

14 High Bridge Road • Sandy Hook, Connecticut 06482 • http://www.smtcorp.com



### **SMT Overview**

- Established in 1995.
- Independent Stocking Distributor of Electronic Components and Peripherals.
- Located in S.W. Connecticut approximately 1.5 hours from N.Y.C. and 2.5 hours from Boston.
- Woman Owned Small Business



### **Facility Overview**

- 72,000 sf. facility specifically engineered for the proper storage, inspection, and distribution of ESD and humidity sensitive electronic components.
- Over 100,000 line items in-stock from over 600 manufacturers.
- Actives, Passives, IC's, Discrete's, Connectors, LCD's and Peripherals









#### **Facility Security**







#### Dehumidification System









#### ESD Floor Treatments









#### **ESD Air-lock**







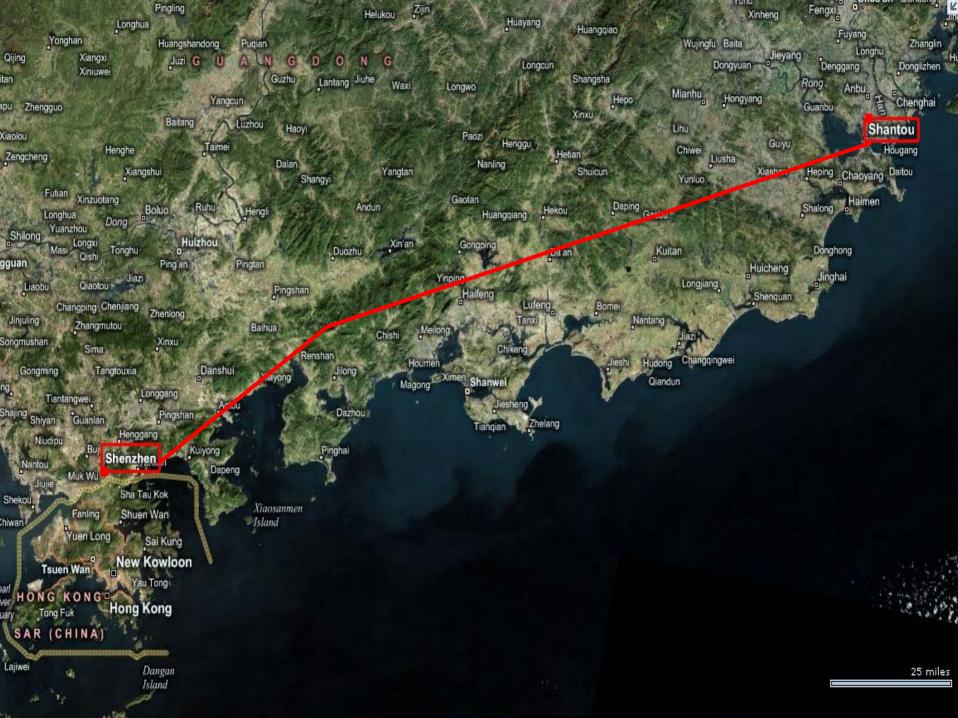
#### SMT Corporation Certifications & Memberships

- ISO9001:2000
- AS9120:2002
- ISO14001:2004
- OHSAS 18001:2007
- ANSI/ESD-20.20:2007
- WBENC
- IDEA
- ERAI
- GIDEP
- AIA
- EPA

CERTIFIED CERTIFIED CERTIFIED CERTIFIED CERTIFIED CERTIFIED **MEMBER MEMBER MEMBER MEMBER** REGISTERED

## China Trip 2008







### Vehicle Inspection Point Just Outside City of Shantou





### Entering City of Shantou





### Electronic Debris Stored in Front and Back Yards seen while driving through city streets













### Shantou warehouse: Boards stacked, waiting for chip removal.







## Components being washed in the river & laid on bank to dry.

#### Washing components in river

## Components on river bank drying



### Pulled components drying on city sidewalks, then separated by type.





0402 Case Size Capacitors (\$.005 ea from Fran. Disty)



### Pulled components stored in bags, being delivered and awaiting processing.







# Pulled components sorted by sifting







### Pulled components prepared for counterfeiting process











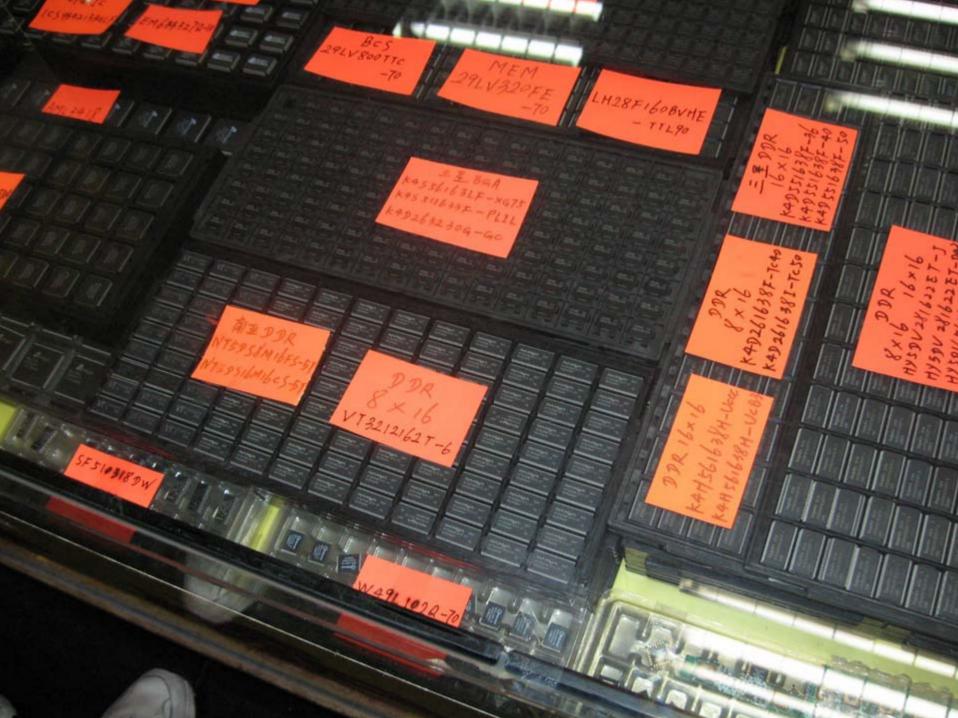


### **Counterfeiting District** where Refurbishing, Remarking, and Repackaging occurs. Residence housing is located above.





### Remarked Components Ready for counterfeit packaging and distribution thru Shenzhen's Global Market





# City of Shenzhen

China's main entry point of counterfeit electronics into the global marketplace









	AT24C01 AT24C02 AT24C16 AT24C32 AT89C51-24PI	家电IC TDA2003A TDA2004 TDA2005R TDA2025B TDA2030A TDA2822M	MAX202CPE/EPE MAX232CPE/EPE MAX232ACWE/AEW MAX3232ACWE/AEW MAX3232CPE/EPE MAX483CPA/EPA MAX485CPA/EPA	74HCT02 74HCT245 74LS02	HT1380B HT1381B HT9170B/D HT9200A/B HT1621B HT46R47	10A604 AMS1117 W77E058A40DL W77E516A40DL W77E516A40DL W78E058B40DL V78E054B40PL 78E052C40DL
	AT89C51-24PI AT89C51-24PU AT89S51-24PU AT89S52-24PU AT89C55WD	TDA2030A	MAX483CPA/EPA MAX485CPA/EPA MAX487ECPA/EEPA MAX813LCPA/LEPA MAX1487CPA/EPA MAX3082ESA	74HCT245 74LS02 74LS126 CD4011 H CD4013 HT CD4021 HT	HT1621B HT46R47 WT HT6221 DS10 T7022-1 DS10 T7136-1 DS120 T7330A-1 DS120	178E054B40PL 78E052C40DL 18B20+ 9820+ 887 887 887
MR.	AT45DB041D AT89C2051-24PU ATMEGA8L=8PU ATMEGA32L-8PU	TDA7377 TDA7388	AL 4778		536-1 DS1302	10A604 10A605

UNTER ALTERN

IC AMEN

10

- 10

asse







### Scope of Counterfeit Problem

 ERAI Inc, has confirmed more than 2800 brokers selling counterfeit components

## Aicron Technology, Inc

# Counterfeit factory box





### LOGO AUTHENTICATION

#### FAKE

# A Cron Technology, Inc

REAL



 235C
 Peak Package Body Temp
 Moisture Level: 2

 Floor Life: One Year
 Condition
 < = 30 deg. C/60% RH</td>

 260C
 Peak Package Body Temp
 Moisture Level: 2

 Floor Life: One Year
 Condition
 < = 30 deg. C/60% RH</td>

DATE:200548

235C MST: 3

260C MST: 3

Package Seal Datl: Del 02 2005 Operator: JDOE

Ricron

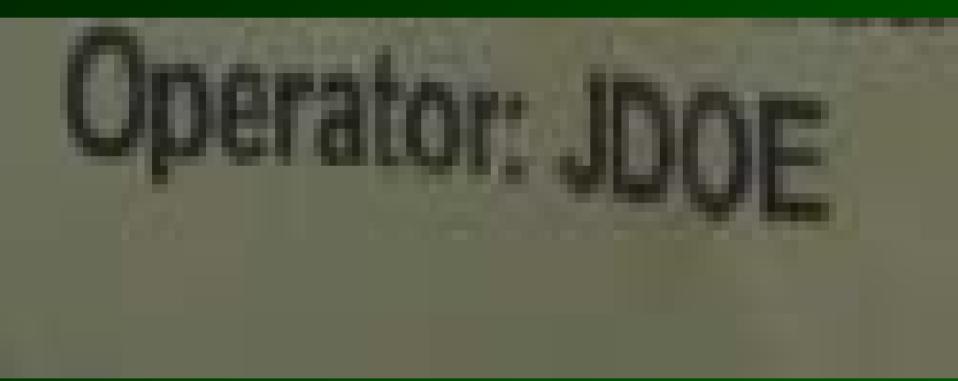
QUANTITY:

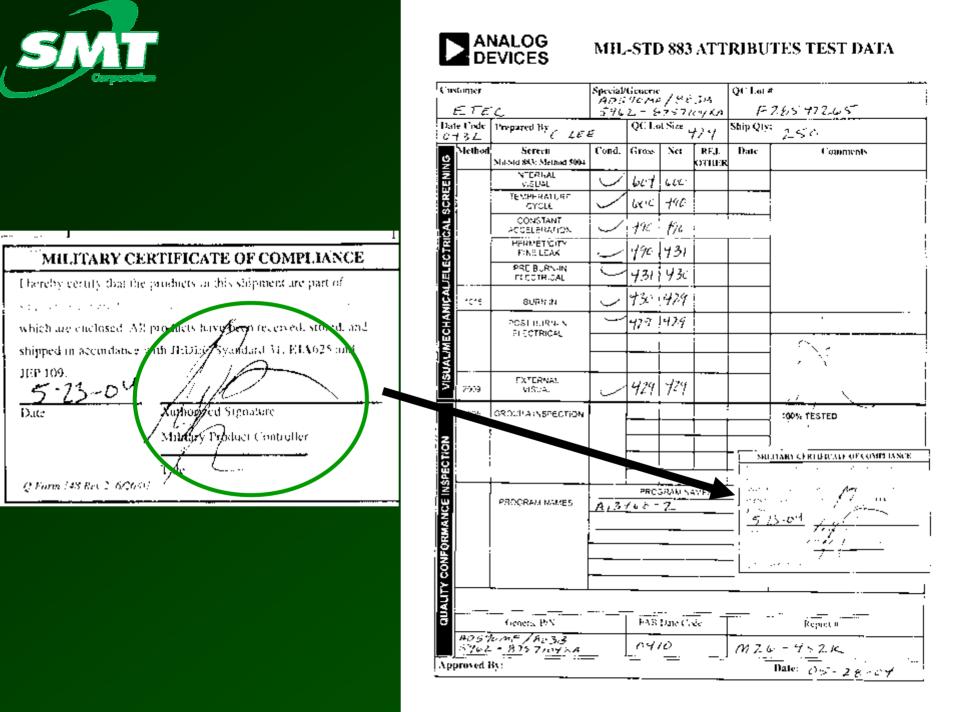
(11) BYKJ2N7.11

PART NUMBER:(1P) MT28F004B5VG-6 B

1000







DE ANALOG DEVICES								
RT. 1 INDUSTRIAL PARK, NORWOOD, MA 02062								
DATE	P.O. #	PART #						
CUSTOMER:		SALES ORDER	DATE CODE					
DOCUMENTS ENCLOSED								
INCOMING QUALITY CONTROL INSPECTION DATA THESE DOCUMENTS MUST								
.AC	COMPA	NY SHIPN	IENT					



# Components on river bank drying

# **SIGNATION STORE S**



Different date code on bottom

2008/10/24 10:03:24

10/24/2008 10:05

Before permanency tests





\*

2008/10/24 10:00:41

10/24/2008 10:05

#### 1997 parts remarked as 2006: Nine years difference



#### **Different Part Number and Date code**

### 2BCNG 2 3 After part permanency test NIXIN MAX173CNG

Before part permanency test



### Laser-Etch remarking still visible after black topping has been removed

# TOP PART MARKING

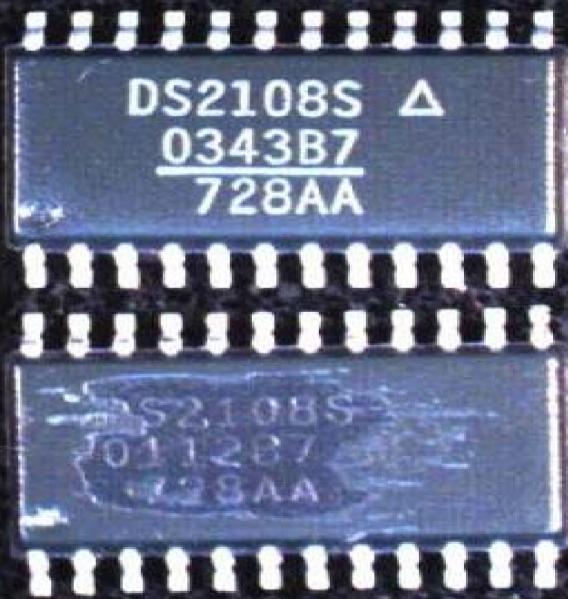
MC1451520W2

10/7/2008 17:08



#### **Baked-On Black-Topping**

# Scraping required to remove finish





#### Chip Sales to Drop 24% in 2009

"Chip sales are on track to fall 24% in 2009." says Gartner Inc. The industry research group also said the industry will not be able to return to 2008 revenue totals through 2013.



#### Is the "Perfect Storm" Approaching?

 Historically, severe component shortage and allocation events begin at the end of recessionary periods.

•Currently we are in the worst recessionary period of our generation.

Is this industry preparing to face this very real possibility?



## Development of a Stringent Counterfeit Mitigation Process

#### Equipment Required for Component Authentication & Quality

- Real Time X-ray
- Acid Etch Decapsulation
- Microscopy Equipment
- XRF Tester (RoHS)
- Solderability Tester
- Baking & Dry packing equipment



# Require More!

- Professional liability insurance
- Certifications: <u>Not Compliance</u>
- Verification of financial stability
- Periodic site audits
- Detailed documentation on component authenticity and quality with every order



