

Personalization

Related to the inherent complexities and costs associated with building a brand new chip, fabless chip manufacturers are under constant pressure to improve operating efficiencies while, at the same time, satisfying OEM customer requirements. As such, large OEM customers requesting personalization, customer-specific data preparation and feature customization of standard parts challenge the chip-makers ability to minimize inventory overhead and improve operating efficiencies.

For example (see Figure 1), if three OEM customers of a SoC manufacturer each request different feature configurations and/or data preparations for a standard SoC product, the SoC manufacturer needs to figure out how to support three customer-specific part types without creating three different SKUs.

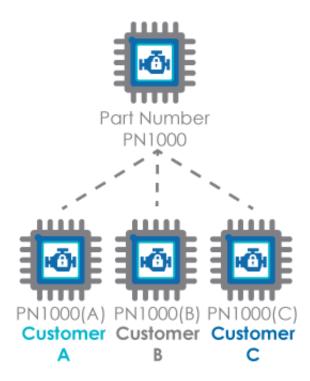


Figure 1. Device Personalization at device manufacturer

Device personalization creates complexity in manufacturing and in inventory management. With multiple SKUs for standard products, managing inventory for each step requires accurate forecasts and discrepancies can result in wasted silicon or delays in fulfilling orders (see Figure 2).

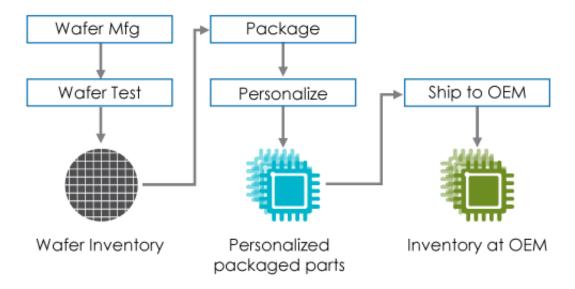


Figure 2. Multiple SKUs in current process

In this case, pushing the personalization processing step to the end of the manufacturing flow just prior to or, in some cases after delivery to the customer, mitigates the impact on inventory and operations (See 3).

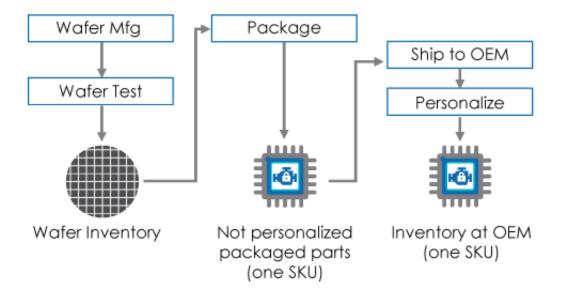


Figure 3. With one SKU, CryptoManager solution improves the supply chain

By enabling chip and device makers to securely provision features and keys into their SoCs at the beginning and throughout manufacturing, customer-specific requirements may be satisfied while, at the same time, having the ability to streamline the manufacturing process for standard products.

Additionally, these customer-specific personalization services may be accomplished with a high degree of visibility and audit tracking controls that are secured by the CryptoManager solution for each step in the manufacturing supply chain. The complexities are both automated and managed by the CryptoManager solution to minimize any incremental overhead or human error that results from

supporting these value-added services.

Other Use Cases



