



Title of Change:	Datasheet update PYTHON 300/500/1300		
Effective date:	16 December 2016		
Contact information:	Contact your local ON Semiconductor Sales Office		
Type of notification:	ON Semiconductor will consider this change accepted.		
Change category:	<input type="checkbox"/> Wafer Fab Change <input type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input checked="" type="checkbox"/> Other Datasheet update		
Change Sub-Category(s):	<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 type="checkbox"/> Product specific change <input type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Other: _____		
Sites Affected:	<input type="checkbox"/> All site(s) <input checked="" type="checkbox"/> not applicable <input type="checkbox"/> ON Semiconductor site(s) : <input type="checkbox"/> External Foundry/Subcon site(s)		
DESCRIPTION AND PURPOSE:			
The datasheet for the products referred to in this Product Bulletin (PYTHON 300/500/1300) has been updated on a number of items as shown in the table below. Two important changes have been made:			
PRODUCT BULLETIN NOTIFICATIONS:			
<ul style="list-style-type: none"> Updated information on the location of the optical center of the pixel array relating to the package outline. Internal metal layer change to reduce PRNU and improve image quality. The SPI chip configuration has been revised up to reflect the new silicon. 			
Rev 3	December 2016	Formatting change throughout the document on P1, P3 replaced with P1-SN/SE/FN and P3-SN/SE Page 1: Formatted Feature section Page 2: Further clarification on Production Marking Page 3: Added PRNU as a percentage in Table 2 Page 5,6: Remove fin=72Mhz from Table description Page 6: Reformatted fps table for CMOS version Page 9, 10: Formatting change to Figure 5 & 7 titles Page 15: Edited paragraph Normal and Zero Row Overhead Times Modes. Page 17: Added Hyperlink linked to Image Sensor Portal Page 21: Removed register uploads for P1: 461-478 and for P2: 444-461 from Table 8. Page 25: Reformatted Sections on Dynamic Configuration Potentially causing Image Artefacts to Window Configurations Page 34: Replace y_stop with y_end. Renamed Title "Channel Multiplexing" to LVDS Output Multiplexing" and updated content and Table 21. Deleted duplicated Table 22: Bias Upload for P1 and P3 Page 36: Added Note for Signal path Gain Stages Table 23 Page 53: Replace "62 Msps" with "the applied clk_pll frequency". Page 56: Added missing reserved registers to the Register map. Updated the Chip ID to reflect new silicon revision to improve image quality Page 77: Updated Table 40: Mechanical Specifications optical center information to the 100th precision to sync with Table 41: Optical Table on Page 76. Add CTE value for the LCC package Page 79: Replaced Optical center information with Table 41, reflecting actual coordinates for PYTHON 300/500/1300 Page 79, 80: Updated Optical center package diagrams Page 81, 82: Updated Figure 56, 57: Packing and Tray Configuration Page 83: Replaced Figure 59: Dimensions of the Protective Foil Page 84: Updated url with hyperlink to Image Sensor Portal	


List of affected Standard Parts:

Part Number (OPN)	Description
NOIP1SN1300A-QDI	PYTHON 1300 LVDS Monochrome no protective foil
NOIP2SN1300A-QDI	PYTHON 1300 CMOS Monochrome no protective foil
NOIP1FN1300A-QDI	PYTHON 1300 LVDS NIR no protective foil
NOIP1SE1300A-QDI	PYTHON 1300 LVDS Color no protective foil
NOIP2SE1300A-QDI	PYTHON 1300 CMOS Color no protective foil
NOIP1SN1300A-QTI	PYTHON 1300 LVDS Monochrome with protective foil
NOIP1SE1300A-QTI	PYTHON 1300 LVDS Color with protective foil
NOIP1FN1300A-QTI	PYTHON 1300 LVDS NIR with protective foil
NOIP1SN0500A-QDI	PYTHON 500 LVDS Monochrome no protective foil
NOIP1FN0500A-QDI	PYTHON 500 LVDS NIR no protective foil
NOIP1SE0500A-QDI	PYTHON 500 LVDS Color no protective foil
NOIP1SN0500A-QTI	PYTHON 500 LVDS Monochrome with protective foil
NOIP1SE0500A-QTI	PYTHON 500 LVDS Color with protective foil
NOIP1FN0500A-QTI	PYTHON 500 LVDS NIR with protective foil
NOIP1SN0300A-QDI	PYTHON 300 LVDS Monochrome no protective foil
NOIP1FN0300A-QDI	PYTHON 300 LVDS NIR no protective foil
NOIP1SE0300A-QDI	PYTHON 300 LVDS Color no protective foil
NOIP1SN0300A-QTI	PYTHON 300 LVDS Monochrome with protective foil
NOIP1SE0300A-QTI	PYTHON 300 LVDS Color with protective foil
NOIP1FN0300A-QTI	PYTHON 300 LVDS NIR with protective foil
Low Speed Grades	
NOIP3FN1300A-QDI	PYTHON 1300 2 port LVDS NIR no protective foil
NOIP3FN1300A-QTI	PYTHON 1300 2 port LVDS NIR with protective foil
NOIP3SE1300A-QDI	PYTHON 1300 2 port LVDS color no protective foil
NOIP3SE1300A-QTI	PYTHON 1300 2 port LVDS color with protective foil
NOIP3SN1300A-QDI	PYTHON 1300 2 port LVDS Monochrome no protective foil
NOIP3SN1300A-QTI	PYTHON 1300 2 port LVDS Monochrome with protective foil