



Title of Change:	Datasheet update PYTHON 300/500/1300/2000/5000	
Effective date:	23 May 2018	
Contact information:	Contact your local ON Semiconductor Sales Office or <Danny.Scheffer@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>Datasheet update</u>	
Change Sub-Category(s):	<input checked="" type="checkbox"/> Datasheet/Product Doc change <input type="checkbox"/> Manufacturing Site Change/Addition <input type="checkbox"/> Material Change <input type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Manufacturing Process Change <input type="checkbox"/> Product specific change <input type="checkbox"/> Other: _____	
Sites Affected:	ON Semiconductor Sites: Mechelen, Belgium	External Foundry/Subcon Sites: None
Description and Purpose:		
<p>This document summarizes the recent changes to the datasheet of the PYTHON 300/500/1300 and PYTHON 2000/5000 of which the removal of the so-called 'Multiple Slope operation is one of the more important changes. Although the silicon and the functionality of the silicon hasn't been modified or changed as such, this HDR mode will no longer be mentioned in the datasheets from now on as due to limitations in the production testing, the correct functionality of the multiple slope mode cannot be guaranteed. Customers who are already using this mode, are free to continue doing so yet without any warranties from ON Semiconductor.</p> <p>The list below summarises the changes made to this datasheet when compared to the prior version of this document (Revision 4, dated November 2017). No change has been made to the sensor design, assembly, or final test procedures of these products as part of this datasheet revision. The datasheet has been revised and updated where needed to improve the accuracy of the specifications and/or settings listed so as to provide optimal performance.</p> <p>Datasheets of the affected PYTHON devices can be downloaded from the following websites:</p> <p>PYTHON 300/500/1300 - http://www.onsemi.com/pub/Collateral/NOIP1SN1300A-D.PDF</p> <p>PYTHON 2000/5000 - http://www.onsemi.com/pub/Collateral/NOIP1SN5000A-D.PDF</p> <p>SUMMARY OF CHANGES IN THE DATASHEETS OF PYTHON 2000/5000</p> <p>Page 1: Remove "High Dynamic Range (HDR) Modes Possible"</p> <p>Page 15-19: Move register uploads to the Image Sensor Portal</p> <p>Page 29: Change picture to resemble subsampled readout more accurately</p> <p>Page 30: Remove Bias Register Uploads to Image Sensor Portal</p> <p>Page 31-32: Remove Multiple Slope Operation</p> <p>Page 36,37: Typo: 2st -> 2nd</p> <p>Page 42: Correct Window ID error. This is only 3 bits wide</p> <p>Page 49: Corrected P1 subsampling scheme with correct sequence</p> <p>Page 69-74: Replace "No connection" with "For test purposes only. Do not connect"</p> <p>Overall: Remove all binning references since this is not supported with NZROT</p> <p>SUMMARY OF CHANGES IN THE DATASHEETS OF PYTHON 300/500/1300</p> <p>Page 1: Remove "High Dynamic Range (HDR) Modes Possible"</p> <p>Page 17-24: Move register uploads to the Image Sensor Portal</p> <p>Page 33: Change picture to resemble subsampled readout more accurately</p> <p>Page 34-35: Remove Multiple Slope Operation</p>		



TIME LINE FOR CONVERSION:

This PB is effective immediately.

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

If purchasing ON Semiconductor image sensors from a distributor, please contact your distributor. If buying directly from ON Semiconductor, contact your local ON Semiconductor sales office or a customer service representative.

List of Affected Standard Parts:

Web Part Number (WPN)	Orderable Part Number (OPN)	Description
PYTHON1300	NOIP1SN1300A-QDI	PYTHON 1300 LVDS Monochrome no protective foil
PYTHON1300	NOIP2SN1300A-QDI	PYTHON 1300 CMOS Monochrome no protective foil
PYTHON1300	NOIP1FN1300A-QDI	PYTHON 1300 LVDS NIR no protective foil
PYTHON1300	NOIP1SE1300A-QDI	PYTHON 1300 LVDS Color no protective foil
PYTHON1300	NOIP2SE1300A-QDI	PYTHON 1300 CMOS Color no protective foil
PYTHON1300	NOIP1SN1300A-QTI	PYTHON 1300 LVDS Monochrome with protective foil
PYTHON1300	NOIP1SE1300A-QTI	PYTHON 1300 LVDS Color with protective foil
PYTHON1300	NOIP1FN1300A-QTI	PYTHON 1300 LVDS NIR with protective foil
PYTHON1300	NOIP3SN1300A-QDI	PYTHON 1300 2 LVDS, Monochrome no protective foil
PYTHON1300	NOIP3FN1300A-QDI	PYTHON 1300 2 LVDS, NIR no protective foil
PYTHON1300	NOIP3SE1300A-QDI	PYTHON 1300 2 LVDS, Color no protective foil
PYTHON1300	NOIP3SN1300A-QTI	PYTHON 1300 2 LVDS, Monochrome with protective foil
PYTHON1300	NOIP3FN1300A-QTI	PYTHON 1300 2 LVDS, NIR with protective foil
PYTHON1300	NOIP3SE1300A-QTI	PYTHON 1300 2 LVDS, Color with protective foil
PYTHON500	NOIP1SN0500A-QDI	PYTHON 500 LVDS Monochrome no protective foil
PYTHON500	NOIP1FN0500A-QDI	PYTHON 500 LVDS NIR no protective foil
PYTHON500	NOIP1SE0500A-QDI	PYTHON 500 LVDS Color no protective foil
PYTHON500	NOIP1SN0500A-QTI	PYTHON 500 LVDS Monochrome with protective foil
PYTHON500	NOIP1SE0500A-QTI	PYTHON 500 LVDS Color with protective foil
PYTHON500	NOIP1FN0500A-QTI	PYTHON 500 LVDS NIR with protective foil
PYTHON300	NOIP1SN0300A-QDI	PYTHON 300 LVDS Monochrome no protective foil
PYTHON300	NOIP1FN0300A-QDI	PYTHON 300 LVDS NIR no protective foil
PYTHON300	NOIP1SE0300A-QDI	PYTHON 300 LVDS Color no protective foil
PYTHON300	NOIP1SN0300A-QTI	PYTHON 300 LVDS Monochrome with protective foil
PYTHON300	NOIP1SE0300A-QTI	PYTHON 300 LVDS Color with protective foil
PYTHON300	NOIP1FN0300A-QTI	PYTHON 300 LVDS NIR with protective foil



Web Part Number (WPN)	Orderable Part Number (OPN)	Description
PYTHON5000	NOIP1SN5000A-QDI	PYTHON 5000 LVDS Monochrome no protective foil
PYTHON5000	NOIP1SE5000A-QDI	PYTHON 5000 LVDS Bayer Color no protective foil
PYTHON5000	NOIP1FN5000A-QDI	PYTHON 5000 LVDS NIR no protective foil
PYTHON5000	NOIP1SN5000A-QTI	PYTHON 5000 LVDS Monochrome with protective foil
PYTHON5000	NOIP1SE5000A-QTI	PYTHON 5000 LVDS Color with protective foil
PYTHON5000	NOIP1FN5000A-QTI	PYTHON 5000 LVDS NIR with protective foil
PYTHON5000	NOIP3SN5000A-QDI	PYTHON 5000 4 LVDS Monochrome no protective foil
PYTHON5000	NOIP3SE5000A-QDI	PYTHON 5000 4 LVDS Color no protective foil
PYTHON5000	NOIP3SN5000A-QTI	PYTHON 5000 4 LVDS Monochrome with protective foil
PYTHON5000	NOIP3SE5000A-QTI	PYTHON 5000 4 LVDS Color with protective foil
PYTHON5000	NOIP1SN5000A-LTI	PYTHON 5000 LVDS LGA Monochrome with protective foil
PYTHON5000	NOIP1SE5000A-LTI	PYTHON 5000 LVDS LGA Color with protective foil
PYTHON5000	NOIP1FN5000A-LTI	PYTHON 5000 LVDS LGA NIR with protective foil
PYTHON5000	NOIP3SN5000A-LTI	PYTHON 5000 4 LVDS LGA Monochrome with protective foil
PYTHON5000	NOIP3SE5000A-LTI	PYTHON 5000 4 LVDS LGA Color with protective foil
PYTHON2000	NOIP1SN2000A-QDI	PYTHON 2000 LVDS Monochrome no protective foil
PYTHON2000	NOIP1SE2000A-QDI	PYTHON 2000 LVDS Color no protective foil
PYTHON2000	NOIP1FN2000A-QDI	PYTHON 2000 LVDS NIR no protective foil
PYTHON2000	NOIP1SN2000A-QTI	PYTHON 2000 LVDS Monochrome with protective foil
PYTHON2000	NOIP1SE2000A-QTI	PYTHON 2000 LVDS Color with protective foil
PYTHON2000	NOIP1FN2000A-QTI	PYTHON 2000 LVDS NIR with protective foil
PYTHON2000	NOIP1SN2000A-LTI	PYTHON 2000 LVDS LGA Monochrome with protective foil
PYTHON2000	NOIP1SE2000A-LTI	PYTHON 2000 LVDS LGA Color with protective foil
PYTHON2000	NOIP1FN2000A-LTI	PYTHON 2000 LVDS LGA NIR with protective foil



Appendix A: Changed Products

Product	Customer Part Number
NOIP1FN0300A-QDI	
NOIP1FN0300A-QTI	
NOIP1FN0500A-QDI	
NOIP1FN0500A-QTI	
NOIP1FN1300A-QDI	
NOIP1FN1300A-QTI	
NOIP1FN2000A-LTI	
NOIP1FN2000A-QDI	
NOIP1FN2000A-QTI	
NOIP1FN5000A-LTI	
NOIP1FN5000A-QDI	
NOIP1FN5000A-QTI	
NOIP1SE0300A-QDI	
NOIP1SE0300A-QTI	
NOIP1SE0500A-QDI	
NOIP1SE0500A-QTI	
NOIP1SE1300A-QDI	
NOIP1SE1300A-QTI	
NOIP1SE2000A-LTI	
NOIP1SE2000A-QDI	
NOIP1SE2000A-QTI	
NOIP1SE5000A-LTI	
NOIP1SE5000A-QDI	
NOIP1SE5000A-QTI	
NOIP1SN0300A-QDI	
NOIP1SN0300A-QTI	
NOIP1SN0500A-QDI	
NOIP1SN0500A-QTI	
NOIP1SN1300A-QDI	
NOIP1SN1300A-QTI	
NOIP1SN2000A-LTI	
NOIP1SN2000A-QDI	
NOIP1SN2000A-QTI	
NOIP1SN5000A-LTI	
NOIP1SN5000A-QDI	
NOIP1SN5000A-QTI	
NOIP2SE1300A-QDI	
NOIP2SN1300A-QDI	
NOIP3FN1300A-QDI	
NOIP3FN1300A-QTI	
NOIP3SE1300A-QDI	
NOIP3SE1300A-QTI	
NOIP3SE5000A-LTI	
NOIP3SE5000A-QDI	
NOIP3SE5000A-QTI	
NOIP3SN1300A-QDI	
NOIP3SN1300A-QTI	
NOIP3SN5000A-LTI	
NOIP3SN5000A-QDI	
NOIP3SN5000A-QTI	