Insist on RFID Solutions Powered by Impinj

The choice of components that make up an RFID system determines the quality, reliability and performance of an RFID implementation. Impinj customers realize increased system data reliability, greater insight into the supply chain, safer products, improved customer experience, and more.

**Impinj Solutions**

| Software | Impinj’s application software, including Speedway Connect, Octane SDK, and the STP™ source tagging platform, helps you quickly integrate RFID into existing systems and provide flexibility for additional functionality in your solution. |
| Reader Antennas | The Impinj family of reader antennas controls read zones from point of sale to packaging lines. |
| Tag Chips | Monza® tag chips set the standard in RFID performance and features, providing the industry’s best sensitivity, omni-directional antenna support, and innovative privacy features. |
| Reader Chips | Indy® reader chips provide integration and supporting software to power a full range of RFID readers and embedded applications. |

**NOTICE:** Copyright © 2012-2013, Impinj, Inc. All rights reserved. Impinj gives no representation or warranty, express or implied, for accuracy or reliability of information in this document. Impinj reserves the right to change its products and services and this information at any time without notice.

EXCEPT AS PROVIDED IN IMPINJ’S TERMS AND CONDITIONS OF SALE OR AS OTHERWISE AGREED IN A VALID WRITTEN INDIVIDUAL AGREEMENT WITH IMPINJ, IMPINJ DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATED TO SALE AND/OR USE OF IMPINJ PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY PATENT, COPYRIGHT, MASK WORK RIGHT, OR OTHER INTELLECTUAL PROPERTY RIGHT IS GRANTED BY THIS DOCUMENT.

Impinj assumes no liability for applicators assistance or operator product design. Customers should provide adequate design and operating safeguards to minimize risks.

Impinj products are not designed, warranted or authorized for use in any product or application where a malfunction may reasonably be expected to cause personal injury or death, or property or environmental damage ("hazardous use") or for use in automotive environments. Customers must indemnify Impinj against any damages arising out of the use of Impinj products in any hazardous or automotive uses.

Impinj, Indy, Monza, Speedway, and STP are trademarks or registered trademarks of Impinj, Inc. All other product or service names are trademarks of their respective companies.

Quick Start Guide

**Speedway® Revolution Reader**

This guide provides simple steps to quickly start using your new Speedway® Revolution reader. For a full description of connection methods, reader configuration and system setup options, please consult the latest Speedway Installation and Operations Manual.

**Box Contents**

- 1 Speedway Revolution reader
- 1 Quick Start Guide
- May include tag samples from Impinj inlay partners® featuring Monza® chips

**Available separately:**
- Power supply*
- Power cord
- Console cable
- Antenna

**Speedway Revolution Reader Connectors**

1. +24 VDC locking power supply connector
2. 10/100Base-T Ethernet port (RJ45)
3. USB Device and Host ports
4. Management console port (RJ45)
5. GPIO (DB-15)
6. Antenna ports (RP TNC)
7. LED indicators

**Before getting started, download and install the following on your PC:**

- Impinj Multireader Software Utility
- Speedway Revolution Installation and Operations Manual

**http://support.impinj.com/downloads**

- Bonjour Print Services

*Samples are provided courtesy of our inlay partners®, and may not be available with every reader. Samples are provided for use in reader setup and for experience unique Monza features, and are not intended to represent all the Monza based inlay varieties available from Impinj inlay partners. We encourage you to ask your provider about RFID labels or inlays featuring Monza tags.

**This product is intended to be supplied with a Listed/Certified power supply, marked LPS or Class 2, with 24Vac output, rated minimum 2.5A. (Ce produit est conçu pour être alimenté avec une alimentation Majeur 2 et certifiée, marqué LPS ou de classe 2, avec sortie 24V, 2.5 A nominal minimum.)**
Reading Tags with the Speedway Revolution Reader

1) Connect reader to a DHCP-enabled network
   a) Connect the reader directly to your Ethernet network using a standard Ethernet cable (a crossover cable is not necessary).
   b) Connect the RJ-45 connector on the reader to a LAN drop or network switch. A typical set-up is as follows:

   ![Image of the Speedway Revolution Reader setup]

   c) This product is intended to be supplied with a Listed/Certified power supply, marked LPS or Class 2, with 24Vdc output, rated minimum 2.5A. When supplied from an IEEE 802.3af (Power over Ethernet) compliant power source which is certified by the appropriate agencies, the RF transmit power is limited to +30dBm. (Ce produit est conçu pour être alimenté avec une alimentation Mis / certifiés, marqué LPS ou de classe 2, avec sortie 24V, 2.5 A nominal minimum. Lorsqu’il est fourni à partir d’une norme IEEE 802.3af (Power over Ethernet) de la source d’alimentation conforme qui est certifié par les organismes appropriés, la puissance d’émission RF est limitée à 30 dBm.)

   d) Ensure your PC has Bonjour Print Services enabled (install if necessary)

   e) If desired, test your reader connection by pinging hostname.local. The hostname follows the format SpeedwayR-XX-XX-XX where XX-XX-XX is the last three couplets of the reader’s MAC address (printed on reader label). (e.g., ping speedwayR-10-28-42.local)

   NOTE: If your network does not support DHCP, use a Cisco-style console cable (RJ-45 to DB9) for a direct RS-232 serial connection to the reader. The reader’s RShell command line interface can configure a static IP address for the reader (p16, Installation and Operations Manual). Once completed, you can connect the reader over Ethernet.

2) Set reader region and check firmware version
   a) Connect to reader WebUI using a web browser http://<reader name or IP address>
   b) Log in to the reader. Default credentials are:
      - user name: root
      - password: impinj
   c) Select your region from the drop down list. You, the user, are responsible to ensure operation with the correct RF settings and are solely responsible for any fines and other damages due to incorrect or non-compliant country/region settings on your reader. NOTE: GX1 and GX2 readers have no region pre-configured and will not transmit RFID signals until region is selected.

   d) Click the REBOOT button. When changing the reader’s operating region, the effect of the change does not take effect until the next reboot.

   e) Note the “Software Version” shown on the WebUI. Ask your authorized Impinj partner or reseller for the latest released version and upgrade if necessary using the “Reader Upgrade” utility in the WebUI. The reader firmware for Speedway Revolution is named Octane.

3) Read tags with Multireader software utility
   a) Attach antenna RF cable to antenna port 1 on the reader.
   b) Install (if necessary) and open the MultiReader application.
   c) Click “Configure Settings” and add information to connect to your reader.
   d) Place tags in the antenna’s field of view. Click the Start Inventory button and watch tag information as it is read and displayed in MultiReader.
   e) Some basic reader settings can be changed in MultiReader, review Impinj documents to learn about each setting.

Resources & Next Steps

- Connect via RShell for advanced reader settings.
- Develop controlling application using Octane SDK.
- Find helpful information here:
  - http://www.impinj.com
  - http://support.impinj.com

### SPEEDWAY READER ACCESSORIES

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal Power Supply</td>
<td>IPJ-A2002-000</td>
</tr>
<tr>
<td>AC Power Cord (region-specific)</td>
<td>IPJ-A2051-xxx</td>
</tr>
<tr>
<td>GPIO Box</td>
<td>IPJ-A5000-000</td>
</tr>
<tr>
<td>Console Cable</td>
<td>IPJ-A4000-000</td>
</tr>
<tr>
<td>Extended Warranty</td>
<td>IPJ-C2001 / IPJ-C2003</td>
</tr>
</tbody>
</table>