

ATL First Article Inspection Standard for Suppliers

Purpose:

This document outlines Alpha Technologies Ltd. ("ATL") standard First Article Inspection (FAI) requirements for custom manufactured, fabricated or otherwise processed parts.

Scope:

This document applies to all suppliers who supply to ATL manufactured, fabricated or processed parts as part of meeting the contractual requirements of an ATL-issued and supplier-accepted Purchase Order. Specific requirements within this document apply as appropriate to the parts or services being supplied to ATL.

Definitions:

ATL: Alpha Technologies Limited.

ATE: Acceptance Test Equipment. Equipment designed specifically to test product as per an ATP.

ATL Part Number: The unique identifier applied to an ATL-custom designed or manufactured part. This number is explicitly noted on any ATL-provided drawing(s) as well as the ATL PO.

ATP: Acceptance Test Procedure. A functional test procedure that is specified by ATL. Execution of an ATP may or may not be automated.

Burn-in: Burn-in is the process by which components of a system are exercised prior to being placed in service (and often, prior to the system being completely assembled from those components), with the goal of detecting those particular components that would fail as a result of the initial, high-failure rate portion of the bathtub curve of component reliability. Burn-in is frequently conducted at elevated temperature and perhaps elevated voltage

FAI: First Article Inspection.

First Article: First unit of an ATL Part Number that the supplier manufactured for ATL.

First Article Production: First Articles of a new or modified part or subassembly of medium to high complexity or criticality. Typically 1-10 units produced in a lot, but may be as high as 30-50 units.

Supplier: An organization that supplies finished goods, raw materials and/or services to ATL.

1.0 General Requirements:

The supplier shall provide an FAI report that consists of:

1. A copy of each of the applicable documents listed in [ATL Production Standards for Suppliers](#) signed by the authorized personnel in Supplier's Quality Department.
2. Copies of drawings and related documents used on the Supplier's Quality Checks process and signed off by the Supplier's inspector (e.g. Traveler or other documentation that show fit-form-function test).

The above (1&2) can be accomplished by providing a standard template.

3. Certificate of Conformance (COC) on critical component (if applicable).
4. FAI report shall be submitted together with the shipping documents **and** emailed to:
Report.QA@alpha.ca

2.0 Specific Product Requirements (in addition):

2.1 Electronics

- 2.1.1 Record of Verification of workmanship on PCBA per IPC-A-610 (latest revision) Class 2 standard or otherwise specified in ATL's drawing.
- 2.1.2 Record of Verification of wire harness/ crimp per IPC/WHMA-A-620 (latest revision) Class 2 standard or otherwise specified in ATL's drawing.
- 2.1.3 Copies of Acceptance Test Equipment (ATE) and Acceptance Test Procedure (ATP) documents.
- 2.1.4 Record of Training Documents that shows that personnel are trained and qualified to perform Testing, Inspection, and/or Burn-In Process.

2.2 Metal or Plastics

- 2.2.1 Verification of welding workmanship/ quality.

2.3 Engineering Projects / Special Projects

- 2.3.1 Additional documents may be required by Alpha Quality Engineer.
- 2.3.2 Example of the documents are Process Control Plans, Incoming Inspection Records, Yield Report, Work Instructions, Process Failure Mode and Effects Analysis (PFMEA), etc.

! Note: Failure to provide the FAI report will result in unit(s) being quarantined for non-conformance.

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