

Celestica Notification of Product / Process Changes, Discontinued Availability and Product Alerts by Suppliers No. CELQ-033-POL-2 Rev. 10

Introduction:

From time to time, a supplier will make a change to its product or process for any number of reasons such as quality improvement, cost reduction or as a result of a corrective action. Some of these changes have the potential to affect the product's performance in their customer's application. The supplier may also become aware of a product quality issue which should result in a quality alert communicated to its customers. Under certain circumstances, the supplier may also decide to discontinue to offer a product. Therefore, it is required that the supplier have a process for notifying Celestica of such changes, product discontinuance and product quality alerts.

Purpose:

This document establishes general requirements to suppliers for notifying Celestica of all product and/or process changes, product discontinuance and product quality alerts.

Scope:

This process is globally applicable to all Celestica purchased parts and materials that are consumed in Celestica's manufacturing processes.

Applicability:

This specification is applicable to all suppliers.

References:

- Celestica's General Quality Requirements for Purchased Parts (CELQ-001-SPEC-7)
- Celestica Environmental Requirements for Purchased Components (CELQ-033-POL-7)
- Customer Notification of Product/Process Changes (JESD46-C)
- Product Discontinuance (JESD48-B)
- Moisture Classification for SMT Devices (J-STD-020-D)
- Handling of Moisture Sensitive SMT Devices (J-STD-033B.1)
- Stress-Test-Driven Qualification of Integrated Circuits (JEDS47-E)
- Test Method for Measuring Whisker Growth on Tin and Tin Alloy Surface Finishes (JESD22A121.01)
- Celestica Bar Coding Standard for Procured Production Goods (CELQ-033-STD-51)
- Corporate Printed Wiring Board Specification (CELQ-001-SPEC-2)

Definitions:

Supplier:

Any organization to which Celestica has ever issued a purchase order.

Change:

Any alteration to the product or process that can potentially affect form, fit, function, quality, reliability or safety.

PCN:

Product or Process Change Notification is a document sent to Celestica describing the product or process change, the reason for the change and the projected impact of the change.

EOL:

End Of Life is a document sent to Celestica announcing future discontinued availability of product, the last time buy date and the alternate product(s) to be used (if applicable).

PA:

Product Alert is a document sent to Celestica announcing the escape of potential non-conforming product to the field, a description of the non-conformance, the magnitude of the escape and suggested immediate containment activities.

QSPEC:

Celestica's Quality Specifications to suppliers for a specific part or material.

Form:

The visual appearance including shape, colour, marking, and surface finish of the product as specified by the supplier and/or Celestica.

Fit:

The external dimensions and associated tolerances of the product as specified by the supplier and/or Celestica.

Function:

The electrical, mechanical, thermal, chemical and performance characteristics of the product as specified by the supplier and/or Celestica.

Quality:

The current outgoing quality level of the product as shipped from the supplier.

Reliability:

The ability of the product to meet it's stated performance requirements over time.

Safety:

The safety of the product as indicated by any externally recognized organization, the supplier and/or Celestica.

Change Implementation Date:

The date upon which final assembly of the product incorporates the change.

Last Time Buy Date:

The last date on which Celestica can place an order on the supplier for product (refer to Discontinuance Notification section).

Standard Product:

Supplier product that is commercially available in the market.

Custom Product:

Supplier product that is unique to an organization and / or their application.

Procedure:

General PCN/EOL/PA Requirements:

1. The supplier shall have a documented PCN process that includes criteria for identifying a change
2. The supplier shall provide a point of contact for each individual PCN through which all related communication can occur
3. Each individual PCN must have a unique supplier tracking number assigned to it
4. Each individual PCN must include a complete list of all the supplier's affected part numbers and affected Celestica part numbers if possible

Celestica Notification:

Celestica requires notification of all changes be received by Celestica's Global PCN Coordinator a minimum of 90 days prior to the change implementation date.

All Product / Process Change Notifications, Product Discontinuances and Product Alerts must be sent to:

Global PCN Coordinator Celestica
Celestica, CDM Department
Plot 15, Jalan Hi-Tech 2/3 Phase 1
Kulim Hi-Tech Park
09000 Kulim
Kedah, Malaysia
fax: +604-4034299
pcn@celestica.com

Minimum content of the supplier's Product/Process Change Notification:

1. Name, address, telephone, email and fax number of supplier contact
2. Product identification (e.g. supplier part numbers, affected product lines including specific package types, product family)
3. Detailed description of change(s)
4. Reason or rationale for change
5. PCN tracking number
6. Anticipated (positive and negative) impact on fit, form, function, quality, reliability, and safety
7. Implementation date for change
8. Supplier qualification Pass/Fail results, where applicable*
9. Celestica part numbers affected (if possible)
10. Date, if required, when qualification samples are available

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11. Date, if required, when final qualification data is available
 12. Identification method to distinguish changed product (new part numbers, date code, revision, marking, etc.)
 13. Last order date (if applicable) of the unchanged product

Additional minimum content required for RoHS related supplier PCNs:

1. Moisture Sensitivity Level (for current and change product)
2. Maximum process temperature (for current and changed product)
3. Termination finish (for current and changed product)
4. Forward and backwards process compatibility/incompatibility of changed product
5. Tin whisker test information where applicable*
 - has Tin Whisker test been performed
 - what guideline/standards has Tin Whisker test been performed according to (iNemi, JEDEC, etc.)
 - has the product, according to supplier, passed or failed Tin Whisker test (please indicate guideline/standard used e.g. iNemi, JEDEC, etc.)
6. Certificate of Compliance ** (CofC) for RoHS compliant parts (if unable to provide, please state a reason)

* Qualification and test data to be available upon request

** As per Celestica template (CLS CofC)

Note 1: Please refer to the documents listed under references when providing the above information

Note 2: For email notifications, it is recommended that the subject line include the manufacturer's name, change type (i.e. PCN, EOL, or Alert) and a brief description of the change.

Celestica Response:

Any concerns, requests for additional information, extension requests or even rejection of the supplier's PCN will be communicated by Celestica to the supplier contact within 30 days of original receipt.

Discontinuance Notifications:

All supplier product Discontinuance Notifications shall be sent to Celestica's Global PCN Coordinator a minimum of 6 months prior to Last Time Buy date and 12 months prior to notice of final shipments.

Minimum content of the supplier's Discontinuance Notification:

1. Name, address, telephone, email and fax number of supplier contact
2. Product Identification (e.g. supplier part numbers, affected product lines including specific package types, product family)
3. Celestica part numbers affected (if possible)
4. Documentation tracking number
5. Reason or rationale for discontinuance
6. Date for Last Time Buy (placement of purchase order)
7. Recommended replacement part number(s)
8. Recommended alternate sources of supply (if possible)

Product Quality Alerts:

Whenever the supplier suspects that non-conforming product has been shipped to Celestica, the supplier must immediately send a written quality alert to Celestica's Global PCN Coordinator.

Minimum content of the supplier's Product Alert:

1. Name, address, telephone, email and fax number of supplier contact
2. Product Identification (e.g. supplier part numbers, affected product lines including specific package types, product family, date / lot code)
3. Celestica part numbers affected (if possible)
4. Documentation tracking number
5. Detailed description and explanation of the alert and non-compliance (identify failure mode if applicable)
6. Impact to product quality, reliability and safety (highlight any danger to users if applicable)
7. Recommended containment activities
8. Disposition of non-conforming product

Note: The subject line of the Product Alert notification must identify it as such.

Plant Closures / Insolvencies:

The supplier is required to advise Celestica's Global PCN Coordinator of an impending insolvency or plant closure in conjunction with notifying their OEM customers. Celestica expects to be advised a minimum of 90 days before the effective insolvency or closure date. The notification should be sent to both the Commodity Manager and the Celestica PCN Coordinator.

Manufacturing Location Change:

For a manufacturing location change, the supplier must provide a product transfer plan that indicates the reason for the proposed location change. Qualification requirements shall be specified at the discretion of Celestica Global Commodity Engineering and could include on-site audits of the new location by Celestica. **A location change will not be considered if the quality history (as determined by Celestica or our customers) of the proposed facility is not equal or better than the current facility.**

Records:

The supplier shall retain documentation of individual PCN information for a minimum of five years after Celestica notification.

Appendix A:

The supplier is expected to notify Celestica of all product and process changes. Examples of changes which are notifiable are listed below.

Design Changes:

- Die revision
- Data sheet specifications
- Part programmability
- External dimensions and associated tolerances

Site Changes:

- New manufacturing site
- Relocation or movement of manufacturing site

Process Changes:

- Diffusion dopant
- Gate oxide material
- Gate oxide thickness
- Dielectric material
- Polysilicon dopant type
- Metallization material
- Metallization thickness
- Top protective layer material
- Top protective layer thickness

Package Assembly Changes:

- Assembly site
- Lead frame base material
- Plating material
- Wire bond material
- Wire bond method
- Mold compound / encapsulant material
- Sealing material
- Die attach material
- Marking method
- Marking appearance

RoHS Compliance

- Product Moisture Sensitivity Level
- Maximum process temperature
- Termination finish or other metallurgical changes
- Forward and Backwards process compatibility
- Tin Whisker information

Other Changes:

- Packing / shipping / labeling
- Carrier type (reel, tray, bulk)
- Carrier dimensions
- Dry pack requirements
- Moisture sensitivity levels
- ESD characteristics
- Hazardous substances content
- Part numbering schema
- Change of company ownership
- Plant closure/insolvency

Additional requirements for PWB changes:

- Fabrication process (any tool number changes)
- Equipment (type or supplier)

- Chemistry (type or supplier)
- Material (such as copper, laminate, core or soldermask) (type or supplier)
- Sub-contracted services

(Refer to CELQ-001-SPEC-2 for more information related to Celestica's PWB requirements)

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