
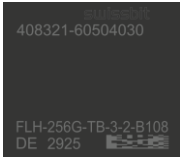


Product Change Notification

PCN #: PCN25-0049		Rev: 1.0	Issue Date: August 07, 2025
Purpose of notification: Adding in-house packaging of BiCS5 NAND BGAs for SATA SSDs Type of notification: Minor change			
Detailed Description: As part of Swissbit's commitment to continuous product / process improvement, quality, and supply chain stability, Swissbit has introduced fully integrated in-house manufacturing of Kioxia BiCS5 NAND packages. Swissbit will implement the inhouse NAND packages as an additional source across the SATA SSDs platforms. Swissbit's in-house manufacturing site, located in Berlin, Germany, enhances supply chain resiliency and provides customers with improved quality assurance standards and controls. BiCS5 based flash products manufactured in our facility have been fully qualified and are assured to meet or exceed all performance, endurance and reliability metrics.			
	Current NAND package	Additional packaging	Description
Packaging location	Taiwan	Germany	Packaging location Taiwan or Swissbit Berlin (Germany)
NAND die	Identical	Identical	In both cases Kioxia BiCS5 dies are used
Firmware	Identical	Identical	No change of FW
Front side (symbolic image)			New laser marking increases information level for the additional packaging.
Formfactor Dimensions Ball pitch	132BGA 12.0 x 18.0mm Identical 1.0mm	108BGA 11.5 x 13.5mm Identical 1.0mm	The 108BGA form factor was intentionally selected to align with future product generations (BiCS8 and beyond), which will be based on this new package size. While the external dimensions of the BGA package have changed, the ballout remains unchanged, ensuring continued compatibility with existing PCB layouts.
Package ballout, PCB routing or any other components	Identical	Identical	Although the outer dimensions (BGA formfactor) of the package are different, the ballout / pinout is identical. There is no impact on compatibility with the SSD PCB or PCB routings on the SSD.

Product Change Notification

Traceability	Fully traceable to wafer level Batch based	Fully traceable to wafer level Item based	The traceability of the NAND components used in the SSDs is maintained through all stages of production, from the final BGA package down to the individual die and wafer lot.
Quality impact:	Improved		
Reliability impact:	Improved		

Product series affected:		
Series	Part Number	New Part Number
X-73	SFSAddddSgAKxTB-t-xx-21E-STD	No change, traceability over lot code
X-75 P	SFSAddddQgAKxTB-t-xx-21G-STD	
X-75m2 (2242)	SFSAddddMgAKxTB-t-xx-x1E-STD	
X-75m2 (2280)	SFSAddddMgAKxTB-t-xx-x1E-STD	
X-75m2 (2280) P	SFSAddddMgAKxTB-t-xx-x1G-STD	
X-78m2 (2242)	SFSAddddMgAKxTB-t-xx-x1K-STD	
X-78m2 (2280)	SFSAddddMgAKxTB-t-xx-x1K-STD	
X-75s	SFSAddddVgAKxTB-t-xx-21E-STD	
X-78s	SFSAddddVgAKxTB-t-xx-21K-STD	
d = drive capacity; g = generation, t = temperature grade C or I; x = configuration and options		
Milestones:		
Milestone	Date	
Official notification to customer	August 07, 2025	
Floating transition to mixed use based on stock	Estimated starting from October 2025	
Recommended action:		
No action required unless you do not want to benefit from our inhouse packaging.		
Should you have any questions or concerns with the content of this change, please contact the Swissbit PCN team at customer.pcn@swissbit.com within 30 days. No response will be deemed as customer's acceptance of the change and the change will be implemented pursuant to the implementation date set forth in this PCN.		
IMPORTANT NOTE:		
Swissbit – as a provider of industrial products – announces and informs about every change in the product hardware and firmware. We always test backwards compatibility and assure best quality, reliability and transparency for our customers.		
We apologize for any inconvenience caused.		
The dates mentioned are subject to change based on business and operational conditions.		

Product Change Notification

Products affected:

Series	Current Part Number	New Part Number
X-73	SFSA120GS2AK1TB-C-EB-21E-STD	No change, traceability over lot code
	SFSA120GS2AK1TB-I-EB-21E-STD	
	SFSA240GS2AK2TB-C-EB-21E-STD	
	SFSA240GS2AK2TB-I-EB-21E-STD	
	SFSA480GS2AK4TB-C-EB-21E-STD	
	SFSA480GS2AK4TB-I-EB-21E-STD	
	SFSA960GS2AK2TB-C-XC-21E-STD	
	SFSA960GS2AK2TB-I-XC-21E-STD	
	SFSA1T92S2AK4TB-C-XC-21E-STD	
	SFSA1T92S2AK4TB-I-XC-21E-STD	
X-75 P	SFSA120GQ2AK1TB-C-EB-21G-STD	No change, traceability over lot code
	SFSA120GQ2AK1TB-I-EB-21G-STD	
	SFSA240GQ2AK2TB-C-EB-21G-STD	
	SFSA240GQ2AK2TB-I-EB-21G-STD	
	SFSA480GQ2AK4TB-C-EB-21G-STD	
	SFSA480GQ2AK4TB-I-EB-21G-STD	
	SFSA960GQ2AK2TB-C-XC-21G-STD	
	SFSA960GQ2AK2TB-I-XC-21G-STD	
	SFSA1T92Q2AK4TB-C-XC-21G-STD	
	SFSA1T92Q2AK4TB-I-XC-21G-STD	
X-75m2 (2242)	SFSA120GM2AK1TB-I-EB-11E-STD	No change, traceability over lot code
	SFSA240GM2AK2TB-C-EB-21E-STD	
	SFSA240GM2AK2TB-I-EB-21E-STD	
	SFSA480GM2AK1TB-C-XC-11E-STD	
	SFSA480GM2AK1TB-I-XC-11E-STD	
	SFSA960GM2AK2TB-C-XC-21E-STD	
	SFSA960GM2AK2TB-I-XC-21E-STD	
X-75m2 (2280)	SFSA120GM2AK1TB-I-EB-51E-STD	No change, traceability over lot code
	SFSA120GM2AK1TB-C-EB-51E-STD	
	SFSA240GM2AK2TB-I-EB-51E-STD	
	SFSA240GM2AK2TB-C-EB-51E-STD	
	SFSA480GM2AK4TB-I-EB-61E-STD	
	SFSA480GM2AK4TB-C-EB-61E-STD	
	SFSA960GM2AK2TB-I-XC-51E-STD	
	SFSA960GM2AK2TB-C-XC-51E-STD	
	SFSA1T92M2AK4TB-I-XC-61E-STD	
	SFSA1T92M2AK4TB-C-XC-61E-STD	
X-75m2 (2280) P	SFSA120GM2AK1TB-I-EB-51G-STD	No change, traceability over lot code
	SFSA120GM2AK1TB-C-EB-51G-STD	
	SFSA240GM2AK2TB-I-EB-51G-STD	
	SFSA240GM2AK2TB-C-EB-51G-STD	
	SFSA480GM2AK4TB-I-EB-61G-STD	
	SFSA480GM2AK4TB-C-EB-61G-STD	
	SFSA960GM2AK2TB-I-XC-51G-STD	
	SFSA960GM2AK2TB-C-XC-51G-STD	
	SFSA1T92M2AK4TB-I-XC-61G-STD	
	SFSA1T92M2AK4TB-C-XC-61G-STD	

Product Change Notification

Products affected:

Series	Current Part Number	New Part Number
X-78m2 (2242)	SFSA032GM2AK1TB-I-EB-11K-STD	No change, traceability over lot code
	SFSA064GM2AK2TB-I-EB-21K-STD	
	SFSA160GM2AK1TB-I-XC-11K-STD	
	SFSA320GM2AK2TB-I-XC-21K-STD	
X-78m2 (2280)	SFSA032GM2AK1TB-I-EB-51K-STD	No change, traceability over lot code
	SFSA064GM2AK2TB-I-EB-51K-STD	
	SFSA160GM2AK4TB-I-EB-61K-STD	
	SFSA320GM2AK2TB-I-XC-51K-STD	
X-75s	SFSA120GV2AK1TB-C-EB-21E-STD	No change, traceability over lot code
	SFSA120GV2AK1TB-I-EB-21E-STD	
	SFSA240GV2AK2TB-C-EB-21E-STD	
	SFSA240GV2AK2TB-I-EB-21E-STD	
X-78s	SFSA032GV2AK1TB-I-EB-21K-STD	No change, traceability over lot code
	SFSA064GV2AK2TB-I-EB-21K-STD	
	SFSA160GV2AK4TB-I-EB-21K-STD	
	SFSA320GV2AK2TB-I-XC-21K-STD	