



<b>Title of Change:</b>	FAN8811TMPX Voltage spike immunity and Breakdown Voltage spec update																				
<b>Proposed first ship date:</b>	2 May 2018 or earlier upon customer approval																				
<b>Contact information:</b>	Contact your local ON Semiconductor Sales Office or <scott.brow@onsemi.com>																				
<b>Samples:</b>	Contact your local ON Semiconductor Sales Office																				
<b>Additional Reliability Data:</b>	Contact your local ON Semiconductor Sales Office																				
<b>Type of notification:</b>	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. ON Semiconductor will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact <PCN.Support@onsemi.com>.																				
<b>Change Part Identification:</b>	Product shipped after WW17 2018 will be built with die with the design modification listed in this notification.																				
<b>Change category:</b>	<input type="checkbox"/> Wafer Fab Change <input type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input checked="" type="checkbox"/> Other <u>Design Change</u>																				
<b>Change Sub-Category(s):</b>	<i>[Multiple options might be applicable]</i> <input type="checkbox"/> Manufacturing Site Change/Addition <input type="checkbox"/> Material Change <input checked="" type="checkbox"/> Datasheet/Product Doc change <input type="checkbox"/> Manufacturing Process Change <input checked="" type="checkbox"/> Product specific change <input type="checkbox"/> Shipping/Packaging/Marking <input checked="" type="checkbox"/> Other: <u>Device Change/Improvement</u>																				
<b>Sites Affected:</b>	ON Semiconductor Sites: ON S. Portland, Maine	External Foundry/Subcon Sites: UTAC																			
<b>Description and Purpose:</b>																					
This notification is to inform customers of (2) changes to the FAN8811TMPX. During additional temperature characterization, it was found that the product is not capable of meeting the current 120V Breakdown voltage over temperature as specified in the datasheet. Based on the results, the datasheet will be modified to show a maximum breakdown of 100V as shown here:																					
<table border="1"> <thead> <tr> <th rowspan="2">Symbol</th> <th rowspan="2">Parameter</th> <th rowspan="2">Min</th> <th>Old</th> <th>New</th> <th rowspan="2">Units</th> </tr> <tr> <th>Max</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td rowspan="2">VHS</td> <td>High-Side Floating Supply Offset Voltage(Note 2)</td> <td>-1</td> <td><del>118</del></td> <td>100</td> <td>V</td> </tr> <tr> <td>Repetitive Pulse (&lt; 100 ns)(Note 3)</td> <td>-(24 – VDD)</td> <td><del>118</del></td> <td>100</td> <td>V</td> </tr> </tbody> </table>			Symbol	Parameter	Min	Old	New	Units	Max	Max	VHS	High-Side Floating Supply Offset Voltage(Note 2)	-1	<del>118</del>	100	V	Repetitive Pulse (< 100 ns)(Note 3)	-(24 – VDD)	<del>118</del>	100	V
Symbol	Parameter	Min				Old	New		Units												
			Max	Max																	
VHS	High-Side Floating Supply Offset Voltage(Note 2)	-1	<del>118</del>	100	V																
	Repetitive Pulse (< 100 ns)(Note 3)	-(24 – VDD)	<del>118</del>	100	V																
Additionally, some customer interactions showed that the product had a lower High Voltage spike immunity than competitor products. In order to improve the device performance an additional SCR ESD Diode in the Half-bridge structure of the device has been added. By adding this structure, the product is now able to handle a significantly higher voltage spike than before.																					



**Reliability Data Summary:**

There is no reliability data associated with this notification. Only ESD validation and electrical characterization is necessary.

**Electrical Characteristic Summary:**

Voltage Spike Immunity:

	DC-BV	Voltage spike immunity
Competitor	127V	145V
FAN8811	131V	128V
Revised FAN8811	almost same	Around 150V

ESD Results:

	Current FAN8811	Revised FAN8811
HBM	>2kV	>2kV
CDM	>1kV	>1kV

**List of Affected Standard Parts:**

Part Number	Qualification Vehicle
FAN8811TMPX	FAN8811TMPX



---

## Appendix A: Changed Products

---

---

Product	Customer Part Number	Qualification Vehicle
FAN8811TMPX		FAN8811TMPX