Card Technology and Testing

Specification Discovery Process Guide



- 1. eXpress badging works with customers to **precisely understand** all card technology requirements (RFID, barcode, and magnetic stripe) and their use in physical access control (PAC), time and attendance (T&A), point of sale (POS), logical access control (PC Sign-on), and any other card-based reader solutions.
- 2. Based on the above technology discovery, eXpress badging creates and ships **test samples** with approval forms for all applicable systems.
- 3. Customer tests the sample cards, documents testing process and outcome per applicable system, then provides an **authorized signature** per test approval form.
 - a. If required, conduct further discovery and testing until all card-based systems are approved.
- 4. eXpress badging **produces** customer's order upon approval and ships as specified.

Understand Technology Used

Customer must provide eXpress badging with all of the following: technology specifications per system, system name, reader type per system, and common "location name and address." If the customer has several locations with varying technology, the customer must document each type of technology by location used within the same badge.

- Determine RFID type required: 125 kHz proximity and/or 13.56 MHz contactless smartcard along with bit format (26, 35...)?
- Determine barcode type required: Code 39, 25, 512, Codabar, QR-CODE, etc.?
- Determine magnetic stripe type required: HiCo or LoCo, and which track(s) are encoded?
- Regarding numbering for all technologies:
 - Is a facility or site code required? If yes, document all required.
 - How many digits is the sequence number (if applicable)?
 - What is the sequential starting value and range?
- Are any reader types using proprietary cards or unique technologies?
 - HID Corporate 1000 format, or other formats that are manufacture specified
 - Dual technology RFID stock
 - Cover code masks for barcodes

The customer must not assume what each system's card technology is in this step, as they require exact specifications to work correctly. We highly recommend that a system administrator and/or integrator ensure that each of their reader types is the same. Reader types can vary greatly, even if the same manufacturer makes them.

An eXpress badging ID Specialist guides customers by obtaining all necessary system information, as we cannot provide card test samples until 100% of the specifications are discovered per system

TIP: An ideal way to provide eXpress badging the specifications of your RFID or magnetic stripe card stock is to send a photo of the label from the box they came in.

Refer to the mock-up example to the right:



Example of box label

Test Samples

Based on technology discovery, eXpress badging creates and ships test samples along with approval forms for all applicable systems.

- eXpress badging will document:
 - Reader technology type per system and card related information
 - Name, phone, email, and a complete physical mailing address for the point of contact per system
 - System integrator and contact information (supporting vendors)
 - Support contract information
 - Estimated installation date of each system's software and related hardware
 - Software solution manufacturer's name, if it's different from the integrator

All documented card technology discoveries are stored in a secure location.

Approval Process

Upon receipt of test form(s), the customer must test cards in each designated system, document the testing process and outcome per applicable system, and then provide an authorized signature per test approval form.

- eXpress badging recommends the customer:
 - Enrolls all provided cards in the software and ensure enrollment at the reader level
 - Present each card to the reader and document the results per card.
 - Examples card 1 opened the North Main door/gate/cabinet; acknowledged an in-and-out clock punch main employee entrance 2.
 - Runs a report in each system tested documenting the success of each card
 - Documents all steps used in the card test form; the more detailed, the better

Product Creation

- eXpress badging will produce the customer's card order, and afterward, confirms specifications and tests when applicable.
- Orders ship as specified per Confirming Sales Order and Approved Test Forms.
- Upon product receipt, customer spot checks and tests random cards before use or mass issuance.