

Work Domain: Quality Assurance

Revisions Record				
Rev. No.	Written/Updated by	Approved by	Effective date	Main Changes
09	Yoav Gilad	Eyal Frishberg	10.07.12	Full revision of Rev. 09
10	Yoram Shushan	Yacov Sokolovsky	06.04.17	New document template and Full revision of Rev. 09 (adjust the document to these days' processes).
11	Yoram Shushan	Yacov Sokolovsky	15.03.18	Removing IPC-6016, that was canceled from Related paragraphs (Para. 5.5.4). Updating the document template with AudioCodes' Logo. Add a reference to Quality, Environment and Safety Policies (Para. 4.1.16). EICC was replaced with RBA (Para. 4.1.11 and 5.10). Adding Para. 5.5.6- Record keeping instruction.
12	Yoram Shushan	Yacov Sokolovsky	15.08.19	Updating AudioCodes' web site link in Para. 4.1.16
13	Arie Elboim	Yacov Sokolovsky	01.10.20	Update Par. 4 – Related Documents, Par. 5.9 – Environmental Quality Management and Par. 5.10 - CSR



1. General

The quality of the goods that are supplied to AudioCodes by our suppliers, has a significant influence on the quality of the final products delivered to the customers.

In addition, AudioCodes' customers expect that our supply chain will preserve the environment and be committed to social accountability.

2. Objectives

To define and determine the requirements from AudioCodes' suppliers on the subjects of Quality,

Environment, Safety and Corporate Social Responsibility (CSR).

The requirements detailed in this document are a mandatory part of every Purchase Order and should be implemented on every delivery.

3. Terms & Abbreviartion

- **3.1 Goods** A general term for raw materials, items, subassemblies, final assemblies, and off-the-shelf products.
- **3.2** Supplier-A general term for Manufacturer, Agent or S/C supplying goods affecting the product quality.
- **3.3** Manufacturer- A plant making a defined manufacturing job for AudioCodes (mechanical, packaging, labels, PCB, etc.).
- **3.4** Chips Manufacturer- Chip manufacturer with whom AudioCodes contracted (in the development stage) for the supply of chips containing AudioCodes desgin.
- **3.5** Agent Business selling/supplying goods (capacitors/resistors/fasteners, etc.).
- **3.6** S/C Subcontractor with whom the company contracted to perform a defined assembly work.
 - **3.6.1 OEM (Original Equipment Manufacturer) S/C-** Company that makes a part or subsystem that is used in another company's end product.
 - **3.6.2 ODM (Original Design Manufacturer) S/C** Company that designs and manufactures a product as specified and eventually rebranded by another firm for sale.
 - **3.6.3** T/K (Turn-Key) S/C- Provision of a complete purchasing, manufacturing, testing, packaging and shipping of products or services, ready for immediate use.
- **3.7 EXW (Ex Works)** is an international trade term that describes an agreement in which the seller is required to make goods ready for pickup at his or her own place of business. All other transportation costs and risks are assumed by the buyer.

4. Related Documents

- **4.1** The latest revision of the following documents and regulations (incuidng all amendments) constitute an integral part of this document:
 - **4.1.1** P-08-04E S.O.W (Statement of Work) for PCB manufacturers.
 - **4.1.2** P-08-11E S.O.W (Statement of Work) for Electronic sub-contractor assemblers.
 - **4.1.3** P-08-13E Visual inspection of mechanical parts and plastic parts (Criteria).
 - **4.1.4** IPC-A-610 Acceptability of Electronic Assemblies (International Standard).
 - **4.1.5** ANSI/ASQC Z1.4 Sampling Procedures and Tables for Inspection by Attributes.
 - **4.1.6** IPC/JEDEC J-STD-033: Handling, Packing, Shipping and Use of Moisture/Reflow Sensitive Surface Mount Devices.
 - **4.1.7** RoHS Directive (EU Directive 2011/65/EC on the restriction of hazardous substances).
 - **4.1.8** China RoHS Management Methods for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products.
 - **4.1.9** REACH Regulation (EU 1907/2006/EC on the Registration, Evaluation, Authorisation and Restriction of Chemicals).
 - 4.1.10 WFD Waste Framework Directives (EU Directive 2008/98/EC and Directive 2018/851).
 - **4.1.11** WEEE Directive (EUDirective 2012/19/EU).
 - **4.1.12** Conflict Minerals Act (Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act).
 - **4.1.13** Packaging and Packaging Waste Directive (EU directive 94/62/EC).
 - **4.1.14** POPs Regulation (EU Regulation 850/2004/EC Persistent Organic Pollution).
 - **4.1.15** ODS Regulation (EU Regulation 1005/2009/EC Ozone Depleting Substances).
 - **4.1.16** California Proposition 65 ("Prop-65") The Safe Drinking Water and Toxic Enforcement Act of 1986.
 - 4.1.17 Battery Directive (EU Directive 2006/66/EC).
 - 4.1.18 IATA lithium Battery Shipping Guidelines and IATA Dangerous Goods Regulations (DGR) documents.
 - **4.1.19** IMDG Code (International Maritime Dangerous Goods Code).

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4.1.20 AudioCodes Quality, Environemntal and Safety Policies (See AudioCodes WEB site -

https://www.audiocodes.com/corporate/quality-safety-environment)

5. Method

5.1 General

- Supplier should maintain a certified Quality Management System (ISO-9001), monitor its sub suppliers' quality performances and make every reasonable effort to persuade his key suppliers to undergo qualification to ISO-9001.
- Supplier must be familiar with AudioCodes Quality Policy (See Related Document para. 4.1.20).
- **5.2** In case of conflict between the requirements of this document and any other existing requirements, the following order of preference will prevail:
 - Supply agreement/Contract.
 - Purchase Order and Terms & Conditions (if exist).
 - Drawings and any engineering instructions.
 - This document.

5.3 Order Acceptance

- **5.3.1** Upon receiving the P.O., it is the supplier's responsibility to acknowledge the P.O. receiving within maximum two days.
- **5.3.2** Supplier needs to confirm delivery date and technical requirements within 3 to maximum 5 working days according to our requested delivery date. In case the supplier



can't meet our delivery date, they need to inform the relevant buyer. The buyer will inform the relevant planner, to consider other alternatives if needed.

- **5.3.3** It is the supplier responsibility to verify that:
 - **5.3.3.1** The revision level of the documentation attached to the order (when applicable) meets the revision indicated in the P.O.
 - **5.3.3.2** All documentation is in proper and legible condition.
 - **5.3.3.3** All requirements and definitions are clear. (Price, Qty, Delivery, PN...).
 - **5.3.3.4** He has the technical ability to perform the work ordered.
- 5.3.4 In any case of unclear or unfinished definitions, inability to perform the processes indicated in the drawings/specifications, lack of material or absence of any document, the supplier should promptly notify AudioCodes' Purchasing relevant Buyer and Engineering Director by E-Mail/Fax accordingly.



5.3.5 A supplier which work with sub-contractors will submit the list of his custom-made products' sub-contractors to AudioCodes' approval before work starts. It is his responsibility to request his S/C to supply the goods with inspection reports and compliance reports. This documentation will be kept at the supplier's possession and will be availabled to audit by AudioCodes' representative at all times.

Notes:

- **5.3.5.1** By all means, the responsibility for the work performed by the S/C lies with the S/C to whom the P.O. was addressed.
- **5.3.5.2** It is the supplier's responsibility to require his sub-contractors to meet the requirements of para 5.9 & 5.10 of this document.
- **5.3.6** AudioCodes reserves the right to increase, decrease or cancel the P.O. up to two months before the supply date listed in the P.O.
- **5.3.7** Any deviation from AudioCodes manufacturing instructions as well as usage of unauthorized components, will be considered legitimate cause for termination of the contract with the supplier, rejection of the goods and returning them to the supplier (on his expense) without paying good's invoice.

5.4 Manufacturing

- **5.4.1** The supplier will perform the work ordered or supply the required goods as detailed in the order and/or the technical documents attached to it.
- 5.4.2 In case the manufacturing file or its attached documents contain any handwritten corrections/omission/addition, it is the supplier's responsibility to inform AudioCodes' Q.A. Manager or Engineering Manager, and receive written authorization to continue production in the current situation.
- 5.4.3 PCBs manufacturing will meet all the requirements of AudioCodes' Process Specification P-08-04E.
- **5.4.4** Assembly, soldering and inspection of PCBs and assemblies will meet the requirements of AudioCodes' Process Specification P-08-11E.

5.5 Quality Control

- **5.5.1** It is the supplier's responsibility to perform quality control of the goods before shipment to AudioCodes.
- **5.5.2** It is the agent responsibility to verify compatibility to AudioCode's order, including the following points: type of goods, quantity, packaging and accompanying documentation.
- 5.5.3 In their quality control, Manufacturers and S/Cs will include the requirements of para.
 5.5.2 and a physical final inspection of the products. Unless otherwise agreed, the final inspection results will be attached to the documentation sent with the goods (see para.
 5.8).
- 5.5.4 Unless otherwise specified in the P.O., final inspection will be based on ANSI/SQC Z1.4-2008, General Inspection Level II, A.Q.L. of 0.65%. PCBs will be inspected per Table 4-2, C=0, per IPC-6012, according to the PCB type.
- 5.5.5 The quality of mechanical and plastic parts will meet the requirements of AudioCodes' Process Specification P-08-13E.
- **5.5.6** The Supplier will keep records of all test reports related to work performed for AudioCodes for minimum three years, either as hard copy or in software media.

5.6 Documentation Control

5.6.1 Manufacturing files/drawings/computer files which are part of the P.O. will be kept by the supplier in a controlled manner. Whenever a revision is made to any of the manufacturing documentation terms, it is the responsibility of AudioCodes' Purchasing Director or the applicable buyer to send the supplier the most up to date documentation, together with the P.O.

5.7 Storage and kitting

5.7.1 In case Manufacturer/Sub-Contractor stores items belonging to AudioCodes and/or intended to be installed in AudioCodes product, it is their responsibility to hold and manage a logistic system enabling full stocks control and identification of the stored goods. It is the manufacturer/Sub-Contractor responsibility to insure these goods are kept in its full value as well as to assure proper storage conditions.

5.8 Packaging and shipment

- **5.8.1** All Product packaging shall comply with the requirements of Packaging and Packaging Waste Directive (EU directive 94/62/EC) especially in respect of its design and composition, including the Directive's restrictions on the use of certain hazardous substances in the manufacturing of the packaging and the marking requirments.
- **5.8.2** Items (not including products) will be shipped in their original package only. Package will contain manufacturer name, quantity, and the item catalogue number. When, under certain circumstances, it is impossible to supply the goods in its original packaging, or when the ordered quantity do not match the standard packaging quantity of the item (e.g. the ordered quantity is not an accurate multiplication of the standard quantity of items in a tray/ruler), it is the supplier's responsibility to call Purchasing Director's and pay his attention to this deviating condition and receive his prior permission to the supply of the goods.
- **5.8.3** Non-hermetic humidity sensitive components will be packed in vacuum packaging as defined in the latest revision of IPC/JEDEC J-STD-033. The MSL of the component will be clearly printed on the product label. If the original vacuum package was opened in order to ship partial quantity of components, than both quantities (the remaining and the quantity shipped) should be re-packed in vacuum within the time limit dictated in the above spec, and product data as well as its MSL should be kept on both packages.
- 5.8.4 It is the supplier's responsibility to attach Shipping Certificate/Invoice to every shipment, detailing the following: AudioCodes' P.O. number, AudioCodes' catalogue number and the quantity.
 - **5.8.4.1** Agent and Manufacturer will also include a Certificate of Compliance (C.O.C.).
 - **5.8.4.2** Manufacturer will add a Test Report.

<u>Note</u>: In case that part of the job is done by a S/C, then its S/C Certificate of Analysis (C.O.A.) should also be included.



- **5.8.5** Serial Numbered goods: In cases of S/N controlled goods, the outer package must have relevant bar-coded S/N label. A list of the S/Ns of the shipment must also be supplied as part of the accompanying documents. If possible, supply the S/N list by Excel file directly to ACL warehouse.
- 5.8.6 Supplier will pack the ordered goods in a proper package to avoid any damage to the goods during shipping and transportation. The outside package marking will include AudioCodes' P.O. number, AudioCodes catalogue number and quantity. Shipment from overseas will also include the country of origin.
- **5.8.7** For purchase orders whose shipping terms are EXW, AudioCodes' purchasing/shipping department will provide vendor/supplier/sub-contractor with shipping instructions and/or forwarder account number (if relevant/needed).
- **5.8.8** European suppliers shipping EU manufactured goods will attach an EUR1 Certificate to the shipment or a document of equal value, as permitted under the IL-EU trade agreement.
- **5.8.9** US suppliers shipping US manufactured goods will attach a Certificate of Origin to the shipment or a document of equal value, as permitted under the IL-US trade agreement.
- **5.8.10** Any costs incurred to AudioCodes due to supplier's failure to comply with shipping instructions/requirements presented by AudioCodes will be billed to supplier.
- **5.8.11** Special requirements to suppliers of electronic components:
 - 5.8.11.1 The manufacturing date of the components will be marked on their packaging. This date will not be earlier then 18 months from the date received to AudioCodes' warehouse. In case of vacuum packed devices, the date won't be earlier then 30 months from the date received to AudioCodes' warehouse.
 - **5.8.11.2** Active components and IC components will be packed in anti-static packaging.



5.9 Environmental Quality Management

- Supplier should maintain a certified Environmental Quality Management System (e.g. ISO-14001), monitor its sub suppliers' environmental performances and make every reasonable effort to persuade his key suppliers to undergo qualification to ISO-14001 or equivalent Environmental Quality Management System.
- Supplier must be familiar with AudioCodes Environmental Policy (See Related Document para. 4.1.20).
- Supplier will comply to all material environmental regulations requirements for products, their accessories and their packaging affected by any enacted legislation.

In particular, and without derogating from the foregoing, products should comply with the following legislations and their effective amendments:

5.9.1 Directive 2011/65/EU and 2015/863/EU ("RoHS")

All goods supplied to AudioCodes must meet the EU-RoHS requirements and will be marked with "CE" label. Supplier shall supply a Full Material Disclosure (FMD) of the product and of its accessories or a Declaration of Compliance (DoC). Supplier will provide a list of all exemptions in use. Supplier is required to update immediately about any substances exceed the allowed limit detailed in the regulation or any change in the use of any exemption.

5.9.2 Management Methods for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products ("China RoHS")

Supplier will mark the product with the appropriated label and supply the hazardous substances table when applicable.

5.9.3 Directive 2012/19/EU ("WEEE")

Supplier will label the product by the crossed-out wheel bin label and will prepare and supply dismantling instructions of the product to Audiocodes Engineering.

5.9.4 Regulation 1907/2006/EC ("REACH").

Supplier will supply a Full Material Disclosure (FMD) of the product, of the accessories and of the packaging materials or a Certificate of Compliance (CoC) with all SVHCs in use. The list will include all SVHCs (names and CAS numbers) with a concentration above 0.1% w/w (weight by weight) and their concentration



(article-level Concentration in PPM) in any article within the product and the article name. CoC is also required when no SVHC exist in the product or all SVHC in the products are below 1000PPM. Supplier will supply the product's weight.

5.9.5 SCIP DB (Data Base). Directive 2008/98/EC and Directive 2018/851 ("WFD" - Waste Framework Directives)

All producers, importers and suppliers of articles to the EU market, containing SVHCs with a concentration above 0.1 % w/w threshold per article (as defined in REACH Directive, article 33) are required to submit information about the use of those substances starting January 2021 to ECHA Data Base. Supplier will support AudioCodes by supplying the required information as required by those directives as per AudioCodes or its representative request.

5.9.6 Directive 94/62/EC ("Packaging and Packaging Waste")

All Product packaging shall comply with the requirements of Directive 94/62/EC and its amendments in respect of its design and composition, including the Directive's restrictions on the use of certain hazardous substances in the manufacturing of the packaging. All packages' materials will fully be able to be recycled and appropriate marking will be on them as per the relevant regulations.

5.9.7 Directive 2006/66/EC ("BATTERY" directive)

In case a battery is part of the product, Supplier will meet all the requirements set in this directive and its amendments and will supply AudioCodes an updated MSDS of the supplied batteries.

5.9.8 Conflict Minerals Act (Section 1502 of the Dodd–Frank Wall Street Reform and Consumer Protection Act)

The supplier will identify and verify his sources of tin, tantalum, tungsten and gold incorporated into the products supplied to AudioCodes are conflict-minerals free. Supplier will report his data annually or when requested by AudioCodes or its representative on an updated CMRT template.

5.9.9 Regulation 850/2004/EC ("POPs"- Persistent Organic Pollution)

The supplier is requested to report if any of the substances exist in the product.

5.9.10 Regulation 1005/2009/EC ("ODS" – Ozone Depleting Substances)

The suppliers should not use any ozone depleting chemicals and report immediately if such a chemical is in use.

5.9.11 California Proposition 65 ("Prop-65" -The Safe Drinking Water and Toxic Enforcement Act of 1986)

Supplier shall identify whether any California Prop-65 chemical is in the product and provide warning label if required as per the regulation requirements.



- All above mentioned regulations and directives are for reference only. The supplier must meet the most update version including all its amendments effective in the day of the products delivery.
- Supplier will respond within 14 working days for AudioCodes' inquiries about compliance status with the above or any other specific regulations.
- It is Supplier responsibility to update immediately AudioCodes Quality Manager and Product Manager in any case a product does not meet or stop to meet, from any reason, any of the regulations

5.10 Suppliers Code of Business Conduct and Corporate Social Responsibility (CSR)

AudioCodes Code of Business Conduct and Social Responsibility sets a high standard for behavioral conduct in areas including human rights, harassment and discrimination, conflicts of interest, work conditions and environment.

We view our suppliers as partners and care about the way they do business.

We expect our suppliers to fully comply with applicable laws and to adhere to AudioCodes Code of Business Conduct and Social Responsibility principles, as described below.

We also expect our suppliers to use their best efforts to implement this code with their suppliers and subcontractors who support them in supplying AudioCodes.

• General / Humane Treatment

AudioCodes expects suppliers to preserve human rights of their workers, and to treat them with dignity and respect as understood by the international community. This applies to all workers including temporary, migrant, student, contract, direct employees, and any other type of worker. There is to be no harsh and inhumane treatment including any sexual harassment, sexual abuse, corporal punishment, mental or physical coercion or verbal abuse of workers; nor should there be threatening behavior of this nature.

• Freedom of Association and Right to Collective Bargaining

Employees and representatives including temporary workers may openly express themselves to their company concerning matters related to their working conditions.



• Child and Forced Labor

Child Labor is strictly prohibited. "Child Labor" means under the minimum age for employment per the law in the country. Slavery in all forms is forbidden. All work must be voluntary and workers shall be free to leave work at any time or terminate their employment.

• Diversity and Non-discrimination

AudioCodes expects suppliers to prohibit and fight negative discrimination based on race, age, color, sex, sexual orientation, language, religion, political or other opinion, national or social origin, property, birth or other status, and shall promote diversity, equality of opportunity or treatment in employment and occupation.

AudioCodes expects suppliers to treat all their employees with respect and not to use any corporal punishment, mental or physical coercion, any form of abuse or harassment or perpetrate threatening behavior of this nature.

AudioCodes expects suppliers to commit to equal employment opportunity. Suppliers should not discriminate against their employees or applicants for employment based on race, color, religion, sex, national origin, age, handicap, disability or veteran status, sexual orientation, marital status, genetic information, ancestry, or any other classification protected by applicable law.

• Work Health and Safety

Suppliers should provide all its employees a safe and healthy working environment and treat occupational health and safety of employees as a priority throughout all its activities.

Suppliers will comply with all applicable laws and regulations regarding Health and Safety.

AudioCodes encourages suppliers to maintain a certified Occupational Health & Safety Management System.

Working Conditions

Compensation paid to workers shall comply with all applicable wage laws, including those relating to minimum wages, overtime hours and legally mandated benefits and the granting of paid annual vacation. Suppliers will provide remuneration according to national legal standard on minimum wage. The basis on which workers are paid shall be clearly conveyed to them in a timely manner. Suppliers will not use deductions from wages as a disciplinary measure.

• Working Hours

Working hours, including overtime, shall comply with applicable local laws. Working hours are not to exceed the maximum set by local law. Workers shall be allowed at least one day off every seven days.

Business Integrity

The highest standards of integrity are to be upheld in all suppliers' business interactions. Suppliers will refrain from any form of corruption or actions that could potentially be construed as such. AudioCodes is committed to a Code of Ethics, that can be found on its website at https://www.audiocodes.com/corporate/code-of-ethics.

It is the policy of AudioCodes to comply with all applicable anti-bribery and anti-corruption laws, including the U.S. Foreign Corrupt Practices Act.

AudioCodes expects suppliers to comply to all legislations, adapt similar standards and maintain supported processes.



• Competition

AudioCodes expects suppliers to respect the rules of free and fair competition in all business relations.

Political Contributions

AudioCodes expects suppliers not to donate money or grant any monetary benefits to any political party unless permitted by law.

• Environmental

AudioCodes' management is aware of the global efforts invested in reducing damage to the environment and in minimizing the use of scarce natural resources. AudioCodes' management is committed to contributing towards environmental preservation with relevance to its activities and products. AudioCodes expects suppliers to join this effort - see paragraph 5.9 above.

• Supplier must be familiar with AudioCodes Safety Policy (See Related Document para. 4.1.20).

6. Responibility & Authority

As specified in this procedure

7. Records

As specified in para. 5.5.6

8. Appendices

N/A