LOGICDATA MOTION FOR YOUR LIFE	**Quality Assurance Agreement**	**Rev.**: 5
		Date: 29.01.2020

CREATED BY: Gregor Weinzettl

MODIFICATION HISTORY:

Revision	Remark	Date
1	Initial Release	23rd May 2016
2	Changes on attachment 1,3,9 (Rev.02)	15th Dec 2016
3	Layout changes, no content changes	23rd March 2017
4	- PPAP Content changed - PPAP-KIT Attached - SPC-Tool attached	09th May 2017
5	-PPAP kits redefined -Change on attachment 7 (Rev.03) - Changes in all chapters - add new chapter 14, 15 - move and changed chapter 13 to 16	29th January 2020

between

LOGICDATA
Electronic & Software Entwicklungs GmbH
Wirtschaftspark 18
A-8530 Deutschlandsberg / Austria
(Hereinafter referred to as LOGICDATA)

and

SUPPLIER NAME
Supplier Address
(Hereinafter referred to as Supplier)

Preamble

The high quality of LOGICDATA electronically height-adjustable furniture systems is a key success factor to meet the demand of LOGICDATA customers.

1. Scope of the document

This document defines the basic quality requirements of LOGICDATA suppliers. It applies to prototypes and production material and all products manufactured by supplier for LOGICDATA. Deviations from this Quality Assurance Agreement ("QAA") have to be agreed in writing between the Parties.

The General Terms and Conditions of Purchase of LOGICDATA in their currently valid version apply, available on the LOGICDATA website https://www.logicdata.net/terms-and-conditions/.

2. Attachments

These Attachments are part of the QAA – subject to Supplier having its own Attachments.
In any case, Supplier's Attachments must fulfill the minimum content as contained in the Attachments.

(1) Roadmap for PPAP
(2) 4D/8D Report Template
(3) Parts of Maturity Matrix
(4) IAA Template
(5) Deviation Report
(6) Logistic Templates
(7) PSO Checklist
(8) Communication Matrix
(9) Contract Manufacturing
(10) COC Certificate of Conformity
(11) PPAP Toolkit
(12) SPC-Toolkit

3. Quality and Environmental Management Systems

Supplier provides evidence for a functional Quality Management and Environmental system ("QM") according to ISO 9001 and ISO 14001 (or similar) to LOGICDATA and submits respective certificates to LOGICDATA following 2 weeks after signature of this QAA. If no certificate exists or is expired, an action plan to meet the standard requirements of ISO 9001 or ISO 14001 (or similar) needs to be provided by Supplier within 2 weeks after signature of the QAA.

4. Product Quality

LOGICDATA expects a **Zero failure strategy** from Supplier. Costs which are caused by Supplier will be charged to Supplier.

LOGICDATA shall have the right to audit Supplier whither Supplier is in compliance with this QAA.

5. Special documents: FMEA, Control Plan, Part History List

The starting point for an FMEA is the special characteristics which are defined in the product specification/drawings. The supplier is requested to create **PFMEA's** to secure the special characteristics in the manufacturing process. All derived special characteristics have to be shown in the **Control Plan**, verified and documented in the production. Unless otherwise agreed, the following minimum requirements with respect to special characteristics have to be fulfilled:

Approval of the manufacturing	Cm / Cmk > 1,67	defect contribution < 0,5 ppm
Process and the product	Pp / Ppk > 1,67	defect contribution < 0,5 ppm
series production	Cp / Cpk > 1,33	defect contribution < 63 ppm

All derived special characteristics have to be shown in the **Control Plan**, verified and documented in the production.

Basically, all items from the Control Plan must be recorded in Control Charts (see SPC-Tool -> **attachment *12***). Other documentation must be agreed with LOGICDATA. For each product, a **parts history list** is required. This part history list shall include, for example, information on adjustments made on tools, process improvements, index changes, new materials and all other relevant changes. The life cycle report has to be made available on request and with initial sampling.

The Supplier has to store all quality control documentation for a minimum period of 10 years and shall be made available to LOGICDATA for review if required by LOGICDATA. After expiry of the specified retention period, the contracting parties shall jointly determine whether the records are to be further retained or destroyed.

6. Production Part Approval Process (PPAP), parts of maturity matrix, IAA

The Supplier is obliged to develop a detailed project timetable for LOGICDATA. The project deadlines have to be agreed with LOGICDATA and complied with. LOGICDATA has to be informed as soon as possible of potential variances from these deadlines. Solutions have to be proposed to nevertheless adhere to the delivery commitment.
The Supplier is responsible for the preparation of suitable feasibility studies, zero-defect strategies, manufacturing coordination plans, FMEA and resulting quality assurance and measurement concepts for the preparation of process flow diagrams, control plans including inspection equipment and checking gauge concepts for the planning of equipment, maintenance and packaging as well as for the qualification of their employees.
The Supplier is responsible for using and complying with new and competitive technologies and procedures for development planning, in consideration of the technical situation. The Supplier brings his experience into the product documentation from the beginning of the development and defines the special characteristics of the product and the process in time. The development has to be construed in conformity with the goal of zero-defects strategy (“robust design”). Supplier is responsible for compliance with all legal safety and environmental regulations.

- The Supplier has to add and confirm on LOGICDATA request his timing plan into the Roadmap for PPAP. An example can be found in the ***attachment 01.***
- In addition, LOGICDATA is obliged to request a self-monitoring during the project phase. Content and the questions can be found in attachment 01. Due dates of the deliverables are defined with the agreed road map.

- The product and process maturity from project start until 3 months after SOP is regulated in parts of maturity and binding on the Supplier. The Supplier has to document any part deviation to the “parts of maturity matrix” in an IAA and provide this document to LOGICDATA. This applies both for the project and for the series production.

- The following documents must be provided prior to the start of serial production. The PPAP level (1-3) will be defined during the project phase and depends on the part criticality and Supplier performance. In ***attachment 11*** there is a full “PPAP KIT” which is recommended to use.

	[1] Part Submission Warrant	[2] Drawings	[3] Part History List	[4] Process Flow Chart	[5] PFMEA	[6] Control Plan	[7] Environmental Material Declaration	[8] Tooling Information \ Equipment List	[9] Packaging Information	[10] Sample Parts	[11] Measurement Report/ Dimensional Inspections	[12] Measurement system analysis (Gage R&R)	[13] Capability study (Cpk)	[14] PSO Results (Process Sign Off)
Level 1	M						M							
Level 2	M			M		M	M	M	M	M	M		M	
Level 3	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Toolkit available	X				X	X	X	X	X	X	X	X	X	X
PSO Requirement		X	X	X	X	X		X	X		X	X	X	X

	Not required
M	Mandatory requirement

7. Process Sign Off ("PSO")

- The PSO includes the following main objectives: (1) confirmation of process capability, (2) confirmation of serial production of parts quality, (3) confirmation of production capacity planning (max. capacity), (4) discovery of bottle neck processes (5) production of parts for initial sampling. -> Usually 50 parts per. cavity (in coordination with the SQE)
- The whole production has to run under serial conditions with respect to: Production process, cycle time, equipment technology, manufacturing capacity, parts status, personnel qualifications, documentation, packaging, logistics, and environmental influences.
- The PPAP Roadmap includes also the dates of the Pre-PSO Meeting, the internal and the external PSO Meeting. Valid for the PSO are the attached 12 PSO elements.
- If there are significant deviations, the PSO Meeting can be stopped by the SQE. In this case, a Second PSO visit has to be organized.

8. Part Traceability

Products with importance to functionality the traceability from raw materials to the shipment of the final product has to be documented. Critical parts have to have a date stamp on the part (also documented in the part specification). All part changes have to be documented in the Part History List. (Rev. Date, Prod. Charge)

9. Receiving Inspection

LOGICDATA expects that Supplier has implemented capable and controlled processes in order to avoid any Incoming Inspection on the products. To achieve this LOGICDATA requires an additional Quality check before material Outgoing. This has to be documented in an COC Paper on LD demand (Certificate of Conformity ->***attachment 10***) LOGICDATA Incoming Inspection: Quantity, delivery note, requested test certificates, transport damages. Suppliers IQC and OQC data (part of the control plan) must also be documented and also stored as described in "Item 5".

10. Problem Solving Process

Supplier has to inform LOGICDATA immediately about problems to be able to react and define the corrective actions in time.

11. Claims

Supplier will be notified by phone, email, or via the "LD Claim Platform" on a complaint (please contact the SQE for login information). Supplier has to establish immediately short term actions to minimize the damage. A maximum response time of 24 hours after the receipt of the complaint has to be confirmed. For further information on correct setting of the 4D/ 8D reports can be found in ***attachment 02***. A complaint is only complete when the 4D/ 8D report is accepted by LOGICDATA.

12. Cost take over in case of a complaint

LOGICDATA reserves the right to charge all cost incurred in connection with a complaint to Supplier. The following cost items may be used:

- Response time greater 24 hours on working days: 500 EURO
- All sorting costs related to the justified claim
- Cost related to stoppage of the production line
- Sorting of end-products and / or disposal of the material
- Tests (if necessary)
- Cost of quality assurance for the investigation of the problem
- Additional transportation costs to keep the production running
- Costs caused to the end customer
- Other

13. Logistics

If the packaging is not specified in the part specification it has to be defined and confirmed by LOGICDATA Purchasing. The package label must contain at least the following information: name of the part, part number, revision level, quantity and date of production or batch number.

Special deliveries require special marking of the parts which you will find in the (attachment 06) Logistics:

- Pre-Pilot, Pilot, 0-Series, Sample Parts, PER-Material, Rework Material
- IAA Material
- Clean Point Material has to be marked on the box at least for 4 Weeks or 10.000 parts. Clean Point Material, complaint #“(Size Arial Gr. 30)

14. Period of validity

This QAA is valid for an unlimited period and can be terminated by written notice 6 months before the end of each calendar year but at the earliest two years after signing this Agreement.

15. Amendments of this QAA

After signing of the QAA it is mandatory for the Supplier to check once per month the LOGICDATA OwnCloud for new versions of QAA and related Process and Operation Instructions. New versions have to be appropriate clearly identified. If there are no exceptions in written form from the Supplier within a period of 8 weeks after the implementation of changes in the OwnCloud, the changes are accepted by the Supplier without further written confirmation.

16. Specifications and contract review

LOGICDATA requires a careful review of this QAA from Supplier. All deviations to this document have to be added to the “Deviation Report to Specification and Contract Review” (***attachment 05***). If something is missing from a Supplier perspective it also needs to be added to the list.

Gregor Weinzettl

29.01.2020, (LOGICDATA) Date, Supplier