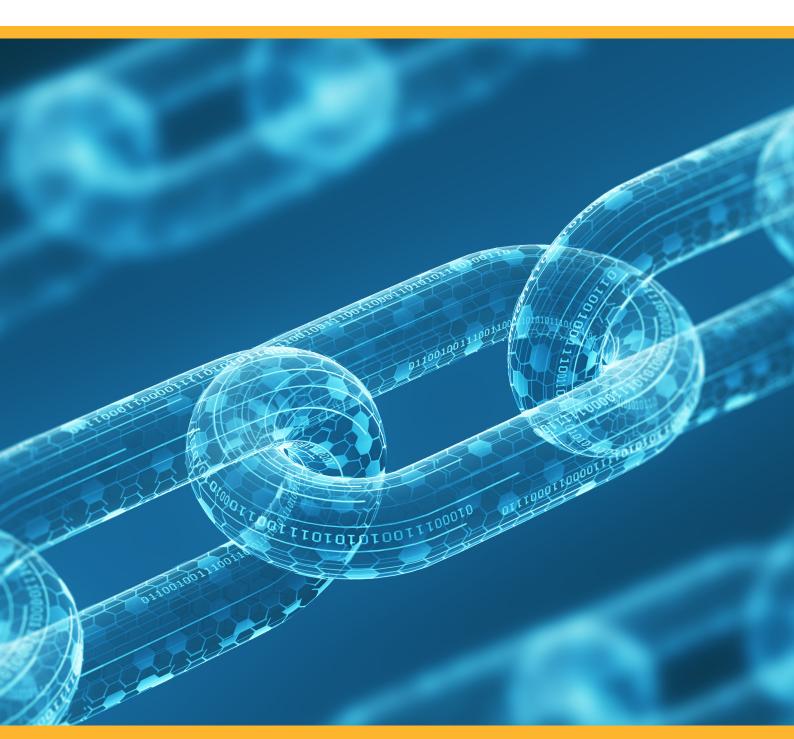


# Quality Guide for Suppliers





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#### Introduction

This document defines the principles and requirements of Premium PSU Quality, which are necessary to ensure a satisfactory relationship with collaborators and thus guarantee the fulfilment of the basic principles and high level expectations required:

- Ensure that the production of components and services is performed according to the required standards, without defects and without previously agreed deviations.
- Manage resources such as facilities, processes, personnel and quality systems that ensure the stability of the products and services to be provided and the best possible cost-benefit ratio and sustainability, in order to satisfy the needs of Premium PSU and its customers.
- Operate in compliance with all applicable environmental laws and regulations in the assigned jurisdictions, ensuring compliance with environmental requirements for products and materials supplied.
- Adopt and comply with values, principles and good practices, in accordance with the integral management and <u>Corporate</u> <u>Social Responsibility</u> policies established at Premium PSU <u>Integrated Management</u> Policy



# Scope

This document applies to suppliers of components or assemblies (prototypes, semi-finished and/or final products) and service providers (testing laboratories, calibration services, design, storage and logistics), which have a direct impact on product quality, environmental compliance and product deliveries to Premium PSU and its end customer.

Premium PSU reserves the right to change any specification associated with this document, so we advise working without relying on printed copies and periodically consulting the document available on the <a href="Premium PSU">Premium PSU</a> website.

It is the supplier's responsibility to ensure the use of and compliance with the latest version of the applicable documents provided by Premium.

Suppliers that can offer specific services, categorised as Special Suppliers according to individual agreements, may be partially or totally excluded from these requirements.

Any exception must be notified in writing and approved by the person responsible for the purchase made and/or the Quality Management Department.



# Requirements

#### Certifications

As a general rule, suppliers should have current, valid ISO 9001 certification as regards their Quality Management Systems.

Product suppliers must ensure compliance with REACH and RoHS requirements.

Although the following certifications are not mandatory, if the supplier currently has them it will be appreciated and may be a deciding factor in project assignment selection decisions, depending on product / end customer requirements:

- **ISO 14001** or EC Ecological Audit Regulation.
- ISO 13485 Medical instruments Quality management systems
- IPC-A-610
- OSHAS / ISO 45001
- IATF 16949
- ENAC CALIBRATION

# Quality and Continuous Improvement

The supplier's main objective will be to establish systematic procedures that ensure the continuous improvement of its processes and that can guarantee a quality product and service, according to Premium PSU's needs.

#### **O Defects Focus**

The supplier will aim for a "zero defects" approach:

- The responsibility for the quality of a product or service belongs to all employees and members of the organisation.
- Every worker is trained to monitor the quality of his or her work and inspect the result of his or her operation and/or process.
- The objective is to achieve zero defects by anticipating defects and reducing rejection rates.

#### **Environment**

As an essential contribution to guaranteeing security of supply, the supplier must carry out effective environmental management, ensuring compliance with applicable standards, continuous improvement and efficiency in terms of its environmental situation.

#### Communication

With close collaboration and fluid communication, there will be a prompt reaction to and notification of any deviation or incident, as well as a proactive reaction with proposals to improve the efficiency of the supplier's processes, in terms of both product improvement and cost reduction.

When there is a deviation in the agreed delivery time, the supplier shall announce the new date and keep Premium PSU informed regarding the progress of the new plan.



# Requirements

#### **Confidentiality**

The supplier agrees to maintain the strict confidentiality of all information received by Premium PSU and understands the necessity of this. Suppliers may be required to sign a Confidential Disclosure Agreement (CDA), Non-Disclosure Agreement (NDA) or Mutual Confidentiality Agreement (MCA). The supplier must return all documents provided to Premium PSU, if requested to do so by an authorised representative of Premium PSU.

#### Civil liability insurance

The supplier will undertake to take out employer and product liability insurance policies with a recognised insurance company that will include coverage for any economic losses caused by products, as well as the costs of any recalls.

#### **Occupational Risk Prevention**

The supplier undertakes to comply with the current regulations regarding Occupational Risk Prevention. For this purpose, as a minimum, it must have an accident prevention structure in accordance with the methods established in Spanish Law 31/1995 regarding Occupational Risk Prevention. There must be Risk Assessment practices and an Emergency Plan, in addition to the Accident Prevention Plan (in the case of specific work projects and services, additional specific documentation will be requested). In turn, the supplier will also comply with Spanish Royal Decree 171/2004 regarding the Coordination of Business Activities and all regulations deriving therefrom.

#### **Others**

Premium PSU providers must not be included in any sanction list.

Premium PSU may request evidence of the financial stability of the company with which the supplier relationship is to be established, such as current AEAT (the Spanish Central Tax Agency) and Social Security payment certificate.



# **Documentation and specifications**

#### **Version Control**

The supplier must review the documentation and specifications received with the order prior to acceptance of the purchase order, ensuring that the product version requested corresponds to the version updated in its system:

In the event of any discrepancy or error, the supplier will notify Premium PSU so that the documentation can be adjusted. In parallel, the supplier will correct the error and make the necessary arrangements for a temporary variation until the final solution can be made.

The supplier may not make any changes without prior written approval from the appropriate authorised person at Premium PSU.

The supplier shall establish a system to ensure proper reviewing, distribution and implementation of authorised changes to drawings and documents, avoiding the use of paper printing as much as possible.

#### **Approvals**

Product suppliers may not use components or materials that are not approved by Premium PSU: they must comply with approved product listings, which describe the relationship of each reference and the manufacturer that can be used for a given reference.

Under the responsibility of the assembler, resistors and capacitors rated SMD 1206 or lower may be sourced from non-approved manufacturers, provided the specified electrical values, materials and tolerances are respected.

The supplier may submit a proposal for approval of new components, but may not use them without prior written approval from Premium PSU.

As far as possible, components of different brands or references should not be assembled in the manufacturing batch for a single reference. If the material for the same code does not allow whole units to be produced with equal components, Premium PSU must be informed.

#### **Documentation access**

Access to and distribution of the documentation and specifications will be done via the channels established by Premium PSU.



# Handling and storage

The supplier is responsible for the handling and storage of materials, components and tools supplied or consigned by Premium PSU. If there are any special handling or storage requirements, they will be stated in the purchase order or other relevant documents.

Electronics manufacturing suppliers (PCBAs) shall demarcate a storage area for materials packed with cardboard and separate it from the assembly lines to avoid particle contamination of the card.

#### **Storage**

- a) Semiconductor components: the supplier shall identify those components with sensitivity to humidity according to the specified level (MSL) to be stored in a temperature-controlled and humiditycontrolled manner.
- b) Solder paste: the supplier shall maintain solder paste in controlled conditions and ensureitsusewithintheexpirationtimeframe for Premium PSU product manufacturing.

#### **ESD and EPA Zone**

The supplier shall ensure proper handling of electrostatic discharge sensitive components, ensuring a controlled environment and proper maintenance.

The use of ESD control winches and registration of access to the EPA area will be appreciated.

We recommend following the guidelines indicated according to UNE-EN-61340-5.1

#### **Packaging**

Dust and moisture-proof packaging and padding materials capable of absorbing vibrations small falls during transport and stopping friction between parts shall be used.

Where possible, the supplier shall use ESD packaging and avoid the use of cardboard and wood.



#### **Processes**

#### for control

The supplier must ensure the stability, robustness and efficiency of the different manufacturing processes and phases, adopting the necessary techniques and checks during each phase to keep the quality of the manufactured product under control.

Premium PSU may request data or evidence of performance, including a CPK study if deemed appropriate, subject to prior agreement between both parties.

Changes to a process must be recorded and documented, ensuring their correct traceability.

Changes to the manufacturing process must be notified and approved, in writing, by Premium PSU.

Process change is defined as any significant modification in the manufacturing process: equipment modifications or replacements, changes of parameters, purchases of new materials (including purchases from new raw material suppliers) and changes in subcontractor processes that could adversely affect the form, fit, function or even product environmental compliance status of purchased material that was accepted and approved by Premium PSU.

#### **Changes**

The supplier shall ensure that the product complies with the drawings and documents received, product specifications and inherent performance requirements. To facilitate this compliance requirement, the supplier must send a written notice and request to the authorised purchasing personnel concerning any proposed changes to processes or manufacturing sites. The vendor must receive approval from Premium PSU prior to implementing any changes (no changes may be implemented without prior approval).

In cases of agreed changes, there must be coordination with Premium PSU regarding the planning and execution of these changes.



# **Packaging and Labelling**

#### **Packaging**

The supplier must ensure that the packaging used is adequate to ensure the protection of the equipment, avoiding any damage or blemishes on the equipment during transportation through to delivery.

When there is more than one unit of product per packaging unit, the filling materials used must ensure that the different units remain immobile during transit, without the possibility of friction or collision between them.

Dust-tight and moisture-tight packaging and padding materials capable of absorbing vibrations or small drops during transport shall be used.

The non-use of cardboard and wood will be appreciated.

Suppliers of PCBA or other electrostatic sensitive components (ESD) shall use appropriate packaging for their protection.

We recommend a weight of less than 20 kg for a box and package for all products delivered in batches, with a maximum weight of 25 kg. If these limits are exceeded, the batch may not be accepted.

#### Identification of the batch

The supplied material shall be identified with one label per batch, preferably including a QR code containing the following information:

- Raw material code and description
- Plan version
- Supplier
- Batch / Date of manufacture
- Premium PSU order number / delivery note
- Quantity per package
- Packaging numbering (x of x)

#### Identification of the product

#### a) PCBAs

All assembled PCBAs shall be individually labelled with a Datamatrix code, with a unique identifier to ensure traceability.

A 10x10mm label that can withstand high temperatures shall be used.

The following information must be stated:

- Item Code up to 12 digits
- Plan up to 2 alphanumeric digits
- **BOM version** up to 3 alphanumeric digits
- PCBA supplier/assembler code 5 digits
- Order Number/Manufacturing Order 6 digits
- Type of Panel 2 digits
- Counter 4 digits

Reference Document on Plate Labelling for Traceability System



### **Calibrations**

All testing and instrumentation equipment used during the manufacture of the ordered product must be properly calibrated, and it is the supplier's responsibility to provide, maintain and calibrate the equipment and to maintain, monitor and record the associated documentation.

The provision of special measuring and test equipment, exclusive to a purchase order or a specific product, will be negotiated when the order is issued, and the supplier's responsibility for calibration and maintenance will remain in effect unless otherwise specifically agreed.

#### **Calibration service outsourcing**

When an external calibration service is requested, the following points must be ensured:

- Ensure that the source set-up is saved and reconfigured after calibration before delivery.
- Establish a plan that guarantees the minimum productive impact while the equipment is being calibrated, when it is inoperative. In the event of any deviations, financial penalties could be issued due to company non-productivity.
- Establish who is responsible for packaging and transport to the calibration supplier and ensure that they assume full responsibility for equipment that may be damaged (repair, replacement, etc.)



# **Quality Checks**

Premium PSU and its customers reserve the right to perform all necessary tests and inspections to determine compliance with product specifications, including possible verifications at the supplier's facility if necessary. The supplier must make the record of tests or inspections available if Premium PSU requests it, as well as repetition and reproduction studies of calibres corresponding to the batches tested or inspected for comparison or correlation purposes.

The supplier shall allow access all Premium PSU stakeholders access to its facilities and/ or those of its subcontractors and suppliers of the supplier, for the purpose of evaluating the supplier's facilities, processes, assets, quality system and records.

Any product accepted at the incoming reception stage at Premium PSU may be deemed a non-compliant product and reclaimed if any deviation or non-compliance with specifications is detected during other subsequent stages of final product inspection or during the application of the final product. The supplier is responsible for such products, regardless of the stage at which a non-compliance issue is detected.



# **Non-Compliant Product**

The supplier shall notify Premium PSU as soon as possible if a shipped material is suspected or known to be non-compliant due to non-compliance with its functional specifications or environmental requirements. The containment and disposal of the affected material will be coordinated with the Quality Department.

If during the incoming inspection phase a non-compliant product is detected for not meeting its functional specifications or environmental requirements, Premium PSU will reject the material and raise a non-compliance issue, requesting immediate action (such as a credit, replacement or repair of the product within 24 hours).

The supplier will be responsible for determining the necessary measures to establish an action plan, establishing containment actions and corrective actions in its system.

It will be the supplier's responsibility to analyse and define the scope of the products and batches affected as well as the containment measures, which must be notified within 24 hours after the incident has been reported. This will include the current batch, all batches in inventory or in transit.

The incident must be resolved by the supplier within 30 days.

Premium PSU may require the supplier to reimburse all charges and penalties arising from the incident due to which the activity of Premium PSU or its customers has been affected. In some cases, an hourly rate may be negotiated.

The supplier shall have 60 days from the issuance of the notification of the defective material to object to the refund and prove that the non-compliance issue was not caused by the supplier or the supplier's agents.



# **Derogations or requests for deviations**

The supplier is responsible for meeting all requirements stated on the purchase order, Premium PSU drawings and specifications or industry standards and specifications (e.g., EIA, ASTM, etc.) where specified or applicable.

Materials that do not meet these requirements will not be accepted and cannot be shipped unless there is prior written approval of a deviation request.

The supplier shall forward the request for deviation from the requirements to its contact person at Premium PSU, who is responsible for documenting and communicating the approval or disapproval of deviation requests vis-à-vis the appropriate supplier.

The deviation request shall include corrective actions and their estimated implementation date, ensuring that the known deviation has been resolved and will not recur.

The supplier shall identify, store and ship the material with the approved deviation, separating it from those that do meet all requirements.



# **8D Report**

In the event of an incident or non-compliance issue, Premium PSU expects suppliers to:

- Investigate the root causes that led to the incident
- Define containment actions, which must be notified within 24 hours
- Define corrective and preventive actions to avoid recurrence of the incident.

When requested to do so by Premium PSU, the supplier will submit an 8D report within 30 business days in response to the incident or a non-compliance issue received from Premium PSU.

The supplier should maintain a record with details of the analysis, a corrective action plan and verification of the effectiveness of the corrective action and preventive actions.

If corrective measures prove ineffective or untimely, or if the supplier is unable to recover its performance, Premium PSU may exercise all rights available to it under contracts or purchase orders.



# **Quality records**

The supplier is responsible for maintaining applicable quality control records according to its scope, for each production reference number manufactured or supplied:

- Inspection and measurement records
- Analysis certificates
- Compliance certificates
- Statistical process monitoring data (if applicable)
- Purchase orders
- Change orders
- Approved deviations
- Calibration records
- Non-compliance records
- Responses to corrective actions
- Shipping records
- Environmental record
- Production record
- Tool maintenance and repair record

If for any reason any additional records are required in addition to the supplier's process, these shall be explicitly notified as part of the specification of the subcontracted product or service.



# Inspection and validation

#### Inspection of initial sample

Any first production run requires the inspection and validation of an initial sample of the manufactured product before finalising the complete batch.

In some cases, the initial inspection and validation of the process will be carried out at the supplier's facilities, subject to prior agreement and coordination between both parties.

Approval of the first item does not relieve the supplier of the responsibility to ensure that subsequent production runs comply with the documented requirements.

#### **Batch inspection**

The supplier must ensure the 100% quality of the batch, verifying each of the units supplied. As a result, it shall issue the certificate of conformity in digital format at the time of shipment of the material.

The inspection should include functional aspects (as far as possible and/or as long as the means are available or can be provided by Premium upon agreement) and aesthetic aspects, both of which are important in Premium PSU products, so the supplier should avoid aesthetic damage such as scratches, stains or others, mainly on the external parts that will be visible in the final application.

The supplier shall preferably use the Premium PSU supplier certificate of conformity format (CoC-xxxx) except in cases where a proprietary format is available, subject to prior agreement with Premium PSU.

The product may be classified as noncompliant if the certificate of conformity has not been received during the incoming material inspection process, since this document is considered part of the product.

# Validation of subcontracted design

The design providers, together with Premium PSU, will agree on the outsourced development plan, issuing a planning and **design verification** plan (DPV&R). Both will be updated and shared according to the agreed period for each project, so that Premium PSU is aware of the progress of the project. General design requirements can be found in the Premium PSU Product Design Guidelines.

In case of problems, full availability of the supplier team assigned to the project is required; they may be required to visit Premium PSU and operate a flexible schedule in order to solve the incident as soon as possible.

The service will not be terminated as long as the total fulfilment of the functions of the agreed prototypes and the delivery of the following documentation (in addition to that specified according to each project) is confirmed:

- Status diagram
- Block diagram
- Code (when SW development is available)
- BOM / Schematics / GERBERS
- AMFE
- DVP&R or equivalent Test Plan



# Inspection and validation

#### Mechanical validation

The supplier shall ensure fulfilment of both aesthetic and functional requirements by carrying out individual inspection of all parts delivered in a batch.

The general requirements and specifications of the mechanics are included in the <u>Mechanical</u> and <u>Finishing Guide document</u>.

- **a) Functional aspects:** the characteristics and functional aspects are defined in the item drawing provided by Premium PSU.
- b) Aesthetic aspects: the acceptance criterion is defined in the Cosmetic Mechanical Criteria section of the Mechanical and Finishing Guide.

#### Validation of PCBAs

The supplier shall perform all aspects of AOI control, ensuring the correct positioning of components and welds, following the guidelines established in *IPC-A-610 Class 2*.

The supplier must have the resources to carry out a minimal electrical test, mainly concerning critical issues that may pose a danger to human safety, since these are high-power products. Possible tests must be proposed and approved by Premium PSU prior to being applied in manufacturing.

As far as possible, the supplier must have the capability and resources to program the boards, incorporating a microcontroller.

The supplier must be aware of and understand the critical points of the product, described in the <a href="Premium PSU Product Assembly Guide">Premium PSU Product Assembly Guide</a>.



# **Business continuity plans**

Premium PSU providers shall have a written Recovery Plan to ensure that a backup plan is in place in the event of an emergency situation, internal or external, that prevents the normal operation of the company.



# Approval, assessment and monitoring

#### **Supplier approval**

Suppliers that meet the requirements set forth in the guide will be approved and can be registered in the system.

#### **Assessment and monitoring**

Premium will perform continuous follow-up and assessment by monitoring product non-compliance issues and delivery deviations.

As a general rule, a six-monthly assessment will becarried outto report any deviations detected. Annually, the assessment and qualification of suppliers will be carried out and notified.

#### **Disqualification**

Suppliers that fail to comply with some above requirements or that become category C and do not submit an action plan within the period agreed by both parties may be disqualified.



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