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July 15, 2011

VIA EDGAR

Brian Cascio Division of Corporate Finance United States Securities and Exchange Commission 100 F Street, N.E. Washington, D.C. 20549-3628

Advanced Micro Devices, Inc.

Form 10-K for the fiscal year ended December 25, 2010

Filed February 18, 2011 File No. 001-07882

Dear Mr. Cascio:

On behalf of Advanced Micro Devices, Inc. ("AMD" or the "Company"), we confirm receipt of the letter dated July 1, 2011 from the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") with respect to the above referenced Form 10-K. We are responding to the Staff's comments on behalf of AMD, as set forth below. The Staff's comments are set forth below in bold and numbered to correspond to the numbered comments in the Staff's letter. AMD's responses follow each of the Staff's comments.

Form 10-K for the fiscal year ended December 25, 2010 Item 8. Financial Statements and Supplementary Data Note 3. GLOBALFOUNDRIES, page 82

We note your response to our previous comments 2 and 5. Please provide us a calculation of the gains recognized under FASB ASC 323-10-40-1 in the year ended December 25, 2010 and the quarter ended April 2, 2011.

Response: The Company respectfully provides the calculation of the gains as follows:

Fiscal 2010 Dilution Gain (\$232 million)

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Pursuant to the original Funding Agreement among AMD, Advanced Technology Investment Company LLC ("ATIC") and GLOBALFOUNDRIES, Inc. ("GF") dated March 2, 2009 (the "Original Funding Agreement"), as amended, ATIC invested a total of \$930 million in cash into GF during the Company's fiscal 2010 in exchange for GF securities consisting of an aggregate of 444,313 Class A Preferred Shares, which were deemed in-substance common stock, and 617,695 Class B Preferred Shares. These capital contributions were made during fiscal 2010 over six separate rounds of funding. Pursuant to the Original Funding Agreement, the first four contributions, totaling \$637 million, resulted in the issuance by GF of both Class A Preferred Shares and Class B Preferred Shares to ATIC. On November 24, 2010, the Company, ATIC and GF signed a letter agreement regarding fundings of GF pursuant to which, among other things, the parties agreed that the securities to be issued in consideration of any future GF funding would consist solely of GF's Class A Preferred Shares. Therefore, GF issued only Class A Preferred Shares to ATIC in consideration for the last two contributions, totaling \$293 million. The Company did not participate in any of the fundings during 2010 and does not own any Class B Preferred Shares.

Consistent with ASC 323-10-40-1, when GF issued additional Class A Preferred Shares for cash at a per share amount that was greater than the Company's per share carrying amount of the GF Class A Preferred Shares, gains were reflected in the income statement of the Company as if the Company had sold a portion of its investment.

Consistent with the detailed calculations set forth in the attached appendices, the Company performed the following steps in calculating the gain each time GF issued additional Class A Preferred Shares:

- 1. Immediately after each capital contribution by ATIC, the Company calculated its ownership interest in Class A Preferred Shares (step 1).
- 2. The Company calculated the per share value for the newly issued Class A Preferred Shares. In determining the per share value of the newly issued Class A Preferred Shares, the Company took the consideration attributed to the newly issued Class A Preferred Shares and divided it by the number of newly issued Class A Preferred Shares. The consideration attributed to the newly issued Class A Preferred Shares was based on the relative fair value between the Class A Preferred Shares and Class B Preferred Shares issued (step 2).
- 3. The Company then calculated its carrying value per share by dividing the carrying value of its investment in GF by the number of Class A Preferred Shares that it owns (step 3).
- 4. The gain on dilution was then calculated by multiplying the Company's newly diluted ownership interest by the newly issued number of Class A Preferred Shares and then by the difference between consideration given and carrying amount per share (step 4).

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5. This gain was then further adjusted to reflect the newly diluted ownership interest of the Company's basis differences in the net assets of GF (step 5).

Please see Appendix A through G for the detailed calculation of these dilution gains.

Fiscal First Quarter 2011 Dilution Gain (\$492 million)

As set forth in Appendix H, the initial gain was calculated consistent with the calculations described above. The Company further limited the amount of gain recognized to the fair value of its remaining investment in GF. Since both GF and GLOBALFOUNDRIES Singapore ("GFS") were under common control by ATIC, the impact to AMD of the contribution by ATIC International Investment Company LLC ("ATIC II") of all of the outstanding ordinary shares of GFS to GF was calculated based on the book value net equity contribution amount of GFS to GF. GFS had approximately \$2.8 billion net equity based on its financial statements at the time of the contribution.

The Company performed the following steps to calculate the gain:

- 1. The Company determined its ownership interest in GF after the GFS contribution. Its ownership interest in GF's Class A Preferred Shares decreased from approximately 62% to approximately 24% as a result of the 2,808,981 newly issued shares of GF Class A Preferred Shares that GF issued to ATIC II (step 1).
- 2. The Company determined the per share value for the GFS contribution to GF by dividing the GFS net equity balance by the number of newly issued Class A Preferred Shares (step 2).
- 3. The Company determined its carrying value per share for its investment in GF by dividing the carrying value of its investment in GF by the number of the Class A Preferred Shares that it owns (step 3)
- 4. The gain on dilution was then calculated by multiplying the Company's newly diluted ownership interest by the newly issued number of Class A Preferred Shares and then by the difference between consideration given and carrying amount per share (step 4).
- 5. This gain was then further adjusted to reflect the newly diluted ownership interest of the Company's basis differences in the net assets of GF (step 5).
- 6. The Company noted that recognizing the gain based on the value of the contribution of GFS would result in the Company's investment balance being carried at more than its fair value; therefore, the Company limited the gain and resulting investment balance up to the extent of the fair value of its investment (step 6).
- 7. The Company adjusted the gain by \$14 million, primarily related to the fees that the Company paid to its financial advisors in connection with the GFS contribution, which resulted in the final net gain amount of \$492 million (step 7).

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Please see Appendix H for the detailed calculation of this dilution gain.

Certain Relationships and Related Transactions and Director Independence, page 132

- 2. We note your response to prior comment 3.
 - It is unclear how your relationship with West Coast Hitech, L.P., is described in detail in this section as you state in your response. Rather, it appears your disclosure is a chronological description of a series of transaction that starts with the 2008 transactions with West Coast Hitech, G.P., Ltd. Your disclosure in this section should not be a repetition of the nearly identical disclosure you have provided on page 13 and in Note 3 to your financial statements. Your disclosure of related party transactions should be a complete discussion of the information required by Item 404(a) of Regulation S-K so that investors can understand the nature and extent of the related party transactions. Please tell us how your future filings will describe the nature of this relationship in this section
 - · Please tell us why you have described the transactions you identify in the fourth sentence of your response and how they affect your disclosure in this area.
 - We note you state there is "no set dollar value of the transactions under the wafer supply agreement". It is unclear how you believe the disclosure of "estimated" purchase obligations for 2011 and 2012 satisfies the requirement to disclosure the dollar value of the transaction as required by Item 404(a). Please tell us the amounts paid under this agreement for the prior fiscal year.

Response: In response to the Staff's comment, the Company will add the following disclosure as a fifth paragraph under the heading "The GLOBALFOUNDRIES Manufacturing Joint Venture Transaction: "Both WCH and ATIC are either directly or indirectly wholly-owned subsidiaries of Mubadala Development Company PJSC, a joint stock company incorporated in the Emirate of Abu Dhabi and which is owned by the Government of the Emirate of Abu Dhabi. Our director Waleed Al Muhairi is the Chief Operating Officer of Mubadala and is the Chairman of ATIC. As of March 2, 2009, ATIC owned 60 percent of GLOBALFOUNDRIES on a fully converted basis and as of ________, 2012, ATIC owned approximately ___ percent of GLOBALFOUNDRIES on a fully converted basis. As of ________, 2012, WCH beneficially owned approximately ___ percent of AMD's outstanding common stock." This disclosure reflects the transactions identified in the fourth sentence of the Company's response to prior comment 3 in that ATIC previously was not directly owned by Mubadala. With respect to the third bullet point of the Staff's comment, the Company respectfully submits that as described in its prior response, the disclosure of the estimated purchase obligations in 2011 and 2012 together with the disclosure of the amounts paid in 2010 on page 44 of the Company's 2010 Annual Report on Form 10-K in the last sentence under the heading "GLOBALFOUNDRIES — Governance Changes, Funding and Accounting in 2010 – Deconsolidation of GF" satisfies the requirements of Item 404(a). The Company will repeat this disclosure with corresponding amounts for 2011 expenses in the

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"Certain Relationships and Related Transactions" section of its 2011 annual meeting proxy statement.

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We therefore respectfully request that if the Staff has any additional questions or comments, please direct them as soon as possible to the undersigned at (650) 463-3060.

Very truly yours,

/s/ Tad J. Freese

Tad J. Freese of Latham & Watkins LLP

cc: Thomas Seifert, Advanced Micro Devices, Inc. Harry A. Wolin, Esq., Advanced Micro Devices, Inc. Faina Medzonsky, Esq., Advanced Micro Devices, Inc.

Appendix A

Total 2010 Dilution Gain Summary (in millions)

Funding Date	Fundin	g Amount	lass A sideration	Class B sideration	Net 0	Gain Realized
1-Apr-10	\$	100	\$ 8.3	\$ 91.7	\$	1
21-Jun-10	\$	227	\$ 18.7	\$ 208.3	\$	6
23-Aug-10	\$	100	\$ 8.3	\$ 91.7	\$	5
20-Oct-10	\$	210	\$ 17.3	\$ 192.7	\$	14
6-Dec-10	\$	100	\$ 100.0	\$ _	\$	75
21-Dec-10	\$	193	\$ 193.0	\$ 	\$	131
	\$	930	\$ 345.6	\$ 584.4	\$	232

Appendix B

April 1, 2010 capital contribution (in millions, except share amounts):

	AMD	ATIC	Total
Class A Preferred Shares Owned Prior to the Funding Date	1,090,950	218,190	1,309,140
Class A Preferred Shares Issued on Funding Date		24,242 B	24,242
	1,090,950	242,432	1,333,382
Class A Ownership % after Funding (Step 1)	81.8% A	18.2%	
Per share value of consideration given for issuance of additional Class A Preferred Shares (Step 2)	\$ 340		
Carrying value per share on date of funding (Step 3)	\$ 248		
Difference between consideration given and carrying value per share (total per share amount)	\$ 92 C		
AMD gain on the issuance of new Class A Preferred Shares (Step 4)	\$ 2 (A*B*C)		
Less:adjustment to basis differences (Step 5)	\$ (1)		
Net gain on the issuance of the additional Class A Preferred Shares	\$ 1		

<u>Appendix C</u>

June 21, 2010 capital contribution (in millions, except share amounts):

	AMD	ATIC	Total
Class A Preferred Shares Owned Prior to the Funding Date	1,090,950	242,432	1,333,382
Class A Preferred Shares Issued on Funding Date		55,030 B	55,030
	1,090,950	297,462	1,388,412
Class A Ownership % after Funding (Step 1)	78.6% A	21.4%	
Per share value of consideration given for issuance of additional Class A Preferred Shares (Step 2)	\$ 340		
Carrying value per share on date of funding (Step 3)	\$ 163		
Difference between consideration given and carrying value per share (total per share amount)	\$ 177 C		
AMD gain on the issuance of new Class A Preferred Shares (Step 4)	\$ 8 (A*B*C)		
Less:adjustment to basis differences (Step 5)	\$ (2)		
Net gain on the issuance of the additional Class A Preferred Shares	\$ 6		

Appendix D

August 23, 2010 capital contribution (in millions, except share amounts):

	AMD	ATIC	Total
Class A Preferred Shares Owned Prior to the Funding Date	1,090,950	297,462	1,388,412
Class A Preferred Shares Issued on Funding Date		24,242 B	24,242
	1,090,950	321,704	1,412,654
Class A Ownership % after Funding (Step 1)	77.2% A	22.8%	
Per share value of consideration given for issuance of additional Class A Preferred Shares (Step 2)	\$ 340		
Carrying value per share on date of funding (Step 3)	\$ 28		
Difference between consideration given and carrying value per share (total per share amount)	\$ 312 C		
AMD gain on the issuance of new Class A Preferred Shares (Step 4)	\$ 6 (A*B*C)		
Less:adjustment to basis differences (Step 5)	\$ (1)		
Net gain on the issuance of the additional Class A Preferred Shares	\$ 5		

Appendix E

${\bf October~20,2010~capital~contribution~(in~millions, except~share~amounts):}$

	AMD	ATIC	Total
Class A Preferred Shares Owned Prior to the Funding Date	1,090,950	321,704	1,412,654
Class A Preferred Shares Issued on Funding Date		50,909 B	50,909
	1,090,950	372,613	1,463,563
Class A Ownership % after Funding (Step 1)	74.5% A	25.5%	
Per share value of consideration given for issuance of additional Class A Preferred Shares (Step 2)	\$ 340		
Carrying value per share on date of funding (Step 3)	\$ (76)		
Difference between consideration given and carrying value per share (total per share amount)	\$ 416 C		
AMD gain on the issuance of new Class A Preferred Shares (Step 4)	\$ 16 (A*B*C)		
Less:adjustment to basis differences (Step 5)	\$ (2)		
Net gain on the issuance of the additional Class A Preferred Shares	\$ 14		

Appendix F

December 6, 2010 capital contribution (in millions, except share amounts):

	AMD	ATIC	Total
Class A Preferred Shares Owned Prior to the Funding Date	1,090,950	372,613	1,463,563
Class A Preferred Shares Issued on Funding Date	_	99,108 B	99,108
	1,090,950	471,721	1,562,671
Class A Ownership % after Funding (Step 1)	69.8% A	30.2%	
Per share value of consideration given for issuance of additional Class A Preferred Shares (Step 2)	\$ 1,009		
Carrying value per share on date of funding (Step 3)	\$ (113)		
Difference between consideration given and carrying value per share (total per share amount)	\$ 1,122 C		
AMD gain on the issuance of new Class A Preferred Shares (Step 4)	\$ 78 (A*B*C)		
Less:adjustment to basis differences (Step 5)	\$ (2)		
Net gain on the issuance of the additional Class A Preferred Shares	\$ 75		

Appendix G

$December\ 21,\ 2010\ capital\ contribution\ (in\ millions,\ except\ share\ amounts):$

	AMD	ATIC	Total
Class A Preferred Shares Owned Prior to the Funding Date	1,090,950	471,721	1,562,671
Class A Preferred Shares Issued on Funding Date		190,783 B	190,783
	1,090,950	662,504	1,753,454
Class A Ownership % after Funding (Step 1)	62.2% A	37.8%	
Per share value of consideration given for issuance of additional Class A Preferred Shares (Step 2)	\$ 1,009		
Carrying value per share on date of funding (Step 3)	\$ (127)		
Difference between consideration given and carrying value per share (total per share amount)	\$ 1,136 C		
AMD gain on the issuance of new Class A Preferred Shares (Step 4)	\$ 135 (A*B*C)		
Less:adjustment to basis differences (Step 5)	\$ (4)		
Net gain on the issuance of the additional Class A Preferred Shares	\$ 131		

Appendix H

Q1 2011 Gain Calculation resulting from the \$2.834 billion contribution of GlobalFoundries Singapore on December 27, 2010 (in millions, except share amounts):

	AMD	ATIC	Total
Class A Preferred Shares Owned Prior to the Funding Date	1,090,950	662,504	1,753,454
Class A Preferred Shares Issued on Funding Date		2,808,981 B	2,808,981
	1,090,950	3,471,485	4,562,435
Class A Ownership % after Funding (Step 1)	23.9% A	76.1%	
Per share value of consideration given for issuance of additional Class A Preferred Shares (Step 2)	\$ 1,009		
Carrying value per share on date of funding (Step 3)	\$ (6)		
Difference between consideration given and carrying value per share (total per share amount)	\$ 1,015 C		
AMD gain on the issuance of new Class A Preferred Shares (Step 4)	\$ 682 (A*B*C)		
Less:adjustment to basis differences (Step 5)	\$ (18)		
Net gain on the issuance of the additional Class A Preferred Shares	\$ 664		

Q1 2011 Gain limited to fair value (in millions, except per share amounts):

Remaining investment in GLOBALFOUNDRIES (number of Class A Preferred Shares owned)	1,0	90,950
Fair value of Clas A Preferred Shares (per share) - Q1 2011	\$	457
Fair value of remaining investment in GLOBALFOUNDRIES (Step 6)	\$	499
Removal of existing negative investment balance	\$	7
Net charges primarily banker fees associated with the contribution of GLOBALFOUNDRIES Singapore to GLOBALFOUNDRIES (Step 7)	\$	(14)
Gain recognized in Q1 2011	\$	492