

Proposal:		Principal Investigator:	
Contract Number:			
Sponsored Project Title:			
Sponsor:			

Background. A Counterfeit Electronic Part is an unlawful or unauthorized reproduction, substitution, or alteration that has been knowingly mismarked, misidentified, or otherwise misrepresented to be an authentic, unmodified electronic part from the original manufacturer, or a source with the express written authority of the original manufacturer or current design activity, including an authorized aftermarket manufacturer. Unlawful or unauthorized substitution includes used electronic parts represented as new, or the false identification of grade, serial number, lot number, date code, or performance characteristics¹.

Summary of Requirements. It is Virginia Tech's responsibility to prevent the proliferation of counterfeit electronic parts and suspect counterfeit electronic parts when procuring electronic parts or end items, components, parts, or assemblies that contain electronic parts that will be provided to the U.S. Department of Defense (DoD) as a deliverable under procurement contracts and subcontracts that contain DoD Federal Acquisition Regulation Supplement ([DFARS](#)) [252.246-7007](#) clause, Contractor Counterfeit Electronic Part Detection and Avoidance System (Aug 2016). A copy of this clause is included as Exhibit (A).

Roles and Responsibilities. The Principal Investigator and their department are responsible for sourcing such parts in support of their sponsored project's hardware provided to Sponsors. The DoD contract/subcontract for this sponsored project includes [DFARS 252.246-7007](#). In order to ensure compliance with these requirements, the following action items will take place:

The Principal Investigator will:

- 1) ensure all purchases of electronic parts or end items, components, parts, or assemblies that contain electronic parts under this contract are executed in accordance with the Procurement Department's *Procurement Guidance: Counterfeit Electronic Parts*, which is included herein as Exhibit (B).
- 2) ensure all project personnel assigned to this sponsored project are informed of these requirements.
- 3) immediately alert the Procurement Department and the Office of Sponsored Programs in the event there is credible evidence (including, but not limited to, visual inspection or testing) that provides reasonable doubt that the electronic part is authentic.

¹ Department of Defense Federal Acquisition Regulation Supplement (DFARS) 252.246-7007(a).



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Exhibit (A)

DFARS 252.246-7007, CONTRACTOR COUNTERFEIT ELECTRONIC PART DETECTION AND AVOIDANCE SYSTEM (AUG 2016)

The following paragraphs (a) through (e) of this clause do not apply unless the Contractor is subject to the Cost Accounting Standards under 41 U.S.C. chapter 15, as implemented in regulations found at 48 CFR 9903.201-1.

(a) *Definitions.* As used in this clause—

“Authorized aftermarket manufacturer” means an organization that fabricates a part under a contract with, or with the express written authority of, the original component manufacturer based on the original component manufacturer’s designs, formulas, and/or specifications.

“Authorized supplier” means a supplier, distributor, or an aftermarket manufacturer with a contractual arrangement with, or the express written authority of, the original manufacturer or current design activity to buy, stock, repackage, sell, or distribute the part.

“Contract manufacturer” means a company that produces goods under contract for another company under the label or brand name of that company.

“Contractor-approved supplier” means a supplier that does not have a contractual agreement with the original component manufacturer for a transaction, but has been identified as trustworthy by a contractor or subcontractor.

“Counterfeit electronic part” means an unlawful or unauthorized reproduction, substitution, or alteration that has been knowingly mismarked, misidentified, or otherwise misrepresented to be an authentic, unmodified electronic part from the original manufacturer, or a source with the express written authority of the original manufacturer or current design activity, including an authorized aftermarket manufacturer. Unlawful or unauthorized substitution includes used electronic parts represented as new, or the false identification of grade, serial number, lot number, date code, or performance characteristics.

“Electronic part” means an integrated circuit, a discrete electronic component (including, but not limited to, a transistor, capacitor, resistor, or diode), or a circuit assembly (section 818(f)(2) of Pub. L. 112-81).

“Obsolete electronic part” means an electronic part that is no longer available from the original manufacturer or an authorized aftermarket manufacturer.

“Original component manufacturer” means an organization that designs and/or engineers a part and is entitled to any intellectual property rights to that part.

“Original equipment manufacturer” means a company that manufactures products that it has designed from purchased components and sells those products under the company’s brand name.

“Original manufacturer” means the original component manufacturer, the original equipment manufacturer, or the contract manufacturer.

Exhibit (A)

“Suspect counterfeit electronic part” means an electronic part for which credible evidence (including, but not limited to, visual inspection or testing) provides reasonable doubt that the electronic part is authentic.

(b) *Acceptable counterfeit electronic part detection and avoidance system.* The Contractor shall establish and maintain an acceptable counterfeit electronic part detection and avoidance system. Failure to maintain an acceptable counterfeit electronic part detection and avoidance system, as defined in this clause, may result in disapproval of the purchasing system by the Contracting Officer and/or withholding of payments and affect the allowability of costs of counterfeit electronic parts or suspect counterfeit electronic parts and the cost of rework or corrective action that may be required to remedy the use or inclusion of such parts (see DFARS [231.205-71](#)).

(c) *System criteria.* A counterfeit electronic part detection and avoidance system shall include risk-based policies and procedures that address, at a minimum, the following areas:

(1) The training of personnel.

(2) The inspection and testing of electronic parts, including criteria for acceptance and rejection. Tests and inspections shall be performed in accordance with accepted Government- and industry-recognized techniques. Selection of tests and inspections shall be based on minimizing risk to the Government. Determination of risk shall be based on the assessed probability of receiving a counterfeit electronic part; the probability that the inspection or test selected will detect a counterfeit electronic part; and the potential negative consequences of a counterfeit electronic part being installed (e.g., human safety, mission success) where such consequences are made known to the Contractor.

(3) Processes to abolish counterfeit parts proliferation.

(4) Risk-based processes that enable tracking of electronic parts from the original manufacturer to product acceptance by the Government, whether the electronic parts are supplied as discrete electronic parts or are contained in assemblies, in accordance with paragraph (c) of the clause at [252.246-7008](#) , Sources of Electronic Parts (also see paragraph (c)(2) of this clause).

(5) Use of suppliers in accordance with the clause at [252.246-7008](#).

(6) Reporting and quarantining of counterfeit electronic parts and suspect counterfeit electronic parts. Reporting is required to the Contracting Officer and to the Government-Industry Data Exchange Program (GIDEP) when the Contractor becomes aware of, or has reason to suspect that, any electronic part or end item, component, part, or assembly containing electronic parts purchased by the DoD, or purchased by a Contractor for delivery to, or on behalf of, the DoD, contains counterfeit electronic parts or suspect counterfeit electronic parts. Counterfeit electronic parts and suspect counterfeit electronic parts shall not be returned to the seller or otherwise returned to the supply chain until such time that the parts are determined to be authentic.

(7) Methodologies to identify suspect counterfeit parts and to rapidly determine if a suspect counterfeit part is, in fact, counterfeit.

(8) Design, operation, and maintenance of systems to detect and avoid counterfeit electronic parts and suspect counterfeit electronic parts. The Contractor may elect to use current Government- or industry-recognized standards to meet this requirement.

Exhibit (A)

(9) Flow down of counterfeit detection and avoidance requirements, including applicable system criteria provided herein, to subcontractors at all levels in the supply chain that are responsible for buying or selling electronic parts or assemblies containing electronic parts, or for performing authentication testing.

(10) Process for keeping continually informed of current counterfeiting information and trends, including detection and avoidance techniques contained in appropriate industry standards, and using such information and techniques for continuously upgrading internal processes.

(11) Process for screening GIDEP reports and other credible sources of counterfeiting information to avoid the purchase or use of counterfeit electronic parts.

(12) Control of obsolete electronic parts in order to maximize the availability and use of authentic, originally designed, and qualified electronic parts throughout the product's life cycle.

(d) Government review and evaluation of the Contractor's policies and procedures will be accomplished as part of the evaluation of the Contractor's purchasing system in accordance with [252.244-7001](#) , Contractor Purchasing System Administration—Basic, or Contractor Purchasing System Administration—Alternate I.

(e) The Contractor shall include the substance of this clause, excluding the introductory text and including only paragraphs (a) through (e), in subcontracts, including subcontracts for commercial items, for electronic parts or assemblies containing electronic parts.

(End of clause)



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PROCUREMENT GUIDANCE: COUNTERFEIT ELECTRONIC PARTS

APPROVED DFAR SUPPLIER CATEGORIES

In order to satisfy U.S. Government requirements (DFARS 246.870 and DFARS 252.246-7007) all purchases of electronic components that will be used on DoD sponsored awards must comply with DoD mandatory requirements and minimize risk to DoD operations.

This guidance describes the set of controls designed to eliminate or mitigate the risk of utilizing counterfeit electronic components in VT delivered hardware. DoD contracts that are subject to DFARS 252.246-7007 are required to adhere to this guidance.

Excluded from these requirements are electronic components procured for use in equipment intended for internal purposes (e.g. research, development, problem resolution, testing theories, trying new ideas, etc.), and which are not planned to be provided to sponsors. Also excluded are unmodified commercial off-the-shelf (COTS) assemblies or subsystems, procured from original equipment manufacturers (OEMs), unless otherwise specified in the project plan or mission assurance plan.

Implementation is the responsibility of any individual or organization, internal or external to VT, which is involved in sourcing such parts in support of program hardware provided to sponsors that is not excluded as called out above. It is important that unit procedures (e.g. college, school, or VT laboratory) reflect the requirements outlined in this guidance. VT is not certified to test suspected counterfeit parts; therefore, VT shall follow the following guidelines in order to avoid the receipt of counterfeit parts.

VT will be in compliance with DFARS 252.246 by obtaining electronic parts from one of three categories listed below in sequential order:

Category 1: VT Departments will obtain electronic parts that are in production by the original component manufacturer (OCM) or an authorized aftermarket manufacturer (AAM). If parts are not in production, obtain from currently available stock in the following order:

- a. OCM of the parts;
- b. OCM-authorized suppliers of the parts; or
- c. Suppliers that obtain such parts exclusively from the OCM of the parts or their authorized suppliers.
- d. OCM authorized suppliers shall be verified using one of these methods:
 1. Verification of OCM authorized supplier legitimacy prior to purchase shall be documented. OCM websites include the suppliers that are authorized to distribute their components. A screenshot from the OCM website designating authorized suppliers or an email from an OCM verifying an authorized supplier is acceptable verification.
 2. The Electronic Components Industry Association (ECIA) maintains a database (<https://www.ecianow.org/>) of verified authorized suppliers. The ECIA database is an alternative source for verifying authorized suppliers and shall be archived with purchase documentation.

A supplier's website should never be solely relied on as a source for OCM authorization to distribute.

Category 2: If electronic parts are not available as provided in Category 1, VT will obtain electronic parts that are not in production by the OCM or an AAM from suppliers identified by the CASL. The CASL is derived from the DLA certified vendor list, which is included in the workflow attached to this guidance. The following three conditions apply to this source of electronic parts:

- a. VT will comply with VT Procurement processes to identify and approve CASs who adhere to established counterfeit prevention industry standards as mentioned in Section 10;
- b. CAS assumes responsibility for the authenticity of parts provided to VT; and
- c. CASL is subject to review and audit by the government CO.

Category 3: If VT (i) obtains an electronic part from a source other than those identified in Categories 1 and 2 because of non-availability or from a subcontractor other than the OCM that refuses to accept the flow down of DFARS clause 252.246-7008; or (ii) cannot confirm that an electronic part is new or previously unused and that it has not been comingled in supplier new production or stock with used, refurbished, reclaimed, or returned parts, then the contractor must adhere to the following:

- a. Promptly notify the sponsor CO in writing;
- b. Be responsible for inspection, testing, and authentication by selecting a test resource from the CASL; and
- c. Log documentation of inspection, testing, and authentication to make available to the government upon request.

Term and Condition:

Counterfeit Parts: This purchase shall be governed by and in accordance with DFARS Sections [246.870](#) and [252.246-7007](#). Any electronic parts must have a Certificate of Origin and the total quantity of any individual part must be from a single manufacturing lot or date code.