



Title of Change:	Update to PB21815X - PYTHON Family Acceptance Criteria Update to the Allowable Defective Count Specification.		
Effective date:	21 Sep 2017		
Contact information:	Contact your local ON Semiconductor Sales Office		
Type of notification:	ON Semiconductor will consider this change accepted		
Change category:	☐ Wafer Fab Change ☐ Assembly Change ☐ Test Change ☒ Other Datasheet Update		
Change Sub-Category(s): ☐ Manufacturing Site Change/Addition ☐ Manufacturing Process Change ☐ Material Change ☐ Product specific change ☒ Datasheet/Product Doc change ☐ Shipping/Packaging/Marking ☐ Other: _____			
Sites Affected: ☐ All site(s) ☒ not applicable ☐ ON Semiconductor site(s) : ☐ External Foundry/Subcon site(s)			
DESCRIPTION AND PURPOSE: This is an update to PB21815X released on July 21st 2017, as part of our continuous improvement action plan, ON Semiconductor has made additional changes and improvements to the most recent revisions of the Acceptance Criteria documents for the various PYTHON products. Details can be found below, as well as affected part numbers. Updated Acceptance Criteria documents are available via MyOn: https://www.onsemi.com/PowerSolutions/myon/erFolder.do?folderId=370307. For access to this folder, please contact your local sales office. Main changes for the PYTHON300/500/1300: ACSPYTHON1300.rev6 - Updated defective pixel specification with further clarification on allowable defective pixels for mono, color and NIR options - Tightened the defective row threshold in a dark image from 30 LSB10 to 10 LSB10 (Effective Date code: 1724) - Tightened defective column threshold in a dark image from 30 LSB10 to 15 LSB10 (Effective Date code: 1724) - Added erroneously deleted Dark Signal and Dark Signal Non-Uniformity tests from Revision 4 - Corrected error in allowable F4 Cluster counts and Temporal Noise limit - Updated Figure 1 to reflect acceptable versus not acceptable clusters Main changes for the PYTHON2000/5000: ACSPYTHON5000.rev6 - Clarified defective pixel specification for mono, color and NIR options - Tightened the defective row threshold in the dark image from 20 LSB10 to 15 LSB10 (Effective Date code: 1724) - Updated Figure 1 to reflect acceptable versus not acceptable clusters Main changes for the PYTHON10K/12K/16K/25K ACSPYTHONxK.rev2 - Updated defective pixel specification with further clarification on allowable defective pixels for mono, color and NIR options - Tightened the defective pixel threshold in the dark image from 102 LSB10 to 30 LSB10, and in a corrected gray image from 102 LSB10 to 60 LSB10 (Effective Date code: 1724) - Tightened the defective row and column threshold in the dark image from 48 LSB10 to 30 LSB10 (Effective Date code: 1724) - Updated Figure 1 to reflect acceptable versus not acceptable clusters			

**OVERVIEW OF MAIN UPDATES OF THE ACCEPTANCE CRITERIA:**

Product (WPN)	Effective Date Code YYWW	Existing Defective Pixel Count (LVDS-P1, P3)	New Defective Pixel Count (LVDS-P1, P3)
		Mono = NIR = Color	Mono and NIR / Color
PYTHON 300	1724	40	10 / 15
PYTHON 500		40	20 / 25
PYTHON 1300		50	30 / 40
PYTHON 2000	1724	75	50 / 50
PYTHON 5000		185	100 / 100
PYTHON 10k	1724	1000	100 / 100
PYTHON 12k		1000	120 / 120
PYTHON 16k		1000	160 / 160
PYTHON 25k		1000	250 / 250

LIST OF AFFECTED STANDARD PARTS:

PYTHON 300/500/1300		DESCRIPTION
MONO	MONO with Protective Foil	
NOIP1SN0300A-QDI	NOIP1SN0300A-QTI	0.3MP 4 LVDS lanes, mono micro lens
NOIP1SN0500A-QDI	NOIP1SN0500A-QTI	0.5MP 4 LVDS lanes, mono micro lens
NOIP1SN1300A-QDI	NOIP1SN1300A-QTI	1.3MP 4 LVDS lanes, mono micro lens
NOIP3SN1300A-QDI	NOIP3SN1300A-QTI	1.3MP 2 LVDS lanes, mono micro lens
COLOR	COLOR with Protective Foil	
NOIP1SE0300A-QDI	NOIP1SE0300A-QTI	0.3MP 4 LVDS lanes, color micro lens
NOIP1SE0500A-QDI	NOIP1SE0500A-QTI	0.5MP 4 LVDS lanes, DS color micro lens
NOIP1SE1300A-QDI	NOIP1SE1300A-QTI	1.3MP 4 LVDS lanes, color micro lens
NOIP3SE1300A-QDI	NOIP3SE1300A-QTI	1.3MP 2 LVDS lanes, color micro lens
NIR	NIR with Protective Foil	
NOIP1FN0300A-QDI	NOIP1FN0300A-QTI	0.3MP 4 LVDS lanes, NIR micro lens
NOIP1FN0500A-QDI	NOIP1FN0500A-QTI	0.5MP 4 LVDS lanes, NIR micro lens
NOIP1FN1300A-QDI	NOIP1FN1300A-QTI	1.3MP 4 LVDS lanes, NIR micro lens
NOIP3FN1300A-QDI	NOIP3FN1300A-QTI	1.3MP 2 LVDS lanes, NIR micro lens



PYTHON 2000/5000		DESCRIPTION
MONO	MONO with Protective Foil	
NOIP1SN5000A-QDI	NOIP1SN5000A-QTI	5MP, 8 LVDS lanes, mono micro lens
NOIP3SN5000A-QDI	NOIP3SN5000A-QTI	5MP, 4 LVDS lanes, mono micro lens
NOIP1SN2000A-QDI	NOIP1SN2000A-QTI	2MP, 8 LVDS lanes, mono micro lens
	NOIP1SN5000A-LTI	5MP, 8 LVDS lanes, mono micro lens, LGA package
	NOIP3SN5000A-LTI	5MP, 4 LVDS lanes, mono micro lens, LGA package
	NOIP1SN2000A-LTI	2MP, 8 LVDS lanes, mono micro lens, LGA package
COLOR	COLOR with Protective Foil	
NOIP1SE5000A-QDI	NOIP1SE5000A-QTI	5MP, 8 LVDS lanes, color micro lens
NOIP3SE5000A-QDI	NOIP3SE5000A-QTI	5MP, 4 LVDS lanes, color micro lens
NOIP1SE2000A-QDI	NOIP1SE2000A-QTI	2MP, 8 LVDS lanes, color micro lens
	NOIP1SE5000A-LTI	5MP, 8 LVDS lanes, color micro lens, LGA package
	NOIP3SE5000A-LTI	5MP, 4 LVDS lanes, color micro lens, LGA package
	NOIP1SE2000A-LTI	2MP, 8 LVDS lanes, color micro lens, LGA package
NIR	NIR with Protective Foil	
NOIP1FN5000A-QDI	NOIP1FN5000A-QTI	5MP, 8 LVDS lanes, NIR micro lens
NOIP1FN2000A-QDI	NOIP1FN2000A-QTI	2MP, 8 LVDS lanes, NIR micro lens
	NOIP1FN5000A-LTI	5MP, 8 LVDS lanes, NIR micro lens, LGA package
	NOIP1FN2000A-LTI	2MP, 8 LVDS lanes, NIR micro lens, LGA package

PYTHON 10K/12K/16K/25K		DESCRIPTION
MONO		
NOIP1SN025KA-GDI		25MP, 32 LVDS lanes, mono micro lens
NOIP1SN016KA-GDI		16MP, 32 LVDS lanes, mono micro lens
NOIP1SN012KA-GDI		12MP, 32 LVDS lanes, mono micro lens
NOIP1SN010KA-GDI		10MP, 32 LVDS lanes, mono micro lens
COLOR		
NOIP1SE025KA-GDI		25MP, 32 LVDS lanes, color micro lens
NOIP1SE016KA-GDI		16MP, 32 LVDS lanes, color micro lens
NOIP1SE012KA-GDI		12MP, 32 LVDS lanes, color micro lens
NOIP1SE010KA-GDI		10MP, 32 LVDS lanes, color micro lens
NIR		
NOIP1FN025KA-GDI		25MP, 32 LVDS lanes, NIR micro lens
NOIP1FN016KA-GDI		16MP, 32 LVDS lanes, NIR micro lens
NOIP1FN012KA-GDI		12MP, 32 LVDS lanes, NIR micro lens
NOIP1FN010KA-GDI		10MP, 32 LVDS lanes, NIR micro lens