



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

September 9, 2010

Via Facsimile and U.S. Mail

Mr. Robert J. Nikl
Chief Financial Officer
Verigy Ltd.
No. 1 Yishun Ave 7
Singapore 768923

**Re: Verigy Ltd.
Form 10-K for the Year Ended October 31, 2009
Filed December 21, 2009
File No. 000-52038**

Dear Mr. Nikl:

We have reviewed your response letter dated August 16, 2010 and filings and have the following comments. In our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended October 31, 2009

Note 24. Segment and Geographic Information, page 103

1. We note your response to prior comment 1 from our letter dated July 20, 2010. With a view towards understanding how your SOC and memory test product segments' gross margins are converging, to the extent available, please provide to us your three year quarterly forecast plan by gross margin for each operating segment.

2. Further to the above, we note your response to prior comment 3 from our letter dated July 20, 2010. Please provide to us an updated historical quarterly analysis by operating segment that includes their gross margin results for the three months ended July 31, 2010.
3. We note your response to prior comment 5 from our letter dated May 25, 2010 related to how your SOC and memory test segments have similar types or classes of customers for your products and services. We further note your response to prior comment 2 from our letter dated July 20, 2010 that you experienced the loss of a significant customer that filed for bankruptcy within your memory test system segment and that you also introduced a new memory test product within your memory test system segment. We finally note you have not discussed any similar types of events within your SOC segment. Giving consideration to paragraph 280-10-50-11 of the FASB Accounting Standards Codification, please address the following comments:
 - Explain to us if your customers purchase products from both segments or just from one segment.
 - Explain the factors that led to a customer in your memory test segment experiencing financial difficulties with no apparent similar experience in the SOC segment. Discuss whether customers in each of the two segments are similarly capitalized.
 - It appears that the memory test segment relied significantly on one customer. Explain whether the SOC segment places significant reliance on one customer or if sales are distributed amongst multiple customers.
 - We note that the introduction of a new product in the memory test segment resulted in a short-term negative impact. Discuss whether you have experienced similar trends in your SOC segment in connection with new product introductions.
 - Discuss the product lifecycles for each of your SOC segment and your memory test segment. In this regard, discuss when you last introduced a new product in the SOC segment. As applicable, discuss why you introduced a new product in the memory test segment but did not introduce a new product within your SOC segment.
 - Quantify the impact that each of the loss of the significant memory test customer and the timing of the introduction of your new memory test product had upon your memory test products segments' quarterly gross margin from fiscal 2008 through fiscal 2010.
4. Further to the above, we note your disclosure on page 30 of your Form 10-Q for the period ended July 31, 2010 that you are experiencing significant growth in the sales of your SOC systems and that many customers are ramping up their manufacturing to high volume to meet high demand. Separately, you discuss continued weakness in the memory segment in part due to a large inventory of used memory systems in the market.

You further state that you expect a rebound in the memory market in 2011. Based on these disclosures, we do not understand how the two operating segments meet the criteria for aggregation outlined in paragraph 280-10-50-11 of the FASB Accounting Standards Codification. Specifically, it appears that both the recent historical economic characteristics and the expected future economic characteristics through at least 2011 do not appear similar. Please explain how the two operating segments meet the aggregation criteria.

5. We note your response to prior comment 6 from our letter dated July 20, 2010 and that you recently appointed a President and COO that will oversee all of your product lines. We further note that you are moving towards combining the SOC and memory test segments into one operating segment. With reference to paragraph 280-10-50-1(a) and 50-5 of the FASB Accounting Standards Codification, please explain to us the individual that is designated as your chief operating decision maker (CODM). Within your response, please explain to us if your CODM reviews separate operating results for your SOC and memory test segments to make decisions about resources to be allocated to each operating segment and assessing each operating segments' performance.

You may contact Tara Harkins, Staff Accountant, at (202) 551-3639 or me at (202) 551-3643 if you have questions regarding these comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

Kevin L. Vaughn
Accounting Branch Chief