and risk assessed, and AXON shall be notified within twenty-four (24) hours with formal SIR or ECO submission.

Emergency implementation does not waive the requirement for formal approval and validation.

2.10 Material and Product Verification (Inspection & Test)

2.10.1 General Requirements

Supplier shall ensure that personnel responsible for inspection and test activities are appropriately trained, qualified for assigned tasks, and periodically retrained as required

Training records shall be maintained and made available upon request.

Supplier shall maintain records for all inspection and test activities in accordance with Section 2.6 (Records Retention).

All Supplier-developed Quality Control Plans (QCPs) shall:

- Be reviewed by AXON Quality
- Be approved through the FAIR/PPAP process
- Not be modified without prior AXON approval

2.10.2 Supplier Incoming Quality Control (IQC)

Supplier shall establish and implement incoming material verification processes to ensure compliance with all AXON documented requirements.

Incoming Quality Control Plans (IQCPs) shall define:

- Characteristics to be verified
- Measurement tools and techniques
- Sample size and frequency
- Acceptance and rejection criteria

At a minimum, IQCPs shall include verification of all CTQ / Capsuled / Inspection Dimensions specified on AXON drawings. Sampling plans shall be based on an industry-accepted standard (e.g., MIL-STD-1916 or equivalent). All inspection plans shall be based on C=0 methodology (reject lot on first failure), unless otherwise approved in writing by AXON.

2.10.3 Certificates of Analysis (CoA) / Certificates of Compliance (CoC)

Where required, a signed CoA or CoC shall accompany each production shipment or manufacturing lot. The certificate shall be signed by the Supplier's authorized quality representative.

2.10.4 In-Process Quality Control (IPQC)

Supplier shall establish process controls, inspection methods, and production testing sufficient to ensure compliance throughout manufacturing.

IPQC requirements shall be documented in a Quality Control Plan, including:

- Product characteristic or process parameter
- Specification or reference
- Measurement tool and technique
- Sample size and frequency
- Control method (e.g., First/Last Piece Check, SPC, Trend Chart, Poka-Yoke)
- Reaction plan

2.10.5 Final Quality Control (FQC) / Out-of-Box Audit (OBA)

Supplier shall verify that all assembly, inspection, testing, and packaging steps have been completed and meet AXON specifications prior to shipment.

FQC/OBA requirements shall be documented in the Quality Control Plan.

Approval of product by AXON does not relieve Supplier of full responsibility for product conformity.

2.10.6 Source Inspection (PSA)

AXON may perform source inspections (Pre-Shipment Audit – PSA) at Supplier or sub-tier facilities.

Source inspection may include verification of Product conformity, Process controls, Traceability systems, and Counterfeit material prevention measures. Supplier shall fully support and cooperate with all source inspection activities. Approval of product through PSA does not waive Supplier responsibility for full compliance.

2.10.7 Production Process Verification (First Article Inspection Report – FAIR / Production Part Approval Process – PPAP)

The purpose of FAIR/PPAP is to verify that the Supplier understands AXON engineering requirements, has processes capable of consistently producing conforming product, can produce at the quoted production rate

2.10.7.1 Pre-Production Build Requirements (SPF, EVT, DVT, PVT)

Supplier shall comply with the following validation requirements during pre-production builds unless otherwise defined in writing by AXON:

SPF (Supplier Process Feasibility) / Prototype Builds

- Complete FAIR required

EVT (Engineering Validation Test) Builds

- Complete FAIR required
- Cpk \geq 1.33 required for all CTQs

DVT (Design Validation Test) Builds

- PPAP submission required

PVT (Production Validation Test) Builds

- Full PPAP approval required prior to shipment of production-intent material
- Interim approval or deviation required if full approval is pending

These requirements apply to:

- New suppliers
- New parts
- Tooling changes
- Transfers of Work (TOW)
- Manufacturing location changes

Failure to meet validation requirements may result in shipment hold or rejection.

2.10.7.2 Resubmission Requirements

Notification to AXON and resubmission of FAIR/PPAP shall occur when:

- Design changes affect form, fit, or function
- Manufacturing location changes
- Tooling is replaced, modified, relocated, or refurbished
- Materials or processes change
- Corrective action requires validation
- Production lapse exceeds 12 months (subject to AXON review)

Annual FAIR/PPAP submission is required unless otherwise waived by AXON.

2.10.7.3 FAIR/PPAP Submission Requirements

FAIR/PPAP shall include:

- Verification of all specified product characteristics
- Process capability study for all CTQs
- Verification of other measurable engineering requirements

All three sections must be completed for each cavity, mold, or production stream.

2.10.7.4 Sample Size Requirements For FAIR/PPAP:

- Five (5) samples per requirement shall be verified
- For injection-molded parts with multi-cavity tools, five (5) parts per cavity shall be verified

2.10.7.5 Process Capability Requirements For CTQs:

- Minimum Cpk of 1.33 required
- Study must use statistically stable, in-control, normally distributed data
- Minimum 25 subgroups
- Subgroup size ≥ 5
- Minimum 32 total measurements
- Data collected over representative production run at quoted rate

AXON Engineering and Quality shall review and approve FAIR/PPAP submissions.

2.10.7.6 Packaging Validation

Products sensitive to ESD, cosmetic, or mechanical damage shall be packaged appropriately.

Supplier shall submit packaging samples for approval and conduct testing on packaging to ensure part/product integrity prior to first shipment.

2.10.7.7 Regulatory Compliance

REACH and RoHS Certificates of Compliance shall be included with FAIR/PPAP submissions where applicable.

2.11 CPK Guidelines

Process capability performance shall be evaluated using Cpk values for CTQ characteristics.

The following guidelines apply:

Cpk < 0

- Majority of parts may be out of specification.
- Lot disposition shall be scrap or 100% screening.
- Tooling or process modification is required prior to continued production.

0 ≤ Cpk < 1.00

- Process is not capable.
- 100% inspection or AXON-approved deviation required.
- Tooling or process modification shall be evaluated, considering production urgency.

1.00 ≤ Cpk < 1.33

- Process is marginally capable.
- Increased inspection plan required.
- Continuous improvement actions shall be initiated to improve capability.

Cpk ≥ 1.33

- Process meets minimum capability requirement.
- Ongoing SPC monitoring required.

Cpk > 2.00

- Results shall be reviewed to confirm statistical validity and measurement accuracy.

Supplier shall not ship product from processes that do not meet minimum Cpk requirements without an approved Deviation.

2.12 Manufacturing Best Practices

Supplier shall implement manufacturing best practices to ensure consistent product quality, process stability, and scalability.

2.12.1 Design for Manufacturability (DFM) / Design for Excellence (DFx)

Supplier shall actively participate in Design for Manufacturability (DFM) and Design for Excellence (DFx) activities throughout the product lifecycle.

DFM/DFx shall ensure that product designs are optimized for Manufacturability, Assembly efficiency, Scalability, Testability, Reliability, Cost effectiveness

2.12.1.1 NPI Stage Requirements

During New Product Introduction (NPI) stages including SPF, EVT, DVT, and PVT builds, Supplier shall:

- Review product design for manufacturability, assembly sequencing, and tolerance stack-up
- Evaluate automation readiness and test coverage
- Identify risks related to yield, tooling, fixtures, process capability, and capacity
- Provide documented DFM/DFx feedback to AXON prior to or during build planning
- Update PFMEA and Control Plans to reflect identified risks and mitigation actions
- Participate in formal design and build readiness reviews when requested

PVT builds shall utilize production-intent tooling, processes, inspection methods, and controls unless otherwise approved in writing by AXON.

2.12.1.2 Sustaining Engineering Changes (ECO)

For sustaining design changes, Supplier shall evaluate and document impact to:

- Form, fit, and function
- Tooling and fixtures
- Process capability (Cpk)
- Automation and test coverage
- Yield and reliability
- Production rate (Run@Rate capability)
- Sub-tier suppliers and materials

Supplier shall evaluate all sustaining engineering changes in accordance with Section 2.9 Supplier Change Management.

Updated PFMEA, Control Plans, and validation data shall be submitted when required.

2.12.2 Business Management Tools

Supplier should utilize appropriate business management systems (e.g., ERP, MRP, MES) to manage manufacturing operations effectively and maintain data accuracy.

2.12.3 Predictive and Preventive Maintenance

Supplier shall establish and maintain predictive and preventive maintenance programs for all production equipment and fixtures, including AXON-owned tooling.

Maintenance programs shall ensure that processes remain capable of meeting AXON requirements.

2.12.4 Smart Automation for Assembly and Testing

Where feasible, Supplier should implement automation to:

- Reduce process variation
- Improve productivity
- Minimize operator-dependent errors

Smart automation may include use of sensors, vision systems, and automated error detection devices to prevent missing parts or incorrect assembly.

2.12.5 Test Process / Fixture Automation

Where feasible, Supplier should implement automated test and inspection equipment that:

- Captures parametric test data at the point of test
- Stores data in a retrievable format
- Provides objective pass/fail results
- Automatically segregates failed items

For PCBAs, failed units shall not proceed to the next manufacturing stage.

2.12.6 Testing Traceability

Where traceability is required, Supplier shall:

- Assign a unique identifier (e.g., serial number, barcode)
- Maintain test records traceable to each identifier

Traceability systems shall prevent unauthorized bypass of test failures.

2.12.7 Foreign Object Debris (FOD) Prevention

Supplier shall establish documented processes to prevent, detect, and remove Foreign Object Debris (FOD) from AXON products.

FOD control shall include housekeeping practices, inspection controls, and operator awareness training.

2.13 Process Control

Supplier shall establish and maintain process controls to ensure fabrication and assembly processes consistently produce product meeting AXON requirements.

Process controls shall be documented in the applicable Quality Control Plan (QCP).

2.13.1 Statistical Process Control (SPC)

For characteristics designated as CTQ, Inspection Dimension, and/or Capsuled dimension, supplier shall demonstrate and maintain a minimum process capability index of $Cpk \geq 1.33$ unless otherwise approved by AXON.

Continuous SPC monitoring shall be implemented during production at a frequency appropriate to process risk and capability performance.

When $Cpk < 1.33$, Supplier shall implement additional controls, which may include:

- Increased inspection frequency
- 100% screening
- Automated monitoring
- Error-proofing measures
- Process adjustment or tooling modification

Any shipment from processes not meeting minimum Cpk requirements shall require an approved Deviation.

2.13.2 Process Control Documentation

Supplier shall define and document process control methods, including Key process parameters, Control limits, Monitoring methods, Reaction plans, and Escalation criteria.

Reaction plans shall clearly define actions to be taken when a process is out of control, a specification limit is exceeded, and/or a trend indicates potential instability

2.13.3 Special Processes

Special processes (e.g., heat treating, brazing, soldering, plating, anodizing, chemical processing) shall:

- Be performed only by qualified and certified personnel
- Comply with applicable engineering specifications
- Maintain documented certification and training records

When special processes are performed by sub-tier suppliers, a Certificate of Compliance confirming adherence to drawing and specification requirements shall be provided.

2.13.4 Run at Rate (R@R)

When required, Supplier shall demonstrate Run at Rate capability, confirming that manufacturing processes can meet AXON quality requirements, sustain quoted production volumes, and maintain process stability at production rate

Run at Rate validation requirements shall be defined by AXON Supplier Quality Engineering.

2.14 Control of Monitoring and Measuring Equipment

Supplier shall establish and maintain a documented process for the control, calibration, and verification of monitoring and measuring equipment used to verify AXON product requirements.

2.14.1 Calibration

Supplier is responsible for controlling and maintaining calibration of all monitoring and measuring equipment, including equipment owned by AXON but located at the Supplier's facility.

Calibration systems shall:

- Identify equipment uniquely
- Define calibration intervals
- Prevent use of out-of-calibration equipment
- Maintain calibration records

Calibration services (internal or external) shall comply with ANSI/NCSL Z540, ANSI/ISO/IEC 17025, or equivalent nationally recognized standard

If out-of-tolerance conditions are discovered that may affect delivered product, Supplier shall:

- Immediately assess product impact
- Notify AXON Quality Engineering in writing
- Implement containment as necessary

2.14.2 Measurement Capability

Supplier shall demonstrate that measurement, inspection, and test equipment are capable of producing accurate and repeatable results.

Measurement System Analysis (MSA) shall be performed as applicable, including Gage Repeatability and Reproducibility (GR&R), Bias studies, Linearity studies, and/or Stability over time

For CTQ measurements:

- GR&R results shall be $\leq 10\%$ of tolerance or study variation unless otherwise approved by AXON
- Exceptions require documented review and approval by AXON Supplier Quality Engineering

MSA records shall be retained as part of FAIR/PPAP documentation where applicable.

2.14.3 Measurement Precision Requirement

Measurement, inspection, and test equipment shall have a minimum resolution of 10:1 relative to the tolerance being measured.

Example:

If tolerance = ± 0.001 (total tolerance = 0.002), equipment resolution shall be at least 0.0002.

All measuring devices shall be verified to be within calibration prior to use in production.

2.15 Identification and Traceability

Supplier shall establish and maintain a documented system to ensure proper identification and traceability of product throughout manufacturing and delivery.

2.15.1 Product Identification

Product shall be identified as defined by AXON drawings, specifications, or Purchase Order requirements.

Identification may include, as applicable: Part number, Revision level, Lot number, Date code, Serial number, and Manufacturing location.

Product identification shall be maintained throughout production to prevent mix-up or loss of traceability.

2.15.2 Serialization and Traceability

When serialization or traceability is required, Supplier shall maintain traceability records linking:

- Finished assemblies
- Subassemblies
- Individual components (where applicable)
- Test results
- Manufacturing process data

Traceability records shall enable identification of:

- Production date
- Manufacturing batch or lot
- Equipment or production line (if required)
- Applicable inspection and test records

Traceability data shall be retrievable within a reasonable timeframe upon AXON request.

2.15.3 Injection Molded Part Identification

Unless otherwise specified, injection molded parts shall be identified with, Part number, Tool number, Cavity number, Revision level, Date wheel, and Material identification (where applicable)

This identification shall support traceability to specific tooling and production streams.

2.15.4 Segregation of Mixed Revisions

Supplier shall prevent mixing of product revisions unless explicitly authorized in writing by AXON.

When authorized, clear identification and segregation controls shall be implemented.

2.16 Handling, Storage, Preservation, and Shipping

Supplier shall establish and maintain documented processes to preserve product conformity during handling, storage, packaging, and shipment.

Processes shall prevent Mechanical damage, Cosmetic damage, Electrostatic discharge (ESD) damage, Moisture absorption, Contamination, and Deterioration due to environmental exposure.

2.16.1 Handling and Storage Controls

Supplier shall implement appropriate controls including, but not limited to Environmental controls, temperature and humidity where required), ESD protection measures, Clean handling practices, Protective packaging during internal transport, Segregation of nonconforming material.

Products sensitive to moisture, corrosion, or environmental exposure shall be stored in controlled environments or protected using approved methods (e.g., desiccants, moisture barrier bags).

2.16.2 Packaging Requirements

Packaging for customer delivery shall follow, AXON Bill of Material (BOM) requirements, AXON Packaging Standards (where defined), AXON Transportation Routing Directive.

Where packaging is not specified, Supplier shall apply best commercial practices to ensure product protection.

Products sensitive to ESD, cosmetics, or mechanical damage shall be packaged in a manner that prevents, Scratches, Dents, Cracks, Contamination, and Moisture ingress.

2.16.3 Shelf-Life and Age-Sensitive Materials

Supplier shall maintain documented controls for materials subject to shelf-life limitations.

For age-sensitive materials (e.g., O-rings, seals, gaskets), the Certificate of Conformance (CoC) or Certificate of Analysis (CoA) shall include Manufacturer name, Manufacturer address, Cure date, Batch number, Compound type.

Such materials shall have been manufactured within the previous eight (8) quarters unless otherwise approved. Adhesives, paints, sealants, and other materials requiring MSDS documentation shall:

- Have a minimum of seventy-five percent (75%) of shelf life remaining at time of shipment
- Clearly display expiration date on the outer container

Materials that exceed defined shelf life shall be treated as nonconforming material.

2.16.4 Moisture Control for Hygroscopic Materials

For hygroscopic injection molded parts and similar materials:

- Environmental conditions shall be controlled to prevent moisture absorption
- Desiccant packaging shall be used where required
- Desiccant shall not be removed from sealed packaging more than one (1) hour prior to use
- If temperature and humidity controls are not maintained, sealed packaging with desiccant shall be used during storage (typically 4–12 months as applicable to material type)

Supplier is responsible for preventing moisture-related defects such as cracking, deformation, or ultrasonic welding failures.

2.17 Customer Property

Customer property includes, but is not limited to, Product, Equipment, Tooling, Gages, Fixtures, Intellectual property, Documentation, and AXON-owned materials.

Customer property shall be clearly identified, protected, and controlled at all times.

Customer property shall not be Reworked, Modified, Transferred to another party, and Used for any purpose other than authorized AXON production without prior written approval from AXON.

2.17.1 Property Control and Tracking

Supplier shall maintain a documented Property List to monitor:

- Location
- Condition
- Usage status
- Maintenance history

Of all AXON-owned tooling, equipment, and materials in Supplier custody.

Records shall be made available to AXON upon request.

2.17.2 Loss, Damage, or Unsuitable Condition

If customer property is, Lost, Damaged, Worn, or Found unsuitable for use, supplier shall immediately notify AXON, document the condition, and cooperate in determining corrective action

For tooling affecting product specifications or cosmetic requirements, Supplier shall immediately notify AXON and coordinate repair, rework, or disposition activities with the responsible AXON Tooling Engineer.

Supplier shall not knowingly produce product using worn or damaged tooling.

Exceptions are permitted only through an approved Deviation or SIR process.

2.17.3 Customer-Owned Material Traceability

Supplier shall provide certification that AXON-owned materials were used in the manufacture of the product.

Traceability records shall include:

- Work order number
- Purchase Order number
- Lot or batch identification

Such information shall be included on the Supplier's Certificate of Conformance.

2.18 Appendix A – Electronic Assembly Suppliers

2.18.1 Electronic Assembly – General Requirements

Supplier shall ensure the following controls are implemented for Printed Circuit Board Assembly (PCBA) production:

- 100% Solder Paste Inspection (SPI) prior to component placement
- 100% Automated Optical Inspection (AOI) with 3D inspection capability after reflow
- 100% X-ray inspection for components with bottom terminations or hidden solder joints

2.18.2 Counterfeit Electronic Component Prevention

Supplier shall establish, document, and maintain a counterfeit electronic component prevention and control program to ensure that only authentic and conforming components are used in AXON products.

The program shall include, at a minimum:

- Procurement of electronic components only from Original Component Manufacturers (OCMs), Original Equipment Manufacturers (OEMs), or authorized distributors
- Documented traceability to the original manufacturer
- Risk-based inspection and testing of components sourced from non-authorized suppliers
- Verification of marking, packaging, and labeling authenticity
- Segregation and control of suspect counterfeit material
- Immediate notification to AXON upon identification of suspect or confirmed counterfeit components
- Flow-down of counterfeit prevention requirements to sub-tier suppliers
- Maintenance of date code, lot code, and purchase documentation traceability

Use of brokers or independent distributors requires prior written approval from AXON.

2.18.3 Electronic Assembly Handling

Supplier shall prevent contamination during PCBA manufacturing, including contamination from Flux residues, Body oils, Unauthorized hand creams or lotions, Deteriorated gloves or finger cots.

Supplier shall establish documented handling procedures consistent with IPC-A-610 guidelines, including Clean workstations (no food or drink), Minimized handling during processing, Prohibition of stacking assemblies, Use of protective racks or containers, No bare-hand contact with solderable or optical surfaces, Frequent glove/finger cot replacement, Prohibition of silicone-containing hand creams.

2.18.4 Moisture Control & IPC-1602 Compliance

Supplier and sub-tier suppliers shall store and handle printed circuit boards in accordance with IPC-1602 (current revision). Moisture-sensitive boards and devices shall be properly sealed and controlled to prevent moisture uptake and delamination, solder defects, or reliability issues.

2.18.5 PCBA Depanelization

To prevent mechanical stress damage, Supplier shall use automated depanelization equipment or stress-reducing fixturing. Manual depanelization methods that induce board stress, and manual separation without stress mitigation is not permitted.

2.18.6 Lead Trimming – Through Hole Components

Lead trimming shall occur at the component level prior to installation and soldering. Post-solder trimming of through-hole leads is not permitted.

2.18.7 Electrostatic Discharge (ESD) Control

Supplier shall maintain compliance to ANSI/ESD S20.20 or equivalent.

The ESD program shall include:

- Periodic reviews and ESD audits
- ESD flooring and ionization systems
- Continuous monitoring of wrist straps
- Prohibition of wireless ESD wrist straps

2.18.8 Hand Soldering and Rework

Hand soldering shall be minimized. Rework or repair shall comply with IPC-7711 and IPC-7721 (latest revision). Any high-volume, high-risk or extensive rework activity requires AXON review and approval.

2.18.9 Vapor Cleaning Process

Applicable when specified on assembly drawings. Supplier personnel must be trained and approved by AXON. Assemblies must be free of process-related contaminants and cleaning shall follow AXON defined procedures.

2.18.10 AXON Approved Flux Removal Process

When imposed by drawing or PO:

- Only AXON-approved materials shall be used.
 - Current approved cleaning fluids:
 - 3M Novec 72DA Engineering Fluid
 - Techspray Precision-V 372DA Vapor-Degreaser Solvent Product# 372DA.
 - 3M™ Novec™ 73DE Engineered Fluid.
 - 3M™ Novec™ 72DE Engineered Fluid.
- Equivalent products require written AXON approval
- Cleaning shall remove all flux residues and contaminants
- IPA shall not be used unless specifically approved

Supplier shall support boards during cleaning to prevent mechanical damage.

2.18.11 Test Point Solder Removal

When allowed by Purchase Order:

- Solder shall be fully removed from test point surfaces
- No raised solder or surface irregularities permitted
- Electrical clearance must be maintained

- Cleaning shall use approved no-clean agents (IPA prohibited unless approved)
- Visual inspection shall follow IPC-A-610
- Initial samples require AXON approval

This process shall only be used as a temporary recovery method while corrective actions are implemented.

2.18.12 PCB Cross Section Analysis

PCB Supplier shall perform cross-section analysis for all First Article Inspections and all subsequent PCB lots.

FAI documentation shall be included in PPAP and approval must be obtained prior to shipment.

Cross-section analysis shall include:

- Base material thickness for all layers
- Surface plating thickness
- Via plating thickness
- Dielectric spacing between layers (for HV/Controlled Impedance)
- Total PCB/FPCB thickness
- Material manufacturer and type
- Impedance measurements (where applicable)
- Electrical test verification
- Gerber compliance
- Current IPC revision compliance

2.18.13 PCBA-Specific FAIR/PPAP Requirements

PCBA FAIR/PPAP submissions shall include:

- RoHS and REACH compliance declaration for full assembly covering all components and parts in BOM.
- Counterfeit material prevention declaration (Tier 1 suppliers)
- Solder joint cross-sections (as defined with SDE)
- Dye and pry test for BGA components
- Strain gauge testing (≤ 500 microstrain unless otherwise approved)
- Mechanical interference analysis
- AOI/X-ray inspection coverage report
- Conformal coating thickness and adhesion validation
- Reflow oven and conformal coating curing oven profiles
- Functional tester logs
- Functional tester GR&R

2.19 Appendix B – Molding Suppliers

2.19.1 Use of Regrind in Molded Parts

Regrind material shall only be used when explicitly permitted on the AXON part drawing.

If regrind usage is not specified on the drawing, regrind material is prohibited.

Supplier shall establish and maintain a documented process controlling:

- Regrind percentage
- Regrind traceability
- Mixing controls
- Verification of material properties

Use of regrind does not relieve the Supplier of responsibility to meet all specified mechanical and material performance requirements.

Supplier shall periodically evaluate mechanical properties to ensure that regrind use does not degrade:

- Strength
- Impact resistance
- Dimensional stability
- Material integrity

2.19.2 Hygroscopic Injection Molded Parts – Moisture Control

Supplier shall implement moisture control practices for hygroscopic molded materials.

Environmental controls shall address Temperature and Relative humidity.

Supplier shall consider environmental combinations (e.g., 55°C / 62% RH and 70°C / 50% RH) that may affect material properties.

Desiccant packaging shall not be opened more than one (1) hour prior to use, and be maintained in sealed packaging where temperature and humidity are not controlled

When environmental controls are not maintained, sealed bags with desiccant (e.g., silica gel) shall be used for storage periods typically ranging from 4 to 12 months, depending on material type and application.

Supplier is responsible for preventing moisture-related defects such as cracking, dimensional instability, or ultrasonic weld failures.

2.19.3 Mold Tooling Qualification

All injection molding tools used for AXON product shall be qualified through an AXON-approved FAIR/PPAP process prior to production release.

Tool qualification shall include Dimensional verification, CTQ capability validation, and Production-rate demonstration (if required)

Production shall not begin until formal approval is granted by AXON.

2.20 Appendix C - Definitions and Acronyms

AML/AVL: Approved Manufacturer List/Approved Vendor List

BOM: Bill of Material

CAPA: Corrective and Preventive Action

Characteristic: A distinguishing feature.

CoA: Certificate of Analysis

CoC: Certificate of Compliance

COTS: Commercial Off the Shelf

Cpk: The capability index for a stable process. Estimate of sigma based on “within subgroup” variation. Sigma calculated with the (R-Bar/d2) equation. A predictor of short term or current state variation.

CTQ: Critical-To-Quality Characteristic. Same as an Inspection Dimension.

DPPM: Defective Parts Per Million: A defect rate calculated as:

$$\text{DPPM} = \frac{1,000,000 \times \text{number of defective parts produced/tested}}{\text{total number of parts produced/tested}}$$

Deviation: A temporary change or departure from approved AXON specifications or documented requirements. Deviation authorization can only be provided by AXON in the form of an approved deviation through Arena.

DFM: Design for Manufacturability.

ECR: Engineering Change Request

ECO: Engineering Change Order

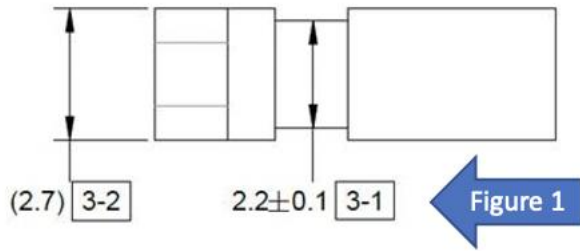
FAIR: First Article Inspection Report: A complete, independent, and documented physical and functional inspection process to verify that prescribed production methods have produced an acceptable item as specified by engineering drawings, planning, purchase order, engineering specifications, and/or other applicable documents.

First Pass Yield (FPY): The number of good units produced divided by the number of total units going through the process.

FOD: Foreign object debris / detection

GR&R: Gage Repeatability and Reproducibility: The process used to evaluate a gauging instrument’s accuracy by ensuring its measurements are repeatable and reproducible, represents both the equipment variation and the appraiser variation.

General Dimension: A dimension provided on a drawing to define the size or geometric characteristic of a feature, not deemed to be a CTQ Characteristic. General dimensions are expected to be verified during the first article inspection process and at a minimum 1 time per year during an annual layout. Additional verification is up to the supplier based on the amount of risk the supplier is willing to accept if non-conforming product is identified by AXON or its customers. Use the Quality Control Plan to document the inspection strategy for all general dimensions. The supplier is responsible for shipping only conforming parts to AXON. An example of a general dimension is shown in figure 1.



Inspection Dimension or CTQ: Critical-To-Quality Characteristic. Also known as an Inspection Dimension on some Legacy drawings.

A feature on the drawing inside a capsule whose variation within the specified tolerance has a significant influence on product fit, performance, service life, or manufacturability. Will require capability studies during FAIR/PPAP and ongoing SPC monitoring. The minimum Cpk requirement is 1.33. When a feature is designated as a CTQ or Inspection Dimension it indicates that there is the need for variation management (i.e. Statistical Process Control) of the process(es) to ensure the feature is produced at or very close to the nominal rather than just within tolerance. CTQ's require a minimum process capability of 1.33 Cpk to be met during the first article inspection process and maintained by the supplier after release to production.

The exact method and expectation of SPC and data availability shall be established with Supplier Quality Engineering and documented in the supplier's Quality Control Plan.

CTQ's or Inspection Dimensions will be designated on the drawing in one of 2 ways: A dimension enclosed by an oval/capsule (see figure 2) or a dimension marked with a CTQ inside a dimension box (see figure 3), with details specified in the drawing notes (see figures 4 & 5).

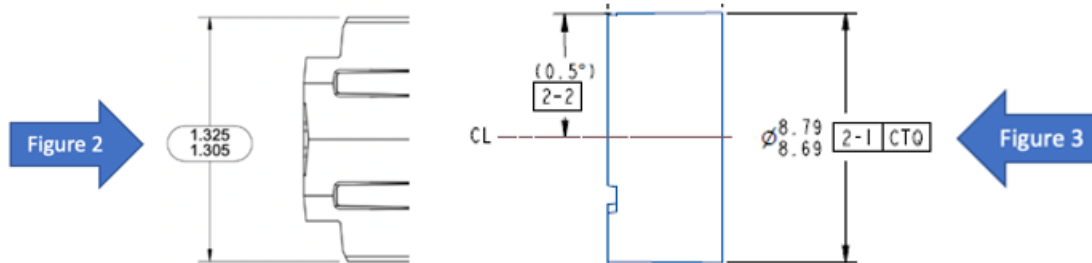
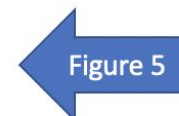


Figure 4 INSPECTION DIMENSIONS, FOR QA USE, ARE INDICATED BY A CAPSULE: (X.XXX)

DRAWING INDICATES FIRST ARTICLE INSPECTION (X-X) AND CRITICAL-TO-QUALITY (CTQ) DIMENSIONS. ASSOCIATED CAD FILE DEFINES ALL NON-DIMENSIONED GEOMETRY (DEFAULT TOLERANCES APPLY TO NON-DIMENSIONED GEOMETRY). A DIMENSION IN PARENTHESIS IS FOR REFERENCE ONLY AND IS NOT REQUIRED TO MEET ANY TOLERANCE SPECIFICATION. DIMENSION LABELS ARE FORMATTED AS VIEW#-DIM# TYPE. EXAMPLE: 3-14 CTQ MEANS THAT DIMENSION 14 IN VIEW 3 IS CRITICAL-TO-QUALITY. REFER TO THE AXON SUPPLIER QUALITY MANUAL FOR FAIR/PPAP, CPK, GRR, ONGOING SPC AND OTHER QUALITY REQUIREMENTS.



Incoming Quality Control (IQC): Inspection performed by the Supplier's prior to a product's use.

Master/Golden Sample(s): A representative sample of product manufactured during the production run used to create the FAIR/PPAP that must be identified, preserved and retained for the same period of time that the FAIR/PPAP records are retained. If multiple cavitied, product streams or production sites are used to make parts, then samples must be retained for each.

Measurement System Analysis (MSA) – an experimental and mathematical method of determining how much the variation within the measurement process contributes to overall process variability. MSA is required for all equipment used in measuring CTQ's. Studies for Repeatability & Reproducibility, Bias between multiple gages/fixtures, Linearity, and Stability over time. See FAIR/PPAP Tool Kit.

Nonconforming material: Product or material which does not conform to specified requirements. This includes nonconforming product or material returned from a customer.

OBA: Out of Box Audit

PSA: Pre-Shipment Audit. The purpose of PSA is to verify if materials and products are consistent to the spec and criteria and will take containment action if any major non-conformance found in the factory.

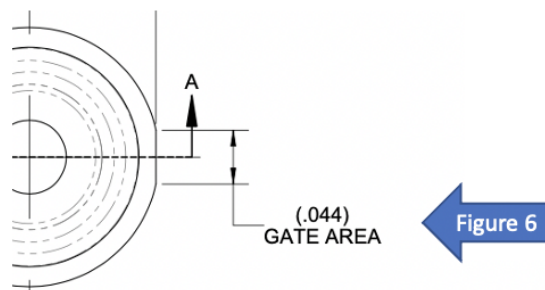
PPAP: Production Part Approval Process. The PPAP process is a set of tools and deliverables that demonstrate the capability of a supplier to meet Axon's quality and production rate requirements.

Ppk: The performance index for a stable process. Estimate of sigma based on "total" variation. Sigma calculated with the (root mean square) equation. It is a predictor of long term or future state variation.

Quality Control Plan (QCP): A document that defines all the methods used for product and process control including inspection tools, sample size, sample frequency and reaction plans when out of specification or out of control processes are detected. See FAIR/PPAP Tool Kit

QMS: Quality Management System

Reference Dimension: A dimension on an engineering drawing provided for information only. Reference dimensions are provided for a variety of reasons and are often an accumulation of other dimensions that are defined elsewhere (e.g. on the drawing or other related documentation). A reference dimension appears on the drawing as a numerical value enclosed in parenthesis, as shown in figure 6. During the first article inspection report/PPAP reference dimensions shall be recorded to understand their initial variation and establish a point of reference for future analysis.



Repair: The act of restoring the functional capability of nonconforming material. However, the restored material does not conform to applicable drawings or specifications. Only allowed under AXON approved Deviation.

Rework: The act of reprocessing nonconforming material, using original or alternate equivalent (AXON approved) processing, in a manner that assures compliance of the material with applicable drawings or specifications.

R@R: Run@Rate is where the supplier proves and demonstrates that its manufacturing process is capable to produce acceptable parts according to customer requirements at the quoted production rate.

SCAR: Supplier Corrective Action Report: is a form in Arena that lists issues/defects that have been found on a product delivered by a supplier, communicates them to the supplier, and requests, containment, investigation, and corrective action (8D).

SDE: Supplier Development Engineer: is the main contact at Axon for quality topics with suppliers.

8D: Eight disciplines corrective action report: is a problem-solving approach for product and process improvement.

Shall: Indicates a requirement that is mandatory.

Should: Indicates a requirement but has more flexibility than a shall. Should's must meet the intent of the requirement.

SIR: Supplier Information Request, used for potential supplier related changes i.e. to request change to drawing, material, a change to fit, form or function, Transfer of Work (TOW), submitted in Arena.

Special Process: A process that generates a characteristic that is difficult to verify. For example, a process involving Heat Treating (e.g. brazing, nitriding, hardening), Soldering, or Chemical Processing (e.g. plating, anodizing, conversion coating). Additionally, the process must be defined by a specification and/or standard on the AXON drawing (e.g. solder in accordance with J-STD-001).

Supplier: A company and its suppliers that provide materials or parts, direct or indirect, to AXON.

SQM: Supplier Quality Manual. This document.

SPC: Statistical Process Control. The preferred method to reduce process variation.

Test Requirements Document (TRD): A document that defines the required testing that is performed on 100% of the product being manufactured internally or externally.

TOW: Transfer of Work between locations

2.21 Revision History

The Revision History documents significant changes made to the AXON Supplier Quality Manual.

Minor editorial updates (e.g., grammar, formatting, or clarification without intent change) may not be individually itemized.

Revision Summary Table

Revision	Description of Changes	Author(s)
15.0	Complete rewrite. Combined Supplier Quality Manual and Supplier Quality Assurance Clauses into a single document.	D. Wasson, J. Repyak
16.0	<ul style="list-style-type: none"> - Added SIR and PSA definitions - Added AXON Directed Supplier (sub-tier) - Reduced document retention from 5 years to 3 years - Added CPK Guidelines - Updated traceability requirements for PCBA - Added hygroscopic/desiccant guidelines - General grammar and formatting updates 	D. Wasson
17.0	<ul style="list-style-type: none"> • Formalized Supplier Change Management as a standalone section. • Introduced Change Classification framework (Minor / Major / Critical). • Added Software & Firmware Security Controls. • Added Information Security and Data Protection requirements. • Added structured Supplier Performance Escalation levels. • Defined Pre-Production Validation requirements (SPF / EVT / DVT / PVT). • Added Nonconforming Material Discovered After Shipment • Clarified Run@Rate requirements for mass production tooling. • Strengthened FAIR/PPAP statistical and CTQ capability requirements. • Enhanced GR&R study requirements for CTQ measurements. • Added Supplier Response timelines for NCMR and RMA. • Strengthened Counterfeit Electronic Component Prevention requirements. • Improved PCBA-specific validation requirements. • Improved cross-referencing and eliminated duplicate change-control language. • Structural reorganization and grammar refinement for improved clarity and audit defensibility. 	TK See, Mauricio Salazar

Revision Control Notes

- Revision approval shall follow AXON internal document control procedures.
- The revision number shall be updated only after formal approval.
- This document is considered uncontrolled when printed unless otherwise specified.

2.23 SQM Requirements Compliance Acknowledgement

Objective	The intent of this form is to document acknowledgement that the recipient complies with the requirements set forth in the latest revision of the SQM requirements document listed above. This form also serves as the means for the recipient and AXON to agree upon those requirements that do not apply.
Scope	This acknowledgement document is to be used in conjunction with the above SQM Requirements document.

To be completed by the Supplier:

SQM Document # & Title: _____

Document Version: _____

Supplier Name: _____

SQM Requirements Compliance Acknowledgement

The recipient has reviewed the above referenced document and acknowledges compliance to all requirements stated within said document, with the exception of those requirements identified on the exceptions page above.

Supplier's Quality Management
Name

Supplier's Quality Management
Signature

Date

AXON Approval

AXON has reviewed and approves of the exceptions taken by the Supplier.

Axon Supplier Quality Engineer
(SQE) Name

Axon Supplier Quality Engineer
(SQE) Signature

Date