



# D.P.A.

## E-Certa, Inc. Internal Visual Verification Analysis

Client	Western Electronics Distribution
DPA/W.O.#	ECDPA33
Part Identification	S5935QF
Manufacturer	AMC CAPS
P.O. #	11859
Date Code	5
Quantity	1
Package Type	QFP

### Lot Disposition

Submitted By:

Meets Requirements

Reviewed By: SE

Does Not Meet Requirements

Approved By: Joel Deutsch

Customer Review



## Laboratory Summary

### Analysis Procedure/Results:

Meets requirements. Texas Instrument name “Ti” is present on die.

Inspection Performed per: Mil-Std 883 Method 2013

**Discrepancies :** \_\_Yes \_x\_No

Sample #	1										
Anomaly											
Anomaly											
Anomaly											
Anomaly											

### 30x-60x Magnification

- a. improper substrate or bonding post plating material
- b. improper bond wire material or size
- c. metallic contamination or foreign material
- d. lifted or broken wires
- e. lifted, cracked or broken die/substrate
- f. improper die mounting
- g. excessive lead wire loop or sag
- h. improper bond technique and size
- i. improper assembly die location and orientation as compared to the applicable assembly drawing
- j. particles other than those introduced during opening

### 75x-150x Magnification

- k. metalization voids, corrosion, peeling, lifting, blistering or scratches
- l. bond inter-metallics extending radially more than 0.1 mil beyond the bond periphery in any direction
- m. improper die or substrate metalization design layout, topography or identification
- n. die cracks
- o. logo does not match
- p. die numbers do not match

### **DPA Component Counterfeit Checklist**



Pass\_x\_Fail\_\_ Check for bent, scratched, broken, or missing pins.  
Comment:

Pass\_x\_Fail\_\_ Check for corrosion or solder on pins.  
Comment:

Pass\_x\_Fail\_\_ Ensure that there are no scratches on the inside or outside of leads.  
Comment:

Pass\_x\_Fail\_\_ Verify that the pins are similar in gloss or shine, color, and texture.  
Comment:

Pass\_x\_Fail\_\_ Make sure the pins are not oxidized, tinned, or discolored.  
Comment:

Pass\_x\_Fail\_\_ Watch for leads that are too shiny for older date codes or too dull for new date codes.  
Comment:

Pass\_x\_Fail\_\_ Verify that dirt or other foreign substances are not on the parts or leads.  
Comment:

Pass\_x\_Fail\_\_ Ensure that there are not multiple countries of origins for identical date codes/lot codes.  
Comment:

Pass\_x\_Fail\_\_ Check for minor directional scratches, in other words, small abrasions that usually appear to be in one direction on the top of the parts.  
Comment:

Pass\_x\_Fail\_\_ Ensure that the surface of the parts have not been mechanically or otherwise resurfaced and re-stamped.  
Comment:

Pass\_x\_Fail\_\_ Confirm that there are not minor cracks on the surface of the parts.  
Comment:

Pass\_x\_Fail\_\_ Make sure that there are not colored dots or ink marks on the tops of the components which indicate previous testing or programming.  
Comment:

Pass\_x\_Fail\_\_ Make certain that "country of origin" circles/marks on the bottom of parts are consistent.  
Comment:



Figure: 1

Magnification: 10x  
Subject: Front view

Subject: Back view

Top of chip de-capped for DPA

Magnification: 300x  
Subject: inside of de-capped chip from Figure 1

name and logo is present.

Note\* Images are clearly visible when viewed by microscope, but lower resolution in photo image.

E-Certa, Inc.



8-5-09