



Title of Change:	Ezairo 7110 Hybrid: Cross-talk problem.																																																																																																														
Effective date:	25 September 2019																																																																																																														
Contact information:	Contact your local ON Semiconductor Sales Office or < christophe.waelchli@onsemi.com >																																																																																																														
Type of notification:	This Product Bulletin is for notification purposes only. ON Semiconductor will proceed with implementation of this change upon publication of this Product Bulletin.																																																																																																														
Change Category:	<input type="checkbox"/> Wafer Fab Change <input type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input checked="" type="checkbox"/> Other <u>Customer information</u>																																																																																																														
Change Sub-Category(s):	<input type="checkbox"/> Manufacturing Site Addition <input type="checkbox"/> Material Change <input type="checkbox"/> Datasheet/Product Doc change <input type="checkbox"/> Manufacturing Site Transfer <input checked="" type="checkbox"/> Product specific change <input type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Manufacturing Process Change <input checked="" type="checkbox"/> Other: <u>Customer information</u>																																																																																																														
Sites Affected:	ON Semiconductor Sites: ON Burlington, Canada	External Foundry/Subcon Sites: None																																																																																																													
Description and Purpose:																																																																																																															
<p>The following issue was discovered on the Ezairo 7110 hybrids (OPN E7110-4-102A33-AG and E7110-4-102A33-BPG) :</p> <p>In very specific circumstances, audio artifacts on certain Audio Analog Inputs (AIs) when certain DIOs are quickly toggling can create a noticeable noise.</p> <p>The following table shows the cross-talk level for all AIs <-> DIOs combinations:</p>																																																																																																															
<table border="1"> <thead> <tr> <th colspan="2"></th> <th colspan="14">Worst case crosstalk relative values scale [Red - Green]</th> </tr> <tr> <th colspan="2"></th> <th colspan="14">OD0 measured crosstalk tone amplitude [dBV]</th> </tr> <tr> <th></th> <th>Worst Case</th> <th>DIO4</th> <th>DIO5</th> <th>DIO6</th> <th>DIO7</th> <th>DIO8</th> <th>DIO9</th> <th>DIO16</th> <th>DIO18</th> <th>DIO21</th> <th>DIO22</th> <th>DIO23</th> <th>DIO24</th> <th>DIO25</th> <th>DIO26</th> </tr> </thead> <tbody> <tr> <td rowspan="4">Inputs</td> <td>A10</td> <td>-77.3</td> <td>-77.3</td> <td>-75.6</td> <td>-77.3</td> <td>-86.7</td> <td>-108.6</td> <td>-108.8</td> <td>-107.2</td> <td>-99.6</td> <td>-102.8</td> <td>-103.1</td> <td>-105.6</td> <td>-101.4</td> <td>-75.1</td> </tr> <tr> <td>A11</td> <td>-87.3</td> <td>-102.1</td> <td>-107.2</td> <td>-72.1</td> <td>-118.3</td> <td>-114.8</td> <td>-115.6</td> <td>-117.7</td> <td>-112.9</td> <td>-107.5</td> <td>-113.7</td> <td>-112.0</td> <td>-77.1</td> <td>-74.1</td> </tr> <tr> <td>A12</td> <td>-103.4</td> <td>-105.6</td> <td>-105.5</td> <td>-106.0</td> <td>-107.6</td> <td>-108.1</td> <td>-106.9</td> <td>-98.7</td> <td>-102.9</td> <td>-101.6</td> <td>-104.1</td> <td>-104.1</td> <td>-80.8</td> <td>-101.9</td> </tr> <tr> <td>A13</td> <td>-100.6</td> <td>-100.6</td> <td>-102.8</td> <td>-105.6</td> <td>-106.2</td> <td>-105.1</td> <td>-107.0</td> <td>-111.2</td> <td>-103.0</td> <td>-104.8</td> <td>-104.1</td> <td>-103.2</td> <td>-101.6</td> <td>-104.7</td> </tr> </tbody> </table>					Worst case crosstalk relative values scale [Red - Green]																OD0 measured crosstalk tone amplitude [dBV]															Worst Case	DIO4	DIO5	DIO6	DIO7	DIO8	DIO9	DIO16	DIO18	DIO21	DIO22	DIO23	DIO24	DIO25	DIO26	Inputs	A10	-77.3	-77.3	-75.6	-77.3	-86.7	-108.6	-108.8	-107.2	-99.6	-102.8	-103.1	-105.6	-101.4	-75.1	A11	-87.3	-102.1	-107.2	-72.1	-118.3	-114.8	-115.6	-117.7	-112.9	-107.5	-113.7	-112.0	-77.1	-74.1	A12	-103.4	-105.6	-105.5	-106.0	-107.6	-108.1	-106.9	-98.7	-102.9	-101.6	-104.1	-104.1	-80.8	-101.9	A13	-100.6	-100.6	-102.8	-105.6	-106.2	-105.1	-107.0	-111.2	-103.0	-104.8	-104.1	-103.2	-101.6	-104.7
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<p>Cross-talk start to be noticeable when the level is higher than -90dB (shown in red in the table above).</p> <p>ON Semiconductor is working a new version of the Ezairo 7110 hybrid that doesn't show this problem.</p> <p>ON Semiconductor will release appropriate customer notification of the new version of the Ezairo 7110 that does not exhibit cross-talk issues in the coming months, upon completion of qualification.</p>																																																																																																															
List of Affected Parts:																																																																																																															
<p>Note: Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the PCN Customized Portal.</p> <p>E7110-4-102A33-AG E7110-4-102A33-BPG</p>																																																																																																															

Japanese translation of the notification starts here.
通知の日本語訳はここから始まります。

Note: The Japanese version is for reference only. In case of any differences between the English and Japanese version, the English version shall control.

注：日本語版は参照用です。英語版と日本語版の違いがある場合は、英語版が優先されます。



変更件名:	Ezairo 7110 Hybrid: クロストーク問題																																																																																																												
発効日:	25 September 2019																																																																																																												
連絡先情報:	現地のオン・セミコンダクター営業所または<christophe.waelchli@onsemi.com>にお問い合わせください。																																																																																																												
通知種別:	本製品速報は通知目的のみのものです。オン・セミコンダクターは本製品速報の発行により本変更を実行します。																																																																																																												
変更カテゴリ:	<input type="checkbox"/> ウェハファブの変更 <input type="checkbox"/> アセンブリの変更 <input type="checkbox"/> 試験の変更 <input checked="" type="checkbox"/> その他 お客様情報																																																																																																												
変更サブカテゴリ:	<input type="checkbox"/> 製造拠点の追加 <input type="checkbox"/> 材料の変更 <input type="checkbox"/> データシート/製品資料の変更 <input type="checkbox"/> 製造拠点の移転 <input checked="" type="checkbox"/> 製品仕様の変更 <input type="checkbox"/> 出荷/パッケージング/表記 <input type="checkbox"/> 製造プロセスの変更 <input checked="" type="checkbox"/> その他: お客様情報																																																																																																												
影響を受ける拠点:	オン・セミコンダクター拠点: ON Burlington, Canada	外部製造工場 / 下請業者拠点: なし																																																																																																											
説明および目的: <p>以下の問題が、Ezairo 7110 hybrids (OPN E7110-4-102A33-AG and E7110-4-102A33-BPG)において発見されました。</p> <p>非常に特殊な状況において、ある DIOs が迅速にトグリングしている時、あるオーディオアナログ入力 (AIs) 上のオーディオ人工物が顕著なノイズを作り出します。</p> <p>以下の表は、全ての AIs <-> DIOs 組み合わせのクロストークレベルを示します。</p> <table border="1"> <thead> <tr> <th colspan="16">Worst case crosstalk relative values scale [Red - Green]</th> </tr> <tr> <th rowspan="2">Case</th> <th>Worst</th> <th colspan="14">ODD measured crosstalk tone amplitude [dBV]</th> </tr> <tr> <th>DIO4</th> <th>DIO5</th> <th>DIO6</th> <th>DIO7</th> <th>DIO8</th> <th>DIO9</th> <th>DIO16</th> <th>DIO18</th> <th>DIO21</th> <th>DIO22</th> <th>DIO23</th> <th>DIO24</th> <th>DIO25</th> <th>DIO26</th> </tr> </thead> <tbody> <tr> <td rowspan="4">Inputs</td> <td>A10</td> <td>-77.3</td> <td>-77.3</td> <td>-75.6</td> <td>-77.3</td> <td>-86.7</td> <td>-108.6</td> <td>-108.8</td> <td>-107.2</td> <td>-99.6</td> <td>-102.8</td> <td>-103.1</td> <td>-105.6</td> <td>-101.4</td> <td>-75.1</td> </tr> <tr> <td>A11</td> <td>-87.3</td> <td>-102.1</td> <td>-107.2</td> <td>-72.1</td> <td>-118.3</td> <td>-114.8</td> <td>-115.6</td> <td>-117.7</td> <td>-112.9</td> <td>-107.5</td> <td>-113.7</td> <td>-112.0</td> <td>-77.1</td> <td>-74.1</td> </tr> <tr> <td>A12</td> <td>-103.4</td> <td>-105.6</td> <td>-105.5</td> <td>-106.0</td> <td>-107.6</td> <td>-108.1</td> <td>-106.9</td> <td>-98.7</td> <td>-102.9</td> <td>-101.6</td> <td>-104.1</td> <td>-104.1</td> <td>-80.8</td> <td>-101.9</td> </tr> <tr> <td>A13</td> <td>-100.6</td> <td>-100.6</td> <td>-102.8</td> <td>-105.6</td> <td>-106.2</td> <td>-105.1</td> <td>-107.0</td> <td>-111.2</td> <td>-103.0</td> <td>-104.8</td> <td>-104.1</td> <td>-103.2</td> <td>-101.6</td> <td>-104.7</td> </tr> </tbody> </table> <p>レベルが-90db より高い時に（上記の表に示される）顕著なクロストークが開始します。</p> <p>オンセミコンダクターは、この問題を起こさない Ezairo 7110 hybrid の新しいバージョンについて検討しています。</p> <p>オンセミコンダクターは、認定が完了次第、来月に、クロストーク問題がない Ezairo 7110 の新しいバージョンについて適切なお客様への通知書を発行します。</p>			Worst case crosstalk relative values scale [Red - Green]																Case	Worst	ODD measured crosstalk tone amplitude [dBV]														DIO4	DIO5	DIO6	DIO7	DIO8	DIO9	DIO16	DIO18	DIO21	DIO22	DIO23	DIO24	DIO25	DIO26	Inputs	A10	-77.3	-77.3	-75.6	-77.3	-86.7	-108.6	-108.8	-107.2	-99.6	-102.8	-103.1	-105.6	-101.4	-75.1	A11	-87.3	-102.1	-107.2	-72.1	-118.3	-114.8	-115.6	-117.7	-112.9	-107.5	-113.7	-112.0	-77.1	-74.1	A12	-103.4	-105.6	-105.5	-106.0	-107.6	-108.1	-106.9	-98.7	-102.9	-101.6	-104.1	-104.1	-80.8	-101.9	A13	-100.6	-100.6	-102.8	-105.6	-106.2	-105.1	-107.0	-111.2	-103.0	-104.8	-104.1	-103.2	-101.6	-104.7
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影響を受ける部品の一覧: <p>注: 標準の部品番号(既製品)のみが部品一覧に記載されます。本 PCN に影響を受けるカスタム 部品は、PCN メールの顧客の特定の PCN の付属文書、または PCN カスタマイズポータルに記載されています。</p> <p>E7110-4-102A33-AG E7110-4-102A33-BPG</p>																																																																																																													



Appendix A: Changed Products

Product	Customer Part Number
E7110-4-102A33-AG	