ALLISON TRANSMISSION, INC.

APQP Kick-off Checklist

The purpose of this meeting is to develop a common understanding concerning the total requirements of the part/material by ensuring proper communication and buy-in occurs betweenour companies. This form encompasses questions from the AIAG Advanced Product Quality Planning and Allison Transmission, Inc. (ATI) Supplier Quality Manual AT-1927. Its intent is to ensure advanced product quality planning activities occur at the appropriate time and establish customer requirements for part qualification, part availability, quality, packaging, scheduling, terms & conditions, unit cost information, and tooling information.

This document should be completed and provided to the Commodity Manager & Supplier Quality Engineer prior to the meeting date.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| DATE: |  |       |  | PROJECT/PROGRAM: |  |       |
|  |  |  |  | SUPPLIER NAME: |  |       |
| ATI CONTACTS:- COMM. MGR: |  |       |  | MANUFACTURING LOCATION: |  |       |
| - SQE: |  |       |  | DUNS #: |  |       |
| - PROD. ENGR.: |  |       |  | IMDS ORG ID#: |  |       |
| - OTHER: |  |       |  | SUPPLIER CONTACTS: |  |  |
|  |  |       |  | - ACCT MGR: |  |       |
|  |  |  |  | - QUALITY REP: |  |       |
| PART NO: |  |  |  |  |  |  |
|  |  |       |  | PART DESCRIPTION: |  |       |
| CHANGE LEVEL: |  |       |  |  |  |       |
|  |  |  |  |  |  |  |

# SECTION 1. CUSTOMER REQUIREMENTS

1. Does the supplier understand allthe application~~s~~ and intended end uses of the parts/materials for all customers?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ] Yes | [ ]  No | If No, Explain: |       |

1. Does the supplier have the latest information about program timing (example: Drawing release, Prototype – series, Matching, LRIPs, SOP)?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No | Explain: |       |

Review Program Milestones with supplier.

|  |  |  |  |
| --- | --- | --- | --- |
| **Key Project Milestones** | **Dates** | **Other Milestones as Needed** | **Dates** |
| APQP Kickoff meeting |       |       |       |
| Tooling/Raw Material Order |       |       |       |
| Raw Material arrival |       |       |       |
| Part manufacturing start |       |       |       |
| Part manufacturing complete |       |       |       |
| Part shipped  |       |       |       |
| SOP/Part MRD at Allison |       |       |       |
|       |       |       |       |

1. Does the supplier understand all of the requirements listed in the Supplier Quality Manual AT-1927?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No | If no, explain: |       |

1. Has the supplier provided all information listed in the Required Quality Information letter AT-1927-04 as outlined in the RFQ package?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No | If no, explain: |       |

1. Does Supplier understand and agree to AT-1700 ATI Packaging & Identifications Requirements?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No | If no, explain: |       |
|  |  |  |  |

1. Are there any packaging issues to be resolved from the AT-1703 Container Assumption Form?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No | If yes, explain: |       |
|  |  |  |  |

1. Does supplier have electronic communications capability and required systems testing complete

 for scheduling and shipping?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No | If no, explain: |       |
|  |  |  |  |

# Does supplier have a copy of AT-1927-87 (Allison Heat Treat Supplier Approved List SUPPLIER COPY) from the Supplier Forms webpage and understand the requirement?

|  |  |
| --- | --- |
| [ ]  Yes | [ ]  No [ ]  N/A |

# SECTION 2. Product Design / Development

1. Does the supplier have and understand ALL of the latest drawings and specifications (TES, TIS, etc.)?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No | If no, explain: |       |

1. Has a validation plan been provided, and are the requirements understood?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No [ ]  N/A | If no, explain: |       |

1. List any Pre-Prototype/Prototype requirements in the space below:

|  |  |  |  |
| --- | --- | --- | --- |
| MRD Type & Date | Quantity | Supplier Promised Date | Comments |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

1. If GP-11 is required, does the supplier understand the requirements of GP-11 procedure?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No [ ]  N/A | If no, explain: |       |

1. If ATI is design responsible, is a Design-FMEA review between supplier and the ATI Engineer requested?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No [ ]  N/A | Specify planned date: |       |

1. If Supplier is design responsible, has a Design-FMEA been completed? Are actions in place to reduce high RPNs? Has a review with the ATI engineer been completed?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No [ ]  N/A | Specify planned dates: |       |

1. If supplier is responsible for system, has a system FMEA been completed and been reviewed?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No [ ]  N/A | Specify planned dates: |       |

1. Have special characteristics (reference Supplier Quality Manual AT-1927) been identified and included in drawings and specifications? Is the supplier aware of the special characteristics? Is the supplier’s intended process able to meet the capability requirements of the special characteristics?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No [ ]  N/A | Explain: |       |

1. Are controls for special characteristics clearly identified?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No [ ]  N/A | If no, explain: |       |

1. Does the supplier understand the critical nature of dimensions that interface with the customer’s application of their mating parts?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No | List all known interfaces: |       |
| If no explain the process to control special characteristics: |       |

1. Will the appropriate control plan (prototype, GP-12, production) be developed for use during each build phase?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No | If no, explain: |       |

# SECTION 3. PROCESS DESIGN/DEVELOPMENT

# Key activities from the Supplier Quality Manual and Timing Chart (Ref. AT-1927 & AT-1927-02).

1. Has the supplier updated the APQP Timing Chart (AT-1927-02) for these parts?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No | Explain: |       |

1. ATI APQP requires periodic reviews. Specify your planned reporting frequency:

\_\_     \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Have the following preliminary documents been completed?

Process Flow Chart If No:

|  |  |  |
| --- | --- | --- |
| [ ]  Yes | [ ]  No | Specify completion date:      \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Process FMEA

|  |  |  |
| --- | --- | --- |
| [ ]  Yes | [ ]  No | Specify completion date:      \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Control Plan

|  |  |  |
| --- | --- | --- |
| [ ]  Yes | [ ]  No | Specify completion date:      \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

 If Yes, upon completion of this checklist, review these documents in detail.

1. Have all risks been identified and refined in the preliminary PFMEA and Control Plan?

|  |  |  |
| --- | --- | --- |
| [ ]  Yes | [ ]  No If no, note expected timing plan for when all risks will be identified: |  |
|       |  |  |

1. Does ATI own tooling? If yes, fill in table below with tooling details.

|  |  |
| --- | --- |
| [ ]  Yes | [ ]  No [ ]  N/A |
| **Tool Description** | **Tool Manufacturer** | **Location Where Tool Used** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

1. Is any new equipment, tooling, gages, special fixtures or test equipment, that is not included in the Allison owned tooling, needed to produce this part?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No | If yes, explain: |       |

1. Allison Transmission minimum required acceptance criteria for the PPAP initial study for special characteristics is established in the Supplier Quality Manual AT-1927.
Are any print, material specifications or process control plan changes needed to meet these requirements?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No | If yes, explain: |       |

1. Has the supplier confirmed their responsibility for management of all tiered suppliers & verified they will conduct APQP, PPAP and R@R of these sub-tiers?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No | If no, explain: |       |

# SECTION 4.0 PPAP (Production Part Approval Process)

1. Are there any unresolved issues from previous Open Issues List, and are they still being tracked?

|  |  |
| --- | --- |
| [ ]  Yes | [ ]  No [ ]  N/A |

1. Is additional lead time required after PPAP approval to meet the contracted LCR/MCR?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No | Explain: |       |

1. Does the supplier understand the requirements for Full PPAP?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No | Explain: |       |

1. Does the supplier have access to QIM to submit the required forms for PPAP?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No | If no, list individuals who will submit the AT-101622 form: |       |

1. Does the supplier have the necessary AIAG forms to use for submitting documentation into the required QIM PPAP activities?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No | If no, explain: |       |

1. Define the number of samples to be submitted along with PPAP documentation.

 Total # of Samples:      \_\_\_\_\_\_\_\_

 Samples per Cavity:      \_\_\_\_\_\_\_\_
 Total # of Cavities:      \_\_\_\_\_\_\_\_

1. Is a production trial run required?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No |  |  |

1. Will validation parts (if applicable) be produced from 100% production tools and following the final production process?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No [ ]  N/A | If no, explain: |       |

1. GP-12 Early Production Containment – In effect from PPAP approval through the period specified in GP-12.

Does the supplier understand the GP-12 requirements in the Supplier Quality Manual AT-1927?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No [ ]  N/A |  |  |

# Run @ Rate & Capacity Related

1. Populate table below with capacity data:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Part Number** | **LCR** | **MCR** | **SCR** | **Equipment Allocation Plan** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

1. Is the AT-1960-C3 Run at Rate worksheet required?

|  |  |
| --- | --- |
| [ ]  Yes | [ ]  No |

1. If the AT-1960-C3 Run at Rate is required, does the supplier understand the requirements for Run at Rate (Reference Supplier Quality Manual AT-1927)?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No [ ]  N/A | If no, explain: |       |

1. Does the supplier understand the procedures that apply when problems occur at an ATI plant?

(Fast Response, Corrective Actions as described in Supplier Quality Manual, Controlled Shipping level 1 & 2, New Business Hold)

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No |  |  |

**SECTION 5.0 – SUPPLIER QUALITY PERFORMANCE**

1. What is supplier’s PPM rating to ATI (3 Month Avg) & overall? \_\_     \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Does supplier have any parts currently in controlled shipping environment?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No | Explain: |       |

1. Does supplier have any open 8D’s?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No | Explain: |       |

**SECTION 6.0 COMMERCIAL INFORMATION**

1. Did supplier provide cost breakdown data sheet using form AT-1804/1810?

|  |  |
| --- | --- |
| [ ]  Yes | [ ]  No |

1. Are there any exceptions to the Supplier Quality Manual requirements?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No | Explain: |       |

#### Is tooling cost finalized?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No | Explain: |       |

1. TIER II SUPPLIERS – Note the following information:

|  |  |  |
| --- | --- | --- |
| **Supplier Name** | **DUNS #** | **Location** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**SECTION 7 - OTHER ISSUES**

1. Does the supplier understand they must have an accepted IMDS submission to ATI Organization ID #28623 (reference TMS-70007 “ATI Restricted Materials”) prior to completion of PPAP?

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  Yes | [ ]  No |  |  |

|  |  |  |
| --- | --- | --- |
| **Date:**  |       |  |
|  |  |  |
| **ATI Attendees:** | **Supplier Attendees:** |
|  |  |
| Supplier Quality Engineer | Quality Manager |
|       |       |
| Product Engineer | Program Manager |
|       |       |
| Commodity Manager | Manufacturing Engineer |
|       |       |
| Procurement Program Manager | Quality Engineer |
|       |       |
| Other | Other |