September 12, 2011

The Honorable John McCain and the Honorable Carl Levin
Committee on Armed Services
United States Senate
Washington DC, 20510

Dear Senators McCain and Levin,

Regarding your request for information in your investigation of counterfeit electronic parts in the DOD supply chain, I provide the following additional information.

In addition to my role at Mouser Electronics, I am also a Director of the Electronic Components Industry Association (ECIA). ECIA is the organization that represents the manufacturer authorized supply chain for electronic components. ECIA members are over 100 of the leading electronic component manufacturers and their approved partners in the authorized supply chain. (Attachment A)

ECIA establishes guidelines for component purchasing, storage, handling, and traceability to provide supply chain standardization, and to prevent counterfeit and non-conforming parts from entering the supply chain. The ECIA also governs the worldwide EIA standards for the production of many of these electronic components.

The ECIA is a leading authority on counterfeit prevention. The ECIA position is that the most effective method to prevent counterfeit electronic components from entering the supply chain is to obtain those components only from the original component manufacturer (OCM) or from OCM authorized distributors. (Attachment B) The Society of Automotive Engineers International (SAE) has created Aerospace Standard AS5553 “Counterfeit Electronic Parts; Avoidance, Detection, Mitigation and Disposition” which also supports this ECIA determination.

The ECIA position is that visual inspection procedures and systems cannot reliably detect counterfeit or non-conforming electronic components and that these counterfeit detection systems are not required when those components are obtained directly from the OCM or OCM approved/authorized sources. The SAE International Aerospace Standard AS5553 supports these ECIA positions.

Mouser is an original component manufacturer authorized distributor. Mouser has incorporated the requirements of SAE Aerospace Standard AS5553 for counterfeit avoidance into our quality system. (Attachment C)

Mouser is also certified by the international certification body TUV-SUD to meet or exceed the SAE Aerospace Standard AS9120 “Quality Management Systems - Aerospace Requirements for Distributors”. AS9120 certification requires rigorous purchasing, handling, storage and traceability controls to prevent counterfeit and non-conforming electronic components from entering the supply chain. (Attachment D)

In the consumer electronics world, there is a ‘grey-market’ that may save consumers money, but can also cause customer dissatisfaction when those products are counterfeit, non-warranted, refurbished, factory rejects, or internally damaged due to improper storage or handling. These same problems exist in the grey-market procurement of electronic components. However in the supply chain, grey-market electronic components that are assembled into military, transportation, plant safety or medical equipment can cause deadly system failures. The DOD supply chain is no place for grey-market electronic components.
Unfortunately there seems to be confusion at some DOD contractors as to the distinction between OCM authorized suppliers/distributors that preserve the integrity of the DOD supply chain and unauthorized suppliers/distributors that adversely impact DOD supply chain integrity. Mouser is also a member of the SAE International committee that is developing Aerospace Standard AS6081 “Counterfeit Electronic Parts; Avoidance Protocol - Distributors”. This new international Aerospace Standard will contain additional controls to mitigate the significant supply chain risks when electronic components are obtained from suppliers/distributors that were not authorized by the original component manufacturer.

Another significant supply chain problem is the shortage of a component that is required for system/sub-system production. I am chairman of the ECIA committee that created the website ECIAauthorized.com. This website is designed to assist contract manufacturers in locating these missing components, while still ensuring supply chain integrity. Besides providing a list of ECIA members that are engaged in OCM authorized component distribution, this website provides a real-time search of OCM authorized inventory. The ECIAauthorized.com website is the authorized supply chain's solution to the problem of locating hard-to-find components and is the only site that delivers a search that is exclusively from OCM authorized inventories. (Attachment E)

Based on these facts, it is therefore recommended that the following counterfeit prevention measures be required for all purchases of electronic components made by the Department of Defense and by DOD contractors and subcontractors:

1. Adhere to the procurement requirements of the SAE International Aerospace Standard AS5553 “Counterfeit Electronic Parts; Avoidance, Detection, Mitigation and Disposition”.

2. Purchase only from suppliers which are duly approved/authorized by the original manufacturer of that electronic component.

3. Purchase electronic components for critical systems/subsystems only from distributors that are certified to the SAE International Aerospace Standard AS9120, “Quality Management Systems - Aerospace Requirements for Distributors”.

4. Use ECIAauthorized.com as the DOD approved web tool to locate hard-to-find electronic components from only original component manufacturer authorized inventory sources.

Should you require further information on counterfeit prevention in the DOD supply chain, please do not hesitate to contact me.

Respectfully Submitted,

Glenn Smith
President & CEO
Mouser Electronics, Inc.
a TTI, Inc / Berkshire Hathaway Company
ECIA MEMBERS AND ASSOCIATES

Manufacturers
3M Electronics
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Hatting, Inc.
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Honeywell Sensing & Control
IBM Global Procurement
Illinois Capacitor, Inc.
Infineon Technologies
Intel Corp.
International Rectifier
ITT
ITT Switches
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Keystone Electronics Corp.
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Laird Technologies
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Lumex
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AESCO Electronics, Inc.
Allied Electronics, Inc.
All-West Components & Fasteners
Altec-MAR Electronics, Inc. dba Altec Engineered
Electronic Solutions
Area51-ESG, Inc.
Ambar Industries
Arrow Electronics, Inc.
Ashex, Inc.
Avnet, Inc.
Beyond Components Inc.
BKT Supply Company, Inc.
Bluff City Electronics
Brothers Electronics, Inc.
Calgeng Electronics, Inc.
Capacitors Plus, Inc.
Carlson-Bates Company
CDM Electronics, Inc.
Channel Comp
Components Center, Inc.
Connex Electronics Corp.
Cumberland Electronics
Dee Electronics, Inc.
Digi-Key Corp.
Dove Electronic Components
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Electro Sonic, Inc.
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Future Electronics
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Koehlke Components
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Marsh Electronics, Inc.
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Mouser Electronics
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Norvell Electronics, Inc.
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Octera Solutions Inc.
Peerless Electronic Supplies
PEI-Genesis, Inc.
Powell Electronics, Inc.
Pridmore Corp.
Progressive Image
PUI
Rochester Electronics
RPA Electronic Distributors, Inc.
RS Electronics

Representatives
Alliance Electronics Marketing Group
Braunard Nielsen Marketing
CFE-DC Technology
Coakley, Boyd & Abbett
Crowley Associates
ELCOM
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Harper & Two
Kruvand Assoc.
Luscombe Engineering
Mei Foster Company
Millennium Alliance
Norris & Assoc.
O'Donnell Associates North
O'Donnell South
Sumer Inc.
Vision Technical Sales
West Electronic Sales

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Electronics Sourcing N.A.
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GCommerce, Inc.
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Membership in ECIA is open to all facets of the electronic components industry: manufacturers, authorized distributors and manufacturer's representatives working together as a stronger voice for our entire industry. The dues structure is based on dollar sales of electronic components in North America and applies to distributor, manufacturer and representative members.

**Application**
ECIA Statement on the Reliability Impact of Procuring Devices through Non-Authorized Sources

Over the past decade, the number of non-authorized sources for electronic components has greatly increased. These sources range from individuals selling electronic components out of their homes, to large web-based traders and independent distributors/brokers. Frequently, more than one of these traders/brokers is involved in fulfilling an order placed with a non-authorized source. There is no way to conclusively determine the storage/handling conditions and legitimacy of origin of products bought through non-authorized sources. Product supplied through non-authorized sources may appear to be legitimate, but issues with such product can include:

- Electronic components with seemingly proper markings and package labeling (including logos) are actually counterfeits. For details on one form of counterfeiting (salvaging and re-marking) common to all types of electronic components, see the BusinessWeek article and video at http://www.businessweek.com/magazine/content/08_41/b4103034193886.htm.
- Moisture-sensitive products are supplied by non-authorized sources without dry-pack, or these products are not properly baked prior to dry-packing.
- ESD-sensitive products are not properly handled by non-authorized sources.
- Electronic components with OEM-specific markings are re-sold to brokers that then sell them to others. Note: This re-sale is easily recognized by manufacturers and frequently voids the original warranty.

The net result of the above issues is that products that pass electrical testing after board mounting may still result in significant field reliability problems for integrated circuits (ICs) and other electronic components such as:

- Die-level corrosion during field use due to chemicals used by counterfeitters (to strip markings and/or to clean components) penetrating plastic packages over time.
- Time-/temperature-dependent lifted wire-bonds due to package delamination induced during board mounting of ICs that were not properly dry-packed.
- Die and/or package cracking due to improper component rework or storage/handling.
- Time-dependent electrical failures due to latent ESD damage from mishandling.

Customers that buy components from non-authorized sources may save money in the short-term, but they run the risk of major reliability issues that can damage their reputation and prove enormously expensive in the long-term due to warranty expenses, field replacements, and liability claims. Customers that nonetheless turn to non-authorized channels for electronic components trade risk for reliability. For these reasons, ECIA strongly encourages all customers to buy electronic components exclusively through manufacturer authorized sources.
AUTHORIZED DISTRIBUTOR CERTIFICATE

Mouser Electronics is dedicated to providing manufacturer warranted, first quality genuine components and adhering to the highest standards in customer service.

We hereby certify that Mouser Electronics is an original component manufacturer (OCM) authorized distributor.

We hereby certify that all electronic components sold by Mouser Electronics:

- Were obtained directly from the original component manufacturer or from OCM authorized channels.
- Were handled and stored in accordance with industry quality standards.

We also hereby certify that Mouser Electronics is a member in-good-standing of the Electronic Component Industry Association (ECIA) and China Electronics Distributor Alliance (CEDA).

ECIA represents electronic component manufacturers and their authorized partners in the authorized supply chain. ECIA members consist of component manufacturers, authorized distributors and sales representatives. ECIA also governs the worldwide EIA standards that cover the production standards for many electronic components. ECIA is a result of the merger of the National Electronic Distributors Association (NEDA) and the Electronic Components Association (ECA). ECIA brings together all of the elements of the authorized electronic components supply chain.

The ECIA encourages all customers to establish internal controls to ensure that all parts are purchased only from the original component manufacturer or the original component manufactures authorized distributors.

For more information visit:  http://www.eciaonline.org/

CEDA (China Electronics Distributor Alliance) is a not-for-profit industrial organization serving the needs of authorized electronics component distributors with operations in Greater China. CEDA's mission is to represent authorized distribution services in the China market, to strengthen cooperation between distributors and suppliers, encourage technical and service innovation, and work with the Chinese government to shape policies. For more information visit:  http://www.cedachina.org/

If you have any questions about this certificate please contact me.

Sincerely,

Charles H. Amsden
Director of Quality
Phone: 817-804-3630
Fax: 817-804-3803
e-mail: chuck.amsden@mouser.com
website: www.mouser.com
CERTIFICATE

The Certification Body of
TÜV SÜD AMERICA INC.

hereby certifies that

Mouser Electronics Incorporated
1000 N. Main St
Mansfield, TX 76063 USA

has implemented a Quality Management System in accordance with:


The assessment was performed in accordance with the requirements of AS9104A. TÜV SÜD America Inc. is accredited under the aerospace Registrar Management Program.

The scope of this Quality Management System includes:


Certificate Expiry Date: July 26, 2014
Certificate Registration No: 951 11 5681
Effective Date: July 27, 2011

Gary V. Minks
VP, Regulatory Affairs

TÜV SÜD AMERICA INC • 10 Centennial Drive • Peabody, MA 01960 USA • www.TUVamerica.com
The eciaauthorized.com site is the fastest and most complete authorized electronics inventory search available on the Internet.

Don't risk your product, your customer, or your reputation. Look for the "Authorized Source" logo to ensure you purchase from a legitimately authorized company. ECIA authorized sources are your safest source for any electronic component. Start your search on eciaauthorized.com.

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ARROW ELECTRONICS  GARRETT ELECTRONICS  NAC
AVNET  GENIE GROUP  Newark NEWARK
BROTHERS ELECTRONICS  GOPHER ELECTRONICS  NC NORTH COAST COMPONENTS
CUMBERLAND ELECTRONICS  HAMMOND ELECTRONICS  PEI-GENESIS
DIGI-KEY  HEIL IND HEILIND ELECTRONICS  POWELL ELECTRONICS
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