



Product Change Notification (PCN)

Title	PCIe 4TG2-P/4TS2-P/4IG2-P Firmware Update Notice	Date	2024/May/24	No.	F240023
Models	PCIe 4TG2-P/4TS2-P/4IG2-P				
Level	B: Change as soon as possible	Change Type	Firmware		
Description					
This PCN is being issued to addressed that PCIe 4TG2-P/4TS2-P/4IG2-P with Innodisk NAND Bics5 and Kioxia eTLC NAND Bics5 are going to upgrade product firmware.					

FW Change (Lower case "x" as a match-one character and "%" as multiple character wildcard)			
Model	Part Number	Current FW	New FW
U.2 SSD 4IG2-P	DHEU2-%DP1KCAEL%	E22C23i	E24109i
U.2 SSD 4TS2-P	DSEU2-%DP1NCAEF%	F22C23	F24109
U.2 SSD 4TS2-P	DSEU2-%DP1NC%P%	F22C25	F24108
M.2 (P80) 4TG2-P	DGM28-%DP1KCCEL%	E22C23	E24109
M.2 (P80) 4TG2-P	DGM28-%DP1KCCEQ%	E22C23	E24109
M.2 (P80) 4IG2-P	DHM28-%DP1KW%LH%	E22C23i	E24109i
M.2 (P80) 4IG2-P	DHM28-%DP1KW%QH%	E22C23i	E24109i
M.2 (P80) 4IG2-P	DHM28-%DP1KC%L%	E22C23i	E24109i
M.2 (P80) 4IG2-P	DHM28-%DP1KC%Q%	E22C23i	E24109i
M.2 (P80) 4TS2-P	DSM28-%DP1NCCEF%	F22C23	F24109
M.2 (P80) 4TS2-P	DSM28-%DP2NCCEF%	F23224	F24108
M.2 (P80) 4TS2-P	DSM28-%DP1KCDELP%	F22C25	F24108
M.2 (P110) 4IG2-P	DHM21-%DP1K%LP%	E22C25i	E24108i
M.2 (P110) 4IG2-P	DHM21-%DP1K%QP%	E22C25i	E24108i

Summary of Change
FW change note of 22C23(i) to 24109(i) & 22C25(i) to 24108(i). 1. Modify pad dummy data mechanism to avoid windows warm boot issue. 2. Fix SMART and get-log page command return wrong size data to host issue. 3. Remove PCIe capabilities SR-IOV & VPD related information. 4. Modify U.2 4TB DDR clock from 2400M Hz to 1600M Hz for Stability 5. Modify 512GB~2TB DDR clock from 2666M Hz to 2400M Hz for Stability 6. Modify system block management mechanism to avoid system block shortage. 7. Enable real-time updates for the Total Time for Thermal Management Temperature 1 and 2 under SMART information. 8. Optimize the ECC fail error handling mechanism 9. Add a mechanism to check PCIe LTSSM(Link Training and Status State Machine). If the PCIe link is not stable, indicating entry into recovery statis in LTSSM, SSD will downgrade to PCIE Gen3 for stability. Note: 22C23(i) to 24109(i) & 22C25(i) to 24108(i) cannot support DLMC. FW change note of 23224 to 24109 1. Remove PCIe capabilities VPD related information. 2. Modify PCIE ASPM-related setting to avoid warm boot panic issue. 3. Optimal read disturb mechanism 4. Unify thermal throttling mechanism 5. Enhance abnormal power cycling flow. 6. Improve Device Self Test efficiency (optional feature). 7. Modify system block management mechanism to avoid system block shortage. 8. Enable real-time updates for the Total Time for Thermal Management Temperature 1 and 2 under SMART information. 9. Optimize the ECC fail error handling mechanism 10. Add a mechanism to check PCIe LTSSM(Link Training and Status State Machine). If the PCIe link is not stable, indicating entry into recovery statis in LTSSM, SSD will downgrade to PCIE Gen3 for stability. Note: 23224 to 24109 can support DLMC.

Note

No response from customers will be deemed as acceptance of the change and the change will be implemented pursuant to the key milestones. Innodisk apologizes for any inconvenience caused by this and appreciate your understanding. Innodisk promises that new items deliver quality and reliability for your application. If you have any further inquiry of our products or if you have any question about the specification of it, please contact Innodisk sales person. Thank you for your confidence in Innodisk in the past and looking forward to serving you in the near future.

Key Milestone Dates	
Effective Date	2024/Aug/26
*Implement from: based on business and operational conditions	

Customer Impact of Change and Recommended Action
To minimize any impact on your user experience, we suggest implementing the required changes promptly. We'll support you in transitioning smoothly to ensure a seamless change process. Kindly contact Innodisk sales to ensure your right.

Revision History		
Date of Revision:	Revision Number:	Remark:
2024/May/24	F240023	

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