SOLERO TECHNOLOGIES

Supplier Manual GSM-P001

Rev. Date: TBD

THIS DOCUMENT IS UNCONTROLLED IF PRINTED ON PAPER.

Table of Contents

Solero Technologies Business Philosophy

Solero Technologies Supplier Business, Product & Service Processes

Performance and Processes Issues

Appendices

Solero Technologies Business Philosophy

Section #1 Vision & Mission

1.1 Vision

Coming Soon

1.2 Mission

Coming Soon

Section # 2 Quality Policy Principles

Quality driven management and employee engagement are keys to success and Customer satisfaction. Solero Technologies is committed to building products that are sound and dependable. We will improve our business continuously in quality, cost, and reliability. We will consistently provide products and services which meet or exceed Customer expectations and satisfy Customers by anticipating their requirements.

Solero Technologies seeks to achieve and maintain a reputation of excellence throughout the communities it serves. To achieve this, dedication to quality in everything the Company does will be a top priority of all our employees and Suppliers. We believe that success will come only through continuous renewal. Quality is at the very core of our Product Leadership culture. All Solero Technologies employees are therefore committed to CQC through our quality policy:

Customer Satisfaction

Quality Product

Continuous Improvement

Solero Technologies Quality Policy

We produce quality products in a safe, clean environment that satisfy our customer requirements through teamwork and continuous improvement.

Section # 3 Goals & Scope

We need Suppliers who are capable of providing best-in-class quality and services. Before presenting the following guidelines, we want to provide the general principles that drive this program to make sure that each Supplier's decision to participate is made with a complete knowledge of our objectives, of the procedure used, and what is required of all Supplier companies.

Goal

The purpose of this manual is to provide Solero Technologies Suppliers and Solero Technologies Employees requirements and guidance as to our Commercial, Quality, Delivery, Technology and Business expectations.

The demand for improved product quality is widely recognized as the primary challenge facing our industry. Solero Technologies has historically been committed to producing the highest quality product possible. Our policy is to meet and strive to exceed Customer requirements with the standard of measurement being zero defects. These manual details the procedures and systems of this quality approach, the basis of which is defect prevention and continuous improvement. Solero Technologies is committed to this approach, and we require the same commitment from our suppliers. It is important that Solero Technologies' supply base develops and embodies our same enthusiasm for excellence and displays the willingness to work toward the common goals outlined in this manual. Solero Technologies has created this common Supplier Manual applicable for all Solero Technologies locations supporting the following points:

- Communicate to the Supplier Solero Technologies' expectations, goals, and minimum requirements to assure quality of supplied parts.
- Encourage open and free communication of ideas, information, and notification of problems among Suppliers, Solero Technologies, and its customers in the spirit of teamwork and cooperation.
- Develop an overall plan to ensure smooth production start-up and ramp-up both at Solero Technologies and the Supplier, based on effective planning and communication.
- Define the quality assurance procedures and documents Suppliers must follow to assure application of an effective quality system certified to ISO 9001, working toward IATF 16949.

Scope

This Supplier Manual applies to all production material Suppliers and service part Suppliers that supply product to the production facilities of Solero Technologies. These procedures may be applied to other parts, materials, and services (such as consumable tools and supplies, indirect material, capital equipment, and non-production services). The applicability of these procedures to tools and supplies will be indicated on purchase orders.

Responsibilities

- All production material Suppliers and service part Suppliers must maintain a comprehensive Quality System to ensure compliance with the requirements of the contract and this document. This manual explains Solero Technologies' minimum expectations as well as the process Solero Technologies follows to assess the capability and performance of each Supplier. Solero Technologies seeks Suppliers who have a minimum of ISO 9001 and who will achieve IATF 16949 registration. Suppliers shall cascade this requirement to their subcontractors.

- The organization shall pass down all applicable statutory and regulatory requirements as well as special product and process characteristics to their Suppliers and require the Suppliers to cascade all applicable requirements down to the supply chain to the point of manufacture.
- Solero Technologies also seeks Suppliers who have ISO 14001 or comparable registered Environmental Management Systems.
- All production material Suppliers and service part Suppliers must inform Solero Technologies if another customer places that Supplier on a special status regarding quality and/or delivery. Such a status could be controlled shipping, customer shutdown due to a supply issue, or a field action.

Section #4 Code of Conduct & Sustainability

4.1 Supplier Code of Conduct

4.1.1 Supplier Code of Conduct

Compliance with these standards will be a mandatory component of our purchase contracts worldwide and must also apply to subcontractors.

4.1.2 Respect for Each Other

Solero Technologies operates in a climate of respect, courtesy, and impartiality. The same fairness and impartiality should be extended to all legitimate Suppliers who wish to compete for Solero Technologies business. We expect open, honest, and timely communication. Solero Technologies Suppliers should encourage a positive and diverse workplace by not tolerating harassment or discrimination, including that involving race, color, religion, gender, age, or disability.

4.1.3 Power of Collaboration

Successful business relationships are the result of mutual goals and values. We encourage differentiating technologies that challenge the status quo and help support Solero Technologies' product leadership model. We view every Supplier relationship as an opportunity to extend our enterprise and grow our business. Information given to us must be accurate, and when requested, will be treated as confidential information so designated.

4.1.4 Passion for Excellence

Solero Technologies seeks to be a leader—in serving our customers, advancing our technologies, and rewarding all who invest in us. To extend our competitive position, we expect our Suppliers to relentlessly improve their own performance and to bring urgency to every business challenge and opportunity.

4.1.5 Personal Integrity

We at Solero Technologies demand uncompromising ethical standards in all we do and say—we expect our Suppliers to do the same. Our policies prohibit the acceptance of gifts, services, or anything of such value that the good judgment of the recipient might be influenced, or that a third party might perceive as influencing that judgment. Payments of money, property, or services for the purpose of obtaining business or special consideration are prohibited. If a Solero Technologies employee solicits a gift or entertainment opportunity from a Supplier for their personal use, the request is to be declined. We discourage our employees from purchasing goods or services from Solero Technologies Suppliers for their personal use, even though paid for by the employee.

- Solero Technologies recognizes that in some cultures, business gifts and business entertainment are considered an important part of the development of business relationships. Any gift or entertainment must be evaluated to ensure it is in the best interest of Solero Technologies, consistent with Solero Technologies policies and the law, and in accordance with local customs.
- No listing of ethical guidelines can be considered complete. It is incumbent upon those affected by this policy to avoid the misconception that if it is legal, it is ethical. Appropriate conduct must reflect good judgment, fairness, and morality.

4.1.6 Responsibility to Our Communities

We are committed to good corporate citizenship. We expect our Suppliers to abide by all applicable employment, environmental, health and safety laws and regulations. We will not allow the use of any forced, involuntary or child labor by Suppliers who

provide goods or services to us. We also believe that Suppliers should provide wage and benefit levels to their employees that address the basic needs of people in light of local conditions.

4.1.7 Adherence

We expect your cooperation in ensuring adherence to our Supplier Code of Conduct. If you or anyone in your company believes that a Solero Technologies employee or other Supplier has violated this policy, please contact the Solero Technologies Compliance Office by phone at +1-844-448-0325.

4.2 Sustainability

4.2.1 Shared Principle of Sustainability

Solero Technologies is committed to environmental responsibility that leads to sustainability – a practice or process that meets today's needs without compromising the ability of future generations to meet their own needs. We believe that this focus will benefit society, future generations, and each of us as individuals, as well as contribute to our competitive advantage in the global marketplace. We expect our Suppliers to share these beliefs.

4.2.2 Environmentally Responsible Products and Process

To ensure that our products and processes will provide the maximum benefit and least damage to the environment, we expect Solero Technologies Suppliers to:

- Develop and offer products that help contribute to improved fuel efficiency and reduced emissions
- Evaluate and minimize the complete-life cycle environmental impact of your products and processes
- Minimize waste generation
- Lead in the conversion to environmentally friendly materials including the use of recycled and recyclable materials
- Maximize the efficient use of resources such as water
- Obtain energy from renewable sources and/or lower impact resources wherever practical to reduce greenhouse gases
- Strive for environmental leadership in regions in which you operate

4.2.3 Environmentally Responsible Products and Process

The Global Automotive Sustainability Guiding Principles outline the expectations of automotive companies towards Suppliers on issues related to sustainability. Based on the Principles, the Global Automotive Sustainability Practical Guidance outlines a practical explanation of what the automotive companies mean for each expectation and examples of how to comply with the expectations.

The Plant Manager of the Supplier's shipping location is required to complete the AIAG Supply-Chain sustainability training. This training is free of charge and is located at the following link:

http://www.aiag.org/corporate-responsibility/supply-chain-sustainability

4.3 Basic Working Conditions General Principles

4.3.1 Basic Working Conditions Guiding Principles

Solero Technologies expects its Suppliers and Sub Suppliers to develop policies and practices for all its facilities worldwide, to provide working conditions that are appropriate under applicable law and that support and uphold the Solero Technologies Beliefs.

4.3.2 Use of Child Labor is prohibited

Prohibits Suppliers from employing any person below the age of 15 except as part of a government sponsored training or apprenticeship program.

4.3.3 Forced Labor is prohibited

Prohibits Suppliers from using forced labor in any form and further prohibits physically abusive practices.

4.3.4 Freedom of association

Encourages open communication between management and employees regarding working conditions without fear of retaliation, intimidation, or harassment.

4.3.5 Compensation

Expects that Suppliers' employees will receive compensation and benefits that are competitive and consistent with applicable laws regarding minimum wages, overtime hours and legally mandated benefits.

4.3.6 Working Hours

Expects Suppliers to comply with applicable laws regulating hours of work.

4.3.7 Equal Employment

Expects Suppliers to have written policies promoting equal employment opportunities and formal, independent practices for responding to any complaints.

4.3.8 Health and Safety

Expects Suppliers to promote safe and healthy work environments for all employees and expects commitment to continually improving the same.

4.3.9 Adherence

We encourage Suppliers throughout our entire supply chain to adopt and enforce policies like those stated above. Solero Technologies seeks to identify and do business with organizations that conduct their businesses to standards that are consistent with those stated in 4.3:1-8.

Solero Technologies personnel are expected to report any known or reported violations of Section 4.3 to their respective management without fear of retaliation.

4.4 Anti-Bribery (US Foreign Corrupt Practices Act and UK Anti-Bribery Act of 2010)

Solero Technologies expects all Suppliers (direct material, indirect material, and services) to comply with all laws and regulations applicable to its business, at all governmental levels worldwide.

The use of corporate funds, property, or other resources for any unlawful or improper purpose is prohibited. Anti-corruption laws require that companies meet prescribed accounting and internal control standards and impose severe penalties on both companies and individuals for certain types of payments and practices. Solero Technologies employees and our suppliers may not give, promise, or authorize any payments, either directly or indirectly to government officials in any country.

4.4.1 Anti-Bribery Due Diligence

All Suppliers (direct material, indirect material, and service provider companies or individuals) who will have contact with government officials on Solero Technologies' behalf are required to complete an Anti-Bribery Due Diligence Questionnaire (preferably prior to award of business). The questionnaire is available upon request.

Section #5 Supplier Manual Access/Responsibilities

5.1 Supplier Communication/Access

5.1.1 Solero Technologies utilizes direct communication via electronic means provide supplier specific information such as Supplier Manual, Forms, Scorecards, Training, etc. Please contact your organization's GSM contact for these items.

5.2 Solero Technologies' Responsibility

5.2.1 Provide Supplier access to the latest released version of the Solero Technologies Supplier Manual.

5.2.2 Update Supplier Manual as required and notify Suppliers of changes

5.2.3 Specific approach to access and notification to be determined by your Solero Technologies Global Supply Management (GSM) representative.

5.3 Supplier's Responsibility

5.3.1 Ensure Supplier uses the current released version of the Solero Technologies Supplier Manual.

5.3.2 Direct material suppliers and service suppliers must have a process in place as part of their management system to distribute and verify understanding of the requirements contained in this manual. It shall include documented evidence of competency in understanding of this manual.

- Suppliers shall communicate with their quality management system certification body/registrar that the requirements in this manual are to be included in quality management system audit plans

5.3.3 Suppliers must ensure that Solero Technologies has the correct Supplier contact information allowing notification of any changes.

5.4 Revisions

5.4.1 Any updates to the Supplier Manual will be provided to the supplier as stated in the Solero Technologies Responsibility section above. Suppliers will be notified through electronic means of any changes to the manual.

5.4.2 Suppliers should never use an uncontrolled version of Solero Technologies Supplier Manual. They should always reference the controlled copy.

Solero Technologies Supplier Business, Product & Service Processes

Section #6 Commercial Expectations

6.1 Purchasing Process

6.1.1 Supplier Agreement (like Non-Disclosure Agreement)

- Unless otherwise directed, suppliers must sign and return the Supplier Agreement (e.g. Confidentiality Agreement) regarding Proprietary Information Security and Disclosure to the appropriate Solero Technologies Supplier Representative prior to being issued an invitation to quote.
- Supplier must sign and return all other agreements as requested.

6.1.2 Request For Quotation

- Manual Request for Quotation
  - Potential suppliers will be invited to participate in the quoting process. Suppliers are required to use the forms supplied in the request for quotation, including detailed cost breakdowns. Failure to use Solero Technologies documents may result in a "no quote" status (Contact your local Solero Technologies Supplier Representative for further instructions).
- Electronic Request for Quotation (eRFQ)
  - Potential Suppliers may be invited to participate in an eRFQ. In this case, Suppliers are required to use the electronic RFQ system completing all required documents (including detailed cost breakdowns) when submitting quotations on new business. Failure to use this system may result in a "no quote" status.

6.1.3 Supplier Selection Criteria

- The following criteria can be used to award new business:
  - The Supplier's demonstrated performance in environmental management, quality, delivery, and cost reduction [reference Supplier Balanced Scorecard and Enterprise Approved Sourcing List (EASL) sections]
  - Supplier Consolidated Risk Assessment
  - Supplier's total cost competitiveness and commitment to continuous improvement
  - Supplier's demonstrated participation in Minority Business Sourcing (United States only)
  - Supplier's demonstrated technical capabilities, Engineering support of Solero Technologies programs, and Program Management of new product launches
  - Supplier’s overall financial condition
  - Supplier’s acknowledgement and acceptance of Solero Technologies' Purchase Order Terms and Conditions
  - Other items, such as customer-directed, regional requirements, etc.
  - Meet requirements mentioned in 9.1 of this Supplier Manual

6.1.4 Cost Breakdown Analysis

- As requested, Suppliers must supply detailed and accurate cost information on appropriate forms.

6.1.5 Purchase Orders

- Refer to the specific Solero Technologies purchase order terms and conditions.

6.1.6 Purchasing Authorizations

- Only employees from Solero Technologies' Global Supply Management (GSM) and/or Indirect Purchasing organizations are authorized to commit monies to a Supplier. This commitment must be in the form of an authorized Purchase Order. This applies to all direct, indirect, service and prototype purchases as well as tooling, capital, design, and development, etc. The appropriate purchasing representative responsible for the tooling purchase orders will communicate these requirements, where possible, on the tooling purchase orders themselves.

6.2 Continuous Improvement

6.2.1 General

- Continuous Improvement regarding cost reduction is an essential element of long-term business success for Solero Technologies and for its suppliers. To remain competitive, Solero Technologies and its Suppliers must recognize the requirement to find effective ways to eliminate waste and reduce the cost of our products.

6.2.2 Expectation—Annual Improvement Factor

- Solero Technologies expects all Suppliers to demonstrate a year-over-year cost reduction. We expect this to be directly reflected in the form of an Annual Improvement Factor (AIF) for all businesses. Cost reduction targets will be communicated to suppliers from Solero Technologies Global Supply Management. However, it is the expectation that suppliers are routinely evaluating potential savings as a means for sustained partnership with Solero.
- All Suppliers are expected to constantly examine and optimize the entire cost structure of their business and the products supplied to Solero Technologies. This includes process improvements, cycle-time reduction, scrap reduction, die/tooling set-up reduction, design improvements, Sales, General and Administration (SG&A) reduction, fixed and variable overhead reduction, transportation, etc. To ensure proper review and validation of supplier ’s design and process improvement ideas, suppliers must strictly comply with Solero Technologies' change management requirements for all design and process change proposals.

6.3 Minority Sourcing Program

6.3.1 Expectation

- Suppliers located in the United States are expected to have a formal Minority Business Enterprise (MBE) development program. Solero Technologies expects Suppliers to make every effort to procure a minimum of 5% of the material and/or services from a certified Minority Business Enterprise.
- In order to be classified as a Minority Business Enterprise a company must satisfy the following criteria:
  - The business is no less than 51% owned and operated by U.S. minority citizens
  - The minority owners are active in the management and daily business operations

- The owners belong to one of the following U.S. minority groups:
  - African American, Asian American, Native American Indian, Asian Pacific American, Hispanic American, American Eskimo, and American Aleuts
- The business is certified by the National, State, or Local Minority Business Development Council

6.3.2 Reporting of MBE Expenditure Data

- Suppliers are required to document purchases from those sources and to report the minority Supplier purchases quarterly to the Solero Technologies Minority Supplier Coordinator. Suppliers should submit their report by the 10th of the month following the end of the quarter utilizing the form dictated by the Solero Technologies receiving plant.

6.3.3 Requests For Quotation

- All quotations from Suppliers will be evaluated with consideration given to each Supplier's MBE development program implementation status. Noncompliance with this expectation may affect a Supplier's ability to quote and receive new business from Solero Technologies.

6.4 Service & Replacement

6.4.1 Duration

- Suppliers are obligated to provide service component requirements for a minimum period of 15 years following the conclusion of series production or as otherwise stated in writing by Solero Technologies.

6.4.2 Pricing

- Service components must be priced at production pricing for a minimum of five years after Solero Technologies Customer production has ceased. In no event will replacement parts be made available to Solero Technologies at prices that are not competitive or exceed those charged to other comparable Customers of the Supplier.

6.5 Terms & Conditions

6.5.1 The Supplier must comply with the Solero Technologies Supplier Manual as well as the Terms and Conditions contained in the Solero Technologies Purchase Order. The Supplier will consult with the appropriate Solero Technologies Supplier Representative for clarification.

6.6 Warranty

6.6.1 The Supplier will accept the warranty requirements specified in the Purchase Order Terms and Conditions and/or separate agreements. Additionally, Supplier will be responsible for all applicable warranty costs.

6.7 Invoicing

6.7.1 General

- The Supplier will contact the Solero Technologies plant that will be receiving the product or service (Solero Technologies receiving plant) for invoicing requirements.

6.7.2 Standard Invoicing Instructions

- The following information must be included in all production part invoices submitted to Solero Technologies:
  - "Original" should be on original copy of invoice
  - "Duplicate" should be on any additional copies submitted
  - Each invoice must contain a unique invoice number (not repeated)
  - Solero Technologies Supplier number
  - Solero Technologies part number
  - Solero Technologies purchase order number
  - Quantity
  - Unit and total price
  - Country of origin
  - Complete and detailed description of the merchandise
  - The terms of sale (latest version of INCOTERMS)
- Supplier will ensure that all information provided on all invoices and shipping/business documents and/or electronic data accurately reflects the physical goods in the shipment.

6.7.3 Invoicing Consigned Inventory

- Consigned inventory may or may not require an invoice depending on the Solero Technologies purchase order and requirements from the Solero Technologies receiving plant. If an invoice is required, the Standard Invoicing Instructions (above) are required. If an invoice is not required, follow the information from the Invoice-less Instructions (below) or specific instructions from the Solero Technologies receiving plant.

6.7.4 Invoice-less Instructions

- If a Solero Technologies plant and purchase order indicate payment from evaluated receipts, the Supplier may not be required to submit an invoice with the shipment (unless required by local Customs authorities with respect to shipments of goods across international frontiers or borders or government regulations). Contact the Solero Technologies receiving plant for verification.

6.8 Advertising and Public Communication

6.8.1 Seller shall not, without prior written consent of the Solero Technologies Marketing department, in any manner advertise or publish its relationship with Buyer or Buyer's customers, make any reference to the award of business or use any trademarks or trade names of Buyer or any of its associated companies in any press release, advertising or promotional materials.

6.9 Contingency Plans

6.9.1 The Supplier shall prepare contingency plans to satisfy Solero Technologies and IATF 16949 requirements in the event of an emergency such as utility interruptions, labor shortages, key equipment failure and field returns.

Supplier's contingency plan shall define preventative measures, immediate response, recovery steps and timing to resume production of quality product.

Contingency plans shall include at minimum:

- Defined roles and responsibilities
- Response organization and contact information
- Initial actions
- Escalation procedures
- Communication Plans
- Recovery plans

Section #7 Tooling and Gauging Policy

7.1 General

7.1.1 Solero Technologies will issue purchase orders for special tooling, including dies, jigs, fixtures, templates, inserts, molds, patterns, gauges, test equipment, etc. as agreed upon.

7.1.2 Solero Technologies reserves the right to immediately remove Solero Technologies-owned tools.

7.1.3 Suppliers must receive written authorization from Solero Technologies before:

- Moving or destroying tooling
- Altering tooling capacity
- Disposing of service parts tooling

7.1.4 Selling products made from Solero Technologies tooling to any other Customer is not allowed.

7.1.5 All Special Tooling owned by Solero Technologies must be identified (see Special Tooling below).

7.1.6 The Supplier is responsible to adhere to all legal safety requirements as applicable.

7.1.7 The Supplier is responsible for ensuring that its sub-Suppliers adhere to the above guidelines.

7.2 Definitions

7.2.1 Special Tooling

- The following general (not all inclusive) guidelines provide characteristics that Solero Technologies typically consider regarding whether tooling and measurement devices are considered special tooling:
  - Specifically designed for a Solero Technologies part or product with little or no other application
  - Life and value are limited to the production and service life of the part(s) which they produce or measure
  - Directly affect the part they measure or produce including part specific gauges, dies, fixtures, gear cutters, broaches, molds, jigs, etc.
  - Can usually be re-located
  - May be found between “bolster plates” of a machine or pieces of equipment (including dies, welding fixtures, sub plates, or automation handling devices) and are not part of the general equipment
  - Unique computer software required to operate the tooling is considered part of tooling and is also the property of Solero Technologies

7.2.2 Measurement Systems

- Any gauges, fixtures, tools, test equipment, etc., required to measure the part/process.
- Measurement Systems may be general in application and usable for many purposes.

7.2.3 Parts

- Any purchased or manufactured component or assembly intended for further manufacture or resale.

7.3 Quotation & Design

7.3.1 Tooling Quotation

The items in this section must be considered as part of a tooling quotation to Solero Technologies unless otherwise specified by Solero Technologies.

- Tooling quotation must include expense breakdown, including fixtures, dies, gauging and other costs as well as tooling design (i.e., number of cavities, material, etc.).
- Capacity of the tool must be clearly defined on the quotation.
  - Capacity will be calculated on a 5-day / 3-shift basis unless otherwise directed by Solero Technologies.
- Tool life must be clearly defined in the quotation.
- Cavity replacement must be clearly defined in the quotation. This should be provided as a per part cost or as a cavity replacement cost.
- The quotation must specify lead-time breakdowns including design, build, testing and PPAP submission & approval.

7.3.2 Supplier's Responsibilities

- The Supplier is responsible for maintaining, repairing, refurbishing, & replacing tooling in production condition at no cost to Solero Technologies and Solero Technologies will retain all title and ownership rights for said repaired, refurbished, or replaced tooling for the defined lifetime of the tool, unless otherwise agreed to in writing by Solero Technologies.
- The Supplier is responsible for disposing of the tooling at no cost when directed in writing by Solero Technologies.
- The Supplier will keep detailed maintenance records for the tooling. The Supplier will make these records available to Solero Technologies on request.
- The Supplier will monitor the tool life and performance to ensure that repair, replacement, and maintenance, whether the responsibility of the Supplier, are identified and corrected prior to the time that part quality or production capacity are affected. This will include regular dimensional reviews of specific part characteristics. Supplier agrees to make this data available to Solero Technologies on request.
- The Supplier will, on a regular basis, monitor tool life and advise the Solero Technologies Supplier Representative well in advance when tooling replacement is necessary.
- The Supplier will ensure that enough components will be in Supplier’s inventory and available to support Solero Technologies production prior to and during the time that the tooling is being refurbished or replaced.

7.3.3 Tool Design

- When tooling is designed by the Supplier, Solero Technologies must be provided with electronic and hard copies of the design and all related drawings and specifications. Supplier, upon request from Solero Technologies, will provide reproducible tooling prints for any existing tools.

- All designs must be based on the metric system unless otherwise agreed to in writing by Solero Technologies.

7.3.4 Tooling Run-off

- The Supplier must document tooling run-off quantities in the quotation.

7.3.5 Measurement System

- Solero Technologies' expectation is that all Measurement System devices must be validated in accordance with the AIAG Measurement Systems Analysis.
- All gauging systems must give readings in metric unless otherwise agreed to in writing by Solero Technologies.
- Gauge tolerances must be defined by SAE/DIN/ISO standards.
- The Supplier is expected to maintain the integrity of the Measurement System and provide Gauge Repeatability & Reproducibility (R&R) at required intervals.

7.4 Invoicing

7.4.1 Invoice Amount

- Supplier invoices should document expenditures for Solero Technologies-owned tooling (including a full cost breakdown). In addition, invoices must show the exact physical location by city, town, state or province, and country where the tools will be used in production. Supplier invoices for tooling should reflect the tooling order amount or the actual costs incurred, whichever is less. Any discrepancies should be brought to the attention of the GSM representative. The Measurement System Equipment invoice must include complete descriptions of each device. Note: Supplier must provide photographs of Solero Technologies-owned tooling with all tooling invoices.

7.4.2 Payment Authorization

- Solero Technologies will authorize payment for tooling and Measurement System devices when PPAP and all other applicable customer requirements (regarding tooling audit) are met, statistical studies are approved, and all photographs received, or as otherwise agreed upon with Solero Technologies.

7.4.3 Bill of Sale

- Supplier will provide a bill of sale acknowledging payment and ownership of all Solero Technologies Tooling and Measurement systems.

7.5 Tooling Identification & Ownership

7.5.1 All tooling and materials which Solero Technologies furnishes either directly or indirectly to Supplier or which Solero Technologies buys from or gives reimbursement to Supplier in whole or in part (collectively, “Solero Technologies' Property”) will be and remain the property of Solero Technologies and be held by Supplier on a bailment basis. Supplier will sign or authorize Solero Technologies to sign on its behalf any documents deemed necessary by Solero Technologies to be filed with Federal, State or Local officials to record Solero Technologies' title and interest in Solero Technologies' Property. Supplier will not sell, lend, rent, encumber, pledge, lease, transfer or otherwise dispose of Solero Technologies' Property. Furthermore, Supplier will not assert or permit any person claiming an interest through Supplier to assert any claims of ownership to or any other interest in Solero Technologies' Property.

7.5.2 The Supplier will clearly mark or tag tooling and/or dedicated measurement devices

and associated materials, as appropriate, with “Property of Solero Technologies.”

7.5.3 In certain instances, the Supplier will be required to mark or tag the tooling with the additional note, “Property of (OEM (Original Equipment Manufacturer))” as directed.

7.5.4 The Supplier will permanently mark the tooling with the part number, which the tool is intended to produce.

7.5.5 If directly marking the tool is not practical, an identifying mark will be made, and a corresponding record will be maintained that defines the corresponding part number to the mark. This record will be maintained for the life of the program.

7.5.6 A descriptive breakdown of each of the various components that make up the tooling and/or measurement devices, the size and type of equipment the tooling is designed for, proof of expenditures, as well as photographic evidence of the completed tooling and/or measurement devices must be submitted on the “Supplier Tooling Data” sheet GSM-F026 to the appropriate purchasing representative prior to PPAP. Additional information may be required, dependent upon specific customer needs.

7.5.7 The tooling and/or measurement devices must be stored and handled in a manner to avoid damage and deterioration.

7.5.8 Any Supplier logo or other identifying mark placed in a tool/die that results in a supplier logo on the end part is prohibited unless otherwise approved by Solero Technologies in writing.

Section #8 Prototypes

8.1 General

In most programs, prototypes are required to verify the design concepts. The requirements listed below apply to all Suppliers who have been issued a prototype order.

8.2 Submission Requirements

The following items may be required with each prototype shipment. The specific details are to be defined by the purchasing location. As a guideline, the purchasing location may require information to be submitted on the Prototype Samples Submission Form (GSM- F017).

8.2.1 Solero Technologies Drawing

- Include a copy of the approved Solero Technologies drawing supplied with the purchase order.
- If the drawing is not pre-numbered by Solero Technologies, number the print to coincide with the dimensional report.

8.2.2 Minimum inspection requirements are defined in the table below. Additional quantities may be negotiated prior to purchase order release.

Description	Frequency	Comments
100% layout	3pc / lot	applies to all print dimensions and notes except reference and basic dimensions
All C1 dimensions	20pc / lot	for lot size less than 20 pcs, 100% inspect
All C2/C2.1 dimensions	20pc / lot	
All C3 dimensions	100%	
All C4 dimensions	100%	

- The measured samples must be serialized
- Part number and revision level must be listed on the print. If no revision level is listed, write “none.”
- The method of inspection (CMM (Coordinate Measuring Machine), Calipers, Micro Height, etc.).
- All dimensions MUST meet the print specification or have a written and signed deviation by Solero Technologies attached. Solero Technologies must approve the deviation prior to shipment of parts.
- Out of specification dimensions must be clearly identified. The preferred method would be to highlight the dimension with a note “refer to attached deviation.”
- Any specific requirements, details or deviations should be identified in the comments/remarks section.

8.2.3 Capability Studies as required

8.2.4 Material Certification as required

8.2.5 Gauge Analysis as required

8.2.6 The shipment of prototype parts may also require the submission of material test results and preliminary Failure Mode and Effects Analysis (FMEA), control plans, or any

other item specified by the appropriate Solero Technologies representative.

8.2.7 For injection molded parts the supplier must provide evidence in the form of machine set up, and process parameter verification that the material was used in accordance with the manufacturer's recommendations. Refer to the part drawing for any additional evidence that must accompany prototype submissions such as proof of crystallinity, viscosity number degradation, etc…

8.3 Package Identification to be Defined by Receiving Location

8.3.1 Reference Appendix A-3 for shipping label information

8.4 Prototype Tooling

8.4.1 Unless otherwise specified by the Solero Technologies representative, the Supplier will retain the prototype tooling at their facility. All prototype tooling paid for by Solero Technologies is the property of Solero Technologies and will be marked accordingly. The Supplier will provide such tooling upon Solero Technologies' request.

Section #9 Quality Requirements

9.1 General

9.1.1 Quality Management System

- All Suppliers must comply with the Solero Technologies quality expectations defined in this section. Suppliers are fully responsible for the quality of their products. An effective Quality Management System must be in place to ensure Zero Defects. Suppliers and their subcontractors are required to work in accordance with the requirements described in ISO 9001 and be working toward IATF 16949 and all AIAG & VDA reference documents, including: Production Part Approval Process, Failure Mode and Effects Analysis, Advanced Product Quality Planning, Measurement Systems Analysis, and Statistical Process Control. Latest certification(s) must be on file with Solero Technologies. Suppliers are required to hold subcontractor's latest certification(s) on file and submit to Solero Technologies upon request. These requirements are mandatory unless otherwise agreed to in writing by Solero Technologies or by written permission from the Customer given to Solero Technologies. In some cases, Solero Technologies will provide 2nd party certification through the annual Supplier audit process. In this case, Solero Technologies reserves the right to charge the Supplier for this certification. Suppliers are also responsible for assuring their subcontractor's PPAPs are approved and are under a controlled system of evaluation and review. These records must be made available for Solero Technologies examination when requested.

9.1.2 Customer Specific Requirements

It is the responsibility of the Supplier to:

- Pass down all applicable statutory and regulatory requirements (Team Feasibility Commitment) as well as special product and process characteristics to their Suppliers and require the Suppliers to cascade all applicable requirements down to the supply chain to the point of manufacture
- Certified to ISO 9001:2015 "Quality management systems – Requirements"
- Comply with IATF 16949:2016 "Fundamental quality management system requirements for automotive production through second party audits"

9.1.3 Approved Supplier Status

- All Suppliers currently supplying direct or indirect material to Solero Technologies are approved Suppliers. Approved Supplier lists are maintained Solero Technologies' Approved Suppliers are those we currently purchase from, but it is possible they are not approved for new business awards. Reference the Enterprise Approved Sourcing List in section 15 for sourcing criteria.

9.2 Commitment to QSB

Quality Systems Basics is a set of basic quality initiatives that when successfully implemented will reinforce the current management system. It does not replace the existing management system but is intended to strengthen it. Experience has demonstrated a direct correlation between QSB implementation and improved Supplier performance metrics. For this reason, it is the expectation of Solero Technologies that Suppliers will embrace this set of quality principles. Supplier's commitment to QSB will be considered when awarding new business.

9.2.1 QSB consists of ten basic key elements:

- Quality Awareness
- Level 1 Layered Audits
- Level 2 & 3 Layered Audits
- Error Proofing Verification
- Fast Response
- Control of Non-conforming Product
- Standard Operator Training
- Risk Priority Number (RPN) Reduction
- Standardized Work
- Lessons Learned

9.2.2 Solero Technologies has developed training materials to assist in implementation of the first five elements. A self-assessment, the Supplier QSB Assessment Form (GSM-F010), is available for these five elements and should be used to gauge progress toward implementation.

9.3 Supplier Assessments

9.3.1 New Suppliers

- A Solero Technologies Supplier Representative will provide access to the Solero Technologies Supplier Manual and may request completion of the Solero Technologies Supplier Questionnaire (GSM-F001) and Technical Site Assessment Form (GSM-F002). This assessment includes quality systems and financial risk assessments. Solero Technologies may also complete an on-site Supplier Quality Systems Assessment. Once completed and submitted, Solero Technologies will determine whether the candidate Supplier has the required quality systems, technical core competencies, program management and financial stability to be awarded new business. Regional or customer specific requirements may apply. In these cases, Solero Technologies reserves the right to conduct additional investigations prior to business award (i.e.: potential analysis and process audits according to VDA 6.3).

9.3.2 Existing Suppliers

- Depending on a risk analysis which includes safety and regulatory requirements, the Supplier Scorecard rating and the QMS certification level, Solero Technologies may conduct an on-site assessment using the VDA 6.3 Process Audit form or the Technical Site Assessment form (GSM-F002). Once completed, Solero Technologies will determine whether the existing Supplier has the required quality systems, technical core competencies and financial stability to be awarded additional business.

9.4 Advanced Product Quality Planning (APQP)

9.4.1 General

- Solero Technologies requires all Suppliers to take ownership of and manage the APQP process. A Solero Technologies Representative may initiate the quality planning process with Suppliers during the APQP Kick-Off meeting via an APQP Kickoff Checklist (GSM-F019). Suppliers subsequently have an obligation to establish a cross-functional team to manage the Product Quality Planning process.
- Solero Technologies will provide Suppliers with the prototype/pre-production, PPAP and production requirements and dates as noted in the due dates of the APQP form. Suppliers will be responsible for keeping their product quality planning timelines up to date. Suppliers are required to update their estimated completion dates at frequent intervals or when there is a change that will impact overall program timing.
- Suppliers must require APQP from their sub-contractors and have the records available for review by Solero Technologies.

9.4.2 Off Tool Samples (OTS)

Off tool samples (OTS) may be required before PPAP approval for validations, customer preproduction builds, machine run off, etc. Documentation for these builds should be submitted as part of the APQP process. Unless otherwise directed by Solero Technologies, Supplier shall comply with the following OTS characteristics and information:

- Parts coming from intended serial production tooling
- All dimensional specifications must be 100% according to drawing requirements
- Raw material according to print specification
- Parameters to produce the parts should be documented and provided to Solero Technologies upon request
- 100-piece capability study for designated characteristics (based on 20 subgroups of five or 25 subgroups of four) per Automotive Industry Action Group (AIAG) statistical process control (SPC) and production part approval process (PPAP) documents. Some customer specific requirements may require additional samples and subgroups based on statistical significance.
- Full-dimensional layout will be required unless waived in writing by Solero Technologies APQP representative.

- There may be additional plant-specific or customer-specific requirements that will be communicated through the APQP phase

9.4.3 APQP Status Reporting

- From the time Solero Technologies awards business until the Phase 5 Gate Review, the Suppliers are required to update the APQP statutes at frequent intervals (minimum monthly or as otherwise agreed).

9.4.4 APQP Review Meetings

- Once a Supplier has been awarded business, the appropriate representative of Solero Technologies may establish with the Supplier a plan for visiting their production facilities to allow Solero Technologies, and sometimes it’s Customer, to review and assess the Supplier's APQP process and launch readiness.

9.5 We Are Ready Process Audit

9.5.1 General

- As a verification of the Supplier's production readiness, Solero Technologies may require completion of the We Are Ready Process Audit based on form (GSM-F004) prior to Start of Production (SOP). All instructions relative to the form are contained on the Instructions tab of the form file.

9.5.2 Sequence of We Are Ready Events

- Solero Technologies determines the level of We Are Ready (WAR) activity required.
- If required, Supplier conducts WAR self-audit, completes forms along with supporting documentation, and returns to Solero Technologies.
- Solero Technologies may require formal WAR presentation meeting/audit.
- Solero Technologies and Supplier agree on corrective action plan, if required. All temporary and permanent corrective actions must be in place prior to start of series production (all yellow items must be completed, and all red X's must be eliminated on the Supplier We Are Ready Cover Sheet).

9.5.3 Supplier Responsibility

- Complete We Are Ready Check Sheet Form.
  - All equipment and processes must have been verified at documented capacity rates and be ready to run production at the peak quoted capacity rate. Equipment and tooling should be de-bugged, and an in-house validation of the process completed.
  - Operators and support personnel must be trained in the requirements of the current/updated Control Plan, equipment, and gauges.
  - Process capability, operator instructions, and Gauge R&R studies must be completed and documented. Where applicable, this should include bias, stability, and linearity. This must also be checked for all Sub Suppliers.
  - Material handling systems, packaging, and routing must be in place.
- Perform Run-At-Rate Requirements. Supplier's operation schedule shall meet the weekly volume requirements of Solero Technologies and shall be no more than five days per week unless otherwise agreed in writing by Solero Technologies.
- Complete WAR Cover Sheet Form.

9.5.4 Solero Technologies Responsibilities

- Determine if the audit will be completed on-site at the supplier's manufacturing location.
- Become familiar with Supplier manufacturing process.
- Review WAR self-assessment completed by Supplier: Cover Sheet, Check Sheet, and Run-At-Rate.
- Identify any items not accurately evaluated.
- Conduct Run-At-Rate if required.

9.5.5 Documentation

- Significant amounts of documentation can be required for completion of a WAR process audit. The following is not a complete list. However, it is representative of the types of data that may be required: PFMEA, gauge R&R studies, capability

studies, training plans, customer critical features recognition, work instructions, in-process handling, environmental considerations, dunnage, etc.

9.6 Production Part Approval Process (PPAP)

9.6.1 General

- Suppliers must comply with the latest edition of the AIAG Production Part Approval Process reference manual, VDA Standards, ISO 9001 and IATF 16949 and with all requirements outlined in this Supplier Manual. In addition, certain Customer specific requirements could apply.

9.6.2 Detailed PPAP Submission Requirements

- Please make note of these customer specific requirements for each PPAP element. All PPAP requirements in this manual shall apply to each submission unless waived by the Solero Technologies Supplier Representative. Non-compliance could result in rejection of the PPAP and issuance of a Complaint on Production Material (CPM) for corrective action. GSM-F032 Supplier PPAP Checklist should be used for any products in which a PPAP is submitted to Solero Technologies.
- The PPAP package will be delivered to Solero Technologies with the evidence needed organized and aligned with each section as shown below for easy identification and review.

- Design Record
  - PPAP shall include a copy of the print and related specifications and with the individual requirements documented on the prints and specifications being identified and aligned with all other PPAP documentation. On the prints and specification, this can be done by using a “bubble” or similar method.
  - PPAP shall include a Cover sheet with any invoked specifications and revision level
  - Invoked specifications can be identified by their specification number, section, and sub-section, or by other identification if the linkage to other PPAP documents can be made

- Engineering Change Documentation
  - Any pending changes shall be listed and included in PPAP submission
  - Pending changes must be bubbled or identified to show linkage with the other PPAP documentation

- Customer Engineering Approval
  - All deviations must have prior engineering approval before submitting PPAP through an approved electronic Supplier Change Request (eSCR) submission.
  - Deviations must align with Design Failure Mode Effects Analysis (DFMEA), Process Flow Diagram, Process Failure Mode Effects Analysis (PFMEA), and Control Plan

- Design Failure Mode Effects Analysis (DFMEA)
  - If the supplier is design responsible, the PPAP shall include documented

evidence of Solero Technologies engineering approval of the supplier DFMEA.

- If the supplier is not design responsible, evidence of a DFMEA review with Solero Technologies Engineering shall be included. The evidence shall include at least the date and attendees of the DFMEA review and the completed action plan from the review.

- Process Flow Diagram (PFD)
  - PFD shall have alignment with all process design documents (Control Plan, Failure Modes and Effects Analyses (FMEA), Work Instructions, etc.)
  - PFD shall include all outside and subcontracted processes
  - PFD shall include all operations, from incoming material and components to shipping
  - PFD shall show dunnage, rework/reclaim/repair processes, inspection/quality gates, and handling and storage
  - PFD shall show where all product characteristics from the product design record are fabricated, inspected, or otherwise modified. They shall be aligned with the design record through the identification process used in section 1.a above.
  - All product characteristics with a Special Characteristic Rating (critical characteristic) or from the GSM-F024 shall be documented with the proper symbols

- Process Failure Mode Effects Analysis (PFMEA)
  - PFMEA content shall be compliant with the latest Automotive Industry Action Group (AIAG) FMEA manual edition
  - Severity, Occurrence and Detection shall be according to the AIAG FMEA manual
  - Adequate manufacturing controls shall be documented for each product dimension, specification, other product design record, or product quality related requirements. They shall be aligned with the design record through the identification process used in section 1.a above
  - All product characteristics with a Special Characteristic Rating (critical characteristic) or from the GSM-F024 shall be documented with the proper symbols
  - Consideration of poka-yoke, mistake proof, or undefeatable 100% inspection implementation for failure modes with severity 8, 9 or 10 shall be documented in the recommended actions if not already incorporated in the PFMEA.
  - Actions for Risk Priority Number (RPN) reduction required if severity is ranked 9 or 10 and for the top three overall RPNs shall be documented in the recommended actions
  - Consideration of usage of poka-yokes, mistake proofs or undefeatable 100% detection for interface dimensions (e.g., press diameters, splines, weld diameters, pilot diameters, threaded holes, critical to function characteristics) shall be documented. These can be reviewed with supplier quality in a Special Characteristics list GSM-F024 review
  - All actions shall include responsible name and commitment closure dates

- PFMEA shall have alignment with all process design documents
- Please ensure failure modes and controls are equally rated for all similar characteristics
- All operations from incoming material to shipping are included. This shall also include risks from subcontracted processes, storage, and handling

- Control Plan (CP)
  - CP format shall be compliant with the AIAG Advanced Product Quality Planning (APQP) & PPAP latest edition manuals
  - CP shall contain manufacturing controls for each product characteristic from the product design record or process requirements from PFMEA. They shall be aligned with the design record through the identification process used in section 1.a above
  - CP shall have controls for all product characteristics with a Special Characteristic Rating (critical characteristic) using the proper symbols
  - CP shall document robust and real reaction plans to protect the supplier and Solero Technologies from nonconforming parts and quality spills. Blanket statements related to reaction of non-conforming material are not acceptable
  - CP must be reviewed to ensure all fields contain appropriate data (tolerances, specs, links to standards, etc.)
  - CP shall include full gage descriptions to show linkage to Measurement System Analysis (MSA)
  - Finished product characteristic spec, dimension and tolerances shall match the Solero Technologies design record. When used, control limits shall also clearly be documented
  - Inspection frequencies shall be defined according to PFMEA risk analysis
  - CP shall have alignment with all the product and process design documents
  - The CP shall document controls for all operations from incoming material to shipping including subcontracted processes, storage, and handling

- Measurement System Analysis (MSA)
  - Follow AIAG MSA manual
  - MSA shall be completed for all dimensions checked on the control plan, all requirements designated with a Special Characteristic Ratings (critical characteristic), all requirements defined as needing statistical control, or requirements identified during the establishment of the completion of GSM-F024, regardless of if feature is measured variably or by attribute.
  - Measurement methods for each study shall match the ones defined in the Control Plan and follow these guidelines:
  - A 10X3X3 Crossed or Nested study must be used for variable measurements that contain a distribution of samples across the tolerance range of the feature and gage interaction.
  - A 50X3X3 study must be used for attribute measurements and must contain boundary samples.
  - Operators performing the actual inspections shall be part of the study

- And New Distribution Capability (NDC) value of 5 or greater is required for gage R&R studies
- Visual inspections require an MSA study
- MSA for families of gages are only allowed upon written approval from Solero Technologies Quality Manager and a copy of the waiver must be included in the PPAP
- ANOVA method is preferred
- Minitab analysis is preferred
- Any studies that do not meet AIAG MSA standard or these requirements shall have a containment and action plan to address the noncompliance.

• Dimensional Layout

- PPAP shall include one dimensional layout report for each mold, cavity and manufacturing line or value stream to capture all variation combinations
- Each layout shall contain a minimum of 6 pieces, serialized to align with all reports and sent with the PPAP
- Additional samples or sample pieces should be included if destructive testing is needed to confirm heat treatment, crystallinity, chemical composition, or other product properties.
- Layout shall include data for all features, notes, and callouts on print and identified from the design record specifications (this includes S-, TSES-, or TS-Specs, ISO, ASTM, or others e.g., TSES-1000). Data shall be aligned with the identification process used in section 1.a above
- Layout shall show conformance or nonconformance for each characteristic evaluated
- Layout report shall not include blanket statements of conformity for any characteristics
- Layout report shall be in the same units as design record
- Any samples that were sectioned for dimensional studies shall also be delivered with dimensional layout samples
- All nonconforming results must have an approved eSCR and corrective action plan upon submission of the PPAP
- For changes processed on the supplier's behalf (e.g., Line Move, Plant Move, Machine upgrade, tool replacement etc.), both before and after changing dimensional layouts are required.
- Note: Characteristics/Dimensions shall be defined by any requirements on the design record print or invoked specifications related to the product that must be measured to be verified, this includes hardness, ID or traceability markings, cleanliness, etc.

• Material Certification & Performance Test Results

- Material certifications shall be confirmed by a third-party qualified laboratory for initial PPAP submission. Second-party certifications from sub-tier suppliers are not acceptable to meet this requirement. Material certifications after initial PPAP can be done by the supplier if it is within the scope of their or their sub-

supplier's qualified laboratory documentation

- All material certifications shall be confirmed by the supplier as conforming or nonconforming to the design record requirements. This includes checking all plastic material post molding properties and pre and post heat treatment material requirements etc.
- Material and performance data must be aligned with the identification process used in section 1.a above
- Any performance requirements documented in the design record through the print or invoked specifications must be completed and provided at the time of the PPAP
- For changes processed on the supplier's behalf (e.g., line move, plant move, machine upgrade, tool replacement etc.), both before and after material certification and performance test results are required.

- Initial Process Studies
  - All design record requirements that have a Special Characteristic Rating (critical characteristic), defined as needing statistical control, or pass-through characteristics identified during the establishment of the GSM-F024 shall have an initial process study completed
  - All studies shall follow current revision AIAG Statistical Process Control (SPC) & PPAP manual requirements
  - Capability studies shall be conducted with production gaging that have acceptable MSA studies
  - The supplier is responsible to perform initial process capability utilizing the appropriate statistical process tools and apply the appropriate assessment criteria as needed (i.e., Normal distribution, non-Normal distribution, Unilateral tolerance, MMC / LMC modifiers)
  - Capability studies shall follow AIAG standard of minimum of 100 data points in a minimum of 25 sub-groups.
  - Once capability is established, the manufacturing and measurement process cannot be changed without prior notification to Solero Technologies through the Supplier Change Process (eSCR) and validation (PPAP with PSW approval).
  - A Cover sheet shall be included to present a summary of all features studied and their resulting capability indices.
  - For changes processed on the supplier's behalf (e.g., Line Move, Plant Move, Machine upgrade, tool replacement etc.), before and after capability studies are required.
  - Raw data must be included in an electronic format (Excel, Minitab, etc.) with each capability study.
  - Minitab analysis of data is preferred
  - Any study not meeting the initial capability expectations will need to be controlled for conformance by 100% inspection (Reference GSM-P001 Supplier Manual section 9.7.2). The inspection process shall be shown to be effective through use of MSA and other criteria agreed to by Solero Technologies Supplier Quality Management personnel.

- Qualified Laboratory Documentation
  - PPAP shall include a copy of current valid ISO/IATF16949 certificates
  - PPAP shall include a copy of all second and third-party certifications that are applicable to generation of the data included in the PPAP showing that the second or third party is qualified to perform the services rendered in completion of the PPAP record.

- Appearance Approval Report (AAR)
  - PPAP shall include an AAR where applicable for product characteristics that are based on appearance such as color, texture, sheen, etc.
  - This is required for all parts that are plated, heat treated, or coated in which variation could affect the manufacturing process at Solero Technologies or the end customer (see section 17 of this document for requirements of boundary samples for these product characteristics)

- Sample Parts
  - Besides samples required within this document, additional quantities of sample parts will be defined within a purchase order from Solero Technologies.
  - If not defined by a purchase order, the default will be 300 pieces minimum to be delivered along with the PPAP documentation.
  - Sample parts shall be from the production run in which samples were produced to generate PPAP documentation
  - Samples will be used for Solero Technologies internal and Solero Technologies customer validation processes.

- Master Sample
  - PPAP shall include a picture of the master samples stored at the supplier.
  - One master sample per mold, cavity, machine, or value stream shall be retained by supplier for entire life of program.
  - Solero Technologies retained master's samples will be selected from samples received with the PPAP submission.

- Checking Aids
  - The PPAP shall include pictures of each part specific checking aid (gages or other measurement devices custom engineered for the product, but not height gages, Vernier caliber, micrometers etc.) used in the control plan. The pictures shall be labeled with the gage number and revision. Work instructions, calibration records and MSA study shall be included.
  - If similar checking aids are being provided by the supplier to Solero Technologies, a copy of the work instructions, calibration records and MSA shall be included for that specific checking aid

- Customer Specific Requirements
  - PPAP shall include signed PSW for any sub-supplier related to final product and

include the GSM-F027 Sub-Supplier Matrix

- PPAP shall include an approved GSM-F012 Packaging Form from Solero Technologies
- PPAP shall include a copy of the MSDS/SDS of any products shipped on or with the product (e.g., Rust Preventatives, Desiccant bags, VCI products etc.)
- PPAP shall include a copy of any boundary samples or instructions for print notes that require non-standard gaging practices (e.g., note related to “no burr allowed” conditions, visual appearance, color, or other broad or generic requirements that are quantified visually, tactilely, or have hard to measure expectations).
- PPAP shall include a copy of any gage correlation studies requested by the supplier on features that the supplier would like to confirm correlation. If no correlation study is conducted before PPAP submission the Solero Technologies measurement method will be the method of record for accept/reject. Rejection of parts at Solero Technologies due to gage correlation will not be reversed or deviated if a valid correlation study was not performed before submission of the PPAP. Please work with Solero Technologies supplier quality management contact to document needed correlation studies prior to PPAP submission.
- Note: Supplying Solero Technologies qualified checking aids, as defined in this manual, can be beneficial to avoid correlation issues.
- GSM-F024 must be completed and included once with off tool sample submissions and finalized for PPAP.
- Any items not meeting capability requirements will need to have alternative detection controls.
- If capability was maintained through use of SPC then SPC program must remain as part of process.
- Contamination and Rust should always be considered as Pass Through Characteristics (PTC).
- All applicable AIAG CQI assessments shall be provided with the PPAP for the supplier and any sub tier suppliers. Applicable AIAG CQI assessments include but are not limited to:
- CQI-9 – Heat Treatment
- CQI-11 – Plating System Assessment
- CQI-12 – Coating System Assessment
- CQI-14 – Consumer Centric Warranty Process
- CQI-15 – Welding System Assessment
- CQI-17 – Soldering System Assessment
- CQI-19 - Sub tier Supplier Management
- CQI-23 – Molding System Assessment
- CQI-27 – Casting System Assessment
- Evidence of the auditor's qualification to perform the applicable CQI audits shall also be provided.
- All design record requirements that have a Special Characteristic Rating (critical characteristic), defined as needing statistical control, or pass-through characteristics identified during the establishment of the GSM-F024 must be in

EPC Plan as well as controls for any other issues identified as risks during the development of the process.

- All PPAP submissions shall include an Early Production Containment (EPC) Plan
- EPC Plan shall be established with no defects detected to exit. The length of time must be established to protect Solero Technologies for 6 shipments minimum or more for critical products or ones with developmental issues.
- EPC Plan shall be documented outside of normal Control Plan for ease of understanding the additional controls
- Where practical, EPC checks will be completed in a designated area, separate from production (off-line) with verified secondary gaging
- PPAP shall include executed GSM-F018 Early Production Containment Commitment
- See Supplier Manual GSM-P001 Section 9.6 for more details
- PPAP shall include an initial GSM-F004 WAR Self-Assessment that will be verified by supplier quality if needed
- PPAP shall include GSM-F028 Capacity Run @ Rate
- For changes processed on the supplier's behalf (e.g., Line Move, Plant Move, Machine upgrade, tool replacement etc.), before and after change Run @ Rate studies are required.
- PPAP shall include GSM-F025 Supplier Tooling Checklist and GSM-F026 Supplier Tooling Data for all customer owned tooling.
- PPAP shall include a copy of the Solero Technologies Supplier Manual Training certificate for the supplying location
- PPAP shall include a copy of the Plant Manager's AIAG Supply-Chain sustainability training (Reference Section 4.3)
- PPAP shall include a printout of the IMDS submission for the product

• PSW

- All PSW fields must be filled with accurate information. PPAPs with incomplete PSW will be rejected without further review.
- IMDS submission should be submitted to customer number 2359 (Solero Technologies)

9.6.3 IMDS & CAMDS and CCC Requirements

• International Material Data System (IMDS)

- Suppliers are required to provide material data in electronic format per the requirements defined in the International Material Data System (IMDS). For specifics and further information relating to this requirement, visit http://www.mdsystem.com. Suppliers are also responsible for the on-time provision of all IMDS relevant material data for their products and the products of their supply chain.

• China Automotive Material Data System (CAMDS)

- China Automotive Material Data System (CAMDS) is a product data management platform for implementing the "Recycling and Reutilization Policy of Automotive Product", carrying out the certification of recoverability rate and prohibited/restricted substance and improving the recoverability rate

of China automotive material. Therefore, any product shipped to Solero Technologies for use in the China market may be required to satisfy this requirement. More information can be found on the following website: http://www.camds.org/camds_en.

- Chinese Compulsory Certification (CCC)
  - The China Compulsory Certificate mark, commonly known as CCC Mark, is a compulsory safety mark for many products sold on the Chinese market. It became effective on May 1, 2002. It is the result of the integration of China's two old compulsory inspection systems, namely "CCIB" (Safety Mark, introduced in 1989 and required for products in 47 product categories) and "CCEE" (also known as "Great Wall" Mark, for electrical commodities in 7 product categories), into a single procedure.
  - Solero Technologies Suppliers and External Providers that produce product for usage in China may be required to comply with this regulation. External Providers can obtain information relating to this requirement at the following internet site: http://www.cqc.com.cn.

9.6.4 Submission Disposition and Notification

- There are three possible outcomes of a Supplier PPAP Submission:
  - **Full Approval**—Parts are fully approved for series production. Solero Technologies Material Control will specify proper delivery and release requirements.
  - **Interim Approval**—Parts are conditionally approved for a limited time or limited quantity. Note—in this case, a Documented Action Plan is required.
    - Action plans will be documented via a CPM for tracking and closure
    - Deviations prior to PPAP submission with approved eSCR will result in an Informal CPM
    - Deviations after PPAP submission will result in a Formal CPM
    - The action plan will replace 8D requirement for CPM
  - **Rejected**—Parts may not be used for series production and tooling purchase orders cannot be paid. Note: In this case, a CPM may be issued against the Supplier.
- Solero Technologies will notify Supplier in writing when their PPAP submission has been approved or rejected. The documented format of notification will be a countersigned Part Submission Warrant (PSW).
- In some cases, PPAP approval requires validation testing and signatory approvals from Solero Technologies and their Customer(s) prior to notifying the Supplier.

9.6.5 Interim Approval

- Suppliers must submit a completed Supplier Change Request (SCR) (GSM-F011) in cases where full PPAP approval cannot be obtained. The reasons for this request may include, but are not limited to:
  - Out of tolerance condition(s)
  - Incomplete PPAP submission requirements
- If an Interim Approval is granted, a revised PSW must be resubmitted with appropriate PPAP documentation before the Interim PPAP expiration date. If an SCR is submitted with an Interim PPAP, both must expire on the same date.

9.6.6 PPAP Requirements Waiver

- These requirements can only be deviated by written approval (outside of any related eSCR approvals) of the Solero Technologies Supplier Quality Management Supervisor or Quality Manager and evidence of this approval must be included in Element 17 of the PPAP.

9.6.7 Regular Re-Qualification

- To maintain validation that PPAP documentation matches current process practices and capability, ***Suppliers will agree to an annual layout plan or as deemed necessary by the BU for all Solero Technologies production parts / models or production raw materials***. Suppliers are required to have the appropriate requalification documentation available for submittal or review upon the request of Solero Technologies.
- Suppliers are required to obtain requalification documentation from their Sub-Suppliers for submittal or review upon request of Solero Technologies.

9.6.8 Shipping and Labeling Instructions

- See appendix A-3 for labeling requirements for PPAP material

9.7 Early Production Containment (EPC)

9.7.1 General

- Unless otherwise directed, this procedure applies to all Suppliers to Solero Technologies. It is to be used for all pre-production and production requirements that require the Production Part Approval Process, and whenever mandated by Solero Technologies on any parts that present significant risk to a Solero Technologies plant. e.g., at annual shutdown, model year change, etc.

9.7.2 Definition and Purpose

- The purpose of EPC is:
  - To reduce the risk to Solero Technologies and to protect the Supplier through increased detection
  - To document Supplier efforts to gain control of its processes during start-up and launch so that any quality issues that may arise are quickly identified and corrected at the Supplier's location and not at the Customer's manufacturing location
  - To increase involvement and visibility of the Supplier's top management
- EPC requires a documented launch or pre-launch control plan that is a significant enhancement to the Supplier's production control plan. This EPC Plan will raise the confidence level to ensure that all products shipped will meet Solero Technologies expectations. This is an extraordinary launch measure. The EPC Plan will also serve to validate the production control plan. The EPC Plan should take into consideration all known critical conditions of the part as well as potential areas of concern identified during the Production Part Approval Process. EPC serves to proceduralize the Pre-Launch Control Plan referred to in section 3.7 of the Chrysler, Ford, & GM Advanced Product Quality Planning and Control Plan Reference Manual. Note, this procedure does not provide authorization to ship nor is it a shipping schedule.
- During the APQP Kick-Off Meeting, a completed EPC Commitment Form (GSM-F018) will be signed by the Supplier.

9.7.3 Supplier Responsibility

- Establish a containment process that has the following elements:
  - Identification of the person responsible for the containment process.
  - Development of an EPC Plan consisting of additional controls, inspection audits and factors in the production process (set-up, machinery, fixture, tooling, operator, material/components, preventive maintenance, climate). Additional controls could include:
    - Off-line, separate, and independent check from the normal production process
    - Increased frequency/sample size of receiving, process, and/or inspections
    - Defined/coordinated sub-Supplier containment and/or sub-Supplier support/audits as required
    - Increased verification of label accuracy
    - Increased error proofing validation
    - Increased involvement and visibility by top management, including increased Management Internal Audits

- Other items as specified by Solero Technologies or the Supplier
- Prompt implementation of containment and corrective action if nonconformances are discovered

- Document the EPC Plan (including functional testing and error proofing, if applicable) using the Control Plan format referenced in the Advanced Product Quality Planning and Control Plan Reference Manual, respectively, as mentioned in IATF 16949 appendix A. The development and documentation of the EPC Plan will occur during the Advanced Product Quality Planning Process. The EPC Plan is not a substitute for the Production Control Plan but is over and above the Production Control Plan and is used to validate it.
- To indicate compliance with the EPC requirements, Suppliers will attach to each shipment label a special marking as agreed to between the Supplier and Solero Technologies.

9.7.4 Solero Technologies Responsibility

- The EPC quantity/timeframe will be agreed to with the Supplier and based on Solero Technologies' Customer requirement.
- Review and approve the EPC plan and communicate approval to Supplier.

9.7.5 Exit Criteria

- Supplier will be eligible to Self-Exit Early Production Containment provided it meets the quantity/timeframe agreed to with no discrepancies found at Supplier or Solero Technologies. In the event the self-exit criteria has been met but the EPC plan continues to identify non-conformances, the EPC plan must be kept in place until process controls and capabilities have proven effective, and the Production Control Plan is validated to Solero Technologies' satisfaction.

9.7.6 Consequences of Shipping Non-Conforming Material

- Failure to execute EPC may result in Controlled Shipping.
- Shipment of discrepant material during the specified EPC period or any other time may result in Controlled Shipping.

9.8 Process Capability and Monitoring

9.8.1 Defined Part/Process Characteristics

- In addition to certain Customer Specific Requirements, certain characteristics can be deemed as important, and will require increased monitoring to ensure the quality of the parts. Those characteristics may be designated as special, significant, high impact, major, or other, based on specific Solero Technologies site requirements.
- The appropriate Solero Technologies representative will identify these specific requirements, or characteristics either by direct communication, specification, or product drawing.

9.8.2 Control of Above Defined Part/Process Characteristics

- Statistical techniques must be used to maintain a state of control and to improve the process capability on defined part/process characteristics.
- Unless otherwise specified by Solero Technologies, a minimum 1.67 Ppk index is required for designated characteristics at initial PPAP submission. For ongoing series production, a minimum 1.33 Ppk index is required.
- Suppliers must maintain the statistical data for all designated characteristics and must make the data available to Solero Technologies upon request. The Supplier may also be required to submit this data periodically to Solero Technologies when requested.
- Unless otherwise specified by Solero Technologies, if the process does not meet the required capability target, the Supplier must supply a containment plan describing the 100% inspection method that prevents out of specification parts from being shipped to Solero Technologies, and a Corrective Action Plan for capability improvement.
- Solero Technologies' representative may designate additional requirements.
- Lot traceability shall be maintained by the Supplier, unless otherwise specified by Solero Technologies (see section “9.10 Traceability Requirements” for specific details).

9.8.3 Special Process Requirements

- Solero Technologies may require Suppliers with special processes to complete documented evidence for Solero Technologies and its customers such as AIAG CQI, VDA 6.3, etc. The goal of this standard is the development of a special process management system providing continuous improvement, defect prevention and reduction of variation and waste in the supply chain. Suppliers may be required to perform annual self-assessments. Solero Technologies reserves the right to complete its own on-site assessment.
- Heat Treatment processes are always critical to function and are a core aspect of Supplier’s manufacturing processes. Deviations to a heat treatment process have a considerable impact on the quality and reliability of our products. Solero Technologies puts special focus into the approval of heat treatment processes at our Suppliers or subcontractors. All heat treatment operations where Solero

Technologies products are produced are required to follow the automotive standards (e.g., AIAG CQI-9) and to comply with Solero Technologies Engineering and Quality Standards listed on the drawing specifications. A Solero Technologies Heat Treatment representative may require performing heat treatment audits at Supplier and/or subcontractors. Heat treatment processes must always be released part-specific and furnace-specific.

9.9 Complaint on Purchased Material (CPM)

9.9.1 General

- Solero Technologies will immediately notify the Supplier if non-conforming material is found. Upon verification that Solero Technologies has received a non-conforming product from a Supplier, Solero Technologies will issue a Complaint on Purchased Material (CPM) to the Supplier.
- Evidence of defects such as digital photos will be provided when possible. A sample of the defect may be sent to the Supplier upon request.
- Solero Technologies will issue a CPM to the Supplier regardless of the disposition and/or

  use of the non-conforming material and improper PPAP submissions. Solero Technologies will apply only the number of non-conforming parts to the Parts per Million (PPM) calculation if containment actions are forwarded within 3 days and sort results are forwarded within 10 days.
- Solero Technologies will not issue a CPM and defective parts will not be counted toward

  the Supplier's PPM number, if the Supplier:

  - Requests and gets approval of a Supplier Change Request (GSM -F011) or other equivalent approval to cover 'out of print' conditions **prior** to shipping parts. See **Supplier Change Management** section for deviation request guidelines.
  - Notifies Solero Technologies of a potential quality concern prior to the concern being found by Solero Technologies and removes or sorts the suspect material and replaces it with "certified" material.
  - For these cases, an informal CPM will be issued to track the effective implementation of corrective action to avoid future risk and disruptions from use of deviated from shipment of non-compliant parts.

9.9.2 Containment Actions

Upon receiving a CPM from Solero Technologies, Suppliers are required to immediately sort 100% of their product, including product at the Solero Technologies plant(s), in transit, in warehouses, at the Supplier's production facility, etc., and to ensure that the Solero Technologies assembly plants are supplied with enough certified stock to assure no disruptions to production. Material must be labeled as certified for the specific defect, or defects, for the next three shipments unless otherwise directed by Solero Technologies.

- Depending on the continuity of supply situation, the following may occur:
  - High inventory at Solero Technologies—Supplier may choose to have product returned or Supplier may sort at Solero Technologies
  - Low inventory at Solero Technologies—Supplier must come on-site to Solero Technologies to sort for defective product
  - Extremely urgent (possible line down)—Solero Technologies will take the appropriate

action and the Supplier will be responsible for all costs incurred

- NOTE: Some of the Solero Technologies production facilities do not allow sorting of purchased material to take place on-site. Suppliers must plan for transporting non-conforming material from Solero Technologies, sorting the material, re-packaging, creating new packing slips with accurate quantities, affixing new bar code labels as needed, and arranging transportation of certified stock back to Solero Technologies

- Solero Technologies will contact the Supplier for authorization to return the material at Supplier's expense.
- Solero Technologies will not manage Supplier sorting using an outside source. Suppliers

  are responsible for outside sources and must make all arrangements to ship parts between Solero Technologies and outside source. Supplier will also be responsible for inspecting and monitoring the quality of sorted parts.
- Defective parts returned to the Supplier, reworked, and returned to Solero Technologies

  may still be counted toward the Supplier PPM. Reworked parts must meet specifications. The repairing of parts is not permissible without prior written authorization from Solero Technologies.
- Any gaging, rework or repair process not already documented in the supplier's control plan will require notification through eSCR and may require PPAP submission and approval by Solero Technologies and/or our final customer. Please seek the Solero Technologies supplier quality management engineer for further guidance.
- The Supplier is responsible for reporting accurate sorting results and requesting adjusted defect quantities when appropriate. This can have an impact on the Supplier's PPM calculation.

9.9.3 8-D Reports

- General
  - The Supplier will respond to CPMs by using the Solero Technologies 8-D Problem Solving Form (GSM-F007) or other form approved by appropriate Solero Technologies personnel. The 8-D documentation will be submitted in response to each CPM, unless otherwise agreed to by the appropriate Solero Technologies representative. E-mail is the preferred method of response.
- Initial Submission
  - Solero Technologies must receive the initial 8-D response within 24 hours of notification. The 3-D report, with the containment action taken and initial sort results found, must be submitted within 48 hours and the 5-D report must be submitted within 14 days. The 5-D report must contain the definition, planning and implementation of the long-term corrective action items. The above deadlines apply, unless otherwise specified (e.g., if a customer requires stricter deadlines such as 5-D closure within 7 days instead of 14 days, Solero Technologies may require a faster response from the Supplier).
- Final Submission
  - Suppliers must submit the final 8-D Problem Solving Form for approval and closure as soon as practical, but no later than 30 days from the CPM issuance date. The Supplier may request approval for an extension of the 30- day deadline but must do so prior to the original deadline. Requests should be made to the appropriate representative of Solero Technologies.

- Approval and Closure
  - The appropriate Solero Technologies representative prior to closure of a CPM must approve a Supplier's final 8-D Report. Any 8-Ds open beyond 30 days may negatively impact the Supplier's performance rating (see **Supplier Performance Metrics** section).
  - If the 8-D identifies a change to the process or part, the Solero Technologies Change Management requirements MUST be followed (see **Supplier Change Management** section).
- Supplier may be requested to present their corrective actions on-site at the Solero Technologies Facility.
- Solero Technologies and its Customers reserve the right to verify product conformance to the requirements at the Supplier's and their subcontractor's plants.
- Verification of the implemented corrective action on-site at the Supplier may be accomplished during subsequent visits.
- If Corrective Actions take more than two (2) weeks to implement, a progress report may be required.
- When the corrective action is completed and verified to be effective, the Solero Technologies 8-D Champion is responsible for approving the 8-D closure and notifying the Supplier's quality contact of the closure.

9.9.4 Controlled Shipping

- Solero Technologies may determine that special measures are required to ensure adequate quality and delivery performance. The costs related to these measures, including but not limited to Controlled Shipping, will be at the Supplier's expense.
- Controlled Shipping is a requirement by Solero Technologies for a Supplier to add a redundant inspection process for sorting of a specific non-conformance, while implementing a root cause problem-solving process. The redundant inspection is in addition to normal controls and should be completed in a controlled area. Submission of the Incident Reporting Chart (GSM-F008) showing inspection results is required. The data obtained from the redundant inspection process is critical as both a measure of the effectiveness of the secondary inspection process and the corrective actions taken to eliminate the initial nonconformance.
- Solero Technologies will notify the Supplier they have been placed on Controlled Shipping. Two levels of Controlled Shipping exist:
  - Level 1 includes a problem-solving process as well as a redundant inspection process. The Supplier's employees at the Supplier's location enact the inspection process to isolate the Customer from receipt of non- conforming parts/material.
  - Level 2 includes the same processes as Controlled Shipping – Level 1, with an added inspection process by a third-party representing Solero Technologies or Solero Technologies' Customer's interests specific to the containment activity. The third party is selected by the Supplier, approved by Solero Technologies or Solero Technologies' Customer and paid for by the Supplier. Suppliers may select the third party from an approved listing maintained by Solero Technologies or Solero Technologies' Customer.
- Other measures may be required if Level 2 controls are not effective. Criteria for application for Controlled Shipping – Level 1 or 2:
  - Solero Technologies will make the determination whether the Supplier can

effectively

correct the non-conforming material situation through the normal CPM 8-D process and isolate Solero Technologies or Solero Technologies' Customer from the problem. One or several of the following issues may be cause for Supplier to be considered for implementation of Controlled Shipping:

- Repeat CPMs
- Supplier's current controls are not sufficient to ensure conformance to requirements
- Duration, quantity, and/or severity of the problem
- Internal/external Supplier data
- Controlled Shipping – Level 1 failures
- Major disruptions
- Quality problem in the field (i.e., warranty)

- Based on consideration of the above, Solero Technologies decides whether Level 1 or Level 2 would be appropriate
- A 3rd party or a Solero Technologies representative may perform audits. The data obtained from the 3rd party redundant inspection process as well as any audits are critical as both a measure of the effectiveness of the secondary inspection process and the corrective actions taken to eliminate the initial non-conformance.
- In exceptional cases, the Controlled Shipping – Level 2 inspection may be required to be performed outside the Supplier's facilities at a facility deemed appropriate by Solero Technologies.

• Exit criteria Controlled Shipping – Level 1 & Controlled Shipping – Level 2

- The default exit criteria will be used when no other exit criteria are defined. The default criteria are listed below and must be provided to the Solero Technologies representative when requesting removal from Controlled Shipping:
  - Twenty (20) working days of data from the containment activity, and a summary, which verifies that normal production controls are effective for controlling the discrepancies identified in the Controlled Shipping activity. The time begins accumulating from the date of implementation of permanent corrective action
  - Documentation showing the root cause was identified and verified
  - Documentation indicating that corrective action was implemented and validated
  - Documentation indicating that every effort was taken to implement error proofing
  - Copies of all documentation revised as required (control plan, FMEAs, process flow diagram, operator's instructions, training records, etc.)
  - Statistical data where appropriate
  - Other information requested by Solero Technologies
- Additional exit criteria for CS2 Only:
  - Copy of Passing CS2 Assessment Form (GSM-F009) and completed action plans

- 3rd Party Registrar's statement of approval (or plan) for all activities undertaken by Supplier related to the controlled shipping issue(s) if requested by Solero Technologies or Solero Technologies' Customer

9.10 Supplier Charge Back

9.10.1 General

- Suppliers are responsible for the quality, on-time delivery, and reliability of the product they supply. Product must meet the drawing and any referenced specifications. The Supplier accepts fiscal responsibility for the consequences of non-conforming product and rejected PPAP submissions including, but not limited to, costs incurred for containment, sorting, premium freight, rework, repair costs of Solero Technologies value add processing, and replacement of defective material, resulting overtime, and productivity loss incurred by Solero Technologies or by Solero Technologies' Customers.
- Following is the schedule for charge back costs associated with non-conforming products sent to a Solero Technologies site:
  - Administration fee for each CPM issued
  - Off-site 3rd Party Sorting—charges to be paid directly between Supplier and 3rd Party Sorting Company
  - In-house sorting by 3rd Party Sorting Company (if allowed by specific Solero Technologies site)—charges to be paid directly between Supplier and 3rd Party Sorting Company
  - In-house sorting by Solero Technologies personnel (if required to avoid a down production line—Supplier will be responsible for actual costs incurred
  - Production Line Down Charge—Supplier will be responsible for actual costs incurred
  - Miscellaneous fees such as: rework, material handling, required Customer visit time and travel costs, expedites, Customer location sorting fees, tooling/machine damage, testing, etc. Supplier will be responsible for actual costs incurred.
  - Supplier will be responsible for all applicable warranty costs

9.10.2 Solero Technologies' chargeback fees are shown in the table. Solero Technologies will no longer be issuing Complaint on Purchased Material (CPM) for such instances related to Advanced Shipping Notices (ASN) or labeling nor will such issues result in supplier charge back notices. Instead, the debits will be taken automatically for issues as noted in the table, after vendors have received notification of violation and have been given three days to dispute charges and submit corrective actions.

Issue	Fee	Automatic Debit
TCP Issued due to NCP	$5,000 plus labor to validate per occurrence	No
Late/Missing ASN	$1,500 per occurrence	Yes
Incorrect ASN	$1,500 per occurrence	Yes
Missing/Incorrect Label	$3,000 per occurrence	Yes
Early Delivery	$3,000 per occurrence plus any freight	No
Missing/Late Delivery	$3,000 per occurrence plus any line downtime	No

Line Shutdown Time	$2,000 per hour + labor to make-up downtime	No
Solero Internal Sorting Time	$45 per hour	No
Make-Up Labor	$45 per hour	No
Maintenance Make-Up Labor	$100 per hour	No
Third Party Sorting at Customer	Cost plus 15% mark-up	No
Scrap	Cost per scrapped component	No
Failure to use TMC portal for domestic shipments	Difference between shipment costs or $500, whichever is greater	No
Failure to follow Small Shipment Requirements	$1,500 per occurrence	Yes

9.10.3 Unauthorized Changes

- In cases where a Supplier has implemented an unauthorized change or has failed to deliver contracted products in accordance with the specifications and terms of the Solero Technologies Purchase Order, all costs that are incurred by Solero Technologies and/or its customers will be the sole responsibility of the Supplier.

9.10.4 Charge Back Debit

- The method of charge back will be by debit memo, processed by the Solero Technologies receiving location.

9.11 Traceability Requirements

Having a strong traceability system is a key component to overall success, with the focus on improving quality, reducing costs, optimizing processes, and improving time- to-customer throughout our supply chain. Cradle-to-grave availability and visibility of data is vital for our supply base who make, store, or move components through the supply chain because the data is used in production output calculations, quality control and process capability calculation, inventory management, revenue forecasting, warranty, repair, and other business operations. It is also critical to increase throughput and lower production costs. Lack of individual traceability significantly increases the time for root cause analysis and identification of the source of a defect, as well as increased fiscal impact in the event of a quality incident.

With that in mind, Solero Technologies business units have specific traceability requirements outlined below:

- Traceability System requirements
- Individual or batch/lot component traceability requirements
- Manufacturing, machining, assembly, testing process traceability requirements
- Traceability Data Retention
- Part Identification (Barcoding) requirements.

The specific requirements for this section must be considered by Supplier in collaboration with the associated Solero Technologies business unit.

- Business Unit PowerDrive Systems (PDS) specification: Document 19-00-447- 003

- Business Unit Transmission Systems (TS)
- Business Unit Emission / Thermal Systems / Turbo Systems (ETTS)
- Business Unit Morse Systems (MS)

9.12 Embedded Software Requirements

This requirement is in accordance with IATF16949:2016 requirements which outlines the following:

- Organizations must use a process for quality assurance of products with internally developed embedded software, and have an appropriate assessment methodology to assess their software development process
- The software development process must also be included within the scope of the internal audit program; the internal auditor should be able to understand and assess the effectiveness of the software development assessment methodology chosen by the organization

9.13 Product Safety Requirements

Suppliers must have documented processes for management of product-safety related products and manufacturing processes. This includes:

- Special approval of control plans and FMEAs
- Training identified by the supplier or customer for personnel involved in product-safety related products and associated manufacturing processes
- Transfer of requirements with regards to product safety throughout the supply chain, including customer designated sources

The product must perform its designed or intended purpose without causing unacceptable harm or damage. Suppliers must have processes in place to ensure product safety throughout the entire product lifecycle.

9.14 Cleanliness Requirements

Contamination control will improve part cleanliness over time with measurement, process control and handling improvements. It utilizes a standardized systematic and a structured approach to monitor and control contamination sources and applies a disciplined approach when responding to issues. The Supplier is required to follow GSM-F033 where applicable.

Contamination control:

- Provides a systematic approach for control and communication of contamination issues
- Supports and establishes defined areas of continual improvement
- Identifies areas of contamination risk
- Improves quality metrics, reduces PPM, and warranty

10.1 General

Recognizing that managing change is of critical importance, Solero Technologies has implemented a corporate-wide Change Management System designed to ensure the quality and integrity of Solero Technologies products. Suppliers are to take a proactive approach to issues of non-conforming products or any changes to design, performance, materials, or processes. Suppliers should never ship such product before obtaining written Solero Technologies approval through one of the methods outlined below. In cases where a Supplier has implemented an unauthorized change and Solero Technologies and/or its customers have been negatively impacted, the Supplier will be responsible for compensating Solero Technologies for all associated costs.

10.2 Temporary Changes

10.2.1 When seeking permission to temporarily ship product that is out of specification or product that is produced with a temporary process change not reflected in the Supplier's current Process Control Plan, the Supplier is responsible for obtaining approval prior to shipping. Such situations might include minor dimensional errors or a processing operation outsourced while a machine is down. Note that any changes to Supplier-specified product characteristics also fall under this requirement even if they are not shown on the Solero Technologies drawing.

10.2.2 Suppliers must also seek permission to temporarily ship products that are out of specification or products that are produced with a temporary process change not reflected in their sub-tier supplier control plans.

10.2.3 Solero Technologies suppliers must complete and submit an electronic Supplier Change Request Form (eSCR) that can be found on the supplier portal at http://extraice.borgwarner.com Changes submitted on GSM-F011 will not be accepted.

- In cases where product or process requirements are being requested for temporary change or deviation, the supplier shall document the following with objective evidence contained in the attachment section on the eSCR:
- Reasoning why the condition needing a temporary change cannot be contained at their facility prior to shipment
- Reasoning why conforming replacement stock cannot be made to replace the non-conforming material
- Temporary eSCRs will be subject to non-negotiable chargebacks related to the costs to Solero Technologies for accepting risk that could have been mitigated by supplying conforming products.
- A complaint on purchased material (CPM) will be issued to track root cause and corrective actions for any temporary deviation eSCR approved on the supplier's behalf. See section 9.8 of this addendum for details of the issuance of CPM for temporary deviations
- Parts shipped under deviation shall be labeled per the standard described in Section A of this document.
- These requirements also are invoked for temporary deviations that are associated with a PPAP submission.
- Any temporary changes aligned with the examples shown in the AIAG PPAP Manual Fourth Addition Table 3.1 will also need a Change Detail Presentation as outlined in section 11.3.2 part 7 of this document.
- Obtain authorization for additional shipments beyond the agreed limit

10.3 Permanent Changes

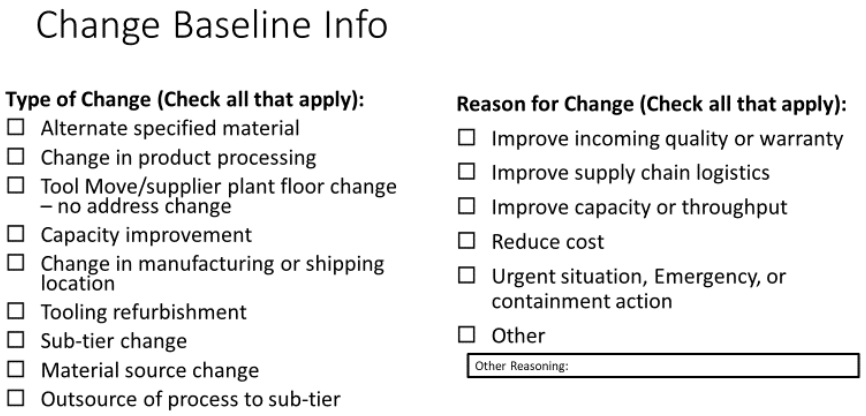
10.3.1 General

- When seeking permission to make a permanent change to the design, performance, or processing of product supplied to Solero Technologies, Suppliers must request approval as described below prior to implementation. Note that any changes to Supplier-specified product characteristics also fall under this requirement even if they are not shown on the Solero Technologies drawing and/or specification.

10.3.2 Supplier Change Request

- Solero Technologies suppliers must complete and submit an electronic Supplier Change Request Form (eSCR) that can be found on the supplier portal at http://extraice.borgwarner.com Changes submitted on GSM-F011 will not be accepted.
- To avoid rejection of the eSCR, the best practice is to have a review with Solero Technologies GSM and Supplier Quality contact just prior to entering the eSCR to review and ensure that the requirements have been met for submission.
  - The form must include all relevant information.
  - Solero Technologies may approve, reject or apply conditions of approval to the SCR (e.g., level 3 PPAP required after change is implemented). The disposition is determined by the nature of the change and impact on manufacturing and Customer requirements.
- Approval of the eSCR does not authorize the Supplier to ship—it is only the authorization to proceed with coordination of PPAP submission.
  - Suppliers must **NOT**:
    - Implement changes before receiving full PPAP approval
    - Ship until satisfying all AIAG and/or VDA Production Part Approval Process requirements
    - Ship prior to the implementation date established with the Solero Technologies Materials Group
  - In cases where a Supplier has implemented an unauthorized change and Solero Technologies and/or its Customers have been negatively impacted, the Supplier will be responsible for compensating Solero Technologies for all associated costs incurred by Solero Technologies and its Customers.
- Solero Technologies requires suppliers to submit an eSCR request for a permanent change no less than 120 days prior to the planned start of production (SOP) date required for the change.
  - Certain Solero Technologies programs or product lines may have established change windows or times where no changes are allowed. The supplier shall manage their process and expectations to meet these constraints appropriately. It is the supplier's responsibility to understand these constraints prior to establishing their change plan or making a change request.
- Suppliers are expected to actively manage their changes with Solero Technologies. Submission of an eSCR is only the first step. After submission suppliers shall regularly follow-up with their GSM and Supplier Quality contacts to drive the execution of their change to meet their timing expectations.

- Violations in submitting requested data and evidence or failing to submit data on time will result in an issuance of a CPM related to compliance with customer specific requirements.
- All changes will be issued an informal CPM for 8D root cause and corrective action to understand systemic issues of what in the supplier's system was unable to capture risk or opportunities prior to the need for a change. If Solero Technologies determines that the analysis shows that the root cause of the change need was unjustified, the CPM will be classified as formal and impact the supplier's scorecard.
- Evidence of unauthorized changes will be referred to the supplier's applicable certifying body (e.g., ISO or IATF registrar or equivalent) as a violation of customer specific requirements with a request for corrective action.
- Change Detail Presentation Content Requirements
  - In addition to all fields being completed appropriately in the eSCR, the minimum information Solero Technologies defines as "all relevant information" is defined in the list below and shall be communicated as an attachment in Microsoft PowerPoint or PDF format within the eSCR submission for the permanent change. eSCR submissions for permanent changes that do not include this file will be rejected without further review. This presentation will be reviewed in prescreening the change during the executive eSCR Board review.
  - Slide 1 – Title Slide – Title Slide with minimum of Change Name, Company and Date of presentation.
  - Slide 2 – Change Baseline Information. This slide contains similar data that is within the eSCR related to categorizing the change organized to easily understand the change impacts in the categories shown in the picture below



  - Slide 3 – Change Statement. This slide shall contain the following information using the defined sections below:
    - Opportunity or Problem Statement – The current state requiring a change to be made. This statement shall include the Solero Technologies and supplier part number and revision plus a picture of each part requiring the change (use of an additional slide may be needed if there are multiple parts impacted)
    - Description of the Change – The need or request to realize an opportunity or mitigate the risk of a problem. In this section, please make sure to note if this is a change in manufacturing location and if the change is reversable.

  - Quantitative Benefits of this change to Solero Technologies – Measurable outcomes that will benefit Solero Technologies.

- Slide 4 – Risk Assessment. This slide should summarize the risk as Low or High and the reason for the risk level selected.
- Slide 5 – Cost Savings to Solero Technologies. Processing changes at Solero Technologies and our customer is not a zero-cost activity. To facilitate this change please present the cost savings benefits that Solero Technologies will receive to process this change. Changes that do not have a cost savings analysis may be rejected without further review.
- Slide 6 - Supplier Change Team. Supply details about who the contacts will be for the distinct aspects of the change. An organizational chart showing escalation paths shall be part of the details presented.
- Slide 7 – Timing Plan. This slide will show a timing plan for the change that includes the following information.
  - Banking Plan – A banking plan is required to ensure ongoing fulfillment of orders; the bank must be long enough to cover the supplier needs plus a minimum of 12 weeks after PPAP submission to Solero Technologies. A larger bank may be needed based on Solero Technologies Customer validation needs. This will be negotiated with the Solero Technologies GSM and Supplier Quality contacts.
  - Tooling and Equipment timing plan
  - Appearance Approval (AAR) (see PPAP requirements above in section 9.5)
  - PFMEA Review
  - Control plan review
  - Planned Product Trial Run and capacity verification
  - Work instructions
  - Design Validation Plan and Report (DVP&R) Testing
  - Capability studies for any features found on GSM-F027 (before and after change)
  - Sub-tier evaluation
  - PPAP Submission date to Solero Technologies
  - Dimensional approval/CMM Layout
  - First Ship Date/SOP
- Slide 8 – Details of the Bank Plan. This slide should show the details of bank management
  - Packaging plan for part preservation
  - Extraordinary controls to ensure that prevention of defects in the bank
  - First in, first out (FIFO) maintenance plan
  - Reaction plan if when quality issues are identified during the use of the bank
- Slide 9 – Validation Plan. This slide should include details about the DVP/PVP&R including dimensional layout, material analysis, capability analysis, and performance or functional testing that will be done to verify the change.

  - For changes like line moves, plant moves, machine upgrades, tool replacement or any other changes that can that have a before and after state that must be compared, a list of dimensions in which capability will be compared must be included in the plan. At minimum, all design record requirements that have a Special Characteristic Rating (critical characteristic), defined as needing statistical control, or pass-through characteristics identified during the establishment of the GSM-F024 shall be included in this listing
  - Any products produced after the change shall show equal or better conformance, capability, and performance than product produced before the change.

- Slide 10 –Early Production Containment (EPC) Plan. This slide shall have an outline of the proposed EPC plan that will be used to verify the effectiveness of the change and protect Solero Technologies from any adverse impact of the change and ensure a safe launch.
- Slide 11 – Sub-Tier Evaluation. If this is a sub-tier change, please describe the method that will be to evaluate the sub-tier process and conformance to Solero Technologies' requirements.
- Slide 12 – Traceability Plan. In this slide describe how the management of old style and new style parts change point tracking so Solero Technologies can easily identify them within the supply chain.
  - Plan shall include labeling per the standard described in Section A of this document.
- Slide 13 – Floor Layout & Process Flow Comparison. A comparison of any planned floor layout and process flow changes, shown side-by-side before and after change.
- Slide 14 – Maintenance Plan. Describe the preventative maintenance plan for new, refurbished, or moved equipment and tooling. How will the plan prevent or detect any issues that could negatively affect Solero Technologies?
- Notes on Relevant Information Needs
  - Supplier can use their own format for the slides, but it must have the information outlined in this section.
  - Added slides can be added to supply further information as needed. The requirements outlined in this section are only the minimum expected
  - Additional information may be needed after initial submission to meet Solero Technologies' customer specific requirements or make clarifications

10.4 Review Process

10.4.1 Review and Approval Process

- A cross-functional group at Solero Technologies will evaluate the SCR (GSM-F011) and APQP forms. The nature of the change (Supplier process or design change) will determine if it can be implemented quickly or if Solero Technologies will require validation testing and approvals from our Customers.
- Suppliers may be required to use the Solero Technologies eAPQP system as part of this process.

11.1 Delivery Expectations

11.1.1 Plant-Specific Requirements

- In addition to complying with the materials and delivery expectations defined in this section, suppliers must also comply with the laws of the country of each receiving Solero Technologies facility and additional materials and delivery expectations, where applicable, of specific Solero Technologies locations. Contact the appropriate material scheduler at the receiving Solero Technologies production facility for any questions on plant-specific requirements.
- All goods or their containers must be marked with the appropriate country of origin. Suppliers are also responsible for supplying Solero Technologies with a certification of origin for each good and promptly notify Solero Technologies if there will be a change in origin. Parts shipped in bulk to support aftermarket operations must include country of origin marking on each individual part.
- All suppliers must be set up to send Advanced Shipping Notices (ASNs) via Supplier Work Place (SWP) or Electronic Data Interchange (EDI). Please review with a Solero Technologies material's contact if there is a need for more information.
    - ASNs must not be sent before shipment but no later than one hour after shipment.
    - There must be only one ASN per packing list.
    - ASN number must match exactly to packing slip number.
    - It is the supplier's responsibility to check the Solero Technologies Supplier Work Place promptly and frequently enough that any changes in demand and releases are captured. Communication with a Solero Technologies materials representative is required for any questions or concerns regarding the ability to meet Solero Technologies demand. It is the expressed and explicit right of Solero to change demand requirements up to the day of shipping. And it is the duty of the supplier to adjust to demand changes accordingly. If demand cannot be met, the supplier must contact their Solero contact and advise of new delivery date and recovery plan. It is the duty of the supplier to exhaust all measures to adhere strictly to the delivery releases from Solero Technologies.
    - It is the supplier's responsibility to notify Solero Technologies materials representative if a shipment is delayed.
    - Solero Technologies considers deliveries on time if the material is not more than two days early and zero days late.
    - Releases are updated weekly, and it is expected that the latest releases be adhered to with regards to delivery dates and quantities.
    - Misses to the complete and on time delivery of material will be strictly enforced through the charge back schedule mentioned in section 9 of the Supplier Manual.
- Small Pack Guidelines – When shipping third party carrier such as UPS, FEDEX or similar, Solero Technologies suppliers are required to combine orders of the same order type for the same consignee shipped on the same day into one consolidated shipment (i.e., a single part number shipped in multiple boxes must be consolidated into one larger box or pallet. Several part numbers in different boxes

on the same shipment must be consolidated into one larger box or pallet. More than one small box shipped on the same day must be consolidated into one larger box or pallet. A consolidated shipment is several pieces in one unitized package or pallet). Combining small boxes into a larger overpack box or container is allowed.

- All suppliers are required to ship based on the requirements below:
  - Each Package
    - Packaging must be sufficient to prevent damage while in transit.
    - A product identification label is not required on the outside of a consolidated over pack box. However, a mixed load and master label are required.
    - Each of the boxes inside a consolidated box or pallet must be labeled individually per Solero Technologies Packaging specifications
    - Void space or air inside a consolidated over pack box must be minimized
    - Each consolidated piece must be labeled with the consignee address
    - Each packing slip, tracking number and ASN number must be unique per container, box or pallet shipped.
    - Each packing slip per container, box or pallet must be visible on the outside of the container and must be presented in a manner that prevents damage during shipment.
  - When to Palletize Small Packages
    - A consolidated box that exceeds 165” in girth
    - Any package measuring more than 108 inches in length
    - Instances of multiple boxes per shipment
    - Multiple unconsolidated boxes when shipped together
    - Multiple unconsolidated boxes that exceed 150 lbs. when shipped together
  - Penalties for non-compliance to the Solero Technologies ASN transmission, packaging and labeling and delivery specifications are listed in section 9.9 of the Solero Technologies Supplier Manual GSM-P001 and this addendum.
    - Note: Solero Technologies materials and supply chain team(s) will be specifically auditing for, and tracking number of occurrences related to:
      - Late or missing ASNs
      - Multiple ASNs per packing slip
      - ASN number does not match packing slip number
      - Multiple individual boxes of same part number not consolidated
      - Multiple small boxes of different parts on same shipment, same day not consolidated
      - Missing individual packing slip per container, box, pallet shipped
      - Receipt quantity does not match packing slip quantity
      - Label format does not conform to Solero Technologies standard
      - Incomplete or missing information on label
      - Missing individual, small box label inside of consolidated shipment

- Damaged container/container insufficient to prevent damage
- Late/too early deliveries

11.1.2 Program-Specific Requirements

- Solero Technologies will specify expectations for materials during the Advanced Product Quality Planning process, RFQs, purchase orders and other forms of communication. The requirements include at least:
  - Labeling
  - Capacity
  - Delivery terms according to the latest INCOTERMS (examples: F.O.B., C.I.F., D.D.P)
  - Containers, trays and other packaging
  - Warehousing
  - Consignment
  - Product identification
  - Hazardous material restrictions (including but not limited to IMDS/CAMDS/ MSDS, REACH, ROHS, GADSL requirements)
  - Preservation of product
    - Rust preventative – Process must ensure parts are rust free for a minimum of 30 days after receipt at the using Solero Technologies facility
    - Contamination – Reasonable care must be taken to ensure parts are contamination free upon receipt at the Solero Technologies using facility. Additionally, part specific contamination standards may be required as noted on the part print
  - Material release and pull systems
  - Transportation mode and carrier route
  - Returnable Packaging (avoid waste wherever possible!)

11.1.3 Suppliers are expected to ship 100% on time to Solero Technologies based on Solero Technologies' terms and conditions as defined in its Purchase Order. Any costs associated with delays in shipments will be at the Supplier's expense.

11.1.4 Overseas Suppliers/Shipments

- Unless specified by Solero Technologies, all Suppliers whose products require ocean transportation and/or border crossing are required to maintain a minimum 30-day inventory buffer in the country of the receiving plant. The 30-day buffer is determined by calculating the average monthly requirement from the latest forecast/release or using the last 6-month shipment history (ex. 12-week release or 6-month forecast). It is the supplier's responsibility to monitor and maintain this buffer at all times. Any expenses incurred by a Solero Technologies facility due to an inadequate inventory buffer will become the responsibility of the Supplier. Any deviation from this policy must be negotiated with the proper Solero Technologies facility or GSM representative.
- If a supplier chooses to not maintain 30 days (about 4 and a half weeks) of supply at a warehouse in the country of the Solero Technologies' facility, they must maintain 30 days (about 4 and a half weeks) stock at their facility and will be liable for any expedite charges that are incurred because of change in demand or need of the customer.

11.2 Packaging/Containerization

11.2.1 The Supplier will plan for the timely provision of containers and/or packaging media to support Solero Technologies requirements. Returnable packaging systems are the preferred method of production part packaging. Extra cleaning processes required to meet Solero Technologies' cleanliness needs are the responsibility of the supplier. Any costs associated with extra cleaning are to be part of the supplier's quotation and are the responsibility of the Supplier. Solero Technologies must approve all packaging design during APQP and prior to PPAP. Suppliers are not permitted to ship products to Solero Technologies without packaging approval by Solero Technologies.

11.2.2 The Supplier will develop and implement a system to monitor container quantity and their condition. The Supplier will also ensure that the following conditions are met:

- Containers are kept in good, suitably clean, and dry condition (free from foreign material)
- Labels from previous shipments are removed
- Containers are maintained in working order (i.e., lubrication of gate hinges, spring clip locking devices, etc.)
- Damaged containers, trays, or other Solero Technologies supplied product be removed from the float, tagged as defective, and returned with notification to the Material Control at the appropriate Solero Technologies plant. Reimbursement to Solero Technologies will be made for Supplier-incurred damage of returnable packaging
- Solero Technologies will ask each Supplier that utilizes Solero Technologies-owned returnable

  dunnage to keep inventories at their plant to ensure proper material flow
- At the end of the calendar year, Solero Technologies will request an inventory count of all returnable dunnage, including what is in storage at any of Supplier's plants and what is in transit to Solero Technologies
- Packaging meets all government and environmental regulations

11.2.3 The Supplier is responsible for all normal and reasonable costs associated with cleaning and minor repair.

11.2.4 Approval of Packaging

- Suppliers must utilize Supplier Packaging Form (GSM-F012) unless otherwise directed as part of the APQP process.
- All Packaging material must comply with ISPM 15 or any of its future revisions.

11.3 Labeling & Identification

11.3.1 General

- These requirements are for the printing and placement of shipping/parts identification labels.
- Deliveries that are made with non-compliant labeling will result in penalties to the supplier as listed in section 9.9 of the Solero Technologies Supplier Manual GSM-P001 and this addendum.
- Deliveries that are made with non-compliant labeling can also result in the following:

- Late delivery due to inability to receive material on time
- A CPM issued for labeling non-compliance as per section 9.8 of the Solero Technologies Supplier Manual GSM-P001 or other required resolution process

- Label Samples may be sent for review and approval to wvsupcom@borgwarner.com

11.3.2 Label Size & Materials

- The size of the Solero Technologies label will be determined by the Solero Technologies receiving plant. Label stock must be white, and the printing must be black. The tag will be affixed via a pressure sensitive or dry gummed application. If the label cannot be affixed to the package/container because of container size or design, special arrangements will be required between the Material Control function at the receiving Solero Technologies plant and the Supplier.
- Solero Technologies requires all material delivered to be sent with label formats conforming to the requirement in Appendix A-4 of this document.
- Penalties for non-conformances are listed in section 9.9 of this Manual

11.3.3 Label Types, Label Placement, & Machine-Readable Information

- Label fields specified as containing machine readable information (bar codes) will comply with plant specific requirements. Of note, Master Labels, and Mixed Load Labels will be affixed to secondary containers in such a manner that when the pack is broken apart, the label is discarded or destroyed (e.g., hang Mixed Load Label from the banding or attach to stretch wrap).
- To ensure label accuracy, it is expected that the Supplier verify (electronically or manually) all labeling to ensure that the label matches the purchase order (or release). Label errors may be treated as a quality complaint necessitating permanent corrective action.

11.4 Transportation & Supply Chain Security

11.4.1 Customs-Trade Partnership Against Terrorism (“C-TPAT”)

- The C-TPAT applies only to Suppliers providing goods to the United States. Suppliers supplying other regions must conform to the World Customs Organization (WCO).
- Supplier will certify in writing that it is either a participating member of the C-TPAT (Customs Trade Partnership Against Terrorism) program as promulgated by the U.S. Customs and Border Protection Bureau or that it follows all applicable supply chain security recommendations or requirements of the C-TPAT program initiative (for more information go to http://www.cbp.gov/xp/cgov/trade/cargo_security/ctpat /). Supplier will indemnify and hold Solero Technologies harmless from and against any liability, claims, demands or expenses (including attorneys’ or other professional fees) arising from or relating to Supplier’s noncompliance.
- Supplier agrees to provide all information necessary for Solero Technologies to comply with all applicable laws, regulations, and related legal reporting obligations in the country(ies) of destination. Supplier agrees to provide all documentation and/or electronic transaction records to allow Solero Technologies to meet customs-related obligations, any local content/origin requirements, and to obtain all tariff and trade program duty avoidance(s) and/or refund benefits, where applicable. Supplier further agrees to assume, and to indemnify Solero Technologies against, all fiscal responsibility arising from Supplier’s failure to comply with these requirements and/or to supply Solero Technologies with the

information required to meet legal reporting obligations, including, without limitation, any fines, penalties, forfeitures, or counsel fees incurred or imposed because of actions taken by the importing country's government.

- The C-TPAT Supplier Status Form (GSM-F013) must be completed by any supplier that is shipping over international frontiers where a Solero Technologies entity will be responsible for the import customs formalities in the country of destination. The completed form, as well as any questions should be directed to your Solero Technologies Supplier Representative.
- The C-TPAT Supplier Status Form (GSM-F013) is to be updated on an annual basis.

11.4.2 Conflict Minerals and Embargoed and Sanctioned Countries

- All suppliers are required to yearly confirm that they are not using conflict minerals in their production processes.
- All suppliers are required to yearly confirm that they are not doing business with any countries that are part of the United States embargoed and sanctioned country list.

11.4.3 WCO Framework of Standards to Secure and Facilitate Global Trade ("WCO-Framework")

- The WCO-Framework applies to all Suppliers exporting goods to locations other than the United States.
- Supplier will certify in writing that it is either a participating member of the WCO program as promulgated by the Worlds Customs Organization or that it is in compliance with all applicable supply chain security recommendations or requirements of the WCO program initiative (for more information go to (http://www.wcoomd.org). Supplier will indemnify and hold Solero Technologies harmless from and against any liability, claims, demands or expenses (including attorneys' or other professional fees) arising from or relating to Supplier's non-compliance.

11.4.4 Requirements for International Shipments

All delivered goods must be accompanied by the commercially necessary documents that are needed to ensure a proper allocation and completion of the shipment. This includes:

- Invoice
- Packing List
- AWB/MAWB, CMR, ECB or BL
- If needed: Preferential Documents, Certificate of Origin

For import related questions contact the customs group of the Solero Technologies subsidiary in charge.

11.4.5 Invoice Requirements

Supplier, if shipping internationally, agrees to comply with the Solero Technologies standard international invoice requirements:

- Invoice Number
- Invoice Date
- Name and address of the seller
- Name and address of the purchaser
- Port of entry into the customer's country/European Community

- Name of the merchandise described in sufficient detail to properly classify the merchandise under importing country's customs law. This description must be written in English or the official language of the destination country.
- Country of origin
- Name and address of the manufacturer, if applicable
- The Solero Technologies purchase order number
- The Solero Technologies part number
- Terms of Sale (latest version of INCOTERMS®)—declared as precisely as possible – e.g.: FCA 1849 BREVARD ROAD, ARDEN INCOTERMS 2010®
- Purchase price and currency
- Unit price and extended price on each line
- Hs Code with 6 digits for each line
- Total value of shipment
- All charges and discounts including but not limited to: assist charges including tooling, dies, molds or any other similar items including materials and components used in the production of or incorporated into the merchandise provided by Solero Technologies or its Customers

11.4.6 Packing List Requirements

- Packing List Number
- Packing List Date
- Reference to Invoice Number
- Marks and numbers of the packages in which the merchandise is packed
- Merchandise quantities, gross and net weights and measures

11.4.7 Preferences/CoO – Certificate of Origin

- Free Trade Agreements (FTA)
- Preferential Treaties between the Supplier's Country and the Customer's Country
- CoO issued by the official agency in charge. The preferential documents must be included with the documents required for customs clearance. Any additional costs incurred due to missing documents will be charged to and accepted by the Supplier.

11.4.8 Importer Security Filing ("ISF" 10 + 2)

- All Suppliers shipping to Solero Technologies U.S. locations via vessel must provide timely ISF information to Solero Technologies or its designated Agent. The Supplier must include all ISF fields on their commercial invoice. For more information, the following link will direct you to the CBP ISF site. http://www.cbp.gov/xp/cgov/trade/cargo_security/carriers/security_filing/

11.4.9 Import Control System (of the European Community)

The required information (see 12.4.3.1 + 12.4.3.2) has – for all transport modes – to be provided to the forwarder who will transmit them electronically to the Carrier. The Carrier completes the pre-arrival declaration in the form of an Entry Summary Declaration (ENS) to Customs authorities at the first point of entry to the European Community.

This information is used to perform a near real-time risk analysis which will inform

Customs authorities on how to deal with individual shipments, reducing the risk of dangerous or suspicious shipments being admitted.

The Information must be transmitted timely as described in the regulations: http://ec.europa.eu/ecip/security_amendment/index_en.htm

11.5 Preferred Transportation Carriers

11.5.1 Freight Paid by Solero Technologies

Suppliers will utilize only Solero Technologies' always preferred transportation carriers unless otherwise instructed by Solero Technologies for opportunities to reduce costs and improve logistics.

11.5.2 Freight Paid by Suppliers

Suppliers should investigate the utilization of Solero Technologies preferred transportation carriers for opportunities in transportation costs reductions and improved logistics.

11.5.3 Special Circumstances

All domestic shipments must be set up using the TMC portal. Please request the mytmc.com user guide from the Solero Technologies material contact or GSM contact for details on how to achieve compliance with this requirement.

Penalties for not using the TMC Portal for domestic shipments can be found in section 9.9 of this manual.

Performance and Processes Issues

Section #12 Supplier Performance Metrics

12.1 General

12.1.1 This Supplier Performance Rating System presents the criteria that will be used by Solero Technologies to rate production material Suppliers. Ratings will be published monthly using the following categories. A combined rating score will be generated by Solero Technologies Business Unit—using the cumulative performance across all plants within that Business Unit.

- Quality - 40 %
- Delivery - 30 %
- Cost Management - 30 %

12.2 Quality Performance

12.2.1 Complaint on Purchased Material (CPM) – 20 Points

- The expectation is "0" CPMs. See section 9.8 in the Supplier Manual for a detailed description of the CPM process.
- The number of CPMs for each month will be shown on the scorecard summary. A Supplier with a total of 0 CPMs over the previous six months will receive the full 20 points as current score. E.g., a Supplier with a total of 3 CPMs over the previous six months will receive "14 points" as a current score (see table below).
- Unless otherwise specified by Solero Technologies, the following scale is used for Suppliers:

Total CPM (in 6 month)	Points
0	20
1	18
2	16
3	14
4	10
5	5
≥6	0

- Suppliers are penalized with a maximum 10 Points reduction per category:
  - Repeat quality issues:
    - A repeat quality issue is:
      1. Defect occurs more than once
      2. Defect after initial 8D is closed

3. Defect with confirmed identical root cause
4. Defect occurs on a similar part, different machine

➢ A repeat quality issue is not:

1. A repeat defect occurring before initial 8D is solved
2. A similar failure with different root cause
3. Same Supplier having a different failure

- Unauthorized change and unapproved SCR (Supplier Change Request): Unauthorized changes are any changes to production components or subcontractors without approval by Solero Technologies.
- Quality issue – Pass through defect to the customer:

  e.g., CPM's can seriously impact Solero Technologies' Customer, resulting in a line shut down or a stop shipment to Solero Technologies' customer.

12.2.2 Responsiveness to CPMs/8-D Closure (10 points)

- The expectation is that the Supplier will submit a response to Solero Technologies with 8-D closure within 30-days. Suppliers will not be penalized if granted a Long-Term Action Pending to the 30-day period for 8-D submission, provided that the request is made within the 30-day period.
- The following scale will apply to all Suppliers:
  - 8-D closure(s) submitted within 30 days 10 points
  - Any 8-D open for more than 30 days 0 points

12.2.3 PPM Defect Rate (10 Points)

- The expectation is "0" PPM. Formula: (Total Number of Defective Parts Found/Parts Delivered in the Month) x 1,000,000). Solero Technologies will count only non-conforming parts, but the Supplier must forward sort results from "in House" sorts or the full quantity will be applied to the Supplier's PPM calculation.
- Unless otherwise specified by Solero Technologies, the following scale will apply to all Suppliers:

PPM	**Points**
0 PPM	10
1 - 30 PPM	9
31 - 50 PPM	7
51 - 80 PPM	5
81 - 100 PPM	3
101 - 150 PPM	2
>150 PPM	0

- Unless otherwise specified by Solero Technologies, the following scale will apply to Raw Aluminum Casting Suppliers **only**:

PPM	**Points**

0 - 1000 PPM	10
1001 - 1500 PPM	9
1501 - 2000 PPM	7
2001 - 2500 PPM	5
2501 - 3000 PPM	3
3001 - 3500 PPM	2
>3501 PPM	0

- Unless otherwise specified by Solero Technologies, the following scale will apply to Raw Iron Casting Suppliers **only**:

PPM	Points
0 - 3000 PPM	10
3001 - 3500 PPM	9
3501 - 4000 PPM	7
4001 - 4500 PPM	5
4501 - 5000 PPM	3
5001 - 5500 PPM	2
>5501 PPM	0

12.3 Delivery Performance

12.3.1 On Time Delivery Score (25 points)

- The expectation is delivery of product 100% on time—the accurate quantity on time.
- Formula: Number of Deliveries on time/Number of Releases required.
- The following scale will apply to all Suppliers:

% On time Delivery	Points
100%	25
98-99%	23
91-97%	20
83-90%	15
76-82%	10
<75%	0

12.3.2 Premium Freight Score (5 Points)

- The expectation is that there is no expedited freight:
  - No Supplier-induced Expedited Freight 5 Points

- Supplier-induced Expedited Freight 0 Points

12.4 Cost Reduction Performance

12.4.1 Cost Reduction Score (20 Points)

- The expectation is that the Purchase Order (PO) piece price is reduced by the agreed target with the respective Solero Technologies Buyers. The following scale will apply to all Suppliers:

% Target achieved	Points	% Target achieved	Points	% Target achieved	Points
100%	20	65%	13	30%	6
95%	19	60%	12	25%	5
90%	18	55%	11	20%	4
85%	17	50%	10	15%	3
80%	16	45%	9	10%	2
75%	15	40%	8	5%	1
70%	14	35%	7	0%	0

12.4.2 Other Performance Objectives (10 points)

- A Supplier can receive up to “10” points for demonstrating exceptional performance in the (5) categories listed below:

- Customer Support & Responsiveness

  The Supplier provides a customer service response to commercial / technical issues.

- Technology & Innovation

  Supplier contributed to Solero Technologies’ success by providing outstanding innovations, which gives Solero Technologies a technological advantage.

- Flawless Launch

  Supplier met all milestones, submitted PPAP without deviations, met quality requirements, received We Are Ready audit rating of Green, submitted EPC (Early Production Containment) on time, and did not receive any complaints within 6-months after SOP.

- Quality Systems

  Supplier has IATF 16949, ISO 9001, ISO 14001, OSHA (Occupational Safety & Health Administration) certificates, Solero Technologies VDA 6.3 audit score of Green and passed Solero Technologies Supplier Manual test.

- Commercial Alignment

  Supplier implements a long- term cost reduction process and competitive quotation activities. The Supplier develops an aggressive cost saving business approach.

- The Solero Technologies Commodity Manager or Buyer is responsible for establishing a Supplier's performance objective score with the input of Supplier Development, Program Management, Quality, and Engineering.

12.5 Supplier Balanced Scorecard

12.5.1 Balanced Scorecard Content

- The Supplier Balanced Scorecard (GSM-F014) addresses Quality, Delivery, and Cost Performance data.
- The Scorecard will be used with supporting details from the plant.

12.5.2 Issuing Scorecards

- Suppliers can view their Balanced Scorecards (GSM-F014) daily via the ExtraICE. Suppliers that have not shipped the product within the previous six months will not be issued a Supplier Balanced Scorecard.

12.5.3 Review of Performance Scores

- Suppliers are expected to review their Balanced Scorecards monthly. If the Supplier believes that the Scorecard contains inaccurate data, the Supplier should immediately notify the appropriate Solero Technologies Supplier Representative for discussion, review, and resolution.
- The organization whose scorecard total score falls to a D Level (Less than 60) shall notify its certification body/registrar within 10 business days after falling below the stated requirement. The certification body shall issue a major non-conformance against IATF 16949:2016, clause 9.1.2.1, when they are notified (or discover) the organization scorecard is D Level (Less than 60).

12.6 Supplier Rating System

12.6.1 A Level (Score 100-90)

- Supplier is a preferred Supplier for new business (within commodity).

12.6.2 B Level (Score 89-75)

- Supplier is approved for new business opportunities.

12.6.3 C Level (Score 74-60)

- Sourcing opportunities are limited based on reasons for status. Effectiveness and suitability of Supplier system should be analyzed for root cause(s) and corrective action. Improvement plans may be required for review with Solero Technologies.

12.6.4 D Level (Less than 60)

- Supplier is not eligible for a new business award without Senior Management review at Solero Technologies. Corrective action plans should be reviewed with Solero Technologies Management on a pro-active basis to maintain the business relationship.

12.7 Scorecard Colors Rating

Characteristics	Green	Yellow	Red
Quality (40 Points)	**30 to 40 points**	**24 to 29 points**	**0 to 23 points**
Delivery (30 Points)	**23 to 30 points**	**18 to 22 points**	**0 to 17 points**

Cost (30 Points)	23 to 30 points	18 to 22 points	0 to 17 points

- The Quality score is GREEN if the Supplier reaches a score of 30 points or more
- The Delivery Score is GREEN if the Supplier reaches a score of 23 points or more
- The Cost Score is GREEN if the Supplier reaches a score of 23 points or more
- The Quality score is YELLOW if the Supplier reaches a score between 24 to 29 points
- The Delivery Score is YELLOW if the Supplier reaches a score between 18 to 22 points
- The Cost Score is YELLOW if the Supplier reaches a score between 18 to 22 points
- The Quality Score is RED if the Supplier reaches a score less than 24 points
- The Delivery Score is RED if the Supplier reaches a score less than 18 points
- The Cost Score is RED if the Supplier reaches a score less than 18 points

Section #13 Process Audits—Post SOP

13.1 Verification of Conformance

Solero Technologies and its Customers reserve the right to verify product and process conformance according to the requirements at the Supplier's and subcontractor's premises—on a scheduled or unscheduled (event-orientated) basis or frequency.

13.2 Auditor Access

Suppliers are to ensure the auditors have full access to all Solero Technologies product related processes and documents—e.g., FMEA, control plan, measurements, etc.

13.2.1 These audits will be based on using the Solero Technologies Supplier Process Audit Form (GSM-F015).

Section #14 Approved Sourcing List (ASL) Process & Directory

14.1 General

The Approved Sourcing List (ASL) is a list that contains all direct material Suppliers and their corresponding sourcing classification. The list is managed at an enterprise level. The ASL identifies the following information:

14.1.1 Supplier DUNS number, Supplier name

14.1.2 Commodities Approved for sourcing

14.1.3 Material

14.1.4 Supplier classification: Approved/Not Approved/Under Development

14.1.5 Business Unit usage

14.1.6 Suppliers will not be sourced production business from Solero Technologies unless they are on the Solero Technologies ASL. A Supplier can only be added to the Solero Technologies ASL through the approval of a classification recommendation by a Solero Technologies unit (15.2)

14.2 Supplier Classifications

The Supplier classification links the Supplier to the commodity in the ASL. Below are the definitions of a Supplier's classification:

14.2.1 Under Development

A Supplier under development is an approved Supplier who is conditionally approved for sourcing by a Solero Technologies unit. A Supplier under development is a Supplier who is new to Solero Technologies and is currently in a launch mode. Upon successful launch, the classification is changed from Under Development to "Approved." Suppliers who have achieved "Approved" cannot be placed "Under Development" at a later date for the same commodity classification.

14.2.2 Approved

A Supplier with an "Approved" classification is eligible for sourcing for all Solero Technologies units. To become eligible for an "Approved" classification, the Supplier must receive an "Approved" recommendation by Solero Technologies (GSM-F016).

- A Supplier currently supplying direct material to Solero Technologies must receive an "Approved" recommendation for the Supplier to be classified as "Approved" for new sourcing.
- A new Supplier must have an acceptable Supplier Assessment and a Business Unit "Approved" recommendation for the Supplier to be classified as "Approved" based on a successful launch.

Once the Supplier receives an "Approved" classification recommendation, one of following approvals must be obtained prior to adding the Supplier to the ASL:

- Supply Chain/ Purchasing Manager
- Plant Manager

14.2.3 Preferred

In addition to meeting and maintaining all the requirements for "Approved," Preferred Suppliers must meet Solero Technologies' strategic goals and consistently meet cross-functional expectations from engineering, quality, delivery, and price. Any Supplier may

be recommended for “Preferred” Classification; however, one of the following approvals must be obtained prior to the formal classification being changed on the ASL:

- Managed Commodity—Commodity Manager (CM)
- Other Commodities—Concurrence of ALL Business Unit VPs purchasing the commodity

As a result of being classified as “Preferred,” the Supplier must be solicited for quotes on all new business opportunities consistent with commodity strategies. In addition, “Preferred” Suppliers are:

- Recommended to assist in product development
- Recommended sources for new Business Units orders
- Encouraged to sign formal business agreements as appropriate
- Required to attend bi-annual Business review meetings with the ECM or applicable Business Units

14.2.4 Strategic Suppliers

A “Strategic” Supplier is an approved Supplier that not only meets and maintains all the requirements for an “Approved” Supplier but also must meet ALL of the following conditions:

- The Supplier’s product or service is fundamental to the success of the Business Unit’s CORE BUSINESS operations
- A limited number of Suppliers exist who can supply the product or technology
- The financial and operational risk of moving to an alternative is great
- A significant number of resources will be dedicated to this Supplier
- Both parties expect a long-term, mutually dependent relationship through negotiation and execution of Long-Term Supply Agreements
- To be classified as a “Strategic” Supplier, the GSM staff (Business Unit VPs and Chief Procurement Officer) must all concur

As a result of being classified as “Strategic,” the Supplier must be allowed to quote on all new business opportunities, and advanced products. In addition, “Strategic” Suppliers are:

- Recommended to assist in product development
- Recommended sources for new Business Units orders
- Encouraged to sign formal business agreements as appropriate
- Required to attend bi-annual Business review meetings with the ECM or applicable Business Units (one to be attended by Senior Management)

14.3 New Business Hold (NBH)

At times, the performance of a Supplier may be so problematic that actions above normal Supplier Development may be required. In these situations, the Solero Technologies Global Supplier Management team may choose to place a Supplier on New Business Hold (NBH). The purpose of New Business Hold is to signal to the Supplier that significant and immediate change and improvement is needed. It is the intent of Solero Technologies Global Supply Management to work with the Supplier to resolve the performance issue(s) so that normalized business relations can occur.

14.3.1 Placing Suppliers on New Business Hold

A Supplier can be placed on New Business Hold by any Business Unit or Commodity Manager and approval/concurrence by the Solero Technologies Global Supply Management (GSM) Executive Council (Chief Procurement Officer and Business Unit Vice Presidents). Supplier will be notified of NBH by the Chief Procurement Officer of Solero Technologies.

14.3.2 Criteria for a Supplier Being Placed on New Business Hold

A Supplier may be recommended for New Business Hold for any of the following issues:

- Chronic or severe quality, delivery, or cost issues
- Unauthorized process changes
- Unethical business practices
- Financial distress
- Any issue not listed above that significantly impacts a Business Unit adversely

14.3.3 New Business Hold Ramifications

- Supplier cannot be awarded new business until established exit criterion has been met and NBH status has been removed.
- New Business Hold affects all locations and divisions of a Supplier on New Business Hold.
- A Supplier on New Business Hold is on New Business Hold for all Solero Technologies locations.
- At Solero Technologies discretion, Suppliers on New Business Hold may be permitted to participate in Solero Technologies quotations and continue to launch business awarded prior to being placed on New Business Hold.
- De-sourcing may be necessary if the Supplier is not able to meet exit criteria.
- Supplier must notify their Quality Registrar of their NBH unless NBH is for financial reasons or issues.

14.3.4 Solero Technologies Champion Responsibilities

- Immediately after written notification, the Solero Technologies Champion will schedule a face-to-face meeting with the Supplier and Supplier Development to review improvement expectations, exit criteria, and timing to exit New Business Hold.
- The Solero Technologies Champion will also verify that the Supplier has notified their QS/TS registrar of being placed on New Business Hold if the New Business Hold is not related to financial issues.
- It is the responsibility of the Solero Technologies Champion to assist the Supplier in meeting their exit criteria and timing. The Solero Technologies Champion is also responsible for communicating to Solero Technologies GSM the Supplier's progress in meeting exit criteria and timing.

14.3.5 New Business Hold Target Exit Date

- Suppliers on New Business Hold will be reviewed based on the timing agreed at the time the Supplier is placed on NBH. At that time, the status will be updated based on the completion of milestones as identified by the Exit Criteria or recommendation of the Solero Management Team.

14.3.6 Exit Criteria

- Upon successfully completing the established exit criteria to the satisfaction of the Solero Technologies Champion, the Solero Technologies Champion will recommend to the GSM Executive Council that the Supplier's status be changed from "New Business Hold" to "OK To Source." The Solero Technologies Champion will notify the GSM Executive Council by completing the Enterprise EASL Add or Change Form (GSM-F016).
- Upon approval of the GSM Executive Council, the Solero Technologies Champion will issue a letter to the Supplier notifying them of status upgrade.

Section #15 Supplier Conferences/Summits

From time-to-time Suppliers will be requested to attend Solero Technologies sponsored conferences or summits. These conferences/summits will either be virtual or in-person. Supplier participation and support of these conferences/summits is required.

Section #16 Record Retention

The control of records will satisfy all regulatory, Solero Technologies, and Customer requirements. These records must be available for review by Solero Technologies upon request and retained for periods of time specified by Solero Technologies.

Record retention may be reviewed during the APQP process as part of customer requirement pass-down.

Section #17 Requirements for Electronics Suppliers

17.1 Scope

The electronic content of vehicles is high and increasing, and therefore plays an increasing role in determining the overall quality and reliability of the vehicle. This section gives clarification of the general Supplier quality requirements with respect to electronics.

The following requirements apply to Solero Technologies Suppliers of electronic assemblies, regardless of the design authority. They are applicable unless specifically superseded by the product drawings or contractual agreements with Solero Technologies.

17.2 Component Qualifications

To achieve the required product quality and reliability, AECQ-100/101/200 qualifications are required on all electronic components, where available, and will be stated on the Bill of Materials or related part drawings and specifications. Corrosion-prone electrode by sulphurated gas (corrosion on Ag electrode by sulphurated gas, etc.) is not allowed in components that have an Integrated circuit. The structure is so designed that the electrode is not exposed and protected by an appropriate circuit board coating.

17.3 Workmanship Standards

The acceptance criteria and allowable rework processes are defined for electronic assemblies and associated parts. Unless otherwise stated on the product drawings, the following workmanship standards are required:

- PCB substrates IPC-A-600 Acceptability of Printed Circuit Boards, Class 3 (track welding is not allowed)
- IPC-TM-650 Test Methods Manual
- PCB Assemblies
- IPC-A-610 Acceptability of Electronic Assemblies, Class 3
- J-STD-001 Requirements for soldered electrical and Electronic Assemblies (The IPC standard takes precedence where the above standards conflict)

Rework within the above standards is only allowed if prior agreement is given by Solero Technologies. Rework outside of the scope of these standards must be agreed by Solero Technologies on a case-by-case basis.

17.4 Printed Circuit Boards (Printed Wiring Boards)

- The Printed Circuit Board (PCB)/Printed Wiring Board (PWB) substrate/laminate is recognized as a complex component of the overall PCB assembly. The bespoke design and lengthy batch manufacturing process have unique risks. It is the responsibility of Solero Technologies' electronics Suppliers to ensure that these risks are managed.
- All PCB laminate Suppliers on Solero Technologies products are required to have IATF16949 certification and have a Control Plan covering their processes.
- All PCB Suppliers are required to meet Solero Technologies qualification and tests requirements.

- PCB laminate Suppliers are required to test all PCB batches according to the agreed Control Plan and using the methods defined in IPC-TM650.
- The PCB Suppliers are required to retain microsections evidencing these results for a minimum of five years.

17.5 Traceability

The effective management of traceability is critical to reducing the impact of defective product, both in the supply chain, and in the field.

In addition to the IATF16949 requirements, Suppliers of electronic assemblies to Solero Technologies must:

- Demonstrate lot traceability of all electronic components
- Apply serial number traceability to all Solero Technologies work in progress
- Apply serial number traceability to all finished product supplied to Solero Technologies
- Ensure traceability of all inspection and test records to the individual unit
- Ensure retrieval of records within 24 hours

Solero Technologies reserves the right to audit Supplier traceability systems at any time.

17.6 Use of Alternative Components

- Electronic products are validated with components from specific manufacturers. Any variation from this validated condition risks production and field issues.
- Solero Technologies Suppliers are responsible for ensuring that the specified component manufacturers and part numbers are maintained and prevent unauthori zed alternatives and counterfeits from being used.
- Suppliers of electronic assemblies to Solero Technologies must not vary from the specified component manufacturer and part number without the formal permission of Solero Technologies.
- In the event of advice from Supplier on restricted/limited supply of components, Suppliers must inform Solero Technologies immediately to trigger qualification of alternative components.
- Where Solero Technologies has given qualification of alternative components, the Supplier must maintain traceability of the use of such alternatives, and NOT mix alternativ es within one production batch of the finished product.
- As well as component changes, any change of process materials such as fluxes, solder paste or solder bar are classed as a notifiable change.

17.7 Alternative Sources of Components

- The approved sources of electronic components are either direct from the manufacturer, or through their nominated distributors. There is a greatly increased risk of counterfeit components when procuring from alternative sources.
- Suppliers of electronic assemblies to Solero Technologies proposing to source components from alternative sources (i.e. brokers, non-approved distributors, etc.)

must gain formal approval from Solero Technologies.

- In such an event, a validation plan must be submitted, agreed, and performed, to confirm that the components are genuine and within specification. The agreed validation may include visual, functional, or other evaluation methods.

17.8 Component Shelf Life

- Manufacturers may define the shelf life of components, solder paste, adhesives, etc. to ensure that they can be processed to achieve the required results.
- Any manufacturer's recommendations regarding component shelf life and storage must be followed by the Supplier. Any deviation from these recommendations requires approval from Solero Technologies.
- In such an event, a validation plan must be submitted, agreed, and performed, to confirm that the components are acceptable for use.

17.9 Handling & ESD Protection

- Suppliers must implement an ESD control system, based on ANSI S20.20, or if applying an equivalent standard, this must be agreed with Solero Technologies.
- Suppliers must follow all component packaging, handling and ESD requirements stated by the manufacturers, plus any in-process handling requirements to achieve the required quality levels.

17.10 PCBA Tooling Qualification

- All tooling used on PCBs and PCB assemblies must be verified before use, to confirm that strain levels are within acceptable limits (as defined in IPC-9704). Unless otherwise agreed with Solero Technologies, this limit is 500με.

17.11 Software Obligations during Product Lifetime

- Suppliers with software parts have a warranty obligation to provide fixes and/or patches, along with new versions or updates of the software during the entire product lifetime cycle, including the spare part period.

17.11.1 Software Quality Assurance Process

- Suppliers of product related software, or products with embedded software shall provide evidence of implementation and maintenance of a software quality assurance process for their products upon request.
- Suppliers of product related software agrees to have ASPICE assessments before, during and after software development phase.
- ASPCIE level 2 needs to be fulfilled before SOP; lighthouse projects cannot be considered for assessment quote.
- All tools used for software development and supporting processes (e.g. requirement or configuration management systems) need to be certified for use in automotive industry. Tools and hardware used for ASIL-related products need to fulfill ISO 26262 standard.
- The network needs to be protected against cyber-attacks. The Supplier agrees to have reviews from internal and external Solero Technologies experts to control

security and data integrity.

17.11.2 Solero Technologies Rights to Use Software, including Licensed Software

The term "use" includes the right:

- To copy, install, transfer, store, load, test, execute the software on all available systems including the right to compile the software, or parts of it, for other products
- To combine, integrate or embed the software in other software or in hardware intended for use in or in conjunction with a Solero Technologies product (hereafter referred to as "products"), nevertheless that the product will not be developed by Solero Technologies internally
- For calibration, configuration, and parameterization of the software
- To use the software as part of a Solero Technologies product or together with Solero Technologies products for demonstration
- Solero Technologies has the right to make copies not only for backups

17.11.3 Supplier Obligation to Use Software Tied to Specific Hardware

- Software shall only be used with specific hardware or only be used in connection with specific hardware.
- The software Supplier has to provide additional software, if necessary, to load, install and run the software to the hardware.

17.11.4 Software Documentation

Solero Technologies has the right regarding all documentation provided by the Supplier, inclusive of the operating manual, to:

- use
- duplicate (also digital), copy, reprint, scan
- translate
- modify
- disseminate
- and otherwise dispose

17.11.5 Sub-Licensing

Solero Technologies has the right to grant sub-licenses to the Licensed Software and to the corresponding documentation to “Authorized Third Parties.”

a) This includes the right to use the Licensed Software in connection with all Solero Technologies and/or customer project(s).

b) For developing, combining and/or integrating the Licensed Software with or in other products from Solero Technologies or customer, responsible persons like systems developers / integrators.

c) To render repair, maintenance or similar services for the Solero Technologies Product, additional, also, third parties which require a right to use the Licensed Software.

d) a) – c) Includes also customers of Solero Technologies and/or any of the customer’s affiliates which require a right to use, market or disseminate the Licensed Software as part of a Solero Technologies Product.

e) a) – d) This right also includes the right to grant end users corresponding rights .

17.11.6 Obligations during the warranty period

Throughout the warranty period the Supplier shall provide to Solero Technologies, without entitlement to any separate remuneration, unless explicitly otherwise agreed in writing in the respective individual transaction agreement, the following services:

a) Workarounds

b) Error corrections

c) Fixes and patches

d) Updates

e) a) – d) to remedy critical errors and malfunctions

f) All generally available new versions or updates of the Licensed Software and sub-components used by the Licensed Software

g) All necessary information, not only with regard to error restriction

h) Error correction and/or error environment

i) Technical support on the telephone or via email

17.11.7 Source code

If the source code of the Licensed Software is not provided to Solero Technologies, the Supplier agrees that upon the request of Solero Technologies, or in case of ownership change of the Supplier, or bankruptcy, it shall enter into a source code escrow agreement and deposit the source code at a renowned depository to be chosen by Solero Technologies for the benefit of Solero Technologies.

Section #19 Supplier Manual Revision History

Rev	Date	Section Modified & Description of Change	Author/Editor
A		Approved & Released for Distribution	

Appendences

A-1 Acronyms & Abbreviations

3-D	Three Discipline Report (first 3 steps of an 8-D Report)
5-D	Five Discipline Report (first 5 steps of an 8-D Report)
8-D	Eight Discipline Report
AECQ	Automotive Electronics Council – Qualification
AIAG	Automotive Industry Action Group
AIF	Annual Improvement Factor
ANSI	American National Standards Institute
APQP	Advanced Product Quality Planning
ASIL	Automotive Safety Integrity Level
ASPICE	Automotive Software Performance Improvement and Capability Determination
EASL	Enterprise Approved Sourcing List
BU	Business Unit
CAMDS	China Automotive Material Data System
CCC	China Compulsory Certification
CCEE	China Commission for Conformity Certification of Electrical Equipment
CCIB	China Commodity Inspection Bureau
CPO	Chief Procurement Officer
CPM	Complaint on Purchased Material
D&B	Dunn & Bradstreet
DIN	Deutsche Industry Norm
DFMEA	Design FMEA
ECM	Enterprise Commodity Manager
EPC	Early Production Containment
ESD	Electrostatic Discharge
eRFQ	Electronic Request for Quotation
FIFO	First In First Out
FMEA	Failure Mode and Effects Analysis
GADSL	Global Automotive Declarable Substance List http://www.gadsl.org
GSM	Global Supply Management
IATF	International Automotive Task Force
IMDS	International Material Data System http://www.mdsystem.com/index.jsp
IPC-A	Institute of Printed Circuits – Acceptability

IPC-TM	Institute of Printed Circuits – Test Methods
ISO	International Organization for Standardization
ISF	Importer Security Filing
ISPM 15	The International Standards for Phytosanitary Measures, Guidelines for Regulating Wood Packaging Material in International Trade
JIT	Just in Time
MBE	Minority Business Enterprise
MSDS	Material Safety Data Sheet
NBH	New Business Hold
OEM	Original Equipment Manufacturer
PCB	Printed Circuit Board
PFMEA	Process Failure Mode Effect Analysis
PPM	Parts Per Million
PO	Purchase Order
PPAP	Production Par Approval Process
PSW	Part Submission Warrant
PWB	Printed Wiring Board
QSB	Quality Systems Basics
REACH	Registration, Evaluation, Authorization of Chemicals http://www.acea.be/index.php
RFQ	Request For Quote
ROHS	Restriction of the use of certain hazardous substances http://ec.europa.eu/environment/waste/weee/index_en.htm
RPN	Risk Priority Number
R&R	Repeatability and Reproducibility
SAE	Society of Automotive Engineers
SCR	Supplier Change Request
SDR	Supplier Deviation Request
SG&A	Sales, General and Administration
SOP	Start of Production
SOSP	Start of Serial Production
SPC	Statistical Process Control
VDA	Verband der Automobilindustrie
VIP	Value Improvement Program

A-2 Forms

Form Number	Form Name	File Name
GSM-F001	Solero Technologies Supplier Questionnaire	GSM-F001 Solero Technologies Supplier Questionnaire.doc
GSM-F002	Technical Site Assessment	GSM-F002 Technical Site Assessment.xls
GSM-F004	We Are Ready Review Form	GSM-F004 We Are Ready Review.xls
GSM-F005	Supplier PPAP Check Sheet	GSM-F005 Supplier PPAP Check Sheet.xls
GSM-F007	8-D Problem Solving Form	GSM-F007 8-D Problem Solving Form.xls
GSM-F008	Incident Reporting Chart	GSM-F008 I-Chart.xls
GSM-F009	CS2 Assessment Form	GSM-F009 CS2 Assessment Form.xls
GSM-F010	Supplier QSB Assessment Form	GSM-F010 Supplier QSB Assessment.xls
GSM-F011	Supplier Change Request Form	GSM-F011 Supplier Change Request.xls
GSM-F012	Packaging Form	GSM-F012 Packaging Form.xls
GSM-F013	C-TPAT Supplier Status Form	GSM-F013 C-TPAT Supplier Status.doc
GSM-F015	Process Audit Form	GSM-F015 Process Audit Form.xls
GSM-F017	Prototype Samples Submission Form	GSM-F017 Prototype Samples Submission Form.xls
GSM-F018	Early Production Containment Commitment Form	GSM-F018 Early Production Containment Commitment.doc
GSM-F019	APQP Kick-off Checklist	GSM-F019 APQP Kick-off Checklist.doc
GSM-F023	Feasibility Commitment Form	GSM-F023 Feasibility Commitment Form
GSM-F024	Pass Through Characteristics Form	GSM-F024 Special - Pass Through Characteristics Form
GSM-F025	Supplier Tooling Checklist	GSM-F025 Supplier Tooling Checklist
GSM-F026	Supplier Tooling Data	GSM-F026 Supplier Tooling Data
GSM-F027	Sub-Supplier Matrix	GSM-F027 Sub-Supplier Matrix
GSM-F028	Capacity Analysis Process	GSM-F028 Capacity Analysis Process
GSM-F029	Rapid Plant Assessment	GSM-F029 Rapid Plant Assessment
GSM-F030	Anti-Bribery Due Diligence Questionnaire for Companies	GSM-F030 Anti-Bribery Due Diligence Questionnaire for Companies
GSM-F031	Anti-Bribery Due Diligence Questionnaire for Individuals	GSM-F031 Anti-Bribery Due Diligence Questionnaire for Individuals
GSM-F033	Cleanliness Audit Form	GSM-F033 Cleanliness Audit Form
	APQP Form	
	Rust Audit	

A-3 Solero Technologies Special Shipment Labeling Requirements

1. Solero Technologies requires deliveries of special shipments to be identified with the Special Shipment label in this document to visually indicate their special status. Special shipments that must be labelled in this way include but are not limited to:
    a. Prototype material
    b. PPAP Material
    c. Material delivered under deviation
    d. Change point material
    e. Any other material that has not been approved by Solero Technologies for production use

2. The Special Shipment Label is applied in addition to any standard product labeling that is required for each shipment and does not supersede any other defined material labeling requirements.

3. The Label format in this section should be used for all shipments with the following requirements:
    a. Palletized material:
        i. All four sides plus the top of pallet.
        ii. At least one label on each unit on the pallet
        iii. One label in the inside of any sealed containers or one label on the top of any open containers
    b. For small shipments (singular or consolidated packages):
        i. At least two sides of the package
        ii. One label in the inside of any sealed containers

Note: This document contains full- and half-page labels depending on container size. Either can be used to meet this requirement but the preference is to use the full-page if the container size has enough area for it to be effectively placed.

Solero Technologies
SPECIAL SHIPMENT

Part Number: _____

Part Name: _____

PO Number: _____

Reason for Special Shipment:

- ☐ **Prototype**
- ☐ **PPAP Initial Sample Parts**
- ☐ **First Shipment After Change**
- ☐ **Parts Containing Deviation**
- ☐ **Sorted, Reworked, or Repaired Parts**
- ☐ **Other:** _____

Approved eSCR: _____ **CPM:** _____

Solero Contact: _____

Solero Contact Phone: _____

Supplier Contact: _____

Supplier contact Phone: _____

Directions for this Label

Supplier: Complete this label and apply to all material as per the requirements found in Section A the Solero Technologies GSM-P001

Solero Technologies Receiving Personnel: Receive Material and immediately put on quality hold. Do Not take this material to the production line. Contact the Solero Technologies contact listed above to make them aware that the material has been delivered and to define the next steps to store and disposition this material.

Solero Technologies Water Valley Special Shipment

Part Number: _____

Part Name: _____

PO Number: _____

Reason for Special Shipment:

- ☐ **Prototype**
- ☐ **PPAP Initial Sample Parts**
- ☐ **First Shipment After Change**
- ☐ **Parts Containing Deviation**
- ☐ **Sorted, Reworked, or Repaired Parts**
- ☐ **Other:**

_____

Approved eSCR: _____ **CPM:** _____

Solero Contact: _____

Solero Contact Phone: _____

Supplier Contact: _____

Supplier contact Phone: _____

Directions for this Label Supplier: Complete this label and apply to all material as per the requirements found in Section A the Solero Technologies GSM-P001

Solero Technologies Receiving Personnel: Receive Material and immediately put on quality hold. Do Not take this material to the production line. Contact the Solero Technologies contact listed above to make them aware that the material has been delivered and define the next steps to store and disposition this material.

Solero Technologies Water Valley Special Shipment

Part Number: _____

Part Name: _____

PO Number: _____

Reason for Special Shipment:

- ☐ **Prototype**
- ☐ **PPAP Initial Sample Parts**
- ☐ **First Shipment After Change**
- ☐ **Parts Containing Deviation**
- ☐ **Sorted, Reworked, or Repaired Parts**
- ☐ **Other:**

_____

Approved eSCR: _____ **CPM:** _____

Solero Contact: _____

Solero Contact Phone: _____

Supplier Contact: _____

Supplier contact Phone: _____

Directions for this Label Supplier: Complete this label and apply to all material as per the requirements found in Section A the Solero Technologies GSM-P001

Solero Technologies Receiving Personnel: Receive Material and immediately put on quality hold. Do Not take this material to the production line. Contact the Solero Technologies contact listed above to make them aware that the material has been delivered and define the next steps to store and disposition this material.

A-3 Solero Technologies Production Material Labeling Requirements

This section contains 8 diagrams defining the proper formatting for production material labeling for deliveries to Solero Technologies

1. SOLERO TECHNOLOGIES DRIVETRAIN RECEIVING LABEL SUPPLIER SPECIFICATION SHEET PRIMARY LABEL (3S)

2. SOLERO TECHNOLOGIES DRIVETRAIN RECEIVING LABEL SUPPLIER SPECIFICATION SHEET MASTER LABEL (4S)

3. SOLERO TECHNOLOGIES DRIVETRAIN RECEIVING LABEL SUPPLIER SPECIFICATION SHEET MIXED LOAD LABEL (5S)

4. SOLERO TECHNOLOGIES DRIVETRAIN RECEIVING LABEL SUPPLIER SPECIFICATION SHEET PRIMARY LABEL (3S) – ALTERNATE FORMAT

5. SOLERO TECHNOLOGIES DRIVETRAIN RECEIVING LABEL SUPPLIER SPECIFICATION SHEET MASTER LABEL (4S) - ALTERNATE FORMAT

The Diagrams are presented in the next pages

SOLERO TECHNOLOGIES RECEIVING LABEL SUPPLIER SPECIFICATION SHEET
PRIMARY LABEL (3S)

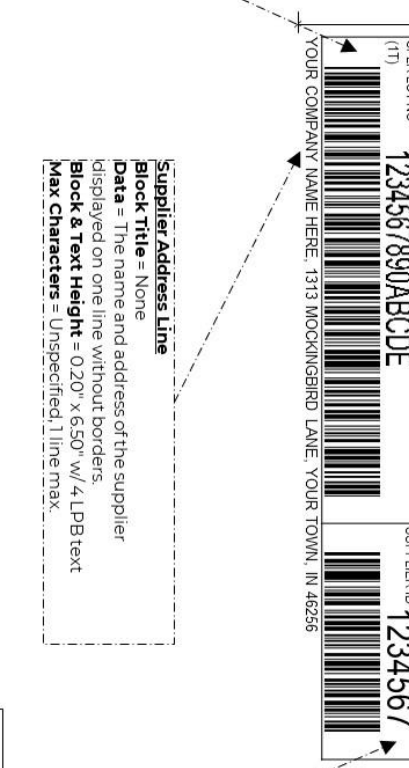
SOLERO TECHNOLOGIES

Purchase Order Number
Block Title = P.O.NUMBER (K)
Data = PO Number as shown exactly on the purchase order.
Data Identifier (DI) = K
Block & *Text Height* = 1.000" x 3.625" w/ 2 *LPB text*
Max Characters = 11, 1 DI and 10 for data value.

Customer Assigned Part Number
Block Title = CUST PART NO. (P)
Data = Customer part number as shown exactly on the purchase order.
Data Identifier (DI) = P
Block & Text Height = 1.000" x 3.625" w/ 2 LPB text
Max Characters = 19, 1 DI and 18 for data value.

Container Serial Number
Block Title = PKG ID – UNIT (3S)
Data = The unique serial number for the container assigned by the supplier. Identifier may be alpha and/or numeric codes. Serial number may not be repeated during the last 366 days, for that part and purchase order.
Data Identifier (DI) = 3S
Block & Text Height = 0.900" x 3.500" w/ 3 LPB text
Max Characters = 12, 2 DI and 10 for data value.

Supplier Assigned Lot / Heat Identifier
Block Title = SPLR LOT NO (1T)
Data = The manufacturing/processing lot identifier assigned by the supplier. Identifier may be alpha and/or numeric codes.
Data Identifier (DI) = 1T
Block & Text Height = 0.900" x 4.375" w/ 3 LPB text
Max Characters = 17, 2 DI and 15 for data value.



Part Description
Block Title = DESCRIPTION
Data = The description of the part as shown on current engineering drawings. (See notes on alternate 3S layout if applicable)
Text Height = 1.000" x 2.875" w/ 3 LPB text
Max Characters = Unspecified, 3 lines max.

Supplier Address Line
Block Title = None
Data = The name and address of the supplier displayed on one line without borders.
Block & Text Height = 0.20" x 6.50" w/ 4 LPB text
Max Characters = Unspecified, 1 line max.

Shipping Date
Block Title = SHIP DATE MM/DD/YY
Data = The date that the container was shipped by the supplier to Solero Technologies. Format shall be in MM/DD/ YY format including slash separators. (See notes on alternate 3S layout if applicable)
Text Height = 1.000" x 1.250" w/ 3 LPB text
Max Characters = 8

Engineering Change Level
(also known as the "Eng Dwg Rev Level")
Block Title = ECN (2P)
Data = The engineering change level as stated on the purchase order. (See notes on alternate 3S layout if applicable)
Data Identifier (DI) = 2P
Block & Text Height = 1.000" x 1.625" w/ 3 LPB text
Max Characters = 4, 2 for DI, 2 for data value.

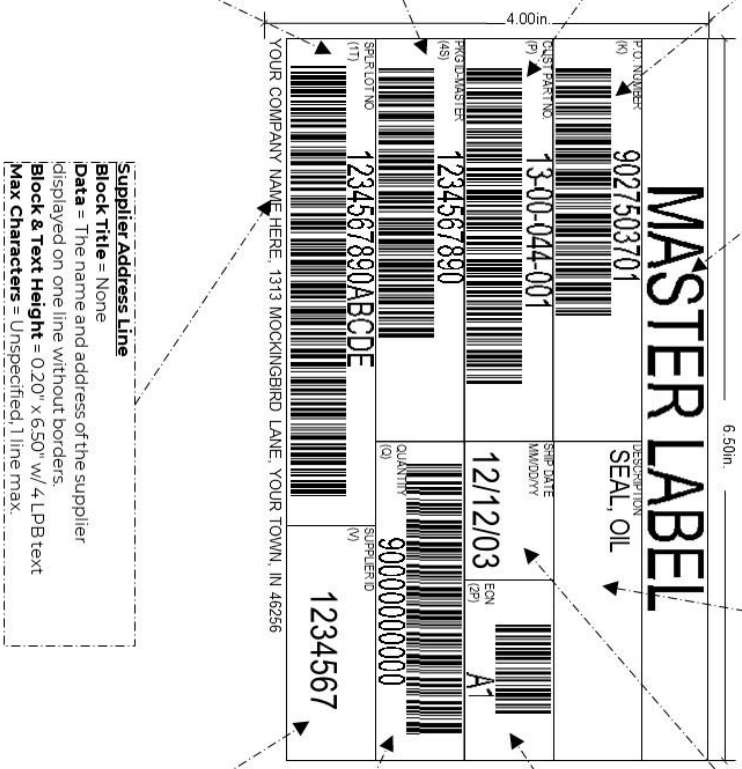
Quantity
Block Title = QUANTITY (Q)
Data = The quantity of parts delivered in the primary container. Thousand separators and leading zeros shall not be used. Unit of measure shall not be shown.
Data Identifier (DI) = Q
Block & Text Height = 0.900" x 3.000" w/ 3 LPB text
Max Characters = 12, 1 DI and 11 for data value.

Supplier Identification Code
Block Title = SUPPLIER ID (V)
Data = The Solero assigned unique 6 digit supplier code which identifies the supplier facility which shipped the primary container.
Data Identifier (DI) = V
Block & Text Height = 0.900" x 2.125" w/ 3 LPB text
Max Characters = 8, 1 DI and 7 for data value.

NOTE: Illustration may NOT be actual size. Any dimensions that are not otherwise specified on this page SHALL be in compliance with AIAG B-10, Issue 02, 03/2000

SOLERO TECHNOLOGIES RECEIVING LABEL SUPPLIER SPECIFICATION SHEET
MASTER LABEL (3S)

SOLERO TECHNOLOGIES



Master Label Legend
Block Title = MASTER LABEL
Data = N/A
Data Identifier (DI) = N/A
Block & Text Height = 0.600" x 6.500" w/ 2 LPB min up to 0.60" high text
Max Characters = 12

Purchase Order Number
Block Title = P.O.NUMBER (K)
Data = PO Number as shown on purchase order.
Data Identifier (DI) = K
Block& *Text Height* = 0.800" x 3.625" w/ *3 LPB text*

Customer Assigned Part Number
Block Title = CUST PART NO. (P)
Data = Customer part number as shown on purchase order.
Data Identifier (DI) = P
Block & Text Height = 0.800" x 3.625" w/ 3 LPB text
Max Characters = 19, 1 DI and 18 for data value.

Container Serial Number
Block Title = PKG ID – MASTER (4S)
Data = The unique serial number for the container assigned by the supplier. Identifier may be alpha and/or numeric codes. Serial number may not be repeated during the last 366 days, for that part and purchase order.
Data Identifier (DI) = 4S
Block & Text Height = 0.800" x 3.625" w/ 3 LPB text
Max Characters = 12, 2 DI and 10 for data value.

Supplier Assigned Lot / Heat Identifier
Block Title = SPLR LOT NO (1T)
Data = The manufacturing/processing lot identifier assigned by the supplier. Identifier may be alpha and/or numeric codes. All secondary containers covered by the master label must be assigned to the same lot.
Data Identifier (DI) = 1T
Block & Text Height = 0.800" x 4.380" w/ 3 LPB text
Max Characters = 17, 2 DI and 15 for data value.

Part Description
Block Title = DESCRIPTION
Data = The description of the part as shown on current engineering drawings. (See notes on alternate 4S layout if applicable)
Text Height = 0.800" x 2.875" w/ 3 LPB text
Max Characters = Unspecified, 3 lines max.

Shipping Date
Block Title = SHIP DATE MM/DD/YY
Data = The date that the container was shipped by the supplier to Solero. Format shall be in MM/DD/YY format including slash separators. (See notes on alternate 4S layout if applicable)
Text Height = 0.800" x 1.250" w/ 3 LPB text
Max Characters = 8.

Engineering Change Level
(also known as the "Eng Dwg Rev Level")
Block Title = ECN (2P)
Data = The engineering change level as stated on the purchase order. (See notes on alternate 4S layout if applicable)
Data Identifier (DI) = 2P
Block & Text Height = 0.800" x 1.625" w/ 3 LPB text
Max Characters = 4, 2 for DI, 2 for data value.

Quantity
Block Title = QUANTITY (Q)
Data = The quantity of parts delivered in the primary container. The total of all quantities contained in secondary containers grouped into the primary container. Thousands separators and leading zeros shall not be used. Unit of measure shall not be shown.
Data Identifier (DI) = Q
Block & Text Height = 0.800" x 2.875" w/ 3 LPB text
Max Characters = 12, 1 DI and 11 for data value

Supplier Identification Code
Block Title = SUPPLIER ID (V)
Data = The Solero assigned unique 6 digit supplier code which identifies the supplier facility which shipped the primary container.
Data Identifier (DI) = V
Block & Text Height = 0.800" x 2.12" w/ 3 LPB text
Max Characters = 8, 1 DI and 7 for data value.

Supplier Address Line
Block Title = None
Data = The name and address of the supplier displayed on one line without borders.
Block & Text Height = 0.20" x 6.50" w/ 4 LPB text
Max Characters = Unspecified, 1 line max.

NOTE: Illustration may NOT be actual size. Any dimensions that are not otherwise specified on this page SHALL be in compliance with AIAG B-10, Issue 02, 03/2000

SOLERO TECHNOLOGIES RECEIVING LABEL SUPPLIER SPECIFICATION SHEET
MASTER LABEL (3S)

SOLERO TECHNOLOGIES

Supplier Identification Code
Block Title = SUPPLIER ID (V)
Data = The unique 6 digit identifier which identifies the supplier facility which shipped the primary container.
Data Identifier (DI) = V
Block & Text Height = 1.000" x 3.625" w/ 3 LPB text
Max Characters = 8, 1 DI and 7 for data value.

Container Serial Number
Block Title = PKG ID - MIXED (5S)
Data = The unique serial number for the container assigned by the supplier. Identifier may be alpha and/or numeric codes. Serial number may not be repeated during the last 366 days.
Data Identifier (DI) = 5S
Block & Text Height = 1.000" x 6.500" w/ 3 LPB text
Max Characters = 12, 2 DI and 10 for data value.

Mixed Load Label Legend
Block Title = MIXED LOAD
Data = N/A
Data Identifier (DI) = N/A
Block & Text Height = 0.800" x 6.500" w/ 2 LPB min up to 0.75" high text
Max Characters = 10

Shipping Date
Block Title = SHIP DATE MM/DD/YY
Data = The date that the container was shipped by the supplier to Solero. Format shall be in MM/DD/YY format including slash separators. (See notes on alternate 4S layout if applicable)
Text Height = 0.800" x 1.250" w/ 3 LPB text
Max Characters = 8.

Supplier Address Line
Block Title = None
Data = The name and address of the supplier displayed on one line without borders.
Block & Text Height = 0.20" x 6.50" w/ 4 LPB text
Max Characters = Unspecified, 1 line max.

NOTE: This Mixed Label specification requires a 3.00" high label. The label may be printed on any label stock which meets or exceeds this dimension. (eg. 4.00" roll stock)

NOTE: Illustration may NOT be actual size. Any dimensions that are not otherwise specified on this page SHALL be in compliance with AIAG B-10, Issue 02, 03/2000

SOLERO TECHNOLOGIES RECEIVING LABEL SUPPLIER SPECIFICATION SHEET
PRIMARY LABEL (3S) - ALTERNATE FORMAT
TO ACCOMMODATE LARGER PART NUMBERS

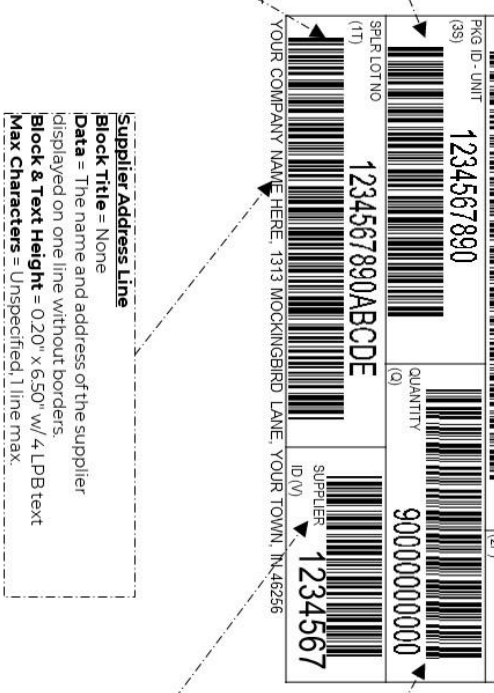
SOLERO TECHNOLOGIES

Purchase Order Number
Block Title = P.O.NUMBER (K)
Data = PO Number as shown exactly on the purchase order.
Data Identifier (DI) = K
Block & Text Height = 1.000" x 3.5" w/ 2 LPB text
Max Characters = 11, 1 DI and 10 for data value.

Customer Assigned Part Number
Block Title = CUST PART NO. (P)
Data = Customer part number as shown exactly on the purchase order.
Data Identifier (DI) = P
Block & Text Height = 1.000" x 4.000" w/ 2 LPB text
Max Characters = 19, 1 DI and 18 for data value.

Container Serial Number
Block Title = PKG ID – UNIT (3S)
Data = The unique serial number for the container assigned by the supplier. Identifier may be alpha and/or numeric codes. Serial number may not be repeated during the last 366 days, for that part and purchase order.
Data Identifier (DI) = 3S
Block & Text Height = 0.900" x 3.250" w/ 3 LPB text
Max Characters = 12, 2 DI and 10 for data value.

Supplier Assigned Lot / Heat Identifier
Block Title = SPLR LOT NO (1T)
Data = The manufacturing/processing lot identifier assigned by the supplier. Identifier may be alpha and/or numeric codes.
Data Identifier (DI) = 1T
Block & Text Height = 0.900" x 4.250" w/ 3 LPB text
Max Characters = 17, 2 DI and 15 for data value.



Part Description
Block Title = DESCRIPTION
Data = The description of the part as shown on current engineering drawings. (See notes on alternate 3S layout if applicable)
Text Height = 0.625" x 2.500" w/ 3 LPB text
Max Characters = Unspecified, 3 lines max.

Shipping Date
Block Title = SHIP DATE MM/DD/YY
Data = The date that the container was shipped by the supplier to Solero Technologies. Format shall be in MM/DD/YY format including slash separators. (See notes on alternate 3S layout if applicable)
Text Height = 0.375" x 2.500" w/ 4 LPB text
Max Characters = 8

Engineering Change Level
(also known as the "Eng Dwg Rev Level")
Block Title = ECN (2P)
Data = The engineering change level as stated on the purchase order. If no ECN on PO, leave this field BLANK.
Data Identifier (DI) = 2P
Block & Text Height = 1.000" x 2.000" w/3 LPB text
Max Characters = 4, 2 for DI, 2 for data value.

Quantity
Block Title = QUANTITY (Q)
Data = The quantity of parts delivered in the primary container. Thousand separators and leading zeros shall not be used. Unit of measure shall not be shown.
Data Identifier (DI) = Q
Block & Text Height = 0.900" x 2.750" w/ 3 LPB text
Max Characters = 12, 1 DI and 11 for data value.

Supplier Address Line
Block Title = None
Data = The name and address of the supplier displayed on one line without borders.
Block & Text Height = 0.20" x 6.50" w/ 4 LPB text
Max Characters = Unspecified, 1 line max.

Supplier Identification Code
Block Title = SUPPLIER ID (V)
Data = The Solero assigned unique 6 digit supplier code which identifies the supplier facility which shipped the primary container.
Data Identifier (DI) = V
Block & Text Height = 0.900" x 2.125" w/ 3 LPB text
Max Characters = 8, 1 DI and 7 for data value.

NOTE: Illustration may NOT be actual size. Any dimensions that are not otherwise specified on this page SHALL be in compliance with AIAG B-10, Issue 02, 03/2000

SOLERO TECHNOLOGIES RECEIVING LABEL SUPPLIER SPECIFICATION SHEET
MASTER LABEL (4S) - ALTERNATE FORMAT
TO ACCOMMODATE LARGER PART NUMBERS

Purchase Order Number
Block Title = P.O.NUMBER (K)
Data = PO Number as shown on purchase order.
Data Identifier (DI) = K
Block& *Text Height* = 0.800" x 3.500" w/ 3 LPB text

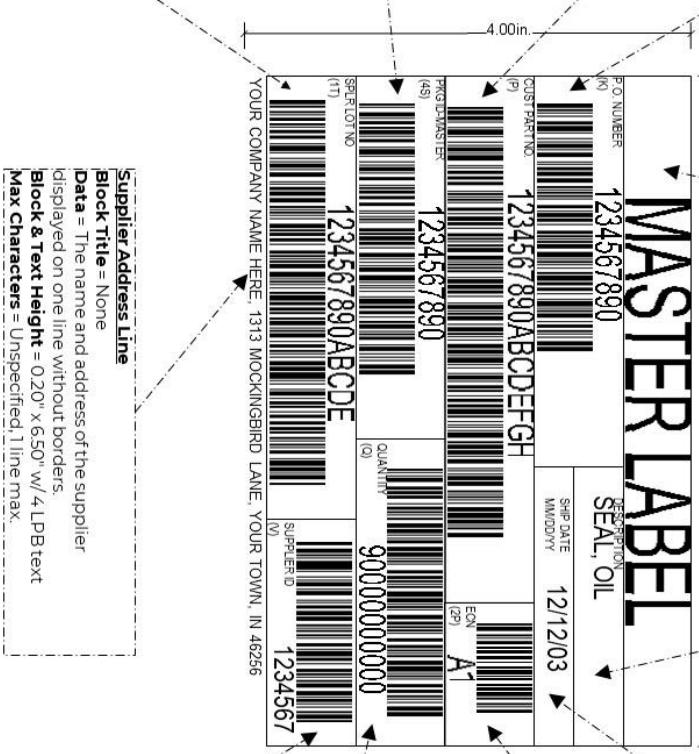
Customer Assigned Part Number
Block Title = CUST PART NO. (P)
Data = Customer part number as shown on purchase order.
Data Identifier (DI) = P
Block & Text Height = 0.800" x 4.000" w/ 3 LPB text
Max Characters = 19, 1 DI and 18 for data value.

Container Serial Number
Block Title = PKG ID – MASTER (4S)
Data = The unique serial number for the container assigned by the supplier. Identifier may be alpha and/or numeric codes. Serial number may not be repeated during the last 366 days, for that part and purchase order.
Data Identifier (DI) = 4S
Block & Text Height = 0.800" x 3.250" w/ 3 LPB text
Max Characters = 12, 2 DI and 10 for data value.

Supplier Assigned Lot / Heat Identifier
Block Title = SPLR LOT NO (1T)
Data = The manufacturing/processing lot identifier assigned by the supplier. Identifier may be alpha and/or numeric codes. All secondary containers covered by the master label must be assigned to the same lot.
Data Identifier (DI) = 1T
Block & Text Height = 0.800" x 4.250" w/ 3 LPB text
Max Characters = 17, 2 DI and 15 for data value.

Master Label Legend
Block Title = MASTER LABEL
Data = N/A
Data Identifier (DI) = N/A
Block & Text Height = 0.600" x 6.500" w/ 2 LPB min up to 0.60" high text
Max Characters = 12

Part Description
Block Title = DESCRIPTION
Data = The description of the part as shown on current engineering drawings. (See notes on alternate 4S layout if applicable)
Text Height = 0.800" x 2.500" w/ 3 LPB text
Max Characters = Unspecified, 3 lines max.



Supplier Address Line
Block Title = None
Data = The name and address of the supplier displayed on one line without borders.
Block & Text Height = 0.20" x 6.50" w/ 4 LPB text
Max Characters = Unspecified, 1 line max.

Shipping Date
Block Title = SHIP DATE MM/DD/YY
Data = The date that the container was shipped by the supplier to Solero. Format shall be in MM/DD/YY format including slash separators. (See notes on alternate 4S layout if applicable)
Text Height = 0.350" x 2.500" w/ 3 LPB text
Max Characters = 8.

Engineering Change Level
(also known as the "Eng Dwg Rev Level")
Block Title = ECN (2P)
Data = The engineering change level as stated on the purchase order. (See notes on alternate 4S layout if applicable)
Data Identifier (DI) = 2P
Block & Text Height = 0.800" x 2.000" w/ 3 LPB text
Max Characters = 4, 2 for DI, 2 for data value.

Quantity
Block Title = QUANTITY (Q)
Data = The quantity of parts delivered in the primary container. The total of all quantities contained in secondary containers grouped into the primary container. Thousands separators and leading zeros shall not be used. Unit of measure shall not be shown.
Data Identifier (DI) = Q
Block & Text Height = 0.800" x 2.750" w/ 3 LPB text
Max Characters = 12, 1 DI and 11 for data value.

Supplier Identification Code
Block Title = SUPPLIER ID (V)
Data = The Solero assigned unique 6 digit supplier code which identifies the supplier facility which shipped the primary container.
Data Identifier (DI) = V
Block & Text Height = 0.800" x 2.125" w/ 3 LPB text
Max Characters = 8, 1 DI and 7 for data value.

NOTE: Illustration may NOT be actual size. Any dimensions that are not otherwise specified on this page SHALL be in compliance with AIAG B-10, Issue 02, 03/2000