

Product Change Notice

Doc. No.: RF-008-0002
Revision: E

PCN-200917-06

**C19_070_8 inch BSI products change from laser anneal process
to High-K process _TSMC
(OV6948/OVM6948)**

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Prepared By	Approval
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Product Change Notice

PCN Number	200917-06	PCN Date	Jan-31, 2021	Effective Date	April-31, 2021
PCN Revision	0				
Title	TSMC 8 inch BSI products change from laser anneal process to High-K process				
Customer Contact	OV06948, OVM6948 customers				
Proposed Ship Date	TBD		Sample Available date	available	

PCN Details	
Description of Change	
<ul style="list-style-type: none"> - TSMC 8 inch BSI products to change from Laser anneal process to High-K process. - TSMC will phase out 8 inch laser anneal tool due to tool vendor end of service. - New part# with high-K <ul style="list-style-type: none"> OVM6948-RALA → OVM6948-RALA-1B (with High-K) OV06948-xxxx-xx → OV06948-xxxx-1B (with High-K) OV06948-xxxx-xx → OV06948-xxxx-1D (with High-K) 	
Reason for Change	
Laser tool phase out at TSMC	
Product Affected	OV06948-xxxx-xx; OVM6948-xxxx-xxxx;
Addition Information	
8 inch BSI products from Laser to High-K_Summary (PCN)	

Notes: Customer should acknowledge receipt of PCN within 30 days. Lack of acknowledgement within 30 days constitutes change acceptance.

Laser anneal to High-K process change_Summary OV6948_OVM6948

OVT

January 31, 2021

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Description:

- TSMC 8 inch BSI products to change from Laser anneal process to High-K process.
- TSMC will phase out 8 inch laser anneal tool due to tool vendor end of service.
- New part# with high-K

OVM6948-RALA → OVM6948-RALA-1B (with High-K)

OV06948-xxxx-xx → OV06948-xxxx-1B (with High-K)

OV06948-xxxx-xx → OV06948-xxxx-1D (with High-K)

Quality Plan:

- Reliability Qualification. (completed by Feb, 2021)

Product Affected:

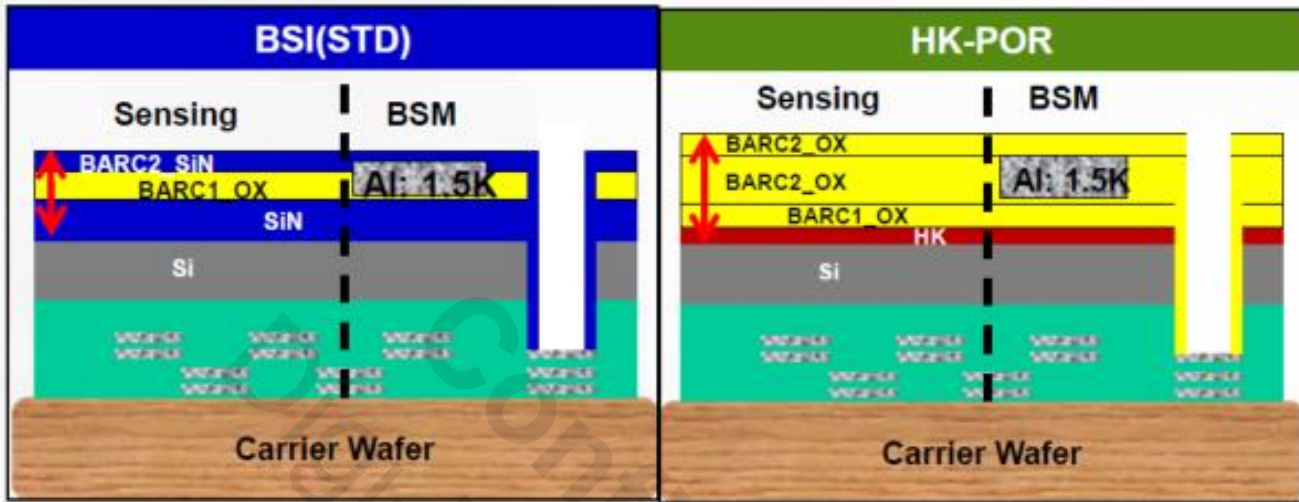
- OVM6948-xxxx-xx
- OV06948-xxxx-xx

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What is changing?

- TSMC 8 inch BSI products to change from 'Laser anneal' process to 'High-K' process.
- TSMC will phase out 8" inch laser anneal tool due to tool vendor end of service.

Process change details



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Performance Summary

High-K over Laser anneal process (see page below for data)

- Color ratio and Color Shading are comparable
- Image mean values were shifted

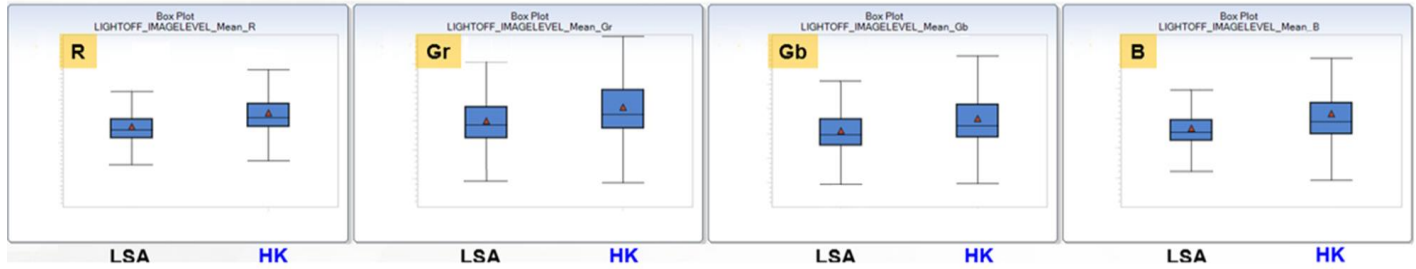
Summary

- Customers can work with FAE if need to fine tune the ISP
- Customer high-K material samples will be available on request

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Image level mean

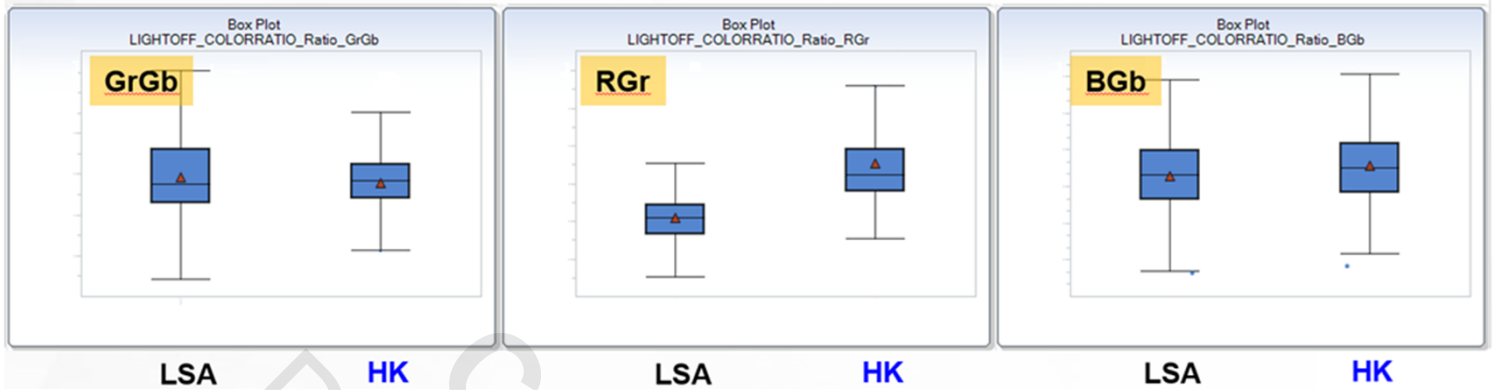
- Image level mean of High-K material are higher (~6%) than Laser anneal process.



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Color Ratio

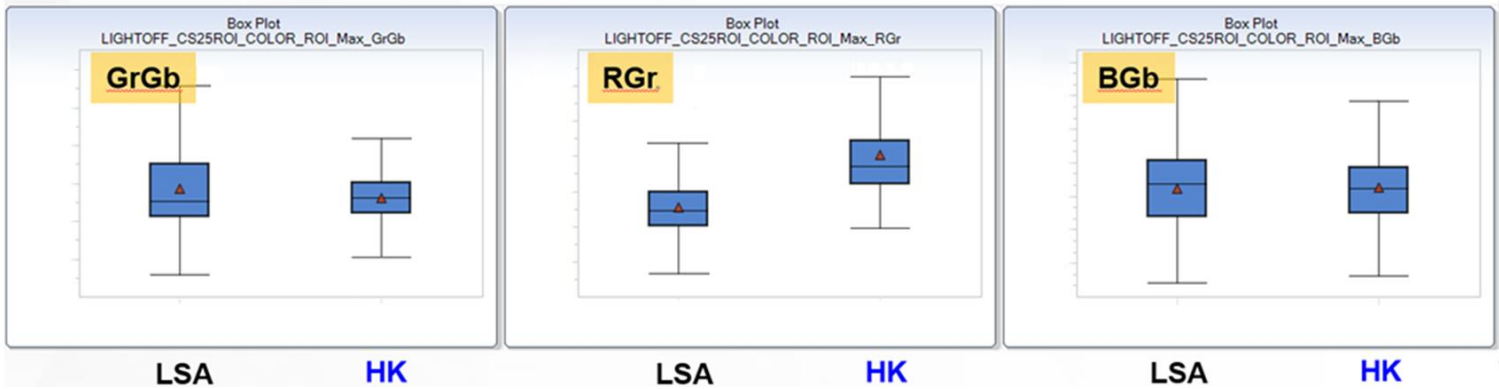
- Color ratio of high-K material are comparable with Laser anneal process.



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Color Shading: CS25ROI

- Color shading of high-K material are comparable with Laser anneal process.



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