



Quality Management Requirements for Suppliers

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Level	Procedure	Approval Signatures
1	Business Manual Quality QM400002, QM400001, EH600011	<input type="checkbox"/> Touch Leadership Team (TLT)
2	Business Management System Policies – The documents that directly support QM400002 – Quality Manual	<input type="checkbox"/> Document owner <input type="checkbox"/> Department Manager <input type="checkbox"/> Director of the Department <input type="checkbox"/> Director of Quality Assurance <input type="checkbox"/> Quality Assurance Manager <input type="checkbox"/> Other
3	Drawings, specifications, product related work instructions, and other documents defining products and processes, including external standards and technical references.	Approval is determined by product. Refer to companies change control system established approval routes
4	Department Procedures (non-product related)	<input checked="" type="checkbox"/> Document owner <input checked="" type="checkbox"/> Department Manager <input checked="" type="checkbox"/> Document Control Manager <input checked="" type="checkbox"/> Quality Assurance Manager <input type="checkbox"/> Other
5	Forms	<input type="checkbox"/> Document owner <input type="checkbox"/> Department Manager <input type="checkbox"/> Other

Change History			
REV	Description of Change	Release Date	Changed By
A	Initial Release	July 20, 1999	Paul Bailey
B	Add sections 6.0 SUPPLIER GUIDE TO SOCIAL RESPONSIBILITY and 7.0 RECORD-KEEPING AND FINANCIAL CONTROLS	Jan 10, 2013	Mike Moran
C	Revise per CO-20-0733 Revised section 5.1 supplier evaluation, and added section 5.2.5 rapid response requirement, 5.11.3 return parts analysis requirement, 5.12.5 rework part management requirement, 5.17 NPI PPAP requirement, 5.18 Notification for Line stops, 5.19 Escalation in the case of non-fulfillment	May 13, 2020	Myron Xiong
D	Revised by CO-23-0497 Revision to Section 6.7 "Conflict Minerals" The changes align the sourcing policy with the OECD's industry standard "Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas": -Update the section title from Conflict Mineral to Responsible Mineral Sourcing -Update the list of minerals from 3TG to 3TG, Cobalt, and Mica -Require RMI CMRT/EMRT reporting annually -Broaden the geographical scope to include CAHRAs	Mar 1, 2023	V. Pallaver
E	Revised by CO-25-1113 Remove the "SUPPLIER GUIDE TO SOCIAL RESPONSIBILITY" out of the QA60006, and in parallel, create a dedicated procedure for the Code of Conduct of the supply chain.	June 11, 2025	Yoyo Fang
F	Revised by CO-25-1162 Carved out the EHS and Code of Conduct related items and created a separate Code of Conduct agreement.	June 16, 2025	James Wang

1.0 PURPOSE

This document (these “Quality Requirements”) has been developed to help suppliers understand the quality requirements necessary to ensure a successful relationship with Elo Touch Solutions, Inc. (including its worldwide subsidiaries, “Elo”). Communication and cooperation are key elements in achieving these high standards. Elo suppliers will implement the following basic business principles and:

- 1.1 Ensure that materials and services are produced in conformance to the required standards, and that Elo will receive defect-free product, on time, at the agreed upon terms.
- 1.2 Manage facilities, processes, quality systems and personnel to consistently and cost-effectively manufacture the products and furnish services that meet the product specifications.
- 1.3 Be committed to continual process improvement by emphasizing reduction of part to part variation and the elimination of all waste.

2.0 SCOPE

This specification defines the minimum quality management system requirements for suppliers of production materials, components, and assemblies and service suppliers (test labs, calibration service, tooling, warehousing/logistics) that have an impact on product quality and delivery.

2.1 Revision of this Specification

- 2.1.1 Elo may change these Quality Requirements and specifications referenced herein and notify suppliers of such changes. Suppliers are responsible for ensuring that they are using the current version of this document. Suppliers shall specify any exceptions to the requirements of this document. Exceptions shall be in writing and must be approved by the Elo Global Quality Leader, and Director of Procurement in writing in advance.

3.0 REFERENCED DOCUMENTS

The following documents and forms constitute a part of these Quality Requirements to the extent specified herein.

3.1 International Standards / Industry Standards (latest revision/edition applies)

- 3.1.1 **ISO 13485** Medical Devices - Quality Management Systems - Requirements For Regulatory Purposes
- 3.1.2 **ISO 9001** Quality Management Systems Requirements
- 3.1.3 **ISO 10012** Measurement Management Systems – Requirements for Measurement Processes and Measuring Equipment
- 3.1.4 **ISO/IEC 17025** General Requirements for the Competence Of Testing and Calibration Laboratories
- 3.1.5 **ISO/TS 16949** Quality Management Systems – Particular Requirements for the Application of **ISO 9001** for Automotive Production and Relevant Service Part Organizations
- 3.1.6 **IECQ 80000** IEC Quality Assessment System for Electronic Components (IECQ)
- 3.1.7 **AIAG** Reference Manuals
 - 3.1.7.1 Failure Mode and Effects Analysis Manual (FMEA)
 - 3.1.7.2 Statistical Process Control Manual (SPC)
 - 3.1.7.3 Measurement System Analysis (MSA)
 - 3.1.7.4 Advanced Product Quality Plan (APQP)
 - 3.1.7.5 Production Part Approval Process (PPAP)

3.2 Reference Documents

- 3.2.1 Handling, Storage, Packaging & Preservation Requirements attached hereto as **Addendum 3.3.1**.

4.0 DEFINITION OF TERMS

4.1 Certificate of Analysis (C of A)

- 4.1.1 A document provided by a supplier that reports and certifies the actual results of the tests performed on a shipment of products or materials.

4.2 Certificate of Conformance (C of C)

- 4.2.1 A certificate provided by a Supplier's Quality Assurance department to Elo confirming that all material conforms to all applicable specifications.

5.0 SUPPLIER QUALITY MANAGEMENT SYSTEM REQUIREMENTS

5.1 Supplier Evaluation

Unless waived by an Elo authorized procurement personnel in writing, Suppliers are required to obtain registration to ISO 9001, TL 9000, ISO/TS 16949, SAE AS 9100, ISO 13485, BS EN 9100, ISO 17025, ISO 14001, IECQ 80000 or equivalent national standards.

5.1.1 Supplier survey

Supplier Survey is to generally understand supplier operation status through ELO supplier survey checklist EF600159. Supplier should work with ELO purchasing department or supplier quality engineer to finish within 3days when needed.

5.1.2 Supplier Audit

ELO will regularly adopt supplier audit based on business needs with official notice in advance, supplier shall support on the audit activities. A supplier audit could be a systematic examination of the acts and decisions with respect to quality to independently verify or evaluate compliance to the operational requirements of the quality program, specifications, or contract requirements of the product or service.

5.1.2.1 Supplier Quality System Audit

The supplier quality management system audit is a documented activity performed to verify, by examination and evaluation of objective evidence, that applicable elements of the quality system are suitable and have been developed, documented, and effectively implemented in accordance with specified requirements based on EF600166.

5.1.2.2 Process Audit

The process audit is an analysis of elements of a process and appraisal of completeness, correctness, or conditions, and probable effectiveness based on EF600167/EF600168/EF600172/EF000305 etc.

5.1.2.3 Product Audit

The product audit is a quantitative assessment of conformance to required product characteristics. Simply stated, the product audit verifies that the system and processes used to produce the product are capable of producing a product that conforms to the established VS/specifications/requirements.

5.1.2.4 Audit Findings

An audit "finding" is the "result of an evaluation of the collected audit evidence against audit criteria. Audit findings can indicate either conformance or nonconformance with audit criteria or opportunities for improvement. A nonconformance is made up of four parts:

- Source of the requirement
- The requirement, written verbatim
- Source of the evidence
- Evidence

If missing any one of these components, we don't have a nonconformance; however, we may still have an Observation (an Observation is nothing more than an opportunity for improvement).

5.2 Supplier Responsibilities

5.2.1 Requirements for Quoting

- 5.2.1.1 Requests for quotation shall be provided by the Elo authorized procurement personnel. Suppliers are to respond to the request for quote within the allocated time to the appropriate - authorized procurement personnel. All requests for exceptions to the requirements shall be documented; otherwise, full compliance with these requirements is expected.

5.2.2 Purchase Order Conditions

- 5.2.2.1 The supplier must agree to the terms and conditions set forth with the Purchase Order unless there is a written contract executed by Elo and the supplier that governs such purchase.

5.2.3 Confidentiality

- 5.2.3.1 The supplier understands and agrees to hold in strict confidence all confidential information received from Elo or derived from such proprietary information and no to use it except for the sole purpose of manufacturing Elo products for Elo. When requested by an authorized representative of Elo, the supplier shall return all documents provided by Elo.

5.2.4 Specification and Document Review

- 5.2.4.1 Prior to acceptance of the purchase order, the supplier shall review all engineering drawings and specifications to ascertain that they are to the engineering revision level specified on the purchase order. The supplier shall notify the appropriate authorized procurement personnel of any errors or omissions within fourteen (14) days of receipt thereof. Elo will either correct the error or arrange for a temporary waiver deviation until correction can be made. The supplier shall not implement changes to any Elo's prior written approval to do so.
- 5.2.4.2 The supplier is responsible for verifying that they are using the most current revision level of all documents referenced on the engineering drawings and specifications called out on the purchase order.
- 5.2.4.3 The supplier will establish a process to ensure the timely review, distribution and implementation of authorized drawing and document changes.
- 5.2.4.4 Contact Elo Touch Solutions Document Control (elocentralsdocumentcontrol@eltouch.com) for engineering drawings and specifications.
- 5.2.4.5 Suppliers are required to provide product compliance documentation upon request. This documentation may include but is not limited to: surveys to gather compliance status to legislation or customer requirements, material, content disclosure, test results to verify compliance, and disclosure of systems and procedures used to ensure compliant products.
- 5.2.4.6 Suppliers are required to purchase raw materials from authorized agents or re-sellers.

5.2.5 Rapid Response

Suppliers shall have a fast response problem solving process including minimum criteria for implementation and timeliness to critical external/internal quality issues. Plant quality manager ensures the applicability and the timely completion of the items being tracked. Plant Staff level personnel actively participate in daily meeting. Required documents are reviewed (Fast Response Tracking Sheet, Problem Solving Document, D/PFMEA, Process control plan, standardized WI, ECR etc.).

- 5.2.5.1 Containment action, including activities of quality block, line stop, sorting, quality breakpoint normally should be finished within 48H.
- 5.2.5.2 Root Cause identification should be finished within 7days after receiving the failures.
- 5.2.5.3 Corrective action implemented and validated should be finished within 35days, including the D/PFMEA, CP, WI update, Related training made.
- 5.2.5.4 Lesson Learn and horizontally unfolded finished within 45days

Supplier must ensure that those parts are supplied to ELO comply with the specifications. The supplier is responsible for all actions that contribute to the fulfilment of the Spec and must ensure fulfilment during the entire supply period. This includes sub-contractors, internal procedures and packaging.

The incoming goods, process-related and outgoing goods inspections must be carried out in accordance with the production control plan and test instructions. The scope of the inspections and process monitoring must be in tune with the stability and capability of the processes. The methodology of all supplier activities must be geared towards failure prevention, in order to minimize inspection expenditure and to increase process safety.

5.3 Handling and Storage Requirements

- 5.3.1 The supplier is responsible for the proper handling and storage of all raw material, components, and tooling supplied or consigned from Elo. Any special handling, packaging, and storage requirements requested by Elo will be documented on the purchase order or other appropriate documents when applicable.
- 5.3.2 Prior to processing, the supplier is responsible for the visual inspection of Elo supplied material and verification of the correct quantity. If Elo supplies nonconforming material to the supplier, the supplier shall be responsible for notifying the respective Elo authorized procurement personnel of the receipt of nonconforming material. Elo authorized procurement personnel shall provide specific instructions regarding the disposition or use of supplied nonconforming material.

5.4 Process Controls

- 5.4.1 The supplier is responsible for the quality of any process that affects the configuration, assembly, FW/image/OS loading, Test tools, cable routing, heat treatment, plating, and/or metallurgical properties of Elo consigned or stocked material.
- 5.4.2 The supplier is responsible for adopting the necessary techniques and controls during all phases of manufacturing to ensure that the quality of the product being produced is both known and controlled. As a measure of continual process improvement, a capability study shall be conducted on key product characteristics with target Cpk requirements as agreed to by Elo and the supplier. The supplier shall submit data or evidence of performance when requested by Elo purchasing or quality personnel. Established key processes that affect the form, fit, or function of Elo product may not be modified by a supplier without written approval from Elo authorized procurement personnel.

5.5 Notification of Product or Process Changes

- 5.5.1 A process change is defined as any significant change to the manufacturing process, equipment modifications or replacements, and/or any changes to process parameters, the purchasing of materials from new sources, and process changes of supplier or its subcontractors that could affect product design form, fit, or function (including status of product compliance status) of the purchased material that has been accepted/approved by Elo (collectively, "Product Change"). By way of example and not limitation, Product Changes include any of the following changes:
 - 5.5.1.1 product design
 - 5.5.1.2 manufacturing process
 - 5.5.1.3 chemicals that are used to manufacture the product
 - 5.5.1.4 materials
 - 5.5.1.5 geographical location change (requires 6 months' notice)
 - 5.5.1.6 process or manufacturing yield (5% decreases of normal yield)
 - 5.5.1.7 regulatory changes in relation to the product
 - 5.5.1.8 test process, test equipment or packaging related to the product
 - 5.5.1.9 End of life notification on the materials (requires 6 months' notice)

- 5.5.2 Elo requires that the supplier provides prior written notice to the Elo authorized procurement personnel and obtains Elo's written approval of any Product Changes. The Elo authorized procurement personnel must be contacted prior to any changes being implemented as the requirements vary for the different Elo business units. The planning and strategy of any agreed changes will be done in strict co-ordination with the Elo authorized procurement personnel. Product Changes cannot be implemented until Elo approval is given.
- 5.5.3 The supplier is required to provide the initial sample report and samples to Elo for the validation process. For proprietary designs, impact on form, fit and function (including performance and/or durability) shall be reviewed with the customer so that all effects can be properly evaluated. When required by Elo, additional verification requirements, such as those required for new product introduction, shall be met.

5.6 Subcontract Jobs

- 5.6.1 The supplier is not to subcontract any work related to any given purchase order without notification and written permission from Elo authorized procurement personnel.
- 5.6.2 The supplier shall not place any Elo tooling with subcontractors without notification and written permission from Elo authorized procurement personnel.

5.7 Packaging and Labeling

- 5.7.1 The supplier shall maintain unit container traceability and identification of all lots of material (trace number, date code, etc.).
- 5.7.2 Packaging shall conform to all packaging and labeling requirements documented on the purchase order, product drawings, contract addendum or schedule, or material specifications. When not specified, packaging and labeling are the responsibility of the supplier and shall be adequate to prevent damage or deterioration during shipment. All shipments shall be labeled as a minimum with the following and shall not contain pricing information unless required to do so by an authorized Elo purchasing personnel:
- 5.7.2.1 Purchase order number
 - 5.7.2.2 ELO part number
 - 5.7.2.3 Product/material revision level
 - 5.7.2.4 Quantity
 - 5.7.2.5 Country of Origin
 - 5.7.2.6 Description

5.8 Inspection

- 5.8.1 When indicated on the purchase order or other appropriate document when applicable, first article inspection data approval shall be obtained from the supplier and approved by Elo in writing prior to initiation of full production. The supplier is responsible for notifying/providing Elo when first article samples and inspection data are available. Elo first article approval does not relieve the supplier of the responsibility of assuring that subsequent production is in accordance with documented requirements.
- 5.8.2 When specified on the Elo purchase order, one copy of a C of A or C of C shall be submitted by the supplier to the designated location.
- 5.8.3 The C of C and/or C of A shall certify and provide evidence (as appropriate) that the material meets all specified requirements of quality including conformance to applicable product specifications.

5.9 Calibration System

- 5.9.1 Responsibility for the supply, maintenance, and calibration of standard measurement and test equipment, such as pin gages, thread gages, micrometers, comparators, multimeters, etc. rests with the supplier.

- 5.9.2 Provision for special measurement and test equipment, unique to a specific purchase order or product, shall be negotiated at time of order placement. Calibration and maintenance of such special equipment rests with the supplier, unless otherwise specified in the purchase order.
- 5.9.3 Gages, measuring devices, and testing equipment used to determine the acceptability of materials and tooling used in production shall be controlled and calibrated in accordance with the current revision of ISO 10012 or equivalent national standard.

5.10 Verification of Quality

- 5.10.1 ELO and its customers reserve the right to perform any testing or inspection that may be necessary to determine that the purchase order requirements have been met, including verification at the supplier's location if required. The supplier may be required to submit test or inspection data along with gage Repeatability and Reproducibility (R&R) study corresponding to the lot(s) being tested or inspected for comparison or correlation purposes.
- 5.10.2 The supplier shall permit access by representatives of Elo, or at Elo's written request - Elo customers, and applicable regulatory agencies to the supplier's premises (and the premises of Supplier's subcontractors and supplier(s)) for the purpose of evaluating Supplier's facilities, processes, goods, quality system and records.
- 5.10.3 Product accepted at receiving inspection may be found to be nonconforming during the manufacturing process. The supplier is liable for such product regardless of when a nonconformance is found.

5.11 Product/Material Nonconformance

- 5.11.1 The supplier shall notify the respective Elo -authorized procurement personnel if nonconforming material, including failure to meet product compliance requirements, has been shipped to Elo. The Elo -authorized procurement personnel shall coordinate the containment and disposition of suspect nonconforming material with Quality and Materials department personnel.
- 5.11.2 Upon the occurrence of a product nonconformance identified by Elo, upon communication of the details of the nonconformance to the supplier, the supplier is responsible for determining the necessary actions to establish an effective containment plan. The supplier is responsible for immediately initiating containment of any suspect product within their facility or in the supply pipeline. This shall include the impacted lots, including any inventoried lots or lots already used by customers. The supplier shall also notify the Elo authorized procurement personnel of any suspect material that is in transit. Supplier is required to communicate details of containment action to the Elo authorized procurement personnel or Supplier Quality Engineer within 24 hours of receiving the initial nonconformance notification or as specified by the business unit purchasing department. The communication shall be via 8-D Corrective Action Plan or Customer specified Form.
- 5.11.3 The supplier must analyze the parts that have been returned by ELO(production plants, CMs, service center or customers) in order to establish the cause of the defect, to work out a solution to the problem and to carry out corrective action that will prevent a recurrence. A structured problem-solving methodology must be applied. The approach preferred by ELO is the 8D problem solving process. Comparable methods may also be applied by agreement. The supplier methodology must be defined in writing and must contain the following:
 - 5.11.3.1 An analysis of the underlying cause of the defect as regards product, process and quality system
 - 5.11.3.2 A description of short-term containment and final corrective action that will be undertaken to remove the root cause
 - 5.11.3.3 The inspections and controls applied in order to ensure that corrective action will be under-taken and that it will be effective
 - 5.11.3.4 The extent of similar problems that require preventive action. This includes variations and similar processes.
 - 5.11.3.5 Preventive action and the application of inspections and controls to ensure that they are effective.
 - 5.11.3.6 Statement of responsibilities for all actions and their applicable documents.

- 5.11.4 Supplier may be charged back for all expenses incurred by Elo as a result of delivery or quality problems attributed to that supplier. Charge backs may be transacted as a debit against open invoices. A supplier will have 60 days from the issue of defective material notification to contest the charge back and provide evidence that the nonconformance was not caused by the supplier or agents of the supplier.

5.12 Request for Deviation

- 5.12.1 Supplier is responsible for meeting all the requirements of the purchase order, drawings, and Elo specifications or industry standards and specifications (e.g., EIA, ASTM, etc.) when specified or applicable. Material that does not conform to these requirements shall not be shipped to Elo, its customers or other suppliers without prior written approval having been given in the form of an approved deviation request for known nonconformance.
- 5.12.2 Request for waiver deviation from requirements shall be brought to the attention of the Elo authorized purchasing or engineering personnel. Approval or disapproval of supplier deviation requests will be documented and communicated to the supplier.
- 5.12.3 Each request for waiver deviation shall include a statement of corrective action, person responsible for the corrective action, and estimated date of implementation of corrective action to prevent recurrence of the nonconformance.
- 5.12.4 Supplier shall identify, store, and ship approved deviated nonconforming material in such a manner as to keep it separate from conforming material. Where applicable, the waiver deviation number shall be noted on the packing slip, and when requested, on all shipping containers.
- 5.12.5 Each re-working of parts that are delivered to ELO must be approved in writing by the ELO receiving plant/CM prior to dispatch of these parts. They must be suitably labelled and delivered as a separate delivery. The supplier is obliged to ensure, that the re-worked parts have been fully checked by quality department to ensure that they fulfil entirely with the SPEC. The relevant documentation shall be supplied to ELO on request. If the defective parts cannot be reworked in such a way as to allow them to fulfil all the specifications, the supplier may, in exceptional cases, apply for an ELO written waiver to dispatch these parts.

5.13 Corrective Action

- 5.13.1 When requested, the supplier will submit an 8-D corrective action plan that provides the details of how the nonconformity will be resolved. Elo expects a supplier to investigate the root cause(s) and respond to the Elo authorized procurement personnel or Supplier Quality Engineer with a corrective action plan within ten business days or as specified by the business unit purchasing department. The details of the investigation, corrective action plan, verification of the effectiveness of the corrective action and preventive actions shall be documented. Should the corrective action be ineffective, untimely, or performance not be restored, Elo may exercise all rights available under contracts or purchase orders.

5.14 Quality Records

The supplier is responsible for maintaining the following records for each production part number manufactured or provided, as applicable:

- 5.14.1 Inspection records
- 5.14.1.1 First article inspection results
 - 5.14.1.2 Incoming inspection
 - 5.14.1.3 Set up inspection records
 - 5.14.1.4 In process inspection records
 - 5.14.1.5 Final inspection records
 - 5.14.1.6 Dock audit results
- 5.14.2 Certificates of analysis
- 5.14.3 Certificates of compliance
- 5.14.4 Laboratory analysis test results
- 5.14.5 SPC data (if applicable)
- 5.14.6 Purchase orders

- 5.14.7 Change orders
- 5.14.8 Approved waiver deviations
- 5.14.9 Calibration records
- 5.14.10 Nonconforming material records
- 5.14.11 Corrective action responses
- 5.14.12 Shipping records
- 5.14.13 IMDS registration number (if applicable)
- 5.14.14 Production record
- 5.14.15 Tool maintenance/repairing record

These records shall be maintained for a minimum of ten years or as specified by the business unit purchasing department.

5.15 Continual Improvement

Supplier must continue to develop his knowledge of familiar procedures and methodologies for the analysis, monitoring and evaluation of processes, in order to effectively implement the process of continuous improvement. The supplier must identify opportunities to improve quality and productivity and implement suitable projects for improvements, some examples are:

- Machine downtimes, installation times
- Cycle time
- Scrapping, reworking, repairs
- The use of floor space without value added
- Waste of labour and material
- Too high costs as a result of insufficient quality
- Difficult assembly or installation of product
- Risk reduction in procedures/processes
- Inventory reduction

5.16 Business Recovery Plans

Supplier will have a documented business recovery plan. These plans shall include the following items.

- 5.16.1 Summary of critical business processes
- 5.16.2 Defined business recovery options
- 5.16.3 Summary of information resources necessary for business recovery
- 5.16.4 Summary of physical resources needed for business recovery
- 5.16.5 Recovery goals for critical business processes
- 5.16.6 List of Emergency Management Team Members

5.17 NPI PPAP Requirement

- 5.17.1 NPI PPAP is the output based on supplier APQP, PPAP should be submitted since DVT stage and finalized at PVT stage.
- 5.17.2 Supplier must ensure to provide sufficient human resource for the NPI project from ELO, if supplier current personnel arrangement can't meet ELO project development needs, supplier should be supplement corresponding human resource or appropriate training in agreed period of time asap to meet the demand of ELO.

5.17.3 ELO defines 3 PPAP submission level as follows

No.	PPAP Element	Level		
		4.1	4.2	4.3
1	Part submission warrant (PSW)	X	X	X
2	Design records			X
3	Approved Engineering Change Documents, if any			X
4	Customer Engineering approval, if required.			X
5	Design FMEA			X
6	Process flow diagram			X
7	Process FMEA		X	X
8	Control Plan		X	X
9	Measurement System Analysis Studies			X
10	Dimensional measuring result	X	X	X
11	Material, Performance Test Results (Validation Plan and Test Report)	X	X	X
12	Initial Process Capability Studies		X	X
13	Qualified Lab Documentation	X	X	X
14	Appearance approval report, if applicable	X	X	X
15	Samples Product		X	X
16	Master Sample			X
17	List of checking fixtures/checking aids			X
18	Records of Compliance with Customer Specific Requirements			X

Supplier should submit the PPAP related records according to the required submission level defined in the following table, the other document not required submission should be ready at factory.

Category	Change Reason	PPAP Submission Level		
		4.1	4.2	4.3
Design	New product			X
	Design changes to existing product			X
Process	New supplier			X
	Existing supplier with new manufacturing location		X	
	New tooling	X		
	Exist tooling modification / upgrade	X		
	New sub-supplier		X	
	Tooling is inactive for 12 months or more	X		
	Supplier / Sub-supplier mfg. process changes		X	
	Change in test or inspection method	X		
	Change in product appearance attributes	X		
Material	Ingredient/type/substance	X		
	Packaging change	X		

5.18 Notification of Line Stops

Supplier shall have a suitable Line stop handling and customer notice procedure, For timely and effectively handling of supplier production abnormalities and line stop caused by man, machine, material, method, measurement or problems caused by design or software/FW, to avoid the issue continue to expand, and completely assess risk range and adopt timely countermeasures to reduce the impact of quality, delivery and cost.

5.19 Escalation in the case of non-fulfilment

If the supplier does not achieve the targets the supplier management must set out a plan of corrective action and submit it to the ELO. The quality of this action plan will determine whether the supplier is placed on probation and how long the probation period will be. If an improvement in the supplier evaluation cannot be expected within a six-month period, the supplier will be put on-hold and new RFQ , new business orders to the supplier may be suspended.

6.0 RECORD-KEEPING AND FINANCIAL CONTROLS.

Suppliers must be of sound financial stability and capable of complying with its obligations to Elo. Upon Elo's request, supplier will furnish financial statements to demonstrate its financial condition. If supplier's audit reports are publicly available, in lieu of providing written copies thereof, suppliers may inform Elo of where and when they may be obtained. If Elo's review of financial statements causes Elo to question a supplier's ability to perform its duties and obligations to Elo, Elo may request, and suppliers shall provide, reasonable assurances of the supplier's ability to perform its duties. Furthermore, suppliers shall notify Elo immediately if there is a material adverse change in supplier's business or financial condition including of there is the filing of insolvency or bankruptcy proceedings or concerning liquidation of assets. To the extent Elo reasonably believes that a supplier is not of sound financial stability, after reasonable consultation with supplier Elo may require a supplier to collaborate with another supplier to ensure that the know-how of the manufacturing of Elo products is smoothly transitioned to another source to ensure Elo's continuous operations.

7.0 Additional quality control Requirement for Panel module suppliers

In order to standardize the panel module suppliers quality management, supplier need also to follow following quality control requirements,

NO.	Item	Elo requirement
1	Epidemic Defect	<p>-Epidemic Defect is defined as a defect in the product sold to buyer hereunder with the defect attributable to substantially the same root cause that(i)occurs in products within 24 months following manufacture date of a product.(ii)in more than 1.5% of similar products delivered by supplier during a 6 month period.(iii) is caused by the violation of one or more of the performance warranties listed in MSA</p> <p>-For the epidemic defect, supplier have to take below items</p> <p>a. do FA/CA for the failure</p> <p>b. repair/handle all the failed/risk products, include the inventory/on the way of shipment /re-call from end-user</p> <p>c. Supplier have to take all the cost because of the epidemic defect, including shipping/handling/testing/re-working/the necessary components/claims from customer/and so on)</p>
2	Burn-in test	<p>-Suppliers have to do the 100% burn-in for all Elo panel modules</p> <p>-The suggested Burn-in Test condition is, if the specification have the burn-in condition definition, we should follow spec as first priority</p> <p>Burn-in->100% test,12H & 50°C</p>
3	ORT (On-going	Sample size 5pcs/lot, test condition based on reliability test requirement in product SPEC

	Reliability Test)	
4	Special Characteristic SPC/CPK	<p>-The key parameters and dimension defined in the drawing should be monitored by SPC</p> <p>-The CPK should ≥ 1.33</p> <p>The following process & parameters, but not limit to, should be SPC monitored, like the critical dimensions of cell cutting, outline of cell/LCM/frame/Bezel, FOG/COG bonding strength & shift etc.</p> <p>-Supplier should do FA/CA and provide the 8D report to Elo when the CPK of key item less than 1.33</p>
5	Rework requirement	<p>Each reworked panel that delivered to ELO must be approved in written by ELO SQE prior to dispatch, they must be suitably labelled and delivered as a separate delivery every quarter, the supplier is obliged to ensure that the reworked panels have been fully checked and entirely meet to spec.</p> <p>-Supplier should have the tracking system to save the SN/defects/rework history of all the rework products.</p> <p>-Supplier should do the reliability test and provide the test report to Elo for the rework defects.</p> <p>-below failed items are not allowed to rework</p> <ol style="list-style-type: none"> the failure about IC/FPC/PCB bonding(related to FOG, COG process) PCBAs(such as L/B,PCBA/FPCA) Cell/filter material <p>in exceptional cases, supplier should apply for an ELO written waiver to dispatch these parts.</p>
6	DPPM Goal	<p>-online DPPM should meet the quality goal(1300DPPM)</p> <p>Supplier has the responsibility to take all effective measures to ensure realization of DPPM target</p>
7	Fly-audit requirement	<p>-Supplier should support ELO randomly on-site audit the factory, 1-2 times/month</p> <p>-Supplier should ensure Elo guys start the audit activity within 4 hours when they get the requirement information of fly-audit.</p> <p>-Supplier should arrange related department guys support the fly-audit running.</p>
8	Claim Rules	<p>-When ELO receives on-line or after-sale quality complaints, but duties is caused by supplier product quality issues, ELO owns rights to claim related rework/repair, travel/transportation or freight costs to supplier.</p>