1. Scope and Purpose
2. References
3. Definitions
4. Supplier Partnership Statement
5. Introduction
6. Quality Management
7. ESD Control
8. Supplier Corrective Action Process
9. Intellectual Property (IP)
10. First Article Inspection Report (FAIR)
11. Responsibility for Nonconforming Material Shipped to BEI
12. Lean Manufacturing and Six Sigma
13. Environmental Policy
14. Social Accountability
15. Business Continuity and Disaster Recovery
16. Product Lifecycle Management
17. Process or Product Change Notification
18. On-going Cost Reduction
19. Technology Roadmap
20. Supplier Sub-Tier Management
21. Supplier Reviews
22. General
1 Scope and Purpose
The purpose of this document is to outline the expectations that Benchmark Electronics Inc. (BEI) has in relation to our suppliers.

2 References
BE-43002 Supplier Barcode Labelling Requirements
BEF-46006 Supplier Acknowledgement and Confirmation
BEF-46007 Amendment to Supplier Assurance Manual

3 Definitions
BEI Expectations (expects, expectations): Goals or outcomes the supplier shall strive to achieve.

Key Supplier: Key suppliers will be defined by individual BEI divisions. The decision will be based on, but not limited to, factors such as total BEI spend and importance in the supply chain.

4 Supplier Partnership Statement
Suppliers and supplier performance are critical to BEI’s success as a global Electronics Manufacturing Services (EMS) provider. Without the skill, dedication and hard work of our suppliers, BEI would be unable to meet the needs of our customers. As such, BEI regards our suppliers as key partners in our Virtually Integrated supply chain.

While BEI recognizes our suppliers have their own internal quality systems and business processes, we feel it is important to document and communicate BEI’s expectations in regard to our relationship with suppliers. The reason for this is to avoid any misunderstanding of matters related to supplier quality, delivery, communication, cost, or customer satisfaction, with the intent of ensuring our mutual success.

5 Introduction
BEI developed this document to give our suppliers guidance and direction on our expectations. Each supplier shall perform continuous improvement to establish documents and implement effective production, quality and management systems that are fully compliant to expectations of this Supplier Assurance Manual (SAM) agreement.

Certain exceptions to compliance with specific elements of the SAM may be granted by BEI with appropriate justification. These exceptions shall be documented on form BEF-46007 and approved by BEI and the supplier.

For all suppliers designated as Key suppliers, and those striving to be a corporate preferred source they shall complete form BEF-46006, once they are in compliance, and return the form to BEI. All other suppliers should strive to meet all the expectations as laid out in this document but are not required to document their compliance.
6 Quality Management

6.1 General
BEI suppliers must establish and maintain a documented quality management system which is certified, where possible, to the most current revision of ISO 9001 by an accredited 3rd party registrar. Where specified, the supplier will establish and maintain a documented quality management system certified by an accredited 3rd party registrar to DIN EN ISO 13485 for medical products and AS9100 for aerospace, defence and space products. BEI may grant exceptions to this requirement. Exceptions must be approved in writing by BEI.

BEI suppliers shall at all times allow for the right of access by BEI, our customers, and regulatory authorities to all facilities involved in the order and to all applicable records.

Benchmark may be require compliance to specific legal or regulatory requirements. When applicable, these special legal or regulatory requirements will be specified in the purchase order or other agreement with the supplier.

The supplier is obligated to confirm to Benchmark in writing about Hazardous Substances, that all materials used for or in the products comply with:

- EC regulation 1907/2006 (REACH)
- Substances listed in the current form of the EC directive 2002/95/EC (RoHS)

The supplier is obligated to monitor changes within the regulations for hazardous substances and inform Benchmark.

The supplier is required to provide data to BEI in the format requested to support compliance with the United States Dodd-Frank Wall Street Reform and Consumer Protection Act Section 1502. Where other governing bodies make rules regarding the use of conflict minerals, the supplier must determine whether additional disclosure is required.

6.2 Quality Plan
A quality plan shall be established for each product supplied to BEI. This quality plan shall include all requirements for controlling the quality of the product. These requirements include (but are not limited to) incoming inspection, process controls, in process inspection, final inspection, testing, packaging and shipping. These quality plans shall be reviewed and updated on a regular basis to take into account any changes to the product, corrective actions implemented, etc. They shall also be available for BEI to review upon request.

6.2.1 Quality Plan Steps
For each step of the Quality Plan, the following fields should be included:

- Process / Step Description
- Machine, tooling or equipment used in the process, as well as a maintenance plan
- Process or product critical or key characteristics description
• Process or product specifications or requirements or reference document
• Evaluation, test or measurement method or required equipment
• Sample size and frequency
• Control method procedure reference
• Reaction plan or procedure reference when non-conformance is detected

6.3 Process control
BEI believes that placing more emphasis on process control than just product quality will ultimately provide a product that consistently meets the requirements. In order to develop a world-class process, a complete evaluation shall be carried out to determine capability and stability of the process performance. Appropriate methods shall be put in place to control the processes. As part of an effective Process Control Plan BEI, expects the supplier to use one or more of the following tools or techniques:

• Process flow charts
• Process failure mode and effects analysis (PFMEA) and similar tools
• Control plans which identify all critical part features and key characteristics according to design documentation and critical process parameters
• Gage repeatability and reproducibility (R&R) on all measurement equipment used for quality decisions with GR&R <20%.
• Statistical process control (SPC) on all critical processes with minimum Cpk=1.33
• Clearly defined procedures to deal with out of control conditions
• Any other applicable tools

6.4 Process capability measurement
BEI expects suppliers to maintain a minimum process capability of Cpk=1.33. Unless a specific sample plan is requested by BEI the Cpk shall be calculated from a minimum of 30 different sample measurements beginning with initial production and recalculated periodically based on data collected according to the documented Quality Plan.

All critical dimensions and key characteristics as identified in the relevant customer design documentation, specifications or requirements, shall maintain a process capability of Cpk=1.33 or as defined. Critical dimensions and key characteristics with process capability of less than Cpk = 1.33 require suppliers to initiate corrective action to achieve the expected capability. If, due to design constraints or other factors this cannot be achieved, written approval shall be obtained from BEI to allow deviation from this requirement.

6.5 Internal process performance
BEI expects that suppliers will make their internal process performance results available for review upon request. Examples of metrics include percent yield or PPM defect rates using trend and defect Pareto analysis and may include:

• Supplier’s receiving inspection performance for its supply chain
6.6 Control of Nonconforming Material
All suppliers shall have a formally documented process for the control of nonconforming material. This process shall include procedures and methods for the following:

- Clear identification and labelling of nonconforming material
- Purge and physical segregation of nonconforming material from acceptable material
- Quarantine and securing of nonconforming material to prevent accidental use
- Prevention of shipment of nonconforming material
- Responsibility and authorization for disposition of nonconforming material
- Feedback into the Benchmarks continuous improvement process.
- Notification to the customer (BEI) of non-conforming material that has shipped immediately after the issue is identified

Suppliers shall not knowingly ship nonconforming material to BEI without concession and written approval from an authorized BEI representative. Material shipped with approval may require additional documentation and labelling upon shipment.

6.7 Quality Records
BEI expects suppliers’ record retention will be in accordance with their Quality Management System or as defined by the purchase order or customer requirements, e.g., ISO 13485 and CFR Part 820 require records to be kept for the lifetime of the product, while a customer may require records be kept beyond the life of the product.

7 ESD Control
Where the supplier provides electrical or electronic parts, assemblies and equipment susceptible to damage by electrostatic discharges, they will establish and maintain a documented ESD Control Program. These materials shall be shipped to BEI facilities in a manner that does not adversely affect the properties and packaging shall be a Faraday Cage so that external static fields will be blocked. BEI may grant exceptions to this requirement. Exceptions must be approved in writing by BEI.

8 Supplier Corrective Action Process
BEI expects suppliers to provide corrective and preventive action (CAPA) responses that address the problem root cause upon receiving a formal BEI complaint or upon receiving a
Supplier Corrective Action Request (SCAR). This should include documented root cause analysis tools and investigation details.

Upon receipt of a formal complaint or SCAR, BEI expects the supplier to initiate immediate containment actions and report these to BEI in a preliminary response within 48 hours.

A supplier documented CAPA Plan must be generated and submitted to BEI within 10 working days, unless otherwise mutually agreed. Additional time may be granted if necessary to allow for the transit time of samples returned for failure analysis, for example. In such cases, the CAPA Plan shall be completed within 10 working days after the supplier receives the samples or per agreement.

CAPA Plans shall include the committed dates for completing the specific actions and the name of the individual responsible. Be specific to the changes or corrections made (e.g. processes, equipment, staffing, and etcetera). Any training solutions must include employee attendees, subject matter used, trainer name, and date of the training.

Corrective and Preventive action effectiveness shall be verified and documented by the supplier after implementation.

BEI expects suppliers to respond to corrective actions in the format requested. However, the minimum requirement is that all questions asked by BEI be answered in the SCAR response. Any responses missing requested information will be rejected.

9 Intellectual Property (IP)

BEI expects suppliers to take all measures to protect any IP, be it the property of BEI or the Customer. IP can include, but is not limited to

- Product hardware design data,
- Product software design data
- Product production process data
- Tool designs
- Firmware
- Software scripts
- PCBA layouts and Gerbers
- 3D models

Protection measures shall include, but not be limited to,

- Storing all hard copy data in secure cabinets when not in use limiting access to this data to essential personnel only
- Destroying copies of the data that are not required
- Storing all computerized data on a secure server
- Treating Design phase data separately from normal production data
• Background checks on any personnel handling sensitive IP data.

If a supplier determines that IP of any kind has been leaked, BEI shall be notified immediately.

In addition, any IP developed by the supplier as a direct result of working with BEI or the customer will at all times belong to the customer. This would include but is not limited to:

• Modifications to piece part drawings
• Drawings and designs for tooling fixtures
• New processes developed to produce parts

Further, it is expected that no sub-tier employee will be able to claim IP rights on any IP so developed.

10 First Article Inspection Report (FAIR)

BEI requires suppliers to complete a First Article Inspection Report (FAIR) on all custom parts. Unless directed otherwise, the FAIR is required to be provided with the first delivery of any part and subsequently each time the part undergoes any change that affects or potentially affects fit, form, function, quality, safety, reliability or appearance. This includes any change of raw material type, chemical composition, manufacturing location, or sub-tier supplier, or when there is a gap in manufacturing of the part equal to or greater than two (2) years. In certain cases, BEI may request the FAIR prior to the first delivery, this request will be communicated via the purchase order.

Any discrepancies or deviations in a FAIR shall be documented and communicated to BEI prior to shipping product.

Product which has failed a FAIR shall not be shipped without prior approval from BEI. BEI Engineering may visit the supplier to expedite the FAIR approval process. BEI will provide the supplier with the specific requirements necessary to be completed by the supplier for the FAIR submission depending on the commodity type and any unique requirements.

At a minimum, the FAIR submission shall include the following items:

• Part Number, Revision
• References to applicable document/revision of drawings, specifications, standards, test methods, and procedures used, etc.
• Certificate of Conformance or Certificate of Analysis to provide traceability for raw materials and finishes used in the manufacture of the end item
• Materials declaration (for restricted substances, e.g. RoHS, REACH)
• 100% dimension measurement data on applicable sample size

For some products, there may be additional specific requirements either called out on the drawing, purchase order, or BEI’s customer documentation. As required, the following will need to be included in the FAIR submission:
• Process Flowchart
• Process FMEA
• Quality Plan
• Cpk analysis on critical dimensions or key characteristics (as required)
• Mechanical, functional, quality or reliability test results (as required)
• Verification of compliance to appearance criteria
• Verification of packaging and labelling (if specified)
• Evidence of DFARs compliance (as required)
• Specific FAIR template to be used, e.g. AS9102, Aerospace First Article Inspection Requirement
• Other specified requirements.

11 Responsibility for Nonconforming Material Shipped to BEI
Discrepant or nonconforming material shipped from a supplier is a major issue and needs to be managed by the supplier in a timely manner. In addition to the risk of contamination to the internal BEI supply chain this type of occurrence also brings additional risks and costs to BEI and our customers

11.1 Return Material Authorization (RMA) Process
Upon confirmation of a supplier’s responsibility for a material nonconformance issue, suppliers are expected to provide a RMA number to BEI within 24 hours of notification. BEI expects that the supplier will pay return freight for this material or pay BEI to scrap it.

The supplier is expected to reimburse BEI for the full value of the returned quantity of material including freight cost of the original shipment as appropriate.

Returned material shall be rescreened, reworked or replaced by the supplier at no additional cost to BEI.

11.2 On Site Sort and Rework Requirements
The supplier may be required to provide personnel to sort or rework material on-site at BEI in order to expedite the availability of the material and meet BEI’s production requirements. In these instances the on-site workers shall comply with all BEI safety requirements

11.3 Additional Costs
There are many other costs associated with receiving nonconforming material in addition to return freight and scrap. BEI expects that the supplier will reimburse BEI for all reasonable costs associated with remedy of a nonconforming material occurrence including but not limited to:
• Purge and field recall costs
• Sorting Costs
• Disassembly costs, where nonconforming material gets built into product. This may be from finished goods or any stage of production
• Rework costs

If such an event occurs, BEI shall provide the supplier with an estimate of expected costs and financial exposure. Actual costs will be determined based on the scope of work executed and presented to suppliers for review.

12 Lean Manufacturing and Six Sigma

BEI encourages our suppliers to engage in lean manufacturing and six sigma practices. We encourage our suppliers to pursue 5S, continuous improvement models, and use of six sigma tools such as DMAIC which result in cost take downs and improved quality, while working towards having at least one black belt on staff to assist with this implementation. BEI has also adopted this philosophy. BEI may provide our suppliers with direction and guidance in this area as resources permit.

12.1 Continuous Improvement and Closed Loop Feedback

BEI expects suppliers to have continuous improvement programs in place and that staff and operators shall be trained in continuous improvement techniques.

These programs should focus on two main areas:

Historically Based Continuous Improvements: The suppliers shall be analysing all failure data from their production processes for root cause, putting corrective actions in place and then monitoring for the effectiveness of these actions. In addition the supplier shall be monitoring their scrap and nonconforming material for any process-induced issues and implementing corrective actions accordingly.

Preventive Action Based Continuous Improvements: The supplier shall be continually reviewing their processes via such tools a PFMEA to look at all the opportunities for error, once these are identified preventive actions shall be put in place prior to these potential errors occurring. This shall be an on-going, cyclical process.

13 Environmental Policy

BEI encourages its suppliers to be environmentally conscious, take all reasonable measures to minimize their impact on the environment and recycle and conserve energy wherever possible. BEI encourages its suppliers to work towards ISO14001 certification. At a minimum, suppliers shall comply with all applicable environmental regulations.

14 Social Accountability

Benchmark Electronics is committed to ensuring the sustainability of its supply chain. Suppliers are expected to conduct their business in accordance with the Electronics Industry Citizenship Coalition Code of Conduct, and pursue a management system approach to labor, ethics, the environment and health and safety. Suppliers shall maintain and enforce internal policies and procedures that meet all applicable industrial, labor, environmental health and safety and ethics laws and regulations. Additionally, suppliers
shall maintain and enforce internal policies and procedures that prevent the use of child or forced, bonded (including debt bondage), indentured, involuntary prison, slave or trafficked labor.

15 Business Continuity and Disaster Recovery

BEI expects suppliers to make reasonable efforts to assess the potential impact of risks that could result in a disruption to their normal business operations. Actions to mitigate risks shall be taken where practical. Documented procedures and plans shall be developed to define the responsibilities and procedures for initiating recovery from a disaster event.

The purpose of a Business Continuity and Disaster Recovery Plan is to have a plan in place for recovering business operations after occurrence of a disaster event. The primary objectives are to safeguard company assets (employees, facilities, equipment and other capital assets), maintain customer service and to communicate responsibly with all those who have a need to know should the supplier experience a significant business disruption.

The Business Continuity and Disaster Recovery Plan addresses the key areas necessary in the event of a disaster occurrence, to ensure the supplier has a plan to maintain business operations; maintain financial and accounting activities; meet contractual obligations and requirements; meet legal and regulatory requirements; safeguard company assets and maintain customer service. BEI recommends the document cover the following aspects of business continuity and disaster recovery planning:

- Annual planning and readiness
- Vulnerability risk assessment
  - Infrastructure disruption (utilities, communications, transportation, etc.)
  - Natural disasters (flood, earthquake, severe weather, etc.)
  - Fire
  - Labor unrest or strike
  - Government stability
  - Pandemic
  - Disasters affecting suppliers
- Management succession
- Disaster team, teams tasks and procedures
- Emergency contact information
- Recovery planning and crisis communication
- Critical IT applications, operations and data backups
16 Product Lifecycle Management

16.1 Introduction
When BEI places a product with a supplier our intent is to maintain the relationship for the life of the product. However, cost, quality, delivery or other factors may result in future supplier changes. Therefore, we expect suppliers, in conjunction with BEI, to be responsible for managing all stages of the lifecycle from new product introduction through sustaining production and on to product end-of-life. BEI expects the supplier to mitigate any risk or exposure from excess or obsolete material through all these stages.

16.2 Engineering Change Orders (ECOs)
BEI expects suppliers will have a clearly defined process for managing ECOs and the timely communication of documentation. This process shall be set up to get the ECO processed in the shortest possible time while ensuring that a complete impact analysis is carried out. BEI expects the supplier to react immediately when an ECO is released to minimize any risk or exposure in the supply chain. BEI expects to be informed immediately if risk in the supply chain exists.

In addition, BEI expects the supplier to implement all ECOs in a timely manner based on the instructions in the ECO. If the direction is Cut In then it must be implemented immediately while Phase In must be implemented as soon as possible, while minimizing obsolescence exposure. If a phase in ECO cannot be implemented in less than 30 days or as specified in the ECO then the supplier must immediately notify BEI.

16.3 New Product Introduction (NPI) Management
The NPI phase of any project is typically the most demanding. NPI projects often run to very short timelines, involve large amounts of change management and have many different organizations involved. BEI expects that suppliers will have taken this into account when bidding for new business and will have the required support in place for the NPI phase. This phase will often require much flexibility on the suppliers’ behalf – the BEI expectation is that the supplier will be prepared for this.

16.4 Management of Sustaining Production
The sustaining production phase of any project is generally the easiest to manage. However, BEI expects our suppliers will continue with their due diligence during this phase. BEI expect suppliers to review forecast both internally and with their sub-tiers on a regular basis to ensure that material is positioned throughout supply chain to support BEI demand. These reviews shall occur every time BEI provides a new forecast, but ideally they shall happen more often. If at any time a supplier feels that there may be a possibility of a gap in supply, BEI expects to be informed immediately in order to allow us time to work with the supplier to mitigate the risk.

16.5 Product End of Life Management
As products near their forecasted end of life (EOL) BEI expects our suppliers to minimize exposure of obsolete material and reduce financial exposure, including consuming materials on other programs or selling it back to their suppliers. The supplier is expected to report any exposure to BEI immediately.
17 Process or Product Change Notification

BEI recognizes that supply chain changes are a part of business, and has the following requirements for these changes. The supplier shall report every change regardless of scale or magnitude to BEI.

Full details on all changes should be e-mailed to pcn@bench.com.

17.1 Production Location Change
Production location changes may come about due to cost, capacity or various other issues.

BEI expects our suppliers to review the time-phased product lifecycle profile for the program through each of the lifecycle phases during the new product introduction (NPI) phase.

If a change of location (or the use of a sub-tier supplier) is unavoidable, BEI expects our suppliers to provide at least 90 days advance written notice. BEI may also require a detailed transition and qualification plan with background on key drivers for the change.

17.2 Production Process Change
BEI expects our suppliers to effectively manage process changes with appropriate validation or verification and approval prior to implementation. BEI expects 90 days advance notice from the supplier for any major process change and a detailed description of background for this change.

This notice shall include technical documentation which supports the recommended or required change. This requirement includes sub-tier suppliers.

Major process changes include but are not limited to:

- Changes to major process equipment
- Implementation of automated equipment
- Significant change in process technology or fabrication methods
- Qualification of major production tooling or refurbished tooling.

17.3 Material Change
Material changes may occur due to end-of life situations, quality improvement, cost reduction or other reasons. BEI expects 90 days advance notice of recommended or required changes, including a detailed description of the background of the issue and technical justification and documentation which supports the recommended or required change. This expectation includes sub-tier suppliers.

17.4 Sub Tier Supplier Changes (Non-Franchised Sources for Electrical Components)
The need to procure material from Broker or Secondary (Non-Franchised) sources may occur due to extenuating circumstances. BEI expects immediate notification of the intent to procure material from a Broker or Secondary (Non-Franchised) source. This notification
shall include a detailed description of the issue with justification and documentation that supports the change in source. Such purchases must be approved in advance by BEI and may also require approval from the end customer.

17.5 Customer-Requested Changes
BEI reviews changes requested by BEI customers with our suppliers. This review is performed to verify supplier capability to implement the required change and ensure supply chain continuity. If a BEI customer requests a change directly from the supplier, the supplier shall notify BEI before the change is implemented.

17.6 Requalification Requirements
BEI or BEI customers may require re-qualification of the product or process when location, process or material changes are planned including submission of new FAIR. Re-qualification plans and subsequent results must be approved by BEI and the end customer prior to the delivery of material to Benchmark. BEI expects our suppliers to facilitate this re-qualification process. If samples are required for a re-qualification BEI expects suppliers to provide these in a timely manner and at no extra cost.

18 Ongoing Cost Reduction
BEI expects that our suppliers will proactively engage in active cost reduction programs. These reductions can come from many different areas such as:

- Lean manufacturing and six sigma initiatives
- Reduced production times
- Economies of scale
- Changes to the product design
- Changes to the production process
- Changes to the production location
- Changes to material content

The above are just some possibilities and we encourage our suppliers to proactively come to BEI with any possible cost savings initiatives. BEI will actively work with our customers to support all viable change requests.

19 Technology Roadmap
BEI expects our suppliers to maintain a technology roadmap which shows how they will stay up to date with developments in their particular area of expertise. BEI expects suppliers to continually look for any new equipment or processes that will improve quality, or reduce lead times or costs. This technology roadmap shall act as a rolling plan that communicates strategic objectives and how the supplier will achieve them. We also expect suppliers to proactively present recommendations to drive improvement throughout the supply chain.
20 Supplier Sub-Tier Management

BEI expects our suppliers to flow down the applicable requirements of this manual to their supply chain and sub-tier suppliers. In addition, we expect suppliers to follow due diligence when selecting sub-tier suppliers. This includes performing audits, assessments, and monitoring their performance on an on-going basis with the use of scorecards or defined criteria. This data shall be available for review at any audit, and sub-tier performance issues shall be proactively communicated to BEI.

21 Supplier Reviews

BEI may periodically conduct supplier reviews with any supplier. These reviews will cover standard business metrics such as quality, delivery and flexibility, cost, and communication. Reviews should typically be conducted at an executive level. The supplier may be requested to be on-site at a BEI site for these reviews.

22 General

22.1 Terms and Conditions
BEI expects our suppliers to adhere to the terms and conditions according to the Purchase Order or as otherwise agreed. If the terms or conditions cannot be met for any reason, the supplier shall contact BEI Purchasing immediately to resolve the issue.

22.2 Shipping
BEI expects all suppliers to ship goods using methods and shipping lanes previously agreed. Any deviations from standard shipping methods must be agreed to prior to execution.

22.3 Packaging
BEI expects that product will be packaged to prevent damage or deterioration under normal transportation conditions. Customer specified packaging must be used when required, and all specified packaging requirements must be met. Suppliers shall use recyclable packaging where possible and economically viable.

Unless otherwise agreed, all packaging shall be labelled per BEI document BE-43002.

22.4 Certificate of Conformance (CoC) or Certificate of Analysis (CoA)
Unless otherwise agreed, BEI expects suppliers to provide CoCs or CoAs for each shipment to BEI involving custom/build to print items. Commercial off the Shelf (COTs) items are exempt from this requirement unless required by specification/print or the BEI Purchase Order.

Certificates shall include the minimum information as follows:

- Company name and address (printed in company letterhead preferred)
- Part number and revision
- Part description
- PO number
• Lot or batch number and date code
• Quantity
• Statement of compliance to all applicable requirements
• Reference to applicable product requirements (e.g. international standard, drawing or specification including revision)
• Reference to applicable safety or regulatory requirements and/or agency safety file number (e.g. UL, CE, CSA, CCC, etc.)
• Reference to applicable environmental requirements (e.g. RoHS, REACH, etc.)
• Assay or analytical data (CoA only)
• Approval printed name and title
• Approval signature
• Approval date

Where a CoC or CoA is supplied in a shipment with multiple packages, the supplier shall mark the box containing the CoC to facilitate retrieval at BEI incoming inspection.

BEI expects suppliers to request and maintain records of CoCs or CoAs for their own incoming material as appropriate. These records shall be made available to BEI upon request.

While many reputable programs are available for automated compliance checks on components BEI strongly recommends that suppliers use BOMCheck.

22.5 Plant Closures
BEI expects at least 60 days advance notice of any scheduled extended plant shutdowns, where extended is taken to mean greater than 2 days excluding government approved national holidays. This is needed since holiday times vary from country to country.

22.6 Acceptable Date Codes for Electrical Components
Where a supplier is supplying BEI with electrical components, on an individual basis, these codes must be within 2 years of the date of manufacture. Where date codes are greater than 2 years the supplier shall not ship without prior BEI approval.

For assemblies which may contain components with date codes of greater than 2 years BEI assume that the suppliers have completed their due diligence prior to using these components.

22.7 Acceptable Shelf Life for Shipped Components
Supplier shall not ship a product to BEI where less than 75% of the total shelf life remains without prior notification and BEI approval.
### Revision History

<table>
<thead>
<tr>
<th>Date</th>
<th>Rev</th>
<th>Reason for Change</th>
<th>ECO Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/10/2015</td>
<td>H</td>
<td>Updated section on ESD control plus several other modifications. Update document template.</td>
<td>CORP003310</td>
</tr>
</tbody>
</table>