ACPS Automotive PPAP Requirements

ACPS AUTOMOTIVE

| | Index: 33 Dated 2023-01-31 | ACPS Aut | omotive PPAP i | Requirements | ACPS AUTOMOTIVE |
|--|--|--------------------------------------|--|--|---|
| | | Commodity number | All | 502 | V = Documets which must be submitted for PPAP approval NDT = Non destructive test - N/A = Not applicable |
| VDA numbers | Requirements | Prototypes, FOTP, Sample parts | Requalification | Wiring harness | Remarks / Agreements ACPS / Supplier |
| | Cover Sheet (Evaluation) | | V | V | |
| 0.2 | Self-assessment for product, process, SW (if appl.) | | N/A | V | |
| ı. | Deliverables of product development | | | | |
| 1.1 | Technical specifications | | V | V | |
| 1.2 / 1.3 | (ACPS Automotive Drawing) Design release | | N/A | N/A | |
| 1.4 | Material data sheet / IMDS for all materials (packaging/wrapper & printed materials) which stay in the car | | V IMDS IDs: HUK = 80908 DEI / DES = 237 MXQ = 185340 | V IMDS IDs: HUK = 80908 DEI / DES = 237 MXQ = 185340 | |
| 1.5 | Product FMEA | | N/A | V | |
| | Deliverables of production process development | | | | |
| .1 | Process flow chart | | V | V | |
| .2 | Process FMEA | | N/A | V minimum required is the Cover | |
| .3 | Control plan | | V | Sheet V | |
| | Deliverables of the validation of the product | | <u> </u> | v v | |
| .1 | Geometry, dimension check | V | V | V | |
| 3.2 | Material check | Material Certificate (3.1) | Material Certificate (3.1) according to DIN ISO 10204 see drawing requirements | v | |
| 3.3 | Function check | | V | v | |
| .4 | Haptic check | | If requested by ACPS N/A | N/A | |
| .5 | Acoustics check Odour check | | N/A N/A | N/A N/A | |
| .7 | Appearance check | | N/A N/A | N/A | |
| .8 | Surface check | | N/A | N/A | |
| .81 | Approval of coating | | N/A | N/A | |
| .82 | Technical cleanliness | | N/A | N/A | |
| | | | V | V | |
| .10 | Reliability tests | | As defined on drawing or specification | As defined on drawing or specification | |
| .11 | Resistance to electrostatic discharge (ESD) Electrical safety / high-voltage safety | | | V N/A | |
| .13 | Electromagnetic compatibility (EMC) | | | N/A | |
| | APQP Tracking Sheet completed for RC1 and RC2 parts | | N/A | v | |
| | Deliverables of the validation of the production process | | | | |
| | Confirmation of process capability of three dimensions defined by supplier CMK >= 1,33 / CpK >= 1,0 < | | V If there was a dimensional complaint last year | V | |
| 1.1 | Achievement of special characteristics (Quantity of measured parts CmK 50 and CpK 125) SC-S> CmK >= 2,0 / CpK >= 1,67 SC-FF> CmK >= 1,67 / CpK >= 1.33 | | V | v | |
| 1.2 | Laboratory qualification (ISO/IEC 17025 or national equivalent) accredited by an body of ILAC MRA | | V | V | |
| .3 | Measured Samples (marked/ numbered and packed in separated boxes) | due to PO | N/A | V (at least 5 pcs) | |
| 1.4 | Master sample | | | If requested by ACPS | |
| .4 | Confirmation of agreed capacity (SLA) | | | 1 sample V | |
| .51 | Capacity evaluation R@R | | | V | |
| .6 | Tooling list and Inventory Protokol if tool is owned by ACPS or QEM acc. ACPS-TMP-S-016 | | N/A | v | |
| | General deliverables | | | | |
| .1 | Compliance with legal requirements | | N/A List of parts used and approval | N/A List of parts used and approval | |
| .2 | PPA status of the supply chain | | status | status | |
| i.3 | Test/inspection equipment list Measuring system analysis for used production and | | V | V | |
| .4 | lab equipment (MSA) | | V | ٧ | |
| i.5 i.6 | Part history (for electronics also for SW) Evidence of suitability of the employed load carriers | | V N/A | v v | |
| | including storage - SLA | | N/A | | |
| i.8 | Documentation of the requalification agreement | | N/A | V | |
| | Deliverables for software | | | | |
| | Software release | | N/A | N/A | |
| | Customer spezific requirements | | | | |
| .1 | WEB 2020 Initial Material Sampling Mercedes-Benz Cars | | V only for Mercedes-Benz ACPS products | V only for Mercedes-Benz ACPS products | |
| 1.2 | TESLA IMDS requirements | | V only for TESLA | V only for TESLA | |
| <u>. </u> | PLM D263835 CAMDS requirements | | ACPS products | ACPS products | |
| 7.3 | (For asian customers) | | V | v | |

| PPAP RICK OII date | |
|--|---|
| ACPS-SQ representative Name and Signature | Supplier representative Name and Signature |
| | |

| Part number / Drawing index / Part index Part Name |
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