Design-In SSDs

SSDs for Purpose-Built Computers

Kingston's "Design-In" SSDs were created due to a strong demand from system builders and OEMs who are creating "Purpose-Built" and "Embedded" systems for various vertical market applications. Kingston created the term "Design-In SSD" to describe solid-state drives (SSD) that system builders would take through a thorough qualification process, and once qualified, could be added to their AVL (Approved Vendor List) system BOM (Bill of Materials).

Kingston's Design-In SSD product line features SSDs that support both SATA and NVMe interfaces, offered in various form-factors, and provide lifecycle management required by system builders. Kingston's Design-In SSDs are managed under controlled BOM so that system builders can be confident that the SSD they qualify at the beginning stage of their project is the same drive they will be purchasing throughout the lifecycle of the SSD.

What is a Purpose-Built Application?

Purpose built systems are specialized computers designed to serve a specific application. Examples of purpose-built applications include computers for digital signage, robots, mobile vehicle applications, gaming, POS (Point of Sale), video surveillance, smart devices, and wearables to name a few. Additionally, IoT devices are appearing in almost every industry from healthcare, agriculture, government, manufacturing, retail, telecommunications, and logistics. In many cases these applications are too critical to just use any off-the-shelf SSD. The risk of using off-the-shelf SSDs is they don't offer the customer any control over changing BOMs, product changes mid-production cycle, EOL (end-of-life) notifications and little to no visibility of upcoming product transitions.

What is a controlled BOM (Bill of Materials)?

Once a system builder qualifies an SSD solution, they want to be assured that the SSD they purchase is the same part that was purchased previously and will be the same in the future. All Kingston Design-In SSDs are managed under controlled BOMs which means that the SSD controller, SSD firmware, and NAND Flash memory will never change.

What is a PCN (Product Change Notification)?

While rare, if a change is needed to an SSD during its lifecycle, the system builder will be notified via PCN (Product Change Notification) well in advance to provide ample time to qualify the new BOM. PCNs are a critical part of the product lifecycle management process as it helps to ensure ongoing system compatibility and helps avoid costly field service issues.

Sample and Qualification Stage

The Kingston Design-In SSD Team is ready to assist customers at the early stages of a project with SSD selection and sample delivery. Part of the Design-In SSD team's responsibility is to ensure we are supplying the customer with the right SSD for the application workload. In many cases the read/write workload in purpose-built applications is relatively light. However, it is always best practice to verify the workload early in the design stage to avoid possible field issues later. Kingston may ask for a brief summary of the intended workload prior to the sample stage so that both companies are in agreement on the SSD selection.

Avoid costly field service issues

While most functional issues can be discovered in lab qualifications, it is impossible to test for every field scenario that may arise. It is Kingston's goal to work with the system builder to provide adequate samples and technical information necessary for a thorough qualification. Kingston takes compatibility testing to the next level by running in-house test suites in our labs on customer-supplied systems to ensure quality, reliability and consistency in compatibility.

Benefits of working with Kingston and the Design-In SSD Team

At Kingston we believe close customer engagement is key to the long-term success of both companies. We understand the concerns that system builders have working with hardware suppliers such as product availability, fluctuations in price, managing allocation periods and quickly resolving technical issues.

When you work with Kingston, we provide you with a quality SSD for your computing solution, as well as access to the various personnel on the Design-In Team that specialize in their own respective areas of expertise.

Kingston Design-In SSD customers have access to:

- **Dedicated Design-In Sales Team:** Customers have direct access to the DI SSD Sales Team for project registration, pricing information, general product information and SSD samples.

- **Dedicated Design-In Business Managers:** The Business Managers are a great resource for sharing information regarding industry trends, pricing, and supply outlook.

- **Dedicated Design-In Field Application Engineers (FAE):** Kingston FAE's are available to help deliver technical related materials both pre/post sale.

- **Dedicated Design-In SSD Product Manager:** Kingston DI SSD Product Managers are experts in delivering product line and program overviews, product roadmap updates, and assisting with any special SSD customization requests.