



DEFENSE LOGISTICS AGENCY

AMERICA'S COMBAT LOGISTICS SUPPORT AGENCY



Procurement Integrity – Protecting Your Business Interests

Anne Burleigh, DLA Headquarters
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Mike Adams, DLA Land and Maritime

August 24-25, 2010



Agenda

- Current status of supply chain integrity
- Trends in fraud, waste & abuse
- Government actions being taken to mitigate risk of nonconforming/counterfeit material entering DoD supply chain
- Desired contractor behaviors
- DLA legal perspective
- Independent distributor qualification
- DLA Land and Maritime initiatives



Current Status of Supply Chain Integrity

- **Customer needs are being met**
 - Most material is conforming
 - Majority of suppliers are honest
- **Business Week article October 2008**
 - Raised public & Government awareness
 - Several valid findings:
 - Parts for aging weapon systems are hard to find
 - “Dishonest brokers” can enter Government market
 - Disposal of electronic waste provides raw material for counterfeiters



Trends in Fraud, Waste & Abuse

- **Exponential increase in risk**
- **Huge economic losses for trading partners**
- **“Perfect storm” for counterfeiters**
 - Poor economy has led to lagging production capacity due to lack of capital investment
 - OEMs/CMs are unable to support demand due to decreased availability of components, leading to increased use of open market
 - The result: New markets & increased profitability for counterfeiters



Government Actions Being Taken

- **Federal Government**
 - Stop Counterfeiting in Manufactured Goods Act; Strategy for Targeting Organized Piracy (STOP!); Bayh-Dole Anti-Piracy Act
- **DoD**
 - Panel on Contracting Integrity; Counterfeit Working Group; Government-Industry Data Exchange Program (GIDEP)
- **DLA**
 - Closed-loop, cross-functional process; reviews to identify & mitigate risk associated with high-risk items



Desired Contractor Behaviors

- **Continuance of industry working groups**
- **Dissemination of best practices**
- **Participation in voluntary standards bodies**
 - AS 5553, “Counterfeit Electronic Parts: Avoidance, Detection, Mitigation, and Disposition”
- **GIDEP participation & reporting**
- **Vetting & assessment of suppliers**



DLA Legal Perspective

Normand Lussier
DLA General Counsel



Suspension and Debarment Process Overview

- **PLFA recommendations submitted to DLA Suspension and Debarment Official for Suspension or Debarment under FAR 9.406.**
- **Recommendations are made by the Contracting Officer and forwarded by the PLFA director/commander and include supporting evidence.**
- **SDO (DLA Deputy General Counsel) reviews the recommendation and takes action. Options include:**
 - Notice of Suspension letter
 - Notice of Proposed Debarment letter
 - Show Cause letter
 - Return recommendation to PLFA for clarification/more information
 - Decline to take action
- **Parties who receive a Suspension or Proposed Debarment letter are listed on the Excluded Parties List System (EPLS) and are ineligible to receive new awards of Government contracts or grants.**



Causes for Suspension or Debarment

- **Suspensions are supported by the commission of fraud or a Criminal offense.**
- **Debarments are supported by a conviction of or civil judgment for a list of reasons.**
- **DLA uses as a cause the provisions that allows debarment for a history of unsatisfactory performance or failure to perform on one or more Government contracts.**



DoD Suspension and Debarment Statistics for FY2009

DLA FY2009 Statistics:

Suspensions	48
Proposed Debarments	163
Debarments	131
Total Actions:	342 (FY2008 264)

Army FY2009 Statistics:

Suspensions	134
Proposed Debarments	112
Debarments	117
Total Actions:	363 (FY2008 301)

Navy FY2009 Statistics:

Suspensions	12
Proposed Debarments	39
Debarments	44
Total Actions:	95 (FY2008 146)

Air Force FY2009 Statistics:

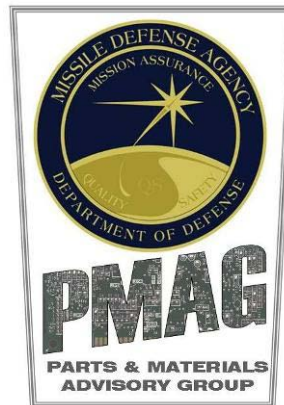
Suspensions	73
Proposed Debarments	86
Debarments	63
Total Actions:	222 (FY2008 239)



MDA Supplier Findings and Expectations

Fred Schipp

Missile Defense Agency





Common Misconceptions

- 1. Counterfeit components are a 1-in-1000 risk.**
- 2. Only bad distributors sell counterfeit components.**
- 3. Only expensive components are counterfeited.**
- 4. Counterfeit components will be detected by electrical testing.**

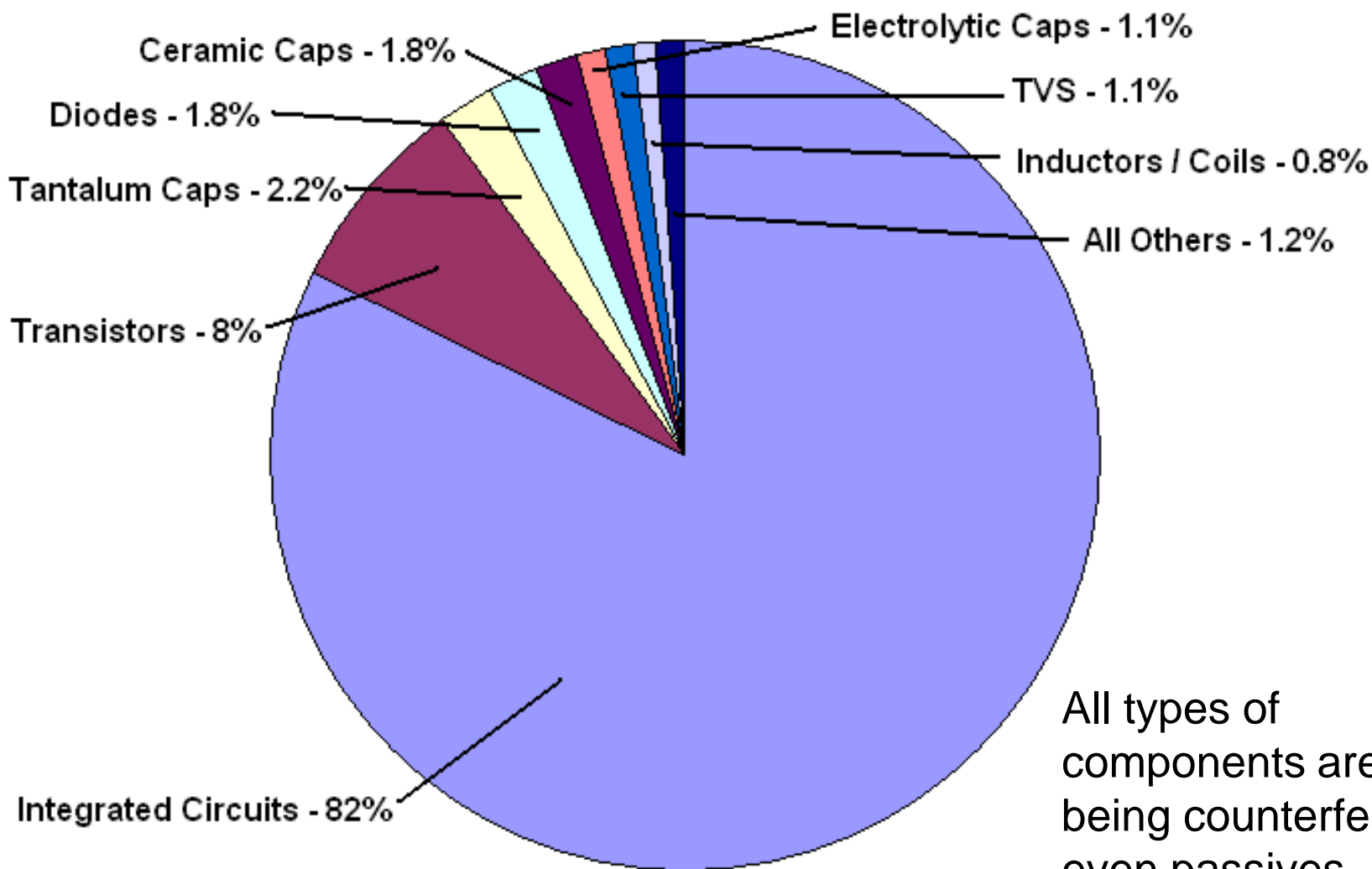


General Observations about Counterfeit Components





What is Being Counterfeited?



All types of components are being counterfeited, even passives.

% of reported counterfeits from ERAI database, 2004 to present



Counterfeit Trends, 2009

Data was gleaned from ERAI's Counterfeit parts database, started in 2004. High risk (suspect) entries were ignored. Over 1,300 entries were used. The largest increases in percentage of counterfeit electronic parts reports (2004-2008 vs 2009-2010) were:

- Tantalum Capacitors (1.5% to 6.2%)
- Transient Voltage Suppressors (1.0% to 1.5%)
- Thyristors / Varistors (0.3% to 1.5%)
- Non-semiconductors in general (6.7% to 9.7%)



MDA Site Visits





MDA Site Visits

MDA initiated independent distributor assessments in January 2009 (form plus site visit)

Priorities for selection:

- Already an MDA approved supplier
- Already a NASA/JPL approved supplier
- Member of IDEA & mil/aero supplier
- Member of ERAI & mil/aero supplier



MDA Site Visits

42 Independent Distributors have been assessed by MDA since January 2009.

- **Distributors are lumped into four categories:**
 - Lowest risk (7%)
 - Low risk (36%)
 - Moderate risk (45%)
 - Significant risk (11%)
- **Information is shared with MDA contractors via tri-yearly meetings.**



False Advertising



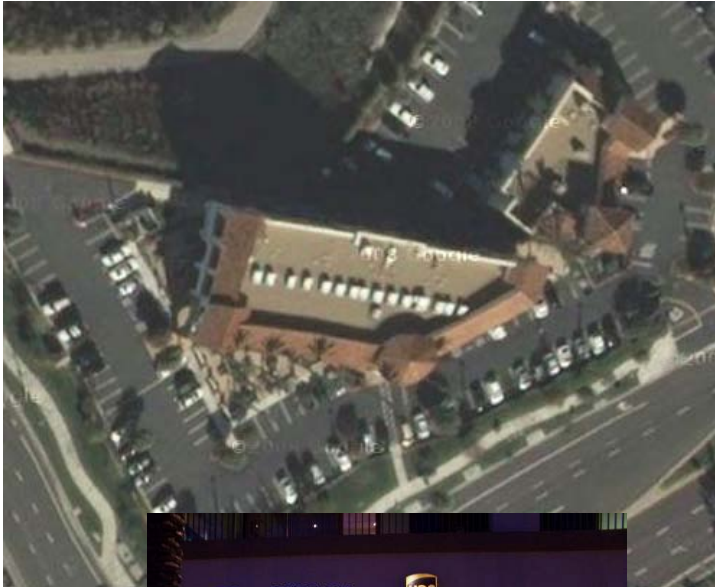
According to the website (has since been removed)

According to Yahoo and Google (New York State)





Supplier Facilities



This ERAI member independent distributor advertises **over 800 companies on its line card, with search capability for thousands of components.** Google indicates the advertised address is a commercial building.



The distributor was not available for a visit. The “suite” located for the company address was determined to be a mailbox (this company was not an MDA-approved supplier).

How certain are you of your suppliers' capabilities?



Interesting Facts About IDs

- **IDs have access to the same component search engines.**
- **IDs frequently buy and sell amongst themselves. They know (better than we do) who not to buy from.**
- **IDs buy many components directly from franchised distribution. Poor reflection of their customers.**
- **Franchised distributors buy from IDs.**
- **Websites can be deceiving.**
- **Some warehouse facilities are neither temperature nor humidity controlled.**



Buying Practices

Most common sources for independent distributors:

- OCMs or franchised distributors
- OEM excess
- Other independent distributors
- Internet sourcing/trading platforms

Virtually anyone can find electronic components. Not all buy from the safest source.



OEM Excess



A worst case example of the condition of OEM excess product purchased by independent distributors for resale.



Buying Practices

Reputable independent distributors actively pursue and identify good sources, while eliminating high-risk sources. Incoming quality, financial reports, and word-of-mouth all contribute. A supplier should not only have an approved supplier list, but also a disapproved supplier list.

MDA has obtained disapproved supplier listings from thirteen distributors. 92 US-based independent distributors show up on three or more blocked lists. One company was on 8 of 13 lists.



Interesting Facts About IDs

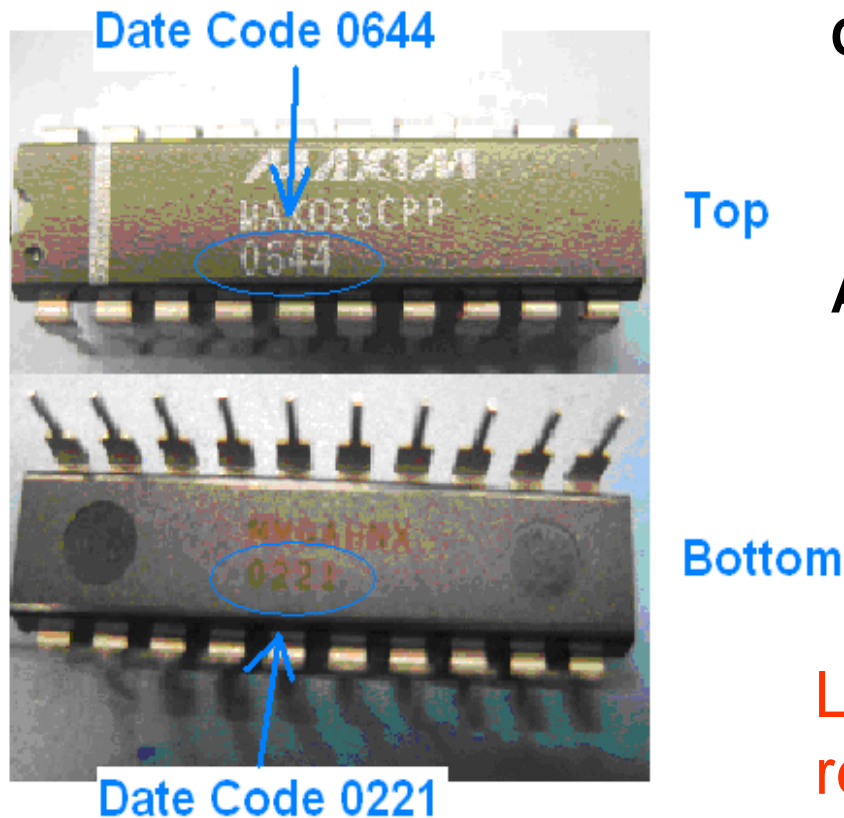
- **Level of inspection varies greatly – if you don't specify it, don't count on it. And many mil/aero contractors do not specify inspection level.**
- **In general, IDs scrap confirmed counterfeits and return suspect counterfeits.**
- **The vast majority of ID-discovered counterfeit parts are returned for refund as suspect parts.**

The reasons:

- Too expensive to investigate further.
- Little support from OCMs.
- Without confirmation there is risk of lost business or lawsuit.



Counterfeit Uncertainty



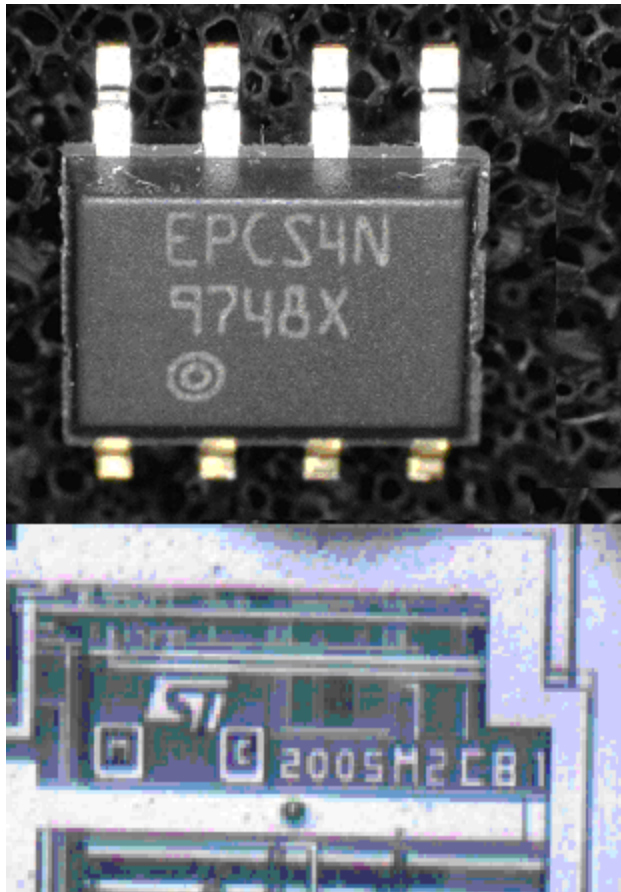
Courtesy North Shore Components

- Q.** Is this a counterfeit part – 0644 top-side date code and 0221 bottom-side date code (part failed acetone swab test)?
- A.** No. It's an authentic part – an older part was retested by the OCM to a newer data sheet spec, and subsequently remarked.

Lesson Learned – OCMs do remark product occasionally. If it's done with no intent to deceive, it is not counterfeiting.



Counterfeit Uncertainty



Courtesy SMT Corp

- Q. Is this a counterfeit part -- 2005 ST Micro die in a 1997 Altera part?**
- A. No. It's an authentic part -- ST Micro die (unknown vintage) in a 2007 Altera part.**

Lesson Learned -- Original Component Manufacturers (OCMs) do use other OCMs' die. Don't assume the date code.



The Four Demandments

When buying electronic components...

- **Never buy from an independent distributor unless there is no other available source.**
- **Assess your independent distributors via a site visit/audit.**
- **Clearly specify a minimum level of inspection and test that must be performed on all independent distributor bought product.**
- **Flow down the above requirements to your subcontractors.**



AS6081 Distributor Assessments





G-19 Subcommittee

G-19 tasked a subcommittee in October to create a more comprehensive version of the Independent Distributor Assessment Form, with various government, industry, and distribution participants, complete with user guidance on distributor assessment criterion. The goal: To create a document which can be tailored to a particular organization's goals, yet provide a consistent indication of distributor performance. The form and manual will either be a standalone SAE document or an Appendix to AS6081.



Supplier Assessments

General statistics about the form:

- 80+ rateable questions for initial assessment
- 25 rateable questions for site visit
- Questions can be tailored for importance by contractor
- Sections include quality certifications, purchasing processes, inspection, handling, warranty, reporting, test, etc.
- Total score is tallied with/without the test capability assessment

As a minimum this provides a tool to enhance contractor assessment capability.



ID Assessment Tool

4	Supplier Qualification and Purchasing Process	Y/N	Comments
4.1	Does your company maintain an approved supplier list (ASL/AVL)?	Yes	
4.1.1	Describe the process by which new suppliers are added to this list.	Fill out a checklist, etc.	
4.1.2	Describe the process by which the ASL/AVL is maintained. Please go into detail.	Software procurement informs the purchase or unknown, will manage approval	
4.2	How do you ensure customer special instructions or requirements are met (date codes, RoHS, vendor selection, etc.)?	System holds this information	
4.2.1	How do you communicate special instructions or requirements to your suppliers (date codes, RoHS, vendor selection, etc.)?	Purchasers inform suppliers upon receipt.	
4.3	What is the estimated percentage of material bought payment in advance or certified check?	50%	
4.4	Please provide a copy of your purchase order warranty provisions.	(Provided, verified)	
4.5	Will you provide a listing of suppliers you have disapproved due to quality concerns?	No	
4.6	Is there any high-risk region(s) that you will not buy product from?	China, India	
4.6.1	If you must buy from the high-risk region(s) above, what additional steps do you take to minimize the risk of obtaining counterfeit product?	We perform authentication on all contracted facilities	

Excerpt from Distributor Assessment Form



ID Assessment Tool

5.2	Inspection, Test, and Documentation	Y/N	Comments
5.2.1	What documentation do you require from your suppliers before you purchase product?	We require all	
5.2.2	What steps do you take if this documentation is not available?	We perform a	
5.2.3	Does your company have a documented inspection process?	Yes	
5.2.4	Does your visual inspection process fully comply to IDEA-STD-1010 as a minimum?	Yes	(Site not c 0.6 p
5.2.4.1	How often do you use the part inspection processes above to check parts?	If concerned	
5.2.4.2	Are there any visual inspection techniques you use that go beyond IDEA-STD-1010A? Please go into detail.	No	
5.2.4.3	How often do you use these processes to check parts?	N/A	
5.2.5	Do you have visual inspection capabilities which includes magnification of at least 40x?	Yes	(No p



ID Assessment Tool

6	Non-Conforming Material Control	Yes/No	Comments
6.1	Do you have a documented counterfeit parts control plan?	Yes	
6.2	What is your process for disposition of suspect counterfeit product?	We return u	
6.3	What is your process for disposition of confirmed counterfeit product?	We scrap it.	

7	Corrective and Preventive Action	Yes/No	Comments
7.1	Do you have a corrective action program? If so, under what circumstances do you require or initiate a corrective action request?	Yes	If a pro
7.2	Have you ever shipped a counterfeit component? How did you respond with respect to corrective/preventive actions?	No	

8	Document Control and Record Retention	Y/N	Comments
8.1	Does your document control system require management review and approval (please describe)?	Yes	
8.2	Are the document latest revisions available at Point of Use (please describe)?	Yes	Revisi
8.3	Do you have systems which protect both paper and electronic media (please describe)?	Yes	Secur
8.4	For how long do you retain all quality/purchasing records?	5 yrs	



ID Assessment Tool

9	Additional Test and Inspection (In-House or Third-Party)		
9.1	Test and Inspection Capability	Y/N	
9.1.1	Do you have X-ray Fluorescence capability?	Yes	(
9.1.1.1	How often do you use XRF to check parts?	At custom	
9.1.1.2	Is this in-house or third-party?	In-House	
9.1.2	Do you have X-ray capability?	Yes	(
9.1.2.1	How often do you use X-ray to check parts?	If concern	
9.1.2.2	Is this in-house or third-party?	In-House	
9.1.3	Do you have Solderability test capability?	Yes	(
9.1.3.1	How often do you use solderability test to check parts?	If concern	
9.1.3.2	Is this in-house or third-party?	3rd Party	
9.1.4	Do you have Decapsulation/Die Analysis capability?	Yes	(
9.1.4.1	How often do you use decap/die analysis to check parts?	If concern	
9.1.4.2	Is this in-house or third-party?	3rd Party	
9.1.5	Do you have Scanning Acoustic Microscopy capability?	Yes	(
9.1.5.1	How often do you use SAM to check parts?	If concern	
9.1.5.2	Is this in-house or third-party?	3rd Party	
9.1.6	Do you have Fine and Gross Leak test capability?	Yes	(
9.1.6.1	How often do you use leak testing to check parts?	At custom	
9.1.6.2	Is this in-house or third-party?	3rd Party	

Excerpt from Distributor Assessment Form



ID Assessment Tool

	Score	Max
Score (Processes, Basic Inspection & Test)	43	93
Score (Additional Test and Inspection)	5	23
Total Score	48	116

Score is based on rating of distributor's process (0 to 3) versus importance assigned to each question by the customer (1 to 5).



Common Misconceptions

1. **Counterfeit components are a 1-in-1000 risk.**
 - IDs say that from 0.5% to 35% of their incoming product is suspected counterfeit.
2. **Only bad distributors sell counterfeit components.**
 - Most counterfeit parts sold to contractors come from legitimate IDs who made poor decisions.
3. **Only expensive components are counterfeited.**
 - DoC reports that over 60% of counterfeit parts have a sale value of \$10 or less.
4. **Counterfeit components will be detected by electrical testing.**
 - More than half of all counterfeit components have the correct (or equivalent) die.



What do We Want from You?

Current and future PMAP requirements for MDA suppliers:

- Documented procedures for approving suppliers.
- Defined criteria for removing suppliers.
- Procedures that force purchases from authorized sources whenever possible.
- Handling procedures compliant to ANSI/ESD S20.20 and IPC/JEDEC J-STD-033.
- Minimum test and inspection for purchases from unauthorized sources.
- Traceability to an authorized source (if available).
- Procedures for containment of suspect/confirmed counterfeit product and customer notification.



Questions?





Microcircuit and Semiconductor Vulnerabilities

DLA Land & Maritime Maintaining the Integrity of the Supply Chain

Mike Adams, DLA Land and Maritime



Purpose and Agenda

- **Purpose:** Provide awareness of issues associated with non conforming/suspect counterfeit electronic piece parts and DLA Land & Maritime implemented processes for managing the risk.
- **Agenda:**
 - Background
 - Definitions
 - Supporting data and examples of counterfeit material
 - DSCC implemented processes
 - Current Initiatives
 - Industry Interface
 - Summary



BACKGROUND

- **Business Week Article**
- **Dept of Commerce Report**
- **GAO Report**
- **FBI Study of the Information Technology Industry (CISCO Counterfeits)**
- **IG Report on M2 Machine Guns**
- **Creation of SIA-Anti Counterfeit Task Force**
- **Government-Industry Data Exchange Program (GIDEP) Failure Exchange Database**
- **Countering Counterfeit Tiger Team (C2T2)**
- **OSD Counterfeit Material Working Group**



Definitions

A counterfeit item is one whose identity or pedigree has been deliberately altered or misrepresented by its supplier.

Nonconforming material is any item, part, product, or packaging of product, with one or more characteristics that depart from the specification, drawing, or product description requirements of the contract.

Counterfeit material is typically considered as a subset of nonconforming material.



Non Conforming Product Categories

- **Non compliant product**
- **Non compliant packaging**
- **Unauthorized product substitution**
- **Substandard quality**
- **Suspect counterfeit**



Supporting Data and Examples of Counterfeit Material



Government Industry Data Exchange Program (GIDEP)

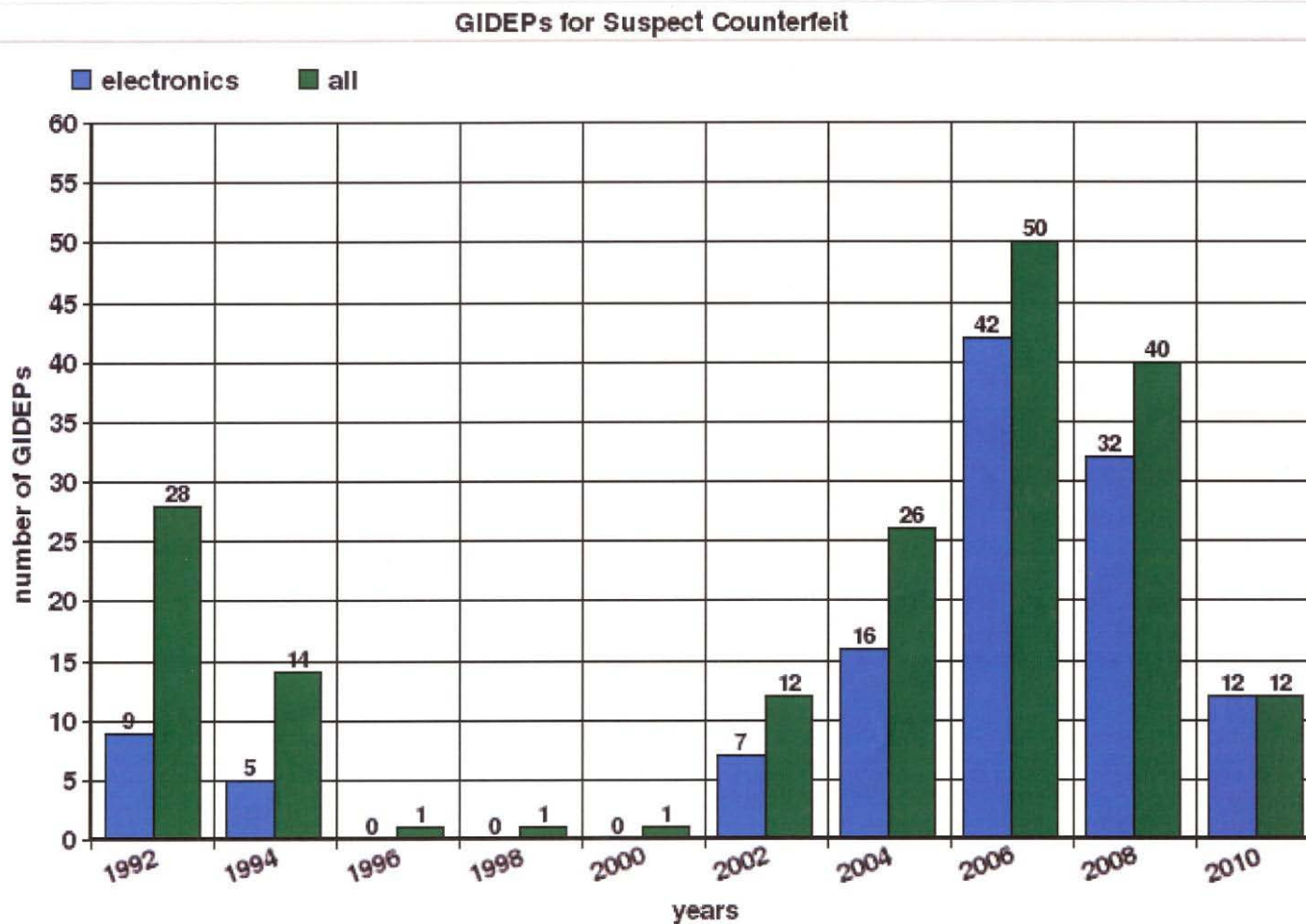
Distribution is not authorized outside of the GIDEP participant's organization.

 GOVERNMENT - INDUSTRY DATA EXCHANGE PROGRAM ALERT		
1. TITLE (Class, Function, Type, etc.) MICROCIRCUIT, PROM, UV ERASABLE, 128K X 8, 300 NS ACCESS TIME		2. DOCUMENT NUMBER CE9-A-03-02
		3. DATE (DD-MMM-YY) 31 MARCH 2003
4. MANUFACTURER AND ADDRESS TEXAS INSTRUMENTS PO BOX 84 SHERMAN, TX 75090	5. PART NUMBER 5962-8961401MXA	6. NATIONAL STOCK NUMBER NOT AVAILABLE
	7. SPECIFICATION NOT AVAILABLE	8. TYPE DESIGNATOR NOT AVAILABLE
	9. LOT DATE CODE START UNKNOWN	10. LOT DATE CODE END UNKNOWN
11. MANUFACTURER'S POINT OF CONTACT S. R. BIDDLE	12. CAGE 01295	13. MANUFACTURER'S FAX (903) 868-6247
14. MFR. POC PHONE (903) 868-6461	15. MANUFACTURER'S E-MAIL s-biddle@ti.com	
16. CROSS REFERENCE VENDOR NOT AVAILABLE	17. CROSS REFERENCE CAGE NOT AVAILABLE	18. CROSS REFERENCE PART NOT AVAILABLE
19. PROBLEM DESCRIPTION / DISCUSSION / EFFECT <p>TEXAS INSTRUMENTS HAS RECEIVED NOTICE OF COUNTERFEIT DEVICES BEARING THE TI TRADEMARK AND PART NUMBER BEING SOLD THROUGH VARIOUS BROKERS WHO ARE NOT AUTHORIZED TI DISTRIBUTORS.</p> <p>IN THIS SPECIFIC CASE, THE DEVICES ARE MARKED AS 5962-8961405QXCA AND SMJ27C010A-15JM, DATE CODE 9939A1, AND COUNTRY OF ORIGIN AS SINGAPORE. TI PRODUCTION IN SINGAPORE WAS TERMINATED PRIOR TO THIS DATE. THE DEVICES IN QUESTION CONTAIN SGS-THOMPSON DIE AND WILL NOT PROGRAM CORRECTLY USING THE TI PART NUMBER.</p> <p>NOTE THAT AUSTIN SEMICONDUCTOR INCORPORATED ACQUIRED THE TI MILITARY MEMORY PRODUCT LINE AND CURRENTLY SUPPLIES PRODUCT UNDER THE ASI TRADEMARK. PER ASI, ALL ASI 27C256 DEVICES ARE MANUFACTURED USING AUTHENTIC TI DIE.</p>		
20. ACTION TAKEN/PLANNED <p>TI HAD NOTHING TO DO WITH THESE DEVICES. ACCORDINGLY, THEY ARE NOT COVERED BY ANY TI WARRANTY.</p> <p>FURTHER, TI WARRANTS MILITARY PRODUCTS PURCHASED DIRECT FROM TI OR FROM AUTHORIZED TI MILITARY DISTRIBUTORS. THE TI WARRANTY MAY NOT EXTEND TO ITEMS PURCHASED FROM NON-AUTHORIZED SOURCES SUCH AS INDEPENDENT DISTRIBUTORS OR BROKERS. UNLESS THE DEVICES ARE ACCOMPANIED BY A TI CERTIFICATE OF CONFORMANCE OR A TI C OF C IS ON FILE, THE PRODUCT IS NOT CONSIDERED COMPLIANT TO MIL-PRF-38535 AS TRACEABILITY CANNOT BE DETERMINED.</p> <p>TEXAS INSTRUMENTS RECOMMENDS ONLY USING CURRENT PRODUCTION PARTS FROM TI OR FROM AN AUTHORIZED TI DISTRIBUTOR.</p>		
21. DATE MFR. NOTIFIED NOT APPLICABLE	22. MANUFACTURER'S RESPONSE <input type="checkbox"/> REPLY ATTACHED <input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> NO REPLY	23. ORIGINATOR ADDRESS/POINT OF CONTACT S. R. BIDDLE / TEXAS INSTRUMENTS PO Box 84, MS 853 Sherman, TX 75090
24. GIDEP REPRESENTATIVE Steve Miller	25. SIGNATURE 	26. DATE 31 Mar 2003

GIDEP Form 97-1 (October 2000)

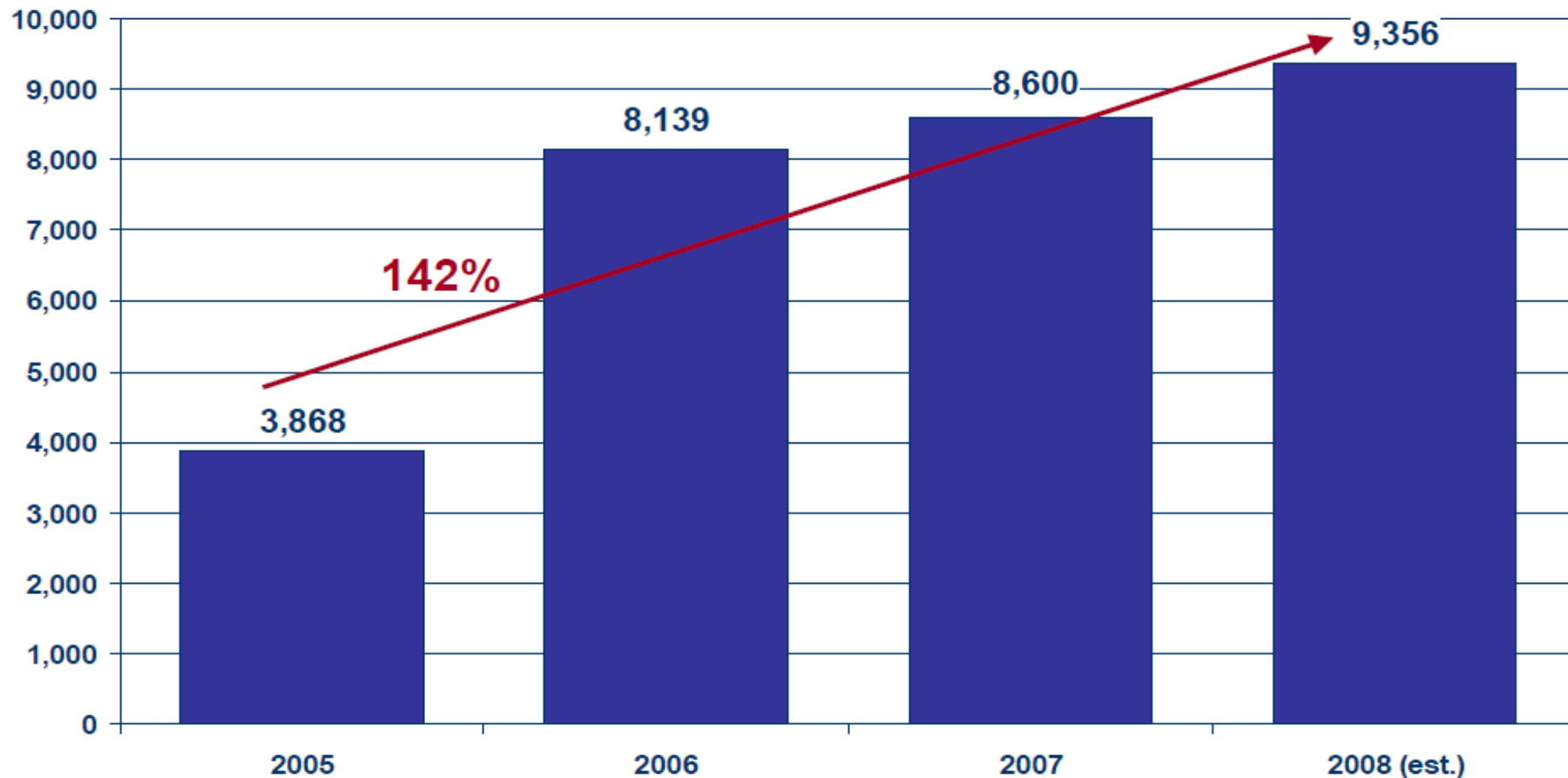


Example of GIDEP Data shown per calendar year through 3/2010



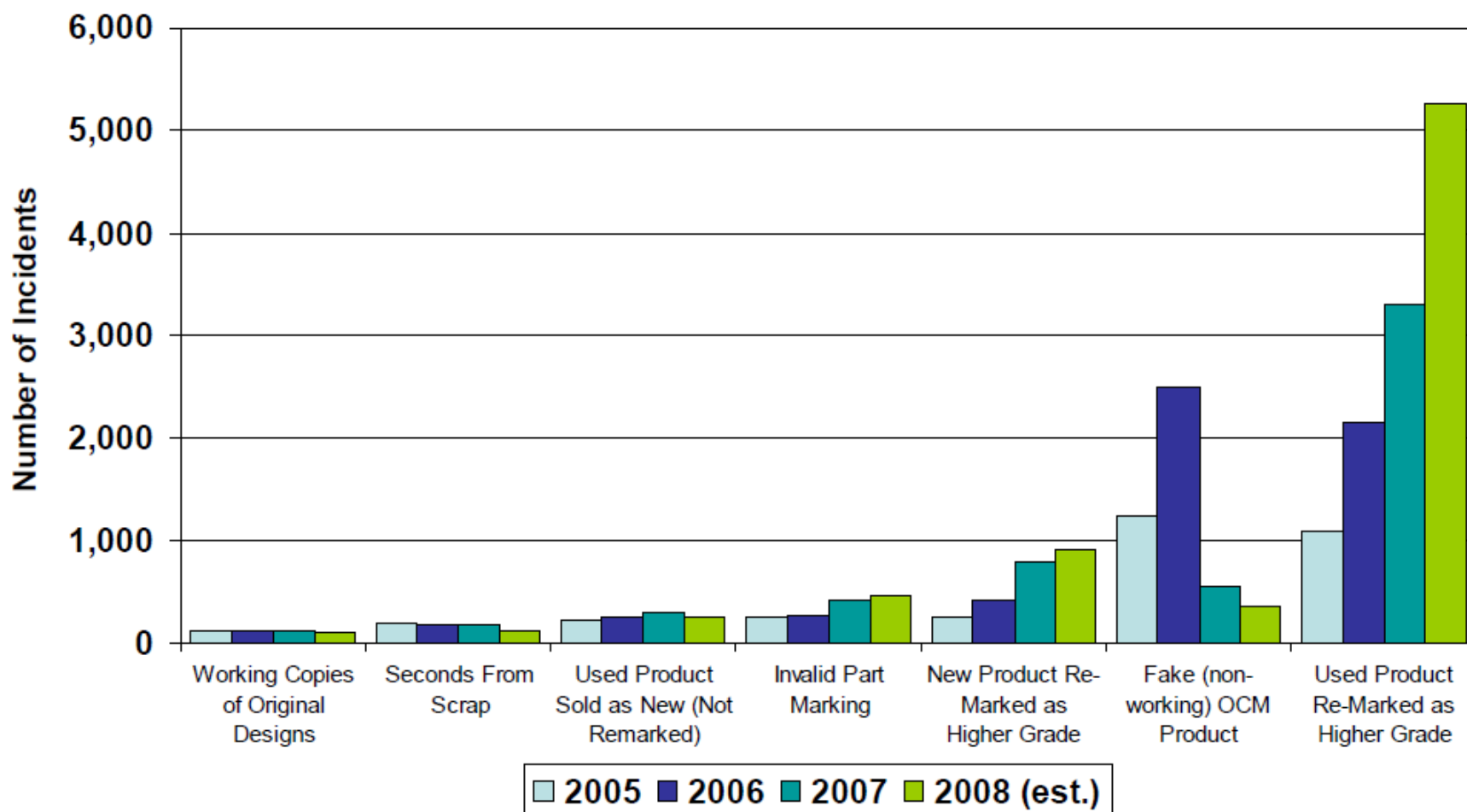


Total Counterfeit Incidents 2005-2008





Counterfeit Incidents by Type of Problem – Microcircuits (2005-2008)



Source: U.S. Department of Commerce, Office of Technology Evaluation, *Counterfeit Electronics Survey*, November 2009.



MD2716M/B

© 1977



0507 C

II MALAYSIA

7802201JA



Counterfeit MD8251A / B



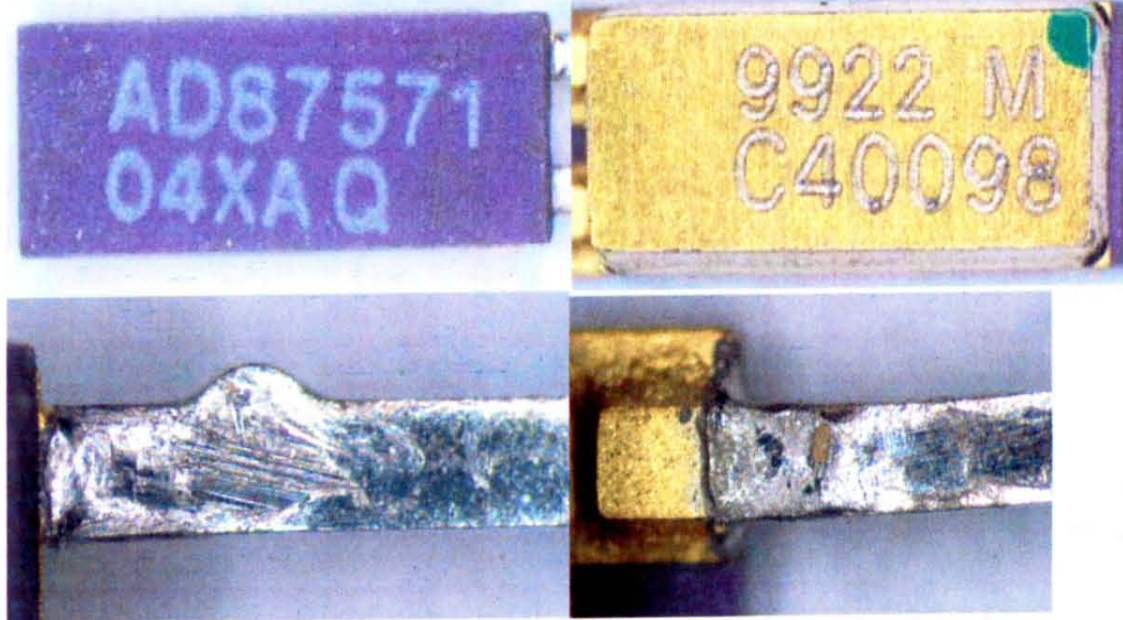
Suspect Device

Incorrect Intel copyright date

Date Code not traceable to authentic Rochester product.

Lot/Date Code 9922

(Typical of other lots received with tin-lead finish)



Lot/Date Code 0541

(No Part identifying number, manufacturer identification or certification mark; incorrect lead finish)



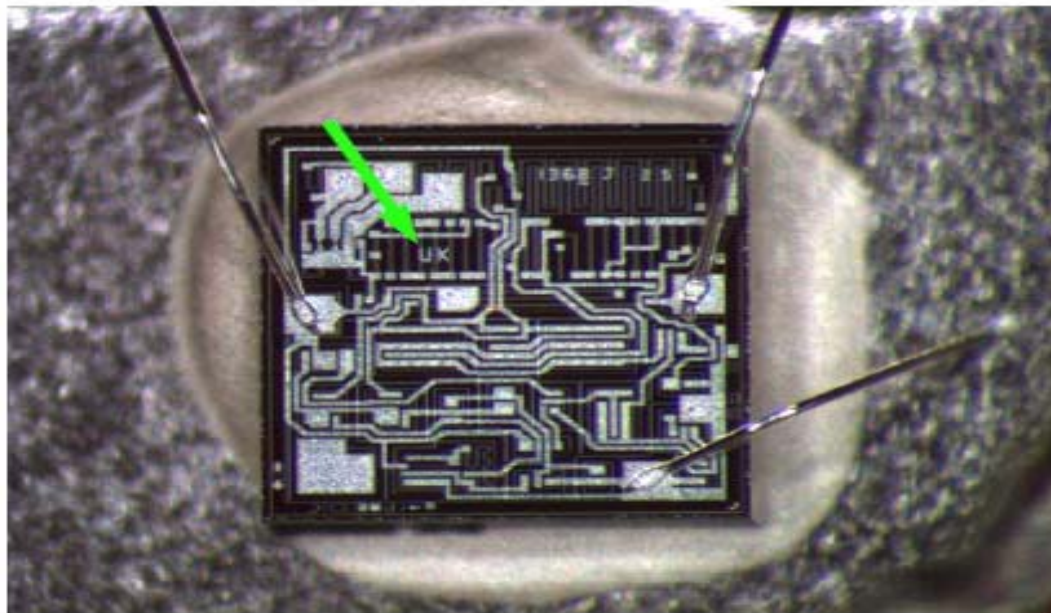
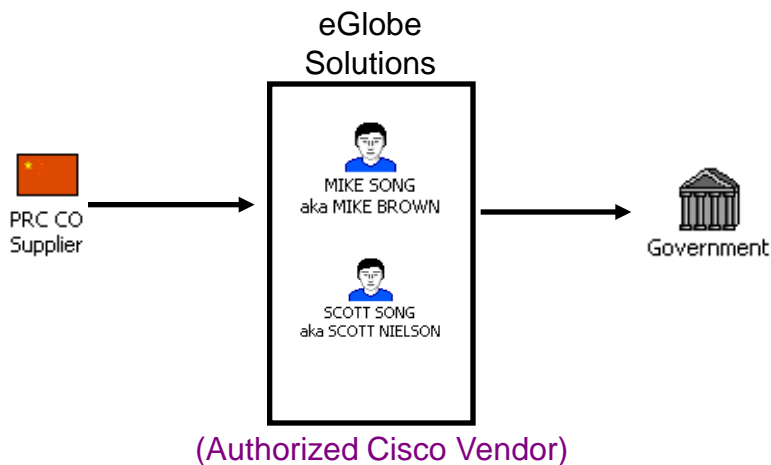


Figure 3: As-delidded view of the die found inside the device shown in Figure 1. Note that it was marked with the alphanumeric characters "UK" (green arrow), rather than with the "LT" alphanumeric characters used by Linear Technology on its dice.



CISCO Router Case



eGlobe Solutions Inc.

- May 2003 – July 2005: Sold \$788,000 of counterfeit equipment
- November 2006 Indictment: Conspiracy, Mail Fraud, Counterfeiting
- Sold to: DoD, GSA, defense contractors, power companies



DLA Land & Maritime Implemented Processes

- **Processes in place for managing risk associated with nonconforming product.**
- **DLA Land & Maritime has taken additional action to address stock classes 5961/5962**
 - PreAward Supply Chain Traceability
 - Post Award CoC/trace review and testing
 - Product Verification Testing (PVT)
 - Targeted sampling and Directed testing (PVP)
 - » Testing can occur at any point in the process
 - Qualified Suppliers List for Distributors



Requiring Traceability

Numerous DLA Clauses That Allow Us To Require Traceability

DLAD provision 52.217-9002 - Conditions for Evaluation and Acceptance of Offers for Part Numbered Items

DLAD clause 52.211-9014 – Contractor Retention of Traceability Documentation

DLAD clause 52.246-9042 – Documentation of Traceability (applicable in all solicitations and awards for QPL or QML integrated circuits or hybrid semiconductor devices procured in accordance with MIL-PRF-38510, MIL-PRF-38534 or MIL-PRF-38535, and semiconductor devices procured in accordance with MIL-PRF-19500)

DLAD 52.246-9066 - Documentation of Traceability

DSCC currently requires contractors to provide “unredacted” traceability – currently receiving some pushback from the contractors



Post Award Certificate of Conformance/ Traceability Review

- **Contract is fulfilled partially or completely.**
- **When parts are shipped, Traceability Documentation (CoC's) are shipped to FMTA.**
- **CoC's are scanned into Electronic Contract File(ECF).**
- **Targeted Contracts are reviewed in ECF monthly.**
- **IF CoC's in ECF are deemed unacceptable per applicable Military specification, Traceability is officially requested from vendor.**
- **Response is reviewed, if unacceptable FMTA is notified and appropriate action is taken.**



Product Verification Testing (PVT)

- **DLA clause in place allowing Product Verification Testing**
 - DLAD clause 52.246-9004, PRODUCT VERIFICATION TESTING, IS HEREBY INCORPORATED, AND MAY BE INVOKED AT THE DISCRETION OF THE PROCUREMENT ACTIVITY.
- **This statement should appear whenever the NSN is coded inspection at origin.**
- **Product Specialist is responsible for invoking PVT testing , reviewing results from DSCC test lab and notifying Post Award of required action.**
- **DLA has many different test programs in place to verify quality conformance throughout the Acquisition cycle:**
 - Product conformance prior to production (FAT)
 - During Manufacturing (PLT), Prior to acceptance (PVT)
 - After acceptance/prior to release (TSM)
 - Post acceptance/after release (Directed)



Qualified Suppliers List Distributors (QSLD)

- Gov/Ind data shows that electronic components are a high risk environment, containing counterfeits in the supply chain
- List of qualified distributors for the supply of Integrated Circuits (5962), Transistors and Diodes (5961). Both military and commercial grade product.
- Used in support of DLA Land & Maritime contracts for logistics support.
- Franchised/Independent Distributors, Brokers and Aftermarket Manufacturers can apply for QSLD approval

Status of the QSLD

- **QSLD clause, DLA approval, FAR deviation in place**
- **First QSLD award made on Sept 15, 2009**
- **57 applications reviewed, 23 Distributors qualified**
- **Circuit Breakers, connectors and caps currently under review**



QSLD Home Page



(DSCC-VQ Program Information) QSL-D Program (Qualified Suppliers List for Distributors) - DSCC - Microsoft Internet Explorer pr

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites

Address C:\Documents and Settings\hc91634\Local Settings\Temporary Internet Files\OLKCB\offices.htm Go

Links SnagIt

 **Defense Supply Center Columbus**
Taking the Lead in Land and Maritime Support 


QSL-D Program (Qualified Suppliers List for Distributors)

[VQ Home](#) | [Programs/Contacts](#) | [Qualification Listings](#) | [Qualification Part Search](#) | [Downloads](#)




QSL-D Program (Qualified Suppliers List for Distributors)

The purpose of the QSLD Program is to establish and maintain a list of pre-qualified sources for certain electronic components that are purchased and managed by the Defense Supply Center, Columbus (DSCC). QSLD products are provided by suppliers that combine accepted commercial practices, quality assurance procedures that are consistent with industry and international quality standards, and tailored when necessary to product-unique requirements that can take the place of provisions traditionally stated in DSCC solicitations.


This program is applicable to selected Federal Stock Class (FSCs) 5961 and 5962 items where a streamlined acquisition process is desired to improve the quality and services provided to our customer; the United States soldier, sailor, airman and marine. The publication below has been developed to outline and discuss the elements needed to successfully qualify for listing on the Qualified Suppliers List of Distributors (QSLD).

TITLE	PHONE	DSN	E-MAIL
Branch Chief	614-692-0621	850-0621	vqe.chief@dla.mil 

TECHNICAL CONTACTS

TITLE/TECHNOLOGY	PHONE	DSN	E-MAIL
Associate	614-692-0593	850-0593	vqe.bpd@dla.mil 
Associate - Lead	614-692-7527	850-7527	vqe.rm@dla.mil 
Associate	614-692-0587	850-0587	vqc.st@dla.mil 

DOWNLOADS

Documents types identified as (PDF) require the Adobe Acrobat reader for viewing, navigating, and printing. The reader is available for many different platforms and operating systems, and is available free of charge from [Adobe Systems Incorporated](#) .

TYPE	FILENAME	TITLE/DESCRIPTION	DATE	FILE SIZE
Form (WORD)	QSLD_App_RevA.doc	QSLD Application 5961-5962, Rev A	4/15/2009	106 KB
Form (PDF)	QSLD_App_RevA.pdf	QSLD Application 5961-5962, Rev A	4/15/2009	21 KB
Information (PDF)	QSLD_Booklet.pdf	QSLD Provision and Criteria	4/8/2009	622 KB



Qualified Suppliers List Distributors (QSLD)

QUALIFIED

JESD97

*Pb-free
RoHS*

J-STD-020

QSLD

J-STD-033

JESD31D

*Certificate
of
Conformance*

JESD625-A

MIL-STD-129P

*Supply
Chain
Traceability*

MIL-STD-2073-1D

AS9100

LIST

ANSI Z540-1

AS9120

*Counterfeit
Part Risk
Mitigation*

ISO9000

Packing Slip

DISTRIBUTORS (QSLD)



QSLD Process

- **Supplier provides DLA Land & Maritime (VQ) with application and all supplemental material requested.**
 - http://www.dscc.dla.mil/downloads/VQGeneral/QSLD_App_RevB.pdf
- **Review application and supplemental material and provides feedback via official correspondences.**
 - Supplier must have a quality system in place that meets JESD31 and JESD 625, all processes documented, and have understanding of the traceability required for QSLD contracts etc.
- **On site audit is scheduled after all requested information is found to be acceptable.**
- **Audit findings/nonconformance's are provided to the supplier at the conclusion of the audit.**
 - Supplier has 30 days to provide a response and action plan.
- **Supplier will be listed on the QSLD upon successful closure of the audit.**



Common QSLD Audit Findings

- **Counterfeit Part Risk Mitigation Process**
- **GIDEP, Recall, PCN**
- **ESD Control Program**
 - Calibration of equipment
 - Documentation and records
- **Documentation and Document Control**
 - Process documentation lacks detail
 - Revision control
- **Internal Audit**
 - JESD 31 and JESD 625
- **Training**
 - Retraining requirements
 - Records



DLA-Electronics Product Testing Center TESTING CAPABILITIES

- **Electrical/Electronic Testing**
- **Materials Analysis**
- **Environmental Simulation Testing**
- **Failure Analysis**
- **Reliability Testing**



Testing & Evaluation for Suspect 5962 / 5961 Components

- Evaluate contractual items such as pre award STO, post award C of C
- Supply chain traceability
- GIDEP
- Data Base of PKG & Die photos
- Unit pack marking and packaging
- Visual of PKS & leads
- X-Ray florescence inspection (XRF)
- X-Ray, IR Luminescence
- Electrical testing
- Mark permanency/resistance to solvents
- Die Shear
- Bond Pull
- Internal Visual

This process is not only verifying the part meets the DLA Land & Maritime contractual requirements but also specifically looks for suspect counterfeit

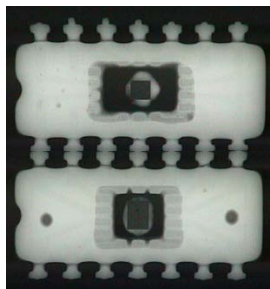


Example 1

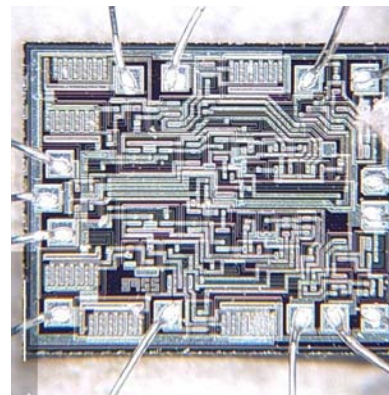
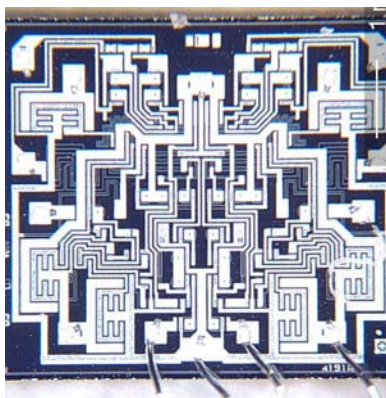
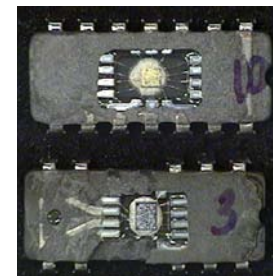
Two devices, identically marked



XRay-2 different dies sizes



Delid confirms Xray

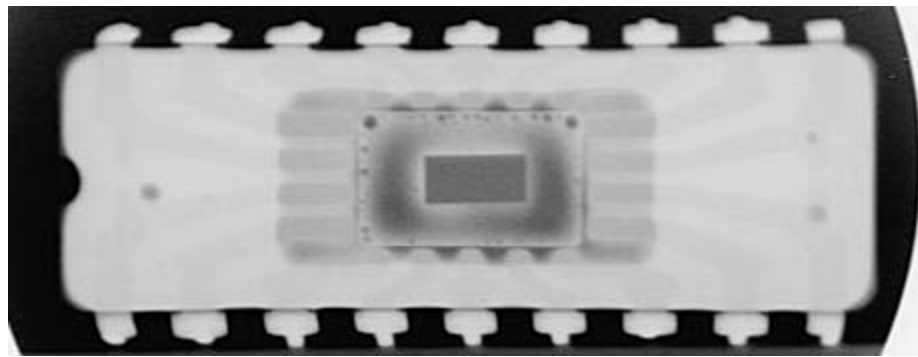
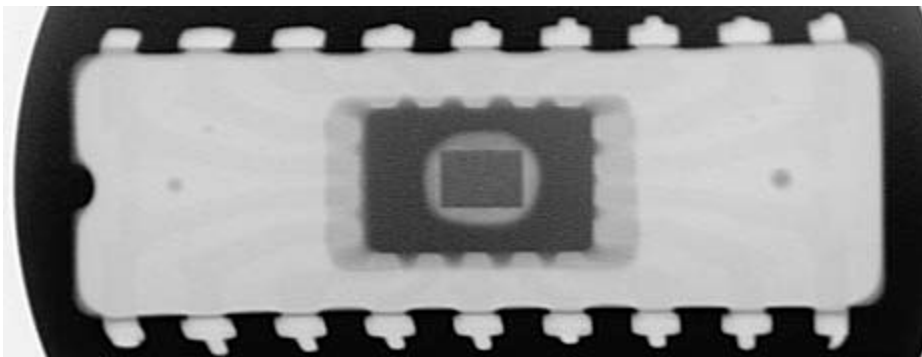


Close up shows 2 entirely different die types



Example 2

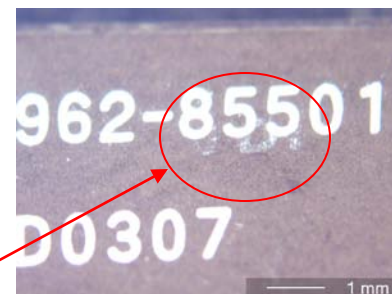
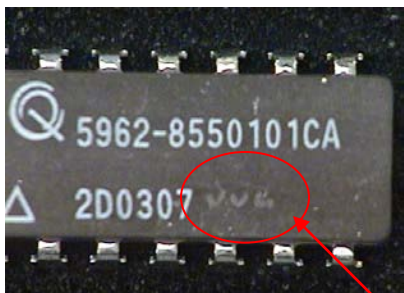
- X-Ray show different die size.
- Vendor had lot tested prior to TE lab test.
 - TE failed 18 of 20 electrically





Example 3

Initial examination showed evidence of remarking. Device logo indicates the manufacturer is QP Labs Inc.



Visual examination revealed traces of other marking.

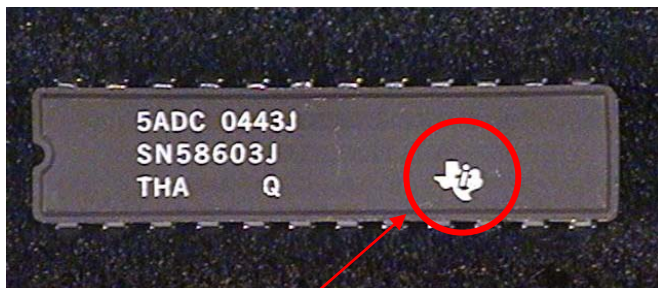


Parts have bent leads and contamination indicating possible prior use



Example 4

Device configuration did not match the part number marked. Internal examination revealed a different manufacturer than that marked on the device.



Texas Instruments Logo on part



AMD logo on die



FY10 Microcircuit Results

178 lots tested from various testing programs

- Suspect (29 lots)
- Commercial Item Substituted (5 lots)
- Reclaimed (5 lots)



Current Initiatives

VALIDATION OF THE QSLD PROGRAM

- % coverage of awarded contracts for 61/62
- % coverage of quotes submitted against contracts for 5961/5962
- GIDEP & PQDRs (Specific items and total %)
- DLA Land & Maritime (TE) Test lab Reports
- Post Award CoC/trace review and directed testing
- Other agencies, OCM(National), OEM under consideration for data mining



Industry Interface

- Electronics Industry Alliance (EIA)/ JEDEC
- Aerospace Industry Association (AIA)
- Air Force Material Command (AFMC)
- Naval Air Systems Command (NAVAIR)
- University of Maryland, Center for Advanced Life Cycle Engineering (CALCE)
- Society of Automotive Engineers (SAE)
- DoD DSP Standardization Conference
- DMSMS Conference
- Aging Aircraft Conference
- Counterfeit Material Working Group (CMWG)

Result:

- Learning best commercial practices
- Exchanging technical data and information



SUMMARY

- **Continue to target testing and data collection to validate the impact of the newly implemented processes**
- **Monitor quality data for the identification of other potential problem stock classes**
- **Ensure DLA Land & Maritime is notified of potential problem vendors and part numbers, based on data received from original component manufacturers, original equipment manufacturers, GIDEP and other government agencies**

DEFENSE LOGISTICS AGENCY

AMERICA'S COMBAT LOGISTICS SUPPORT AGENCY

