DOCUMENT NUMBER: **QA600006**

DOCUMENT TITLE: **Quality Management Requirements for Suppliers**

DOCUMENT REVISION: **G**

DOCUMENT OWNER: **QUALITY MANAGER**

Level	Procedure	Approval Signatures
1	Business Manual Quality QM400002, QM400001, EH600011	☐ Touch Leadership Team (TLT)
2	Business Management System Policies – The documents that directly support QM400002 – Quality Manual	☐ Document owner ☐ Department Manager ☐ Director of the Department ☐ Director of Quality Assurance ☐ Quality Assurance Manager ☐ 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)	☒ Document owner ☒ Department Manager ☒ Document Control Manager ☒ Quality Assurance Manager ☐ Other
5	Forms	☐ Document owner ☐ Department Manager ☐ Other

REVISION HISTORY

Rev	Change Order	Date	Author	Description of Change
A		Jul 20, 1999	Paul Bailey	Initial Release
B	ECO-13-0784	Jan 10, 2013	Mike Moran	Add sections 6.0 SUPPLIER GUIDE TO SOCIAL RESPONSIBILITY and 7.0 RECORD-KEEPING AND FINANCIAL CONTROLS
C	CO-20-0733	May 13, 2020	Myron Xiong	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
D	CO-23-0497	Mar 1, 2023	V. Pallaver	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
E	CO-25-1113	Jun 11, 2025	Yoyo Fang	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.
F	CO-25-1162	Jun 16, 2025	James Wang	Carved out the EHS and Code of Conduct related items into new Supplier Code of Conduct document PP0061281.
G	R-0002628	Jun 15, 2026	V. Pallaver	-Document reformatting and reorganization for clarity -Section 5.2.4.2 New section for General Elo specifications -Section 5.16: Added new PPAP Element 19 (Technical documentation for Regulatory Compliance). Changed PPAP level for packaging and material changes from 4.1 to 4.2.

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1 PURPOSE

This document (these “Quality Requirements”) has been developed to help Elo's suppliers (the "Supplier") 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.

Suppliers will implement the following basic business principles and:

- 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.
- Manage facilities, processes, quality systems and personnel to consistently and cost-effectively manufacture the products and furnish services that meet the product specifications.
- Be committed to continual process improvement by emphasizing reduction of part to part variation and the elimination of all waste.

2 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

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 shall be approved by the Elo Global Quality Leader and Director of Procurement in writing in advance.

3 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)

AIAG Failure Mode and Effects Analysis Manual (FMEA) Manual
AIAG Statistical Process Control Manual (SPC) Manual
AIAG Measurement System Analysis (MSA) Manual
AIAG Advanced Product Quality Plan(APQP) Manual
AIAG Production Part Approval Process (PPAP) Manual
IECQ 80000 IEC Quality Assessment System for Electronic Components (IECQ)
ISO 9001 Quality Management Systems Requirements
ISO 10012 Measurement Management Systems – Requirements for Measurement Processes and Measuring Equipment
ISO 13485 Medical Devices - Quality Management Systems - Requirements For Regulatory Purposes
ISO/TS 16949 Quality Management Systems – Particular Requirements for the Application of ISO 9001 for Automotive Production and Relevant Service Part Organizations
ISO/IEC 17025 General Requirements for the Competence Of Testing and Calibration Laboratories
TL9000 Quality Management System for the ICT Industry
SAE AS 9100 SAE Quality Management Systems Requirements for Space, Aviation, and Defense Organizations

3.2 Elo Standards (latest revision/edition applies)

EF600159 ELO SUPPLIER SURVEY CHECKLIST
EF600166 FORM, SUPPLIER QUALITY SYSTEM AUDIT CHECKLIST
EF600167 FORM, MONITOR & COMPUTER QUALITY PROCESS CHECKLIST
EF600168 FORM, PCBA QUALITY PROCESS CHECKLIST
EF600172 MECHANICAL PARTS QUALITY PROCESS CHECKLIST
EF000305 LCD PANEL QUALITY PROCESS CHECKLIST
ES600665 ELO PACKAGING SPECIFICATIONS
ES600973 ELO GREEN PROCUREMENT GUIDELINES

4 DEFINITION OF TERMS

4.1 Certificate of Analysis (C of A)

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)

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

5 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

When requested by Elo, Supplier shall work with Elo purchasing department to fill out Elo's Supplier Survey Checklist EF600159. The survey is used to assess the Supplier's operational systems and status. Turnaround time shall be within 3 days.

5.1.2 Supplier Audits

5.1.2.1 Audits

Elo reserves the right to regularly audit Supplier based on business needs with official notice in advance. Supplier shall support audit activities. An audit is 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.

The audits types include, but may not be limited to:

Audit Type	Purpose	Reference methodology
Supplier Quality System Audit	Assess suitability of Supplier's quality management systems	EF600166
Process Audit	Assess suitability of Supplier's design and operations processes	EF600167 EF600168 EF600172 EF000305
Product Audit	Assess conformance of supplied products to relevant specifications	

5.1.2.2 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, Observation (opportunity for improvement), or Nonconformance. A finding consists of four elements:

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

A finding with all four elements is a Nonconformance. A finding with 3 or fewer elements is an Observation.

5.2 Supplier Responsibilities

5.2.1 Requirements for Quoting

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

The supplier shall agree to the terms and conditions set forth in the Purchase Order, unless a written contract executed by Elo and the Supplier exists that governs such purchase.

5.2.3 Confidentiality

The Supplier understands and agrees to hold in strict confidence all confidential information received from Elo or derived from such proprietary information and not 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 Compliance to Specifications

5.2.4.1 Compliance to PO Specifications

The Supplier shall supply parts to Elo that comply with the specifications called out in the purchase order. The Supplier is responsible for all actions that contribute to the fulfillment of the specifications throughout the entire supply period. This applies to subcontractors, internal procedures, and packaging.

5.2.4.2 Compliance to General Elo Specifications

Supplier shall ensure all supplied parts and packaging comply with the following general Elo technical specifications:

- ES600973 (Green Procurement Guidelines)
- ES600665 (Elo Packaging Specifications)

Any deviations must be formally approved in writing by Elo.

5.2.4.3 Providing Compliance Documentation

Suppliers are required to provide product compliance documentation upon request. This documentation may include, but is not limited to:

- surveys to determine compliance status with Elo, regulatory or customer requirements
- material content disclosure, test results to verify such compliance,
- disclosure of systems and procedures used to ensure compliance.

5.2.4.4 PO Specifications Review

Prior to acceptance of an Elo purchase order, the Supplier shall review all specifications referenced on the purchase order, and verify they have the correct specification at the specified revision level.

The Supplier shall notify the appropriate authorized procurement personnel of any errors, omissions, or contradictions 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 any changes to the specification prior to Elo's written approval.

5.2.4.5 General Specifications Review

The Supplier is responsible for verifying that they are using the most current revision level of the specifications called out on the purchase order, whether called out explicitly or by sub-reference.

The Supplier will establish a process to ensure the timely review, distribution and implementation of authorized drawing and document changes.

5.2.4.6 Elo Contact

Contact Elo Touch Solutions Document Control (elocentraldocumentcontrol@elotouch.com) for engineering drawings and specifications.

5.2.5 Process Control Plans
The inspections of incoming goods, manufacturing processes, and outgoing goods shall be carried out in accordance with the production control plan and test instructions. The scope of the inspections and process monitoring shall be in tune with the stability and capability of the processes. The methodology of all Supplier activities shall be geared towards failure prevention, in order to minimize inspection expenditure and to increase process safety.

5.2.6 Rapid Response
This section defines response timeliness. Detailed nonconformance handling requirements are defined in "Product/Material Nonconformance" sub-section.

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 shall ensure the applicability and the timely completion of the items being tracked. Plant staff level personnel shall actively participate in daily meetings. Required documents are reviewed (Fast Response Tracking Sheet, Problem Solving Document, D/PFMEA, Process control plan, standardized WI, ECR etc.).

5.2.6.1 Containment action, including activities of quality block, line stop, sorting, quality breakpoint normally shall be completed within 48 hours.

5.2.6.2 Root Cause identification shall be completed within 7 days after receiving the failures.

5.2.6.3 Corrective action implemented and validated shall be completed within 35 days, including the D/PFMEA, CP, WI update, Related training made.

5.2.6.4 Lessons Learned and horizontally unfolded shall be completed within 45 days

5.3 Handling, Storage, and Inspection of Elo-supplied Materials

5.3.1 Handling and Storage
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 Inspection
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 specified by Elo or mutually agreed in writing. 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 Definition of Product Change
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:

product design
manufacturing process
chemicals that are used to manufacture the product
materials
geographical location change (requires 6 months' notice)
process or manufacturing yield (5% decreases of normal yield)
regulatory changes in relation to the product
test process, test equipment or packaging related to the product
End of life notification on the materials (requires 6 months' notice)

5.5.2 Prior Written Notice of Product Changes
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 shall 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 shall be done in strict coordination with the Elo authorized procurement personnel. Product Changes cannot be implemented until Elo approval is given.

5.5.3 Validation of Product Changes
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, Labeling, Traceability

5.7.1 Packaging
Packaging shall conform to all requirements specified in the purchase order, product drawings, contract addendum or schedule, material specifications, or this document. When not specified by Elo, The Supplier shall ensure all packaging meets applicable regulatory requirements and prevents damage or deterioration during shipment.

5.7.2 Labeling
Product and packaging labeling shall conform to all requirements specified in the purchase order, product drawings, contract addendum or schedule, material specifications, or this document. When not specified by Elo, The Supplier shall ensure all labeling meets applicable regulatory requirements and prevents damage or deterioration during shipment.

Labeling shall not contain pricing information unless required to do so by an authorized Elo purchasing personnel.

All shipments shall be labeled at a minimum with the following:

- Purchase order number
- Elo part number
- Elo part number revision level
- Elo part number description
- Quantity
- Country of Origin

5.7.3 Traceability
The Supplier shall maintain unit container traceability and identification of all lots of material (including but not necessarily limited to trace number, date code, manufacturing location).

5.8 **Inspection**

5.8.1 First Articles

First article inspection data 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 Certificates of Analysis/Conformance

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.

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 Gauges, 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 Raw Material Sourcing

Suppliers are required to purchase raw materials from authorized agents or re-sellers.

5.11.2 Notification of Non-Conformance

The Supplier shall notify the respective Elo -authorized procurement personnel within 24 hours 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.

5.11.3 Containment

Upon identification of a product nonconformance (whether identified by Elo or by Supplier), the Supplier shall establish an effective containment plan. The Supplier shall initiating containment within 24 hours of any suspected nonconforming 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 within a time period specified by Elo's business unit purchasing department. The communication shall be via 8-D Corrective Action Plan or Customer specified Form.

5.11.4 Corrective Actions
The Supplier shall analyze the parts that have been returned by Elo (production plants, CMs, service center or customers) in order to identify the root 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 8D problem-solving methodology shall be used by Supplier, unless an alternate, comparable method has been agreed upon. The methodology shall be defined in writing, executed within 10 business days, communicated to the authorized Elo procurement personnel or Elo Supplier Quality Engineer, and shall contain the following:

5.11.4.1 An analysis of the underlying cause of the defect as regards product, process and quality system
5.11.4.2 A description of short-term containment and final corrective action that will be undertaken to remove the root cause
5.11.4.3 The inspections and controls applied in order to ensure that corrective action will be undertaken and that it will be effective
5.11.4.4 The extent of similar problems that require preventive action. This includes variations and similar processes.
5.11.4.5 Preventive action and the application of inspections and controls to ensure that they are effective.
5.11.4.6 Statement of responsibilities for all actions and their applicable documents.

Should the corrective action be ineffective, untimely, or performance not be restored, Elo may exercise all rights available under contracts or purchase orders.

5.11.5 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 shall 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 Suppliers' agents.

5.12 **Request for Deviation**

5.12.1 Supplier is responsible for meeting all the requirements of the purchase order, drawings, general Elo specifications, and 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 shall be approved in writing by the Elo receiving plant/CM prior to dispatch of these parts. They shall 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 comply with the specification. 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 Quality Records

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

- First article inspection results
- Incoming inspection records
- Set up inspection records
- In process inspection records
- Final inspection records
- Dock audit results
- Certificates of analysis
- Certificates of compliance
- Laboratory analysis test results
- SPC data
- Purchase orders
- Change orders
- Approved waiver deviations
- Calibration records
- Nonconforming material records
- Corrective action responses
- Shipping records
- IMDS registration number
- Production record
- Tool maintenance/repairing record

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

5.14 Continual Improvement

Supplier shall continue to develop their 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 shall 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

5.15 Business Recovery Plans

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

- Summary of critical business processes
- Defined business recovery options
- Summary of information resources necessary for business recovery
- Summary of physical resources needed for business recovery
- Recovery goals for critical business processes
- List of Emergency Management Team Members

5.16 PPAP Requirements

5.16.1 Resourcing

Supplier shall provide sufficient human resource for the NPI project from Elo. If the Supplier's current personnel arrangement can’t meet Elo's project development needs, Supplier shall supplement corresponding human resource or appropriate training in agreed period of time to meet Elo's demands.

5.16.2 PPAP requirements
Supplier shall implement APQP as the basis for PPAP preparation and submission.

During NPI, Supplier shall begin PPAP submissions at DVT stage and provide final PPAP package at PVT stage. During ongoing production, Supplier shall submit PPAP with all Product Changes.

The following table defines the PPAP document/data elements required for each PPAP level. Elo defines 3 custom PPAP submission levels 4.1, 4.2, and 4.3:

		PPAP Level		
No.	**PPAP Element**	**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 results	X	X	X
11	Material, Performance Test Results (Validation Plan & 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	Product Samples		X	X
16	Master Sample			X
17	List of checking fixtures/checking aids			X
18	Records of Compliance with Customer Specific Requirements			X
19	Technical Documentation for Regulatory Compliance		X	X

The following table defines the required PPAP Level for different categories of Product Changes. Supplier shall maintain any other APQP documents even if not required for PPAP submission.

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	

5.17 **Notification of Line Stops**
Supplier shall have a line stop handling procedure and associated customer notification procedure. The procedure shall address timely and effective handling and containment of production abnormalities, assess risk ranges, and adopt countermeasures to reduce the impact of quality, delivery, and cost. Line stops could be caused by man, machine, material, manufacturing method, measurement methods, HW design, SW design, FW design.

5.18 **Escalation in the case of non-fulfilment**
If the Supplier does not achieve the targets, the Supplier's management shall set out a plan of corrective action and submit it to 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 RECORD-KEEPING AND FINANCIAL CONTROLS.

Supplier shall 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 within 24 hours if there is a material adverse change in Supplier's business or financial condition including if 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 ADDITIONAL QUALITY CONTROL REQUIREMENTS FOR PANEL MODULE SUPPLIERS

In order to standardize the panel module Suppliers' quality management, Supplier also needs the following quality control requirements in addition to those specified in Section 5:

Number	Item	Elo requirement
1	Epidemic Defect	-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 -For epidemic defects, Supplier shall take the following actions: a. perform failure analysis (FA) and corrective action (CA) b. repair/handle all the failed/risk products, include the parts On Order, WIP, On Hand, In Inventory, In Shipment, Deployed In Field, and Returned from Field c. Supplier shall absorb all the cost due to epidemic defect, including but not necessarily limited to shipping/handling/testing/re-working/the necessary components/claims from customer)
2	Burn-in test	-Suppliers shall perform burn-in on 100% of all Elo panel modules -The burn-in test condition is: 1. As listed in the panel specification 2. If not listed in the panel specification: Burn-in mode, 100% test, 12H & 50℃
3	ORT (On-going Reliability Test)	Sample size 5pcs/lot, test condition based on reliability test requirement in product specification
4	Special Characteristic SPC/CPK	-The key parameters and dimension defined in the drawing shall be monitored by SPC -The CPK shall be greater than 1.33 -Process & parameters shall be SPC monitored, including but not limited to: critical dimensions of cell cutting, outline of cell/LCM/frame/Bezel, FOG/COG bonding strength & shift etc. -Supplier shall do FA/CA and provide the 8D report to Elo when the key item CPK is less than 1.33
5	Rework requirement	Each reworked panel delivered to Elo shall be approved in writing by Elo SQE prior to dispatch, they shall be suitably labelled and delivered as a separate delivery every quarter, the Supplier shall ensure that reworked panels have been checked and comply fully with the spec. -Supplier shall have the tracking system to save the SN/defects/rework history of all the rework products. -Supplier shall do the reliability test and provide the test report to Elo for the rework defects. -The following failure modes are not allowed to be reworked, except when Supplier applies for an Elo written waiver: a. the failure about IC/FPC/PCB bonding(related to FOG, COG process) b. PCBAs(such as L/B,PCBA/FPCA) c. Cell/filter material
6	DPPM Goal	-online DPPM shall meet the quality goal of 1300 DPPM -Supplier shall take all effective measures to reach DPPM target
7	Fly-audit requirement	-Supplier shall support Elo unannounced on-site factory audits up to 2 times/month -Supplier shall ensure Elo start the audit activity within 4 hours of fly-audit announcement -Supplier shall arrange related department teams to support the fly-audit.
8	Claim Rules	-When Elo receives on-line or after-sale quality complaints, where issue is caused by Supplier product quality issues, Elo owns rights to claim related rework/repair, travel/transportation or freight costs to Supplier.

8 END OF DOCUMENT