



Enabling Solutions

Selection and placement of the RFID tag is a crucial step in designing a deployable RFID solution. Each item has unique RF properties and tag placement constraints that must be considered in the context of specific application scenarios. Impinj® offers RFID expertise to analyze your products and help select the optimal tagging solution in cooperation with your tag and solution providers.

Milestones

Impinj has developed a systematic process to characterize the RF properties of an item, select an optimal tag, and accurately measure the performance of RFID tags when affixed to the item. There are three steps in selecting the proper tag for an application.

1. RF Item Characterization

The RF characteristics, placement constraints, and application requirements are evaluated to narrow the set of available tags for detailed evaluation.

2. Inlay Selection

Based on analysis and testing, Impinj selects the best of the available tags. Impinj then tests and analyzes the tag performance, and characterizes and verifies optimal tag placement.

- ❖ Impinj engineers perform the testing in an anechoic chamber, which is a controlled RF environment. The anechoic chamber eliminates all unintended interference and stray RF sources and yields results as close to theoretical as possible.
- ❖ To verify the lab results, Impinj also performs application testing. This testing ensures that there is sufficient margin to provide high reliability in real-world operating environments.

3. Final Recommendation

Based on the laboratory measurements and application testing, Impinj generates a final report. This report details the optimal tag, orientation, and placement of the tag. If no commercially available tag meets the application requirements, Impinj can work with your tag provider on a custom solution using the Fast Track Inlay Design service.

About Fast Track

RFID is a revolutionary technology that is available through an established ecosystem of technology vendors, system integrators, software providers, consultants and integrators. In some cases, specific aspects of implementation are best addressed by the core technology leader, in cooperation with the users and their solution team. With this in mind, Impinj has designed the Fast Track program to help ensure success.

The Fast Track Inlay Design Service is available immediately from Impinj. For more information about our products, please visit our website (www.impinj.com), or contact us at rfid_info@impinj.com.

Powered by Impinj

There is RFID, and then there is Impinj RFID. Impinj assures the integrity of the RFID system—our products perform accurately and reliably with built-in capability to adapt to changing and challenging environments.

Impinj has earned a reputation for having the best technology in the industry, created by innovators who have consistently anticipated, met, and overcome challenges deemed by others as too difficult, while setting new industry standards for quality and reliability.

When it comes to installing RFID into your application, ask for it to be *Powered by Impinj*.

