

## FACTORY AUDIT REPORT (HARDWARE)

Date \_\_\_\_\_

### Factory Information

Factory Name \_\_\_\_\_ Factory Contact \_\_\_\_\_

Factory Location \_\_\_\_\_

Contact Phone \_\_\_\_\_ Contact Email \_\_\_\_\_

Factory Website \_\_\_\_\_

Factory Members Present \_\_\_\_\_

### Project Information

Project Name \_\_\_\_\_

Project Delivery Date \_\_\_\_\_

### Factory Company Outline

Number of Factory Sites \_\_\_\_\_ Annual Revenue \_\_\_\_\_

Product Experience: \_\_\_\_\_ Notes \_\_\_\_\_

- Consumer
- Electronics
- Industrial Electronics
- Medical Devices
- Radios
- Toys
- Other \_\_\_\_\_

Volume Capacity \_\_\_\_\_

New Product Introduction (NPI) Processes \_\_\_\_\_

### Factory Certifications

ISO  9000  9001  9002  13485  14001  14002 \_\_\_\_\_ Notes \_\_\_\_\_

6-Sigma Staff  
with Blackbelts \_\_\_\_\_

## IQC – Incoming Quality Control

This department is responsible for controlling quality and validity of the materials and parts received from outside suppliers, before production begins

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- Parts are being inspected for counterfeit
  - Parts are being assigned unique part numbers

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Comments

## Storage

This department is responsible for inventorying purchased and consigned parts.

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- Storage area keeps record of temperature and humidity
  - ESD (Electrostatic Discharge) Sensitive parts are stored accordingly
  - Customer consigned parts are labeled and stored separately

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Comments

## Assembly – SMT – Surface Mount Technology

This is the space on the factory floor dedicated for assembly and test of SMD (Surface Mount Device) parts, i.e. Printed Circuit Board Assembly (PCBA)

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Equipment	Number of assembly lines:
	Reflow oven stages:
	Stencil:
	Pick and Place:
	Reflow:
	AOI (Automated Optical Inspection):
	ICT (In-Circuit Testing):

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Comments

## Thermal Profiling

The reflow ovens used to assemble the PCBAs must be calibrated and profiled to ensure proper temperature cycles

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Equipment                      Num. thermocouples on mole:  
   Frequency of use:  
   PCB (Printed Circuit Board) Used:  Same  Customer Specific  
   Profile Saved:

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Comments

## Solder Rotation

Reflow solder paste must be stored at specific temperatures and has an expiration date that must be followed.

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Solder Storage:  
Max duration used:  
Date opened is tracked:  Yes  No  
Temperature stored:

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Comments

## Wave

Wave soldering is a process used to assemble Thru Hole electrical parts on a PCBA (Printed Circuit Board Assembly).

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Number of assembly lines:  
Equipment:  
Frequency solder cleaned out:

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Comments

## 2nd Operations

Some products require special assembly procedures that cannot be completed with traditional SMT or Wave assembly processes. This department handles all special assembly requirements.

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Comments

### AOI – Automated Optical Inspection

This equipment is used to optically look for errors in assembled parts on a PCBA. Using optical recognition technology, parts which are missing, incorrect, or not assembled properly are detected and marked for correction

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Equipment:

Frequency of Use:

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Comments

### FCT – Functional Circuit Testing

This equipment is used to determine if a product or sub-assembly is functioning properly after assembly, according to a specified performance specification

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Equipment:

Developed by:  Contract Manufacturer  Customer

Maintained by:  Contract Manufacturer  Customer

Records Stored:

Unique ID Used:

Reports Generated:

Failed Units Identified By:

Passed Units Managed By:

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Comments

### Rework

This department is responsible for fixing, or reworking, any errors that are detected during the assembly and testing processes. The goal is to correct any errors so all PCBAs can be salvaged.

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Track Rework Changes:

Max Single Unit Reworked:

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Comments

## Engineering

This department can provide custom engineering services for customers, depending on skills required for the product and available within the team.

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Comments

## Worker Shifts

Two or three 8-hour shifts are common for EMS suppliers. This information is important to know the production capacity.

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Shift Duration:

Number of Shifts, Normal Work:

Number of Shifts, Overtime Work:

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Comments

## Yield Reporting

No product will be assembled and pass all tests the first time, 100%. Metrics and reports are used to monitor yield and ensure it is constantly improving.

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Reports Generated for Build:

Review Meeting Held:  Yes  No

Customer Visibility:

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Comments

## AQL – Acceptance Quality Limits

This process defines what yields and errors are acceptable for a customer to approve and receive a production build.

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Execution:  Internal  3rd Party

Source Inspection:  Internal  3rd Party  Customer

Reports Shared with Customer:  Yes  No

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Comments

### Test Capabilities

This process defines what yields and errors are acceptable for a customer to approve and receive a production build.

Shipping/Vibration:  Yes  No

UL:  Yes  No

Environment:  Yes  No

CE:  Yes  No

ESD:  Yes  No

FDA:  Yes  No

FCC:  Yes  No

Comments

### Injection Molding

On-Site:  Yes  No

Comments

### General Comments