



Premstaetten, May 3, 2022

PCN39-2022 - 4LS wafer sort specification optimization for defect bright pixel in dark long images

Dear Customer,

Please be informed about the upcoming changes, marked in Bold, in the 4LS device datasheet:

Name	Definition
Defect Pixels	Any active pixel that deviates more than the threshold from the local median value is marked as defect. The local median value is calculated considering sets of 100 pixels, and within each segment individually.
Threshold in Dark Images	200 DN @ 12-bit and 13 DN @ 8-bit.
Threshold in Dark Images (Long Exposure)	Allowed just one pixel up to a threshold of 600 DN @ 12-bit. The remaining pixels still respect the threshold of 200 DN @ 12-bit.
Threshold in Grey/Saturated Images	300 DN @ 12-bit and 18 DN @ 8-bit
Total Defect Pixels	Sum of all defect pixels in dark, grey and saturation
Total Defect Pixels Allowed	No defect pixels are allowed

The wafer test program will change for defect pixel detection, having a new threshold for Dark Images at Long Exposure (integration time of 696 μ s). The remaining defect pixels tests have the same integration time of 101 μ s (Short Exposure). Please note that all these tests are performed with same testing criteria, for a maximum sensor temperature of 85 °C and ADC gain registers defined with following values: AGL1Reg = 101d and AGL2Reg = 111d.

ams-OSRAM AG plans to implement this change with immediate effect.

Affected part number list

Material Part Number	Material Description	Type
508030006	4LS15k-5CIA FT SE	ASSP
507830006	4LS15k-5MIA FT SE	ASSP
508080005	4LS10k-5CIA FT SE	ASSP
508070005	4LS10k-5MIA FT SE	ASSP

Please be advised that unless ams OSRAM receive your written refusal concerning this change notification within 30 days, the change notification shall be deemed accepted.

If you do have further questions, please do not hesitate to contact ams OSRAM team at any time.

Best regards,



Peter Crabbe
ams-OSRAM AG
Director Operations CIS