



<b>Title of Change:</b>	HPM10 datasheet change: updated limits for the STEP DOWN CHARGE PUMP Division ratio.																																		
<b>Effective date:</b>	11 April 2019																																		
<b>Contact information:</b>	Contact your local ON Semiconductor Sales Office or <Christophe.waelchli@onsemi.com>																																		
<b>Type of notification:</b>	This Product Bulletin is for notification purposes only. ON Semiconductor will proceed with implementation of this change upon publication of this Product Bulletin.																																		
<b>Change Category:</b>	<input type="checkbox"/> Wafer Fab Change <input type="checkbox"/> Assembly Change <input checked="" type="checkbox"/> Test Change <input type="checkbox"/> Other _____																																		
<b>Change Sub-Category(s):</b>	<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 type="checkbox"/> Other: _____																																		
<b>Sites Affected:</b>	ON Semiconductor Sites: ON Carmona, Philippines	External Foundry/Subcon Sites: None																																	
<b>Description and Purpose:</b>  A modification of a test limit was done on a parameter of HPM10 (OPN: HPM10-W29A100G), and a new version of the HPM10 datasheet will be made available to reflect this change.  Customers of HPM10 have asked us to <u>tighten the specification</u> of the output ratio of the STEP DOWN CHARGE PUMP (DIV3) as follow:  <b>Old limits (old datasheet):</b> <table border="1"> <thead> <tr> <th>Description</th> <th>Symbol</th> <th>Conditions</th> <th>Min</th> <th>Typ</th> <th>Max</th> <th>Units</th> <th>Screened</th> </tr> </thead> <tbody> <tr> <td>Supply to hearing aid</td> <td>VHA</td> <td>Relative to VBAT. Iload = 1 mA</td> <td>0.31</td> <td>0.33</td> <td>0.35</td> <td>VBAT</td> <td>√</td> </tr> </tbody> </table> <b>New limits (new datasheet):</b> <table border="1"> <thead> <tr> <th>Description</th> <th>Symbol</th> <th>Conditions</th> <th>Min</th> <th>Typ</th> <th>Max</th> <th>Units</th> <th>Screened</th> </tr> </thead> <tbody> <tr> <td>Supply to hearing aid</td> <td>VHA</td> <td>Relative to VBAT. Iload = 1 mA</td> <td>0.326</td> <td>0.331</td> <td>0.336</td> <td>VBAT</td> <td>√</td> </tr> </tbody> </table> The reason for this change is to have a more consistent VHA output voltage, which is critical for proper operation of product using HPM10 to prevent brownouts of chips that are supplied by HPM10, towards the battery end of life.  After we have reviewed our manufacturing data and simulations of process variability, we have decided to tighten this specification and use a VHA to VBAT ratio of 0.326 to 0.336 for our manufacturing test limits.  The new version of the datasheet is Rev.7. It replaces Rev.6.  Lot# Q01F121 (Nov 11th 2018) will be the first lot affected by this change.				Description	Symbol	Conditions	Min	Typ	Max	Units	Screened	Supply to hearing aid	VHA	Relative to VBAT. Iload = 1 mA	0.31	0.33	0.35	VBAT	√	Description	Symbol	Conditions	Min	Typ	Max	Units	Screened	Supply to hearing aid	VHA	Relative to VBAT. Iload = 1 mA	0.326	0.331	0.336	VBAT	√
Description	Symbol	Conditions	Min	Typ	Max	Units	Screened																												
Supply to hearing aid	VHA	Relative to VBAT. Iload = 1 mA	0.31	0.33	0.35	VBAT	√																												
Description	Symbol	Conditions	Min	Typ	Max	Units	Screened																												
Supply to hearing aid	VHA	Relative to VBAT. Iload = 1 mA	0.326	0.331	0.336	VBAT	√																												



**List of Affected Part:**

**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](#).

HPM10-W29A100G



Appendix A: Changed Products

D

Product	Customer Part Number
HPM10-W29A100G	