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United States Senate
 COMMITTEE ON ARMED SERVICES
 WASHINGTON, DC 20510-6050

RICHARD D. DeBOES, STAFF DIRECTOR
 DAVID M. MORRIS, MINORITY STAFF DIRECTOR

October 20, 2011

Mr. Mark Thompson
 President and CEO
 Fairchild Semiconductor
 3030 Orchard Parkway
 San Jose, CA 95134

Dear Mr. Thompson:

Counterfeit electronic parts in the Department of Defense's (DOD) supply chain pose a risk to our national security, the reliability of our weapons systems, and the safety of our military men and women. Government and industry share a common interest in ensuring that the DOD supply chain is free from these parts. As part of an inquiry by the Senate Armed Services Committee into suspect counterfeit electronic parts in the DOD supply chain, the Committee is seeking information from defense contractors and subcontractors, independent testing companies, and electronic component manufacturers about suspect counterfeit electronic parts.

The Committee has identified suspect counterfeit electronic parts that entered the U.S. military supply chain. Among those are parts that were sold by an independent distributor in China as new, authentic Fairchild Semiconductor [REDACTED] transistors [date code F N548]. Enclosed are photos of [REDACTED] transistors from the suspect lot. Additionally, an independent lab that inspected the suspect parts reported that they exhibited the following anomalies:

External Inspection:

- "Mold markings on the top side of the package showed obvious differences in appearance and also appeared to be 'black-topped'"
- "An indentation ring as well as package chipping was observed around the indentation ring as well as package chipping was observed around the mounting hole on S/N 1"
- "The leads had a non-uniform surface appearance; having a smooth shiny appearance at the package egress and transitioning to a rough dull appearance beyond the standoff feature"
- "Metal overlapping and deep scratches characterized the two regions at the stand off"

Radiography

- "The non-uniform areas of the leads noted in the external inspection showed inconsistencies in the density of the metal in these areas"

De-Encapsulation and Visual Inspection

- “The die manufacturer could not be identified due to the lack of die markings on either device”
- “Die markings did not correspond to that of the external package markings”

Conclusion

- “The results of the analysis suggest the devices have possibly been refurbished components or possible counterfeits”
- “The leads may have been cut from solder joints, re-fitted by welds and solder coated”
- “Scrape testing revealed a thin layer of over coat or black-topping”
- “The package surface of both devices flaked off when performing this test revealing a smooth surface beneath”

To assist the Committee with its inquiry, please answer the following questions:

- 1) Does Fairchild Semiconductor sell refurbished [REDACTED] transistors or have an agreement with any third party that would permit them to refurbish and sell [REDACTED] transistors?
- 2) Did Fairchild Semiconductor use remarking or black-topping in its manufacturing of [REDACTED]?
- 3) Would Fairchild Semiconductor recommend the use of [REDACTED] transistors with the anomalies described above?
- 4) Would Fairchild Semiconductor warranty [REDACTED] transistors that exhibited the anomalies described above?
- 5) Please describe the short-term and long-term reliability and performance risks, if any exist, of using [REDACTED] transistors with the anomalies described above.

Please provide responsive information by October 27, 2011. Please send your response as an attachment to an email to Ozge_Guzelsu@armed-services.senate.gov and Bryan_Parker@armed-services.senate.gov. If you have any questions or wish to discuss this request, please contact Senate Armed Services Committee majority staff Ozge Guzelsu (202-224-8922) and Bryan Parker (202-224-8265) of the minority staff. Thank you for your cooperation.

Sincerely,



John McCain
Ranking Member



Carl Levin
Chairman

Enclosures



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@fairchildsemi.com

Paul D. Delva
Sr. V.P. and General Counsel
Corporate Secretary

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VIA EMAIL

October 25, 2011

United States Senate
Committee on Armed Services
Washington, D.C. 20510-6050
Attention: Ozge Guzelsu and Bryan Parker

Dear Ms. Guzelsu and Mr. Parker:

This responds to the Committee's October 20, 2011 letter to Mark Thompson, our Chairman, President and CEO. The Committee's questions and our answers, to the best of our knowledge and belief, are as follows:

1) Does Fairchild Semiconductor sell refurbished [REDACTED] transistors or have an agreement with any third party that would permit them to refurbish and sell [REDACTED] transistors?

Answer: No.

2) Did Fairchild Semiconductor use remarking or black-topping in its manufacturing of [REDACTED]?

Answer: No.

3) Would Fairchild Semiconductor recommend the use of [REDACTED] transistors with the anomalies described above?

Answer: No.

4) Would Fairchild Semiconductor warranty [REDACTED] transistors that exhibited the anomalies described above?

Answer: No. According to Fairchild records, the last shipment made for this part number was for parts manufactured in 2004 only. We have no record of parts bearing such a part number being manufactured in 2005. We believe these devices are not genuine Fairchild devices.

5) Please describe the short-term and long-term reliability and performance risks, if any exist, of using [REDACTED] transistors with the anomalies described above.

Answer: We cannot realistically assess the reliability of the parts in question because we believe they are not Fairchild Semiconductor devices.

We are pleased to assist the Committee's investigation. Please direct further communication about this matter to my attention, and do let me know if you would like to speak with our technical personnel or if you have any additional questions or requests for information.

Yours very truly,

FAIRCHILD SEMICONDUCTOR CORPORATION

A handwritten signature in dark ink, appearing to read "Paul D. Delva", with a horizontal line underneath.

By:

Paul D. Delva
Sr. V.P., General Counsel and Secretary

cc: Mark S. Thompson