



Logical Access "How to Order" Guide

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Date	Author	Description	Version
04/29/10	G. Weller	Added 6221 MicroSD.	A.9
02/10/10	G. Weller	Changed 5321 USB to 5321 V2 USB, 6121 and 4321 Expresscard 54. Added 5321 CL SAM USB, 7121 with Driver Cid, and TAA description. Removed OMNIKEY Packaging Details.	A.8
01/20/10	KG	402/407 – Added DESFire options	A.7
11/24/09	G. Weller	Added OMNIKEY 2061 Bluetooth Reader	A.6



Contents

- Overview 3**
 - Prox on the Desktop 3
 - iCLASS on the Desktop 3
 - Crescendo on the Desktop 4
 - Cards 5
 - Readers 6
 - Software 7
 - Activation Keys 7
 - Credential Credits 7
 - Trial Packages 8
- Basics of Ordering Cards 9**
- Cards 10**
 - Contact & Contactless Combo Cards 10
 - Embeddable Contactless Cards 12
- Logical Access Software 20**
 - naviGO Ordering Guide 20
- Credential Credits 21**
 - HID on the Desktop Credential Credits - 8648x 21
- Trial Packages 22**
 - Trial naviGO Software and Credential Credits Kit - 86482 22
 - Card Packages 22
 - Reader Packages 23
 - Crescendo Evaluation Kit 24
- Desktop Smartcard Readers 25**
 - Reader Ordering Guide 25
- Appendix 28**
 - Custom Cards 28
 - Identity & Access Management Evaluation Kit Questionnaire 32

Overview

Welcome to HID on the Desktop solutions. HID Global offers a variety of logical access and converged solutions, enabled by the use of a single credential for both physical and logical access. HID's primary product lines making up the HID on the Desktop solution include iCLASS[®], Crescendo[™], OMNIKEY[®] and naviGO[™].

No matter where you are in your efforts to improve risk management and physical/data security processes, there is an HID on the Desktop solution to help you.

Please visit www.hidglobal.com Product section for more information.

Prox on the Desktop

Prox on the Desktop provides strong authentication for use with HID PROX, the industry-standard in physical access control. Customers purchasing Prox on the Desktop will need the following components:

- HID Prox cards – HID Prox cards are recognized as the industry standard for physical access control. HID PROX products are robust, affordable and seamlessly integrate with access control systems.
- OMNIKEY[®] Prox reader – Designed to support HID on the Desktop, OMNIKEY readers are connected via USB to a desktop or laptop computer. Models designed to work with the Prox on the Desktop solution include 5325 USB Prox and 5325 CL USB Prox.
- naviGO[™] software – HID's naviGO software is a credential management system that simplifies deployment of strong (two-factor) authentication and works hand-in-hand with the Windows[®] operating system. The software enables password self-service and also provides an Emergency Access option.
- Credential Credits – Credential Credits enable the use of HID physical access credentials for the HID on the Desktop solution. One "credit" is required for each cardholder using the HID log-on solution to add a logical access credential to an HID card. Once assigned during self-enrollment, the credential is permanently linked to that one card.

iCLASS on the Desktop

iCLASS on the Desktop extends the reach of HID iCLASS[®] access technology to computer systems. From a security standpoint, iCLASS on the Desktop moves up the strong authentication continuum to provide a higher level of authentication than password-only log-in. The iCLASS on the Desktop solution takes advantage of the iCLASS card's mutual authentication capability and encodes a certificate-like data structure in a securely protected memory sector of the card.

The iCLASS on the Desktop solution does not require organizations to re-badge, issue a new token or make any changes to their physical access control system.

To implement iCLASS on the Desktop, customers will need the following components:

- HID iCLASS cards – Optimized to make physical access control more powerful, iCLASS 13.56 MHz read/write contactless smart card technology provides versatile interoperability, enhanced security through encryption and mutual authentication and supports multiple applications such as biometric authentication, cashless vending and PC log on security.
- OMNIKEY[®] reader – Designed to support HID on the Desktop, OMNIKEY readers are connected via USB to a desktop or laptop computer. Models designed to work with the iCLASS on the Desktop solution include 5321 USB, 5321 CL USB, 5321 CLi USB, 6321 USB and 6321 CLi USB.
- naviGO[™] software – HID's naviGO software is a credential management system that simplifies deployment of strong (two-factor) authentication and works hand-in-hand with the Windows[®] operating system. The software enables password self-service and also provides an Emergency Access option.
- Credential Credits – Credential Credits enable the use of HID physical access credentials for the HID on the Desktop solution. One "credit" is required for each cardholder using the HID log-on solution to add a logical access credential to an HID card. Once assigned during self-enrollment, the credential is permanently linked to that one card.

Crescendo on the Desktop

Crescendo™ is a series of highly secure multi-technology, off-the-shelf smart cards designed to provide out-of-the-box, standards-compliant support for existing physical and logical access applications. Representing the highest level of network security among HID on the Desktop solutions, Crescendo contact smart cards are designed to be used with certificates in a PKI (Public Key Infrastructure) environment.

HID Crescendo cards – A powerful embedded contact smart chip with cryptographic co-processor is used for logical access control. To meet the needs of current physical access control customers, Crescendo can be customized with the “physical access control” technologies you choose including: Prox (HID, Indala® and others), iCLASS®, MIFARE®, multi-technology combinations and magnetic stripe. Use of Crescendo requires no per-seat middleware licenses, reducing overall costs. The Crescendo smart cards are fully standard based. They work with all PC/SC based smart card readers (including built-in readers in laptops) available on the market. In addition, Crescendo smart cards are supported in many third party applications.

To supplement and to offer the full Crescendo on the Desktop solution, HID also offer the following components:

- OMNIKEY® readers – Designed to support Crescendo and HID on the Desktop, OMNIKEY Smart Card Readers are PC-connected readers for contact-based smart cards. OMNIKEY Smart Card Readers are available in various form factors (for example, desktop, laptop or mobile use), and connector type (for example, serial or USB). All OMNIKEY® readers with contact interface fully support Crescendo (including 3121 USB, 3111 Serial, 4321 Mobile ExpressCard 54 and 4040 Mobile PCMCIA).
- naviGO™ software – HID's naviGO software is a credential management system that simplifies deployment of strong (two-factor) authentication and works hand-in-hand with the Windows® operating system. The software enables a self-service portal with optimized workflows and also provides an Emergency Access option.
- Credential Credits – Credential Credits enable the use of HID physical access credentials for the HID on the Desktop solution. One “credit” is required for each cardholder using the HID log-on solution to add a logical access credential to an HID card. Once assigned during self-enrollment, the credential is permanently linked to that one card.



Cards

Crescendo

Crescendo credentials are designed for combined physical and logical access control.

The embedded crypto-processor contact chip enables Crescendo to perform as a PKI card in both Microsoft® and heterogeneous IT environments.

The Crescendo card is made of highly durable composite plastic and includes the contactless and/or Prox technologies necessary to support your existing physical access control systems. Magnetic stripe technology can be included, and Crescendo cards can be customized with pre-printed graphics and anti-counterfeiting elements. Crescendo cards can also be fully personalized with variable data – photos, text and barcodes.

Crescendo products C200 and C700 are optimized, tested and supported by the OMNIKEY Reader product line.

Crescendo C200:

Includes a Smart Card mini-driver for use with Microsoft CryptoAPI compliant applications.

Crescendo with iCLASS

C200 contact PKI chip, 32K bit iCLASS Contactless

Crescendo with iCLASS/Prox

C200 contact PKI chip, 32K bit iCLASS Contactless and Prox (HID or Indala)

Crescendo with MIFARE

C200 contact PKI chip, 4K byte MIFARE

Crescendo with MIFARE/Prox

C200 contact PKI chip, 4K byte MIFARE, and Prox (HID or Indala)

Crescendo C700:

Includes middleware for use with PKCS#11 and Microsoft CryptoAPI compliant applications.

Crescendo with iCLASS

C700 contact PKI chip, 32K bit iCLASS Contactless

Crescendo with iCLASS/Prox

C700 contact PKI chip, 32K bit iCLASS Contactless and Prox (HID or Indala)

Crescendo with MIFARE

C700 contact PKI chip, 4K byte MIFARE

Crescendo with MIFARE/Prox

C700 contact PKI chip, 4K byte MIFARE, and Prox (HID or Indala)



iCLASS

Optimized to make physical access control more powerful, iCLASS 13.56 MHz read/write contactless smart card technology provides versatile interoperability and supports multiple applications such as biometric authentication, cashless vending and numerous other applications. iCLASS fully supports PC log on security as part of the HID's iCLASS on the Desktop solution.

Prox

With over 200 million credentials in use around the world, HID is the market leader in contactless cards for access control. Our global reputation for delivering quality, value, partnership, and service excellence to our customers is unsurpassed in the security industry. For security managers, dealers, integrators and OEMs, HID Prox cards are recognized as the industry standard for physical access control. Featuring 125 kHz RFID technology HID Prox products are robust, affordable, and seamlessly integrate with access control systems. HID Prox cards fully support PC log on security as part of the HID's Prox on the Desktop solution.

Readers

The OMNIKEY Smart Card reader leverages HID industry-leadership in all forms of identity credentials to assist you in choosing the right smart card reader for your solution.

OMNIKEY Smart Card Readers are PC-connected readers for contact-based and contactless smart cards. OMNIKEY Smart Card Readers are available in various form factors (for example, desktop, laptop or mobile use), and connector type (for example, serial or USB). In addition, drivers are available for operating system support.

In addition to the standard products, OMNIKEY Smart Card Readers have a defined set of customization options (for example, customized housing colors, logo prints or labels). Please contact your sales manager to obtain the OMNIKEY Configuration and Customization Guide.



Software

naviGO

naviGO™ by HID Global is a cost-effective solution that simplifies deployment and manages the lifecycle of strong authentication user credentials including Crescendo™ smart cards (with digital certificates), iCLASS® smart cards, Prox cards and Knowledge Based Authentication (KBA). naviGO makes strong authentication simple.

The naviGO software includes two components: Workstation and Server. These components work independently, but can work together to provide even greater versatility.

Workstation

- naviGO Workstation (Client Software)
 - User Name/Password Authentication; PIN Authentication; Knowledge-Based Authentication
 - Self-service setup, authentication and lifecycle activities
 - Local administration
 - Local policies
 - Single credential per copy of client software

Server

- naviGO Server (Server Software)
 - User Name/Password Authentication; PIN Authentication; Knowledge-Based Authentication
 - Self-service setup, authentication and lifecycle activities
 - Centralized administration
 - Server policies
 - Multiple credentials per server software

Mixed Environment

- naviGO Workstation and naviGO Server (Client and Server Software)
 - User Name/Password Authentication; PIN Authentication; Knowledge-Based Authentication
 - Self-service setup, authentication and lifecycle activities
 - Centralized administration
 - Server policies
 - Multiple credentials per client and server software

Activation Keys

The naviGO software can be activated over the Internet or by phone. Both naviGO Server and naviGO Workstation require activation. The Activation key form includes the software activation codes and credential credits code.

Credential Credits

HID's naviGO software creates and manages Windows log-on credentials as part of the HID on the Desktop solutions. In order for naviGO to create the credential and link it to a specific card, the system uses a Credential Credit. In essence, Credential Credits are the currency used by naviGO to pay for the log-on credential that is being requested by the user. Order a Credential Credit for each HID card you wish to enable for logical access.

The Credential Credit Key activates the purchased credentials within the system allowing users to apply a logical access credential to their HID card.



Trial Packages

HID provides no cost Trial Software to allow users the opportunity to fully test HID on the Desktop within their own environment.

The naviGO Trial Software package includes both naviGO software components and an Activation Key sheet that will enable naviGO Server and establish ten temporary Credential Credits.

The naviGO Trial Software is active for 90-days.

Purchase a naviGO Trial Software license upgrade to continue using the software.

See the naviGO Ordering Guide, page 20 for details on ordering the naviGO Trial Edition Software package.

Clients will need cards and readers to implement the complete solution if they do not already have those portions of the solution. HID offers various trial packages of cards and readers at nominal prices.



Basics of Ordering Cards

Each part number consists of a base number to indicate the type of credential, and a number or letter to indicate each credential option. Each credential has a standard part number which includes default options, as indicated on the attached credential guides. When an order is placed for a credential, the base number and all options must be specified. If you require any options that are different from the default options, you must indicate those options when placing the order. Complete all part numbers for HID's order entry system acceptance.

Include the following information for all orders.

Reader Information

- **BASE MODEL NUMBER**
- **STYLE**
- **READ RANGE**
- **TYPE**
- **COLOR**
- **OUTPUT FORMAT** (*reader's format or format number must also be given at time of order*)

Credential Information

Base Part Number - Indicates type of credential

- Standard PVC
- Composite 40% Polyester/PVC (Recommended for long life applications or when applying an over-laminate)

iCLASS Capacity Size and Allocation -

- 0 – 2k Bits (256 Bytes) with 2 Application Areas
- 1 – 16k Bits (2k Bytes) with 2 Application Areas
- 2 – 16k Bits (2k Bytes) with 16 Application Areas
- 3 – 32k Bits (4K Bytes) Application areas 16k/2+16k/1
- 4 – 32k Bits (4K Bytes) Application areas 16k/16+16k/1

Programming

Indicates whether the credential is programmed at the factory by HID or programmed by you with an HID iCLASS card programmer. If the credential is ordered non-programmed, an HID iCLASS card programmer must be used for programming. (Contact an HID sales representative for iCLASS card programmer eligibility).

Second Contactless Technology Programming

- H** – HID Proximity (Specify Programming Information)
- E** – EM (Fixed sequential programming)
- T** – HITAG II (Programming not available)
- D** – Indala Proximity
- C** – Casi-Rusco Proximity (Fixed Sequential)
- F** – DESFire (Specify Programming)
- M** – MIFARE (Specify Programming)

• MIFARE Capacity Size

- MIFARE 1 K Bytes
- MIFARE 4 K Bytes
- MIFARE Plus 2 K Bytes
- MIFARE Plus 4 K Bytes

• DESFire EV1 Capacity Size

- 2 K Bytes
- 4 K Bytes
- 8 K Bytes

Contact Chip and Embeddable Technology

- Crescendo
 - Crescendo C200 - For use with Microsoft Smart Card CSP and Smart Card KSP
 - Crescendo C700 - For use in PKCS #11 and Microsoft CryptoAPI (CSP) environments
- Embeddable – Must specify contact chip required. Consult your account manager for current availability and contact chip codes

Front Packaging - Indicates standard or custom artwork and type of finish.

Back Packaging - Indicates standard or custom artwork and type of finish.

iCLASS Credential Numbering - Internal 13.56 MHz programmed number and visible external credential number.

Slot Punch

Optional 125 kHz Proximity or Wiegand Credential Numbering - Internal 125 kHz Proximity or Wiegand programmed number and visible external credential number.

Custom Artwork Credential Information

Custom Artwork Number (Call your Customer Service Representative for a custom artwork number.)

Credential Programming Information

Bit Format(s)

Facility Code(s)

Internal and External Start Numbers

Internal PIN Code (Length: 2 – 12 Digits)

Any Special Instruction



Cards

Contact & Contactless Combo Cards

402 / 407 - Crescendo Ordering Guide

Crescendo credentials are designed for combined physical and logical access control. The Crescendo card is made of highly durable composite plastic and includes the contactless and/or Prox technologies necessary to support your existing physical access control systems. Magnetic stripe technology can be included, and Crescendo cards can be personalized with a photo ID, barcode, or anti-counterfeiting element. Ensure to check each option with the appropriate values to fulfill a completed order form.

Base Model: 402 -- Crescendo C200 407 -- Crescendo C700
 For use with Microsoft Smart Card CSP and Smart Card KSP¹ For use in PKCS #11 and Microsoft CryptoAPI (CSP) environments¹

Contactless Technology (Check One) Call HID Customer Service if requiring other technologies.

- 2 – iCLASS Only - 13.56 MHz
- 4 – MIFARE Only - 13.56 MHz 4K Byte memory
- 5 – DESFire Only - 13.56 MHz 4K Byte memory
- A – Combo iCLASS and Prox – 125 kHz HID, Indala, or Casi Compatible Prox plus iCLASS
- C – Combo MIFARE and Prox – 125 kHz HID, Indala, or Casi Compatible Prox plus 4K Byte MIFARE
- D – Combo DESFire and Prox - 125 kHz HID, Indala, or Casi compatible Prox plus 13.56 MHz DESFire 4K Byte Memory

Option - Magnetic Stripe

- M - Standard Three Track High Coercivity Magstripe (ISO 7811-6)

Option - Custom Artwork⁶

- _____ (Specify Artwork Number – Refer to the Custom Artwork Forms for new artwork)

From the above options, enter your final card options. Examples: 407A and 4022M.

Final Part Number									(Options)
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Configuration and Programming (required for order)

External Marking Technology (Check One)

- Inkjet Laser⁸

iCLASS Memory Size and Allocation (Check One)

- Not Applicable (Use this when choosing MIFARE options 4 and C above.)
- 16k Bits (2k Bytes) with 2 Application Areas
- 16k Bits (2k Bytes) with 16 Application Areas
- 32k Bits (4K Bytes) Application areas 16k/2+16k/1
- 32k Bits (4K Bytes) Application areas 16k/16+16k/1

Contactless Technology (Check One)

iCLASS Only (Contactless Technology choice 2)

- Configured, Non-Programmed²
- Programmed (Specify Programming)

MIFARE or DESFire Only (Contactless Technology choice 4 or 5)

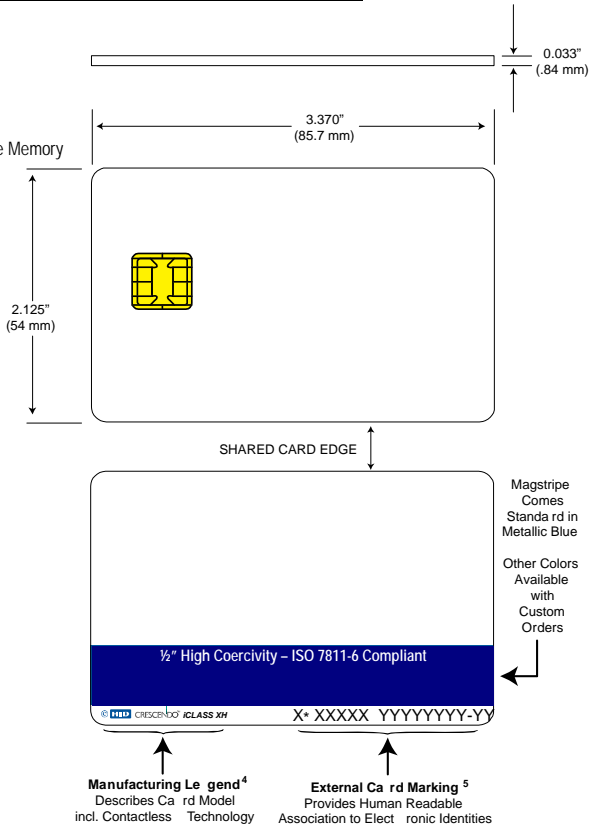
- Programmed HID MIFARE (Specify HID Format, MIFARE only)
- Non-Programmed²
- Custom Programmed, Specify Programming Information³

Combo iCLASS and Prox (Contactless Technology choice A)

- Configured, Non-Programmed² iCLASS & Non-Programmed² 125 kHz Prox.
- Configured, Non-Programmed² iCLASS, Programmed 125 kHz Prox. (Specify Programming)
- Programmed iCLASS & Non-Programmed² 125 kHz Prox. (Specify Programming)
- Programmed iCLASS & Programmed 125 kHz Prox. (Specify Programming)

Combo MIFARE and Prox or DESFire and Prox (Contactless Technology choice C or D)

- Non-Programmed MIFARE or DESFire² & Non-Programmed² 125 kHz Prox.
- Non-Programmed MIFARE or DESFire² & Programmed 125 kHz Prox (Specify Programming)
- Programmed HID MIFARE & Non-Programmed² 125kHz Prox (Specify Programming)
- Programmed HID MIFARE & Programmed 125kHz Prox (Specify Programming)
- Custom Programmed MIFARE or DESFire & Non-Programmed² 125 kHz Prox (Specify Programming)
- Custom Programmed MIFARE or DESFire & Programmed 125kHz Prox (Specify Programming)



¹ For information about MS CAPI and PKCS #11, visit www.hidglobal.com/crescendo.
² Non-programmed cards require field programming capability. Various solutions are available to securely program credentials.
³ Any programming requiring custom keys or non-standard memory locations.
⁴ The Manufacturing Legend is required on all cards.
⁵ External Card Marking is used to trace manufacturing lots and provide readable serialization.
⁶ Contact Customer Service for custom artwork number, lead-times, and cost.
⁷ Though most formats require two fields (site code and card number), use this area for additional values if required by the format.
⁸ Laser marking may extend lead times.

Programming Information									
iCLASS			MIFARE or DESFire				125 kHz		
Format (i.e. H10301)			Format (i.e. H10301)			Format (i.e. H10301)			
Facility / Site Code			Facility / Site Code			Facility / Site Code			
Additional Field Data ⁷			Additional Field Data ⁷			Additional Field Data ⁷			
Internal Card No. Start			Internal Card No. Start			Internal Card No. Start			
External Card No.	<input type="checkbox"/> None	<input type="checkbox"/> Random	External Card No.	<input type="checkbox"/> None	<input type="checkbox"/> Random	External Card No.	<input type="checkbox"/> None	<input type="checkbox"/> Random	
	<input type="checkbox"/> Matching	<input type="checkbox"/> Non-Matching		<input type="checkbox"/> Matching	<input type="checkbox"/> Non-Matching		<input type="checkbox"/> Matching	<input type="checkbox"/> Non-Matching	
External Start No.	(If not Matching)		External Start No.	(If not Matching)		External Start No.	(If not Matching)		
Optional PIN:	<input type="checkbox"/> Sequential:	Start #	<input type="checkbox"/> Sequential:	Start #		<input type="checkbox"/> HID	<input type="checkbox"/> Indala	<input type="checkbox"/> Casi Compatible	
	<input type="checkbox"/> Random:	Length	<input type="checkbox"/> Random:	Length					
Optional Elite Key:	ICE #								



400- Combo Contact and Contactless Ordering Guide

In most cases Crescendo credentials are the ideal combination of contact and contactless technologies (see page 9). However, some legacy systems may require a specific contact chip. Please consult your account manager for current availability and contact chip codes.

Contactless Technology (Check One) Call HID Customer Service if requiring other technologies.

- 2 – iCLASS Only - 13.56 MHz
- 4 – MIFARE Only - 13.56 MHz 4K Byte memory
- A – Combo iCLASS and Prox – 125 kHz HID, Indala, or Casi Compatible Prox plus iCLASS
- C – Combo MIFARE and Prox – 125 kHz HID, Indala, or Casi Compatible Prox plus 4K Byte MIFARE

Option - Magnetic Stripe

- M - Standard Three Track High Coercivity Magstripe (ISO 7811-6)

Contact Technology (Check One)

- XXX – Please use the three character contact chip code provided by your account manager.

Contact Chip Pre-Perso (Check One)

- B – Blank
- S – Operating system instantiated
- A – Applet loaded

Option - Custom Artwork ⁶

- _____ (Specify Artwork Number – Refer to the Custom Artwork Forms for new artwork)

Please enter your final card options from check boxes above. Examples: 47A and 422M

Final Part Number	400		-		-	(Options)
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Configuration and Programming (required for order)

External Marking Technology

- Inkjet
- Laser ⁸

iCLASS Memory Size and Allocation (Check One)

- Not Applicable (Use this when choosing MIFARE options 4 and C above.)
- 16k Bits (2k Bytes) with 2 Application Areas
- 16k Bits (2k Bytes) with 16 Application Areas
- 32k Bits (4K Bytes) Application areas 16k/2+16k/1
- 32k Bits (4K Bytes) Application areas 16k/16+16k/1

Contactless Programming (Check One)

iCLASS Only (Contactless Technology choice 2)

- Configured, Non-Programmed ²
- Programmed (Specify Programming below.)

MIFARE Only (Contactless Technology choice 4)

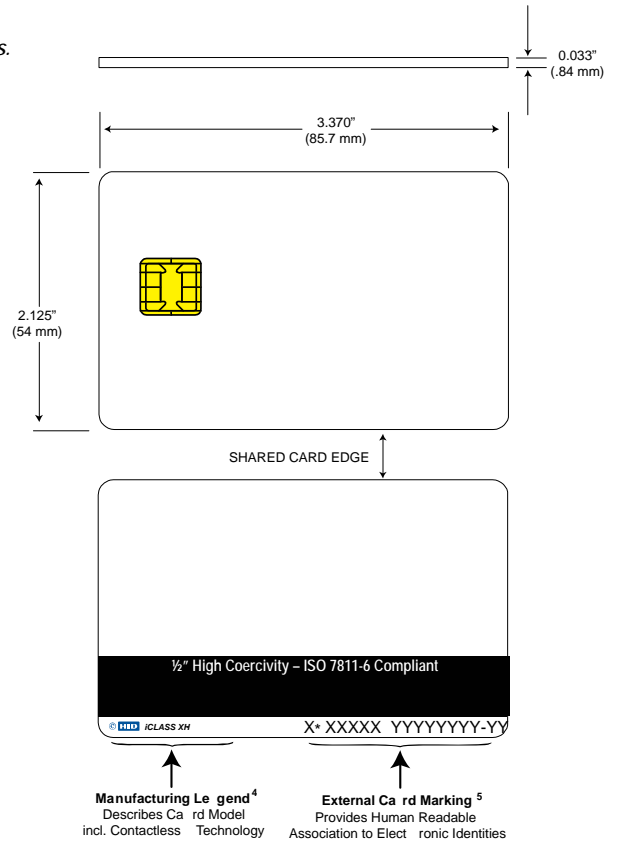
- Programmed (Specify Programming below.)
- Non-Programmed ²
- Custom Programmed ³

Combo iCLASS and Prox (Contactless Technology choice A)

- Configured, Non-Programmed ² iCLASS & Non-Programmed ² 125 kHz Prox.
- Configured, Non-Programmed ² iCLASS, Programmed 125 kHz Prox. (Specify Programming)
- Programmed iCLASS & Non-Programmed ² 125 kHz Prox. (Specify Programming)
- Programmed iCLASS & Programmed 125 kHz Prox. (Specify Programming)

Combo MIFARE and Prox (Contactless Technology choice C)

- Non-Programmed MIFARE ² & Non-Programmed ² 125 kHz Prox.
- Non-Programmed MIFARE ² & Programmed 125 kHz Prox (Specify Programming)
- Programmed MIFARE & Non-Programmed ² 125kHz Prox (Specify Programming)
- Programmed MIFARE & Programmed 125kHz Prox (Specify Programming)
- Custom Programmed MIFARE & Non-Programmed ² 125 kHz Prox (Specify Programming)
- Custom Programmed MIFARE & Programmed 125kHz Prox (Specify Programming)



- ¹ For information about MS CAPI and PKCS #11, visit www.hidglobal.com.
- ² Non-programmed cards require field programming capability. Various solutions are available to securely program credentials.
- ³ Any programming requiring custom keys or non-standard memory locations.
- ⁴ The Manufacturing Legend is required on all cards.
- ⁵ External Card Marking is used to trace manufacturing lots and provide readable serialization.
- ⁶ Contact Customer Service for custom artwork number, lead-times, and cost.
- ⁷ Though most formats require two fields (site code and card number), use this area for additional values if required by the format.
- ⁸ Laser marking may extend lead times.

Programming Information					
iCLASS		MIFARE		125 kHz	
Format (i.e. H10301)		Format (i.e. H10301)		Format (i.e. H10301)	
Facility / Site Code		Facility / Site Code		Facility / Site Code	
Additional Field Data ⁷		Additional Field Data ⁷		Additional Field Data ⁷	
Internal Card No. Start		Internal Card No. Start		Internal Card No. Start	
External Card No.	<input type="checkbox"/> None <input type="checkbox"/> Random	External Card No.	<input type="checkbox"/> None <input type="checkbox"/> Random	External Card No.	<input type="checkbox"/> None <input type="checkbox"/> Random
	<input type="checkbox"/> Matching <input type="checkbox"/> Non-Matching		<input type="checkbox"/> Matching <input type="checkbox"/> Non-Matching		<input type="checkbox"/> Matching <input type="checkbox"/> Non-Matching
External Start No.	(If not Matching)	External Start No.	(If not Matching)	External Start No.	(If not Matching)
Optional PIN:	<input type="checkbox"/> Sequential: Start #		<input type="checkbox"/> Sequential: Start #		
	<input type="checkbox"/> Random: Length		<input type="checkbox"/> Random: Length		
Optional Elite Key:	ICE #			<input type="checkbox"/> HID	<input type="checkbox"/> Indala <input type="checkbox"/> Casi Compatible



1598 - Smart DuoProx® II Card Ordering Form

Please ensure each required option has been checked with the appropriate choice to fulfill a completed order form.

Base Model 1598 Composite 40% Polyester / PVC*

Programming (Check One)

- L - Programmed, Low Frequency (125 kHz). Specify Programming Information.
- C - Programmed, Low Frequency (125 kHz) Casi-Rusco. (Identified on Ink jet Markings) Specify Programming Information.
- N - Non-Programmed, Low Frequency (125 kHz). Programming Information Not Required.

Front Packaging (Check One)

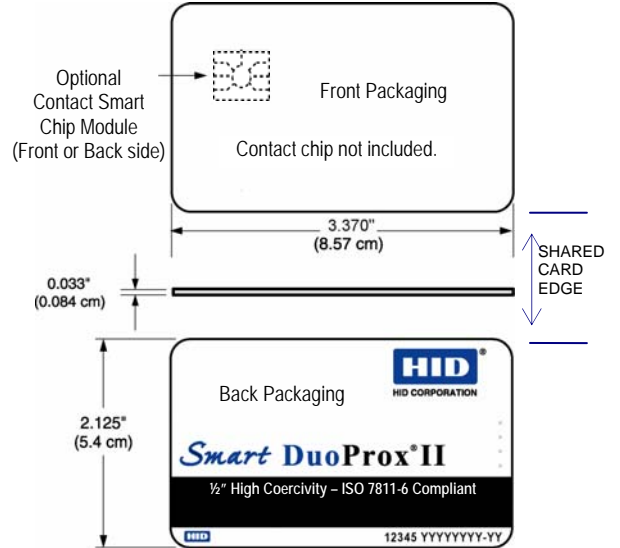
- G - Plain White PVC with Gloss Finish
- C - Custom Artwork with Gloss Finish – Specify Custom Artwork Number¹

Back Packaging (Check One)

- G - Plain White PVC with Gloss Finish²
- S - Standard Smart DuoProx II Artwork (shown)²
- C - Custom Artwork with Gloss Finish – Specify Custom Artwork Number^{1, 2}

Card Numbering³ (Check One)

- M - Sequential Matching Internal/External (Inkjetted)
- N - No External Card Numbering
- S - Sequential Internal/Sequential Non-Matching External (Inkjetted)
- R - Random Internal/Non-Matching Sequential External (Inkjetted)
- A - Sequential Matching Internal/External (Engraved)⁴
- B - Sequential Internal/Sequential Non-Matching External (Engraved)⁴
- C - Random Internal/Non-Matching Sequential External (Engraved)⁴



For a list of embeddable modules, contact your Regional Sales Representative.

Slot Punch⁵ (Check One)

- N - No Slot Punch (Printed location of vertical slot punch will remain)
- V - Vertical Slot Punch

12345 = Card ID Number YYYYYYYY-YY = Sales Order Number
--

Optional Custom Artwork¹

_____ (Specify Artwork Number – Refer to the Custom Artwork Forms for new Artwork)

Please enter your final card options from check boxes above. Example: 1398LGGMN

Final Part Number	1598							-	(Optional Artwork #)
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125 kHz Card Programming Information

Bit Numbers _____ (example: 26 bit) Format Number _____ (example: H10301)

Facility Code _____

(Custom Formats) Site Code _____ City Code _____ OEM Code _____

Internal Card No. Start _____ Stop _____

External Card No. Start _____ Stop _____

Special Instructions: _____

For Contact Smart Chip selection, contact your Regional Sales Representative. Standard configuration does not include a contact smart chip module.

¹ For new artwork files, contact Customer Service for custom artwork number, lead-times and cost.
² Cards ordered with plain white front and back packaging, with no HID artwork or with custom artwork, will still have a small "HID logo" and reference number printed in the lower left-hand corner and a slot punch target printed on the back of the card.
³ The external card number is placed in the bottom right-hand corner on the back of the card.
⁴ For Laser Engraved external numbers, consult factory for lead times and cost.
⁵ Cards are provided with an optional vertical slot punch at no additional charge. Some video imaging printers cannot accommodate pre-slot punched cards. Please consult with the printer manufacturer prior to ordering.
* The composite construction is recommended for all cards that will have an over-laminate applied.

Logical Access How to Order Guide – D00538, A.9

1456 – DESFire® Embeddable Card Ordering Form Guide

Please ensure each required option has been checked with the appropriate choice to fulfill a completed order form.

Base Model 1456 (4K) Composite 40% Polyester / PVC *

Programming (Check One)

- N - Non-Programmed (13.56 MHz)⁶. Programming Information Not Required.
- S - Custom Programmed , (13.56 MHz only)⁶, Specify Programming Information.

Front Packaging (Check One)

If desiring Custom Printing, specify Custom Artwork Number below.¹

- E - Contact Module Embeddable Plain Gloss White Finish

Back Packaging (Check One)

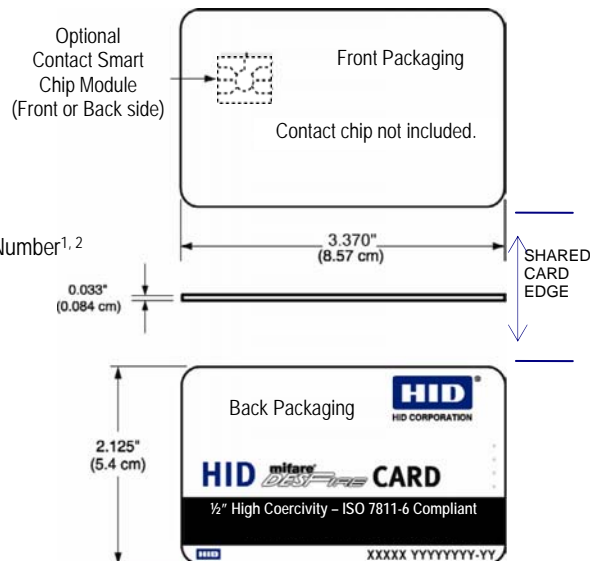
- G - Plain White with Gloss Finish²
- 1 - Plain White with Gloss Finish with Magnetic Stripe²
- C - Custom Artwork with Gloss Finish – Specify Custom Artwork Number^{1,2}
- 3 - Custom Artwork with Gloss Finish with Magnetic Stripe - Specify Custom Artwork Number^{1,2}

Card Numbering³ (Check One)

- M - Sequential Matching Internal/External (Inkjetted)
- O - Sequential External only (Inkjetted)
- N - No External Card Numbering
- S - Sequential Internal/Sequential Non-Matching External (Inkjetted)
- R - Random Internal/Non-Matching Sequential External (Inkjetted)
- A - Sequential Matching Internal/External (Laser Engraved)⁴
- B - Sequential Internal/Sequential Non-Matching External (Laser Engraved)⁴
- C - Random Internal/Non-Matching Sequential External (Laser Engraved)⁴

Slot Punch⁵ (Check One)

- N - No Slot Punch (Printed location of vertical slot punch will remain)
- V - Vertical Slot Punch



12345 = Card ID Number
 YYYYYYY-YY = Sales Order Number

For a list of embeddable modules, contact your Regional Sales Representative.

Option - Custom Artwork¹

_____ (Specify Artwork Number – Refer to the Custom Artwork Forms for new Artwork)

Please enter your final card options from check boxes above. Example: 1450NGGNN

Final Part Number	1456		E						-	(Options #)
--------------------------	------	--	---	--	--	--	--	--	---	-------------

13.56 MHz Card Programming Information

Bit Numbers _____ (example: 26 bit) Format Number _____ (example: H10301)

Facility Code _____

(Custom Formats) Site Code _____ City Code _____ OEM Code _____

Internal Card No. Start _____ Stop _____

External Card No. Start _____ Stop _____

Special Instructions: _____

For Contact Smart Chip selection, contact your Regional Sales Representative. Standard configuration does not include a contact smart chip module.

¹ For new artwork files, contact Customer Service for custom artwork number, lead-times, and cost.
² Cards ordered with plain white front and back packaging, with no HID artwork or with custom artwork, will still have a small "HID logo" and reference number printed in the lower left-hand corner and a slot punch target printed on the back of the card.
³ The external card number is placed in the bottom right-hand corner on the back of the card on Prox Format Programming only. Permanent Unique MIFARE 56 Bit serial # cannot be printed on cards.
⁴ For Laser Engraved external numbers, consult factory for lead times and cost.
⁵ Cards are provided with an optional slot punch at no additional charge. Some video imaging printers cannot accommodate pre-slot punched cards. Please consult with the printer manufacturer prior to ordering.
⁶ Includes a permanent Unique MIFARE 56 Bit Serial number.
 * The composite construction is recommended for all cards with over-laminate applied.

1457 – Combination (DESFire® / PROX) Embeddable Card Ordering Guide

Please ensure each required option has been checked with the appropriate choice to fulfill a completed order form.

Base Model 1457 (4K) Composite 40% Polyester / PVC *

DESFire Programming (Check One)

- L - Programmed, (125 kHz only)⁶. Specify Programming Information.
- N - Non-Programmed (125 kHz & 13.56 MHz)⁶. Programming Information Not Required.
- S - Custom Programmed, (13.56 MHz only)⁶, Prox Configured Specify Programming Information.
- R - Custom Programmed, (125kHz and Custom 13.56 MHz)⁶. Specify Programming Information.

Front Packaging (Check One)

If desiring Custom Printing, specify Custom Artwork Number below.
 E - Contact Module Embeddable Plain Gloss White Finish

Back Packaging (Check One)

- G - Plain White with Gloss Finish²
- 1 - Plain White with Gloss Finish with Magnetic Stripe²
- 3 - Custom Artwork with Gloss Finish with Magnetic Stripe - Specify Custom Artwork Number^{1,2}
- C - Custom Artwork with Gloss Finish - Specify Custom Artwork Number^{1,2}

125 kHz Prox Card Numbering³ (Check One)

- M - Sequential Matching Internal/External (Inkjetted)
- O - Sequential External only (Inkjetted)
- N - No External Card Numbering
- S - Sequential Internal/Sequential Non-Matching External (Inkjetted)
- R - Random Internal/Non-Matching Sequential External (Inkjetted)
- A - Sequential Matching Internal/External (Engraved)⁴
- B - Sequential Internal/Sequential Non-Matching External (Engraved)⁴
- C - Random Internal/Non-Matching Sequential External (Engraved)⁴

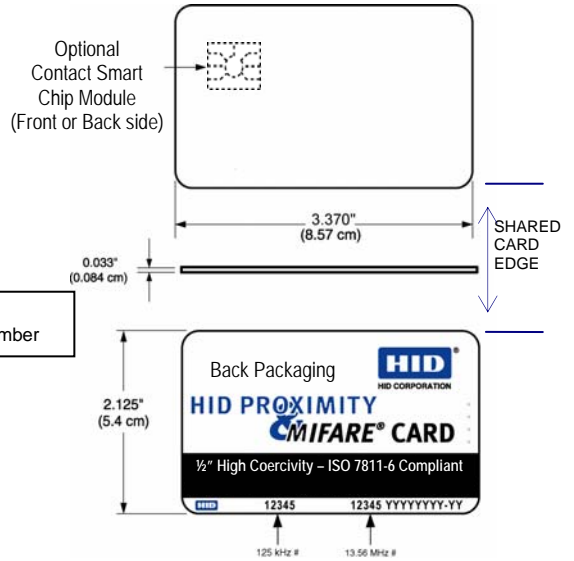
12345 = Card ID Number
 YYYYYYYY-YY = Sales Order Number

Slot Punch⁵ (Check One)

- N - No Slot Punch (Printed location of vertical slot punch will remain)
- V - Vertical Slot Punch

13.56 DESFire Card Numbering³ (Check One)

- M - Sequential Matching Internal/External (Inkjetted)
- O - Sequential External only (Inkjetted)
- N - No External Card Numbering
- S - Sequential Internal/Sequential Non-Matching External (Inkjetted)
- R - Random Internal/Non-Matching Sequential External (Inkjetted)
- A - Sequential Matching Internal/External (Engraved)⁴
- B - Sequential Internal/Sequential Non-Matching External (Engraved)⁴
- C - Random Internal/Non-Matching Sequential External (Engraved)⁴



- R - Random Internal/Non-Matching Sequential External (Inkjetted)
- A - Sequential Matching Internal/External (Engraved)⁴
- B - Sequential Internal/Sequential Non-Matching External (Engraved)⁴
- C - Random Internal/Non-Matching Sequential External (Engraved)⁴

For a list of embeddable modules, contact your Regional Sales Representative.

Option - Custom Artwork¹

_____ (Specify Artwork Number – Refer to the Custom Artwork Forms for new Artwork)

Please enter your final card options from check boxes above. Example: 1457NGGN

Final Part Number	1457		E						-	(Options #)
-------------------	------	--	---	--	--	--	--	--	---	-------------

13.56 MHz Programming Information

Bit Numbers _____ (example: 26 bit)
 Format Number _____ (example: H10301)
 Facility Code _____
 (Custom Formats) Site Code _____ City Code _____
 OEM Code _____
 Internal Card No. Start _____ Stop _____
 External Card No. Start _____ Stop _____
 PIN: Sequential: Start # _____ Random: Length _____

125 kHz Programming Information

Bit Numbers _____ (example: 26 bit)
 Format Number _____ (example: H10301)
 Facility Code _____
 (Custom Formats) Site Code _____ City Code _____
 OEM Code _____
 Internal Card No. Start _____ Stop _____
 External Card No. Start _____ Stop _____
 Special Instructions: _____

For Contact Smart Chip selection, contact your Regional Sales Representative. Standard configuration does not include a contact smart chip module.

¹ For new artwork files, contact Customer Service for custom artwork number, lead-times, and cost.
² Cards ordered with plain white front and back packaging, with no HID artwork or with custom artwork, will still have a small "HID logo" and reference number printed in the lower left-hand corner and a slot punch target printed on the back of the card.
³ The external card number is placed in the bottom left-hand corner (125kHz) and in the bottom right-hand corner (13.56 MHz) on the back of the card on Prox Programming only. Permanent unique MIFARE 56 Bit serial # cannot be printed on cards.
⁴ For Laser Engraved external numbers, consult factory for lead times and cost.
⁵ Cards are provided with an optional slot punch at no additional charge. Some video imaging printers cannot accommodate pre-slot punched cards. Please consult with the printer manufacturer prior to ordering.
⁶ Includes a permanent Unique MIFARE 56 Bit Serial number.
 * The composite construction is recommended for all cards with over-laminate applied.

Logical Access Software

naviGO Ordering Guide

HID's naviGO software is provided free of charge in combination with the purchase of Credential Credits (PN 86480). The software is also available in a Trial Kit (PN 86482). Both of these part numbers are described in more detail in the following How to Order Guide sections.

HID's logical access software, naviGO, includes two components, naviGO Workstation and naviGO Server. Depending on the logical access implementation desired, install both components or either component.

The packaging for HID on the Desktop PN 86480 includes the following:



The packaging for HID on the Desktop Trial Kit PN 86482 includes the following:



Please refer to HID's website for more detailed information on naviGO features and benefits as well as a survey of typical Logical Access Control Reference Implementations.

Credential Credits

HID on the Desktop Credential Credits - 8648x

HID's naviGO software creates and manages Windows log-on credentials as part of the HID on the Desktop solutions. In order for naviGO to create the credential and link it to a specific card, the system uses a Credential Credit. In essence, Credential Credits are the currency used by naviGO to pay for the log-on credential that is being requested by the user. **You will order a Credential Credit for each HID card that you wish to enable for logical access.**

There are three possible part numbers to order depending on the state of your HID on the Desktop implementation.

- Conversion from Trial Installation to Permanent
- A First-time Permanent Installation (skipped Trial offer)
- Adding more Credentials to an Existing Permanent Installation

Conversion from a Trial Installation

86483 Trial Conversion Key and Credential Credits

- Order this part number if you have a Trial Version of naviGO already installed and you have decided to transition to a permanent installation, and begin your implementation of HID on the Desktop.
- This does NOT include the software since the Trial Version is a complete version of software with full capabilities.
- The Activation Keys included in this package remove the time limit on the Trial naviGO software and provide 10 credits for permanent logical access credentials.



Installing a Permanent Version of HID on the Desktop for the First Time (The Trial Version was never installed)

86480 Standard naviGO Software and Credential Credits

- Order this part number if you have chosen to forego the Trial Version of naviGO and are ready to begin your implementation of HID on the Desktop.
- This package includes both components of naviGO – Workstation and Server.
- The Activation Keys included in this package allow for a permanent installation of the naviGO software and provide 10 credits for permanent logical access credentials.



Adding More Credential Credits to an Existing Installation

86481 Credential Credit Refill

- Order this part number if you have already implemented your permanent HID on the Desktop solution.
- This package does NOT include the software since you have already installed naviGO.
- The Activation Keys included in this package will allow you to add more naviGO Workstation clients and provide credits for additional permanent logical access credentials.



Trial Packages

Trial naviGO Software and Credential Credits Kit - 86482

This includes the following:

- Two software installation CDs -- naviGO Workstation CD and naviGO Server CD
- Activation Key Sheet -- naviGO Server Trial Activation Key (no other keys are necessary for Trial installation)

This free package includes a full 90-day trial of the naviGO software as well as ten temporary Credential Credits. You will need HID cards and OMNIKEY readers (or approved embedded readers) to implement a trial. If you do not already have these components, the following packages are available for purchase.

Card Packages

iCLASS / Prox Combo Cards (for iCLASS or Prox on the Desktop)

2124BG3MNN-10PAK iCLASS 32K (16K/16 + 16K/1) and HID Prox

Use *iCLASS / Prox / mag* combination cards to test both *Prox on the Desktop* and *iCLASS on the Desktop* solutions. These cards are pre-programmed with an HID 26 bit format and printed on one-side. The front side is left blank and suitable for dye sublimation imaging, if desired.

Crescendo (for Crescendo on the Desktop)

402AM-10PAK	Crescendo C200	iCLASS/HID Prox
407AM-10PAK	Crescendo C700	iCLASS/HID Prox
402CM-10PAK	Crescendo C200	MIFARE/HID Prox
407CM-10PAK	Crescendo C700	MIFARE/HID Prox

Use *Contact Chip / Prox / (iCLASS or MIFARE) / mag* combination cards to test all *HID on the Desktop* solutions. While they are primarily offered to test *Crescendo on the Desktop*, you can use these cards to test *Prox on the Desktop* and *iCLASS on the Desktop*. These cards are pre-programmed with an HID 26 bit format and printed on one-side. The front side is left blank and suitable for dye sublimation imaging, if desired.

Note: To test iCLASS on the Desktop with a Crescendo card, you must order one of the two models that contain the iCLASS technology.



Reader Packages

These reader kits allow users to purchase a minimum quantity of readers for trial and pilot testing. For detailed information on each reader, please refer to the Desktop Smartcard Reader section that follows on Page 25.

Prox

5325CL-5PAK
Includes five 5325 CLs



iCLASS

CLi Variety PAK
Includes three 6321 CLi s and two 5321 CLi s



5321CLi-5PAK
Includes five 5321 CLi s



6321CLi-5PAK
Includes five 6321 CLi s



Contact

Contact Variety PAK
Includes
3121 (2)
3021
4040
4321



Crescendo Evaluation Kit

A Crescendo Evaluation Kit contains a:

- Crescendo smart card stored in the Crescendo Pocket Guide. Choose from four different card types.

HID Part Number	
1405080111	Crescendo Evaluation kit C700 iCLASS, Prox, Magstripe
1405080112	Crescendo Evaluation kit C200 iCLASS, Prox, Magstripe
1405080113	Crescendo Evaluation kit C700 MIFARE, Prox, Magstripe
1405080114	Crescendo Evaluation kit C200 MIFARE, Prox, Magstripe

- Crescendo Smart Card Reader
This is a USB desktop reader optimized for use with the Crescendo smart card. If you have a contact smart card reader currently connected to your PC, you may choose to use that reader.
- Quick Start Guide

The Crescendo card within an Evaluation kit is a working, printed Crescendo card that contains an evaluation certificate issued by HID. The card is encoded with HID standard values in the contactless part for physical access. Evaluate your Crescendo smart card in three ways.

- Using HID's remote desktop server
- Using your own corporate network with Windows® server
- Together with Microsoft® Identity Lifecycle Manager 2007

To learn more, visit our evaluation site at www.hidcrescendo.com.



Desktop Smartcard Readers

Reader Ordering Guide

Each OMNIKEY Smart Card readers has a unique part number. These numbers as listed below and always represent the standard product. Customized products will receive an individual part number upon confirmation of the order. All part numbers must be complete for acceptance by HID Global's order entry system.

Due to organizational changes, product improvements, and firmware changes, part numbers of OMNIKEY Smart Card Readers are subject to change. For your reference, the previous part numbers are listed.

* **TAA** - TAA stands for Trade Agreements Act of 1979. The TAA is an Act of Congress that governs trade agreements negotiated between the United States and other countries. Provided is a list of countries in which United States institutions may purchase devices.

OMNIKEY Model	PC Interface	Description		Part Number	TAA* Part Number	Solution Compatibility
3111 Serial	Serial (RS 232)	<ul style="list-style-type: none"> Contact Reader EMV Standard (light) standing base TAA compliant 			R31110015-1	Crescendo Crescendo on the Desktop
3021 USB	USB	<ul style="list-style-type: none"> Contact Reader EMV, CCID Transparent housing TAA compliant 		R30210015-1	R30210009-1	Crescendo Crescendo on the Desktop
3121 USB	USB	<ul style="list-style-type: none"> Contact Reader EMV, CCID Standard (light) standing base TAA compliant 		R31210020-01	R31210049-1	Crescendo Crescendo on the Desktop
3121 USB (Jumbo standing base)	USB	<ul style="list-style-type: none"> Contact Reader EMV, CCID Jumbo standing base (431 Gramm) and middle piece TAA compliant 		R31210125	R31210103	Crescendo Crescendo on the Desktop
7121 Biometric	USB	<ul style="list-style-type: none"> Contact Reader CCID compliant Authentec RF Field Fingerprint Swipe Sensor Special Standing Base TAA compliant 			R71210003-1	Crescendo
		<ul style="list-style-type: none"> Contact Reader CCID compliant Authentec RF Field Fingerprint Swipe Sensor Driver CD TAA compliant 			R71210005	
4040 PCMCIA	PCMCIA	<ul style="list-style-type: none"> Contact Reader EMV TAA compliant 			R40400012	Crescendo Crescendo on the Desktop
4321 ExpressCard™ 54	ExpressCard™ 54	<ul style="list-style-type: none"> Contact Reader EMV, CCID No lip TAA compliant 			R43210001-2	Crescendo Crescendo on the Desktop

OMNIKEY Model	PC Interface	Description		Part Number	TAA* Part Number	Solution Compatibility
2061 Bluetooth	Bluetooth (USB 2.0 for configuration and charging)	<ul style="list-style-type: none"> Bluetooth connected contact smartcard reader Lan-yard attachable Two belt-clips Charging cable 		R20610000-1		Crescendo Crescendo on the Desktop
6121 USB Dongle	USB	<ul style="list-style-type: none"> USB 2.0 Dongle (SIM-sized card) EMV, CCID Key ring attachable Optionally available TAA compliant 		R61210020-2	R61210020-TAA	
OMNIKEY 6221 μSD	USB 2.0	<ul style="list-style-type: none"> Contact SIM sized card reader with Micro SD Memory support ISO 7861 SIM-Size (ID-000) contact slot Micro SDHC memory card slot supporting up to 32GB USB 2.0 		R62210000		
3821 USB PINPAD	USB	<ul style="list-style-type: none"> Contact Reader Secure Pin Entry (class 2/3) with display EMV, CCID TAA compliant 			R38210012-1	Crescendo
5321 V2 USB	USB	<ul style="list-style-type: none"> Contactless (13,56 MHz) and Contact Reader Transparent bracket EMV, CCID Optionally available TAA compliant 		R53210037-2	R53210037-3	Crescendo iCLASS on the Desktop Crescendo on the Desktop
5321 CL SAM	USB	<ul style="list-style-type: none"> Contactless (13,56 MHz) and Contact Reader Supporting SIM sized cards Transparent bracket Optionally available TAA compliant 		R53210038-2	R53210038-3	iCLASS on the Desktop
5321 CR	USB 2.0	<ul style="list-style-type: none"> Contactless (13.56MHz) Reader closed housing No edges and grooves for easy cleaning Waterproof casing IP67 TAA compliant 			R53210029-1	iCLASS on the Desktop
6321 USB	USB	<ul style="list-style-type: none"> Contactless (13.56 MHz) and SIM-sized contact reader Special card holder CCID Optionally available TAA compliant 		R63210004-1	R63210001-1	iCLASS on the Desktop
5321 CLI USB	USB	<ul style="list-style-type: none"> Contactless Desktop Reader iCLASS only Closed housing Transparent card retainer 		R53210039-1	N/A	iCLASS on the Desktop

OMNIKEY Model	PC Interface	Description		Part Number	TAA* Part Number	Solution Compatibility
6321 CLI USB	USB	<ul style="list-style-type: none"> ▪ Contactless Dongle Reader ▪ iCLASS only 		R63210003-1	N/A	iCLASS on the Desktop
5325 USB PROX	USB	<ul style="list-style-type: none"> ▪ Contactless (125 kHz HID Prox) and Contact Reader ▪ Transparent card retainer ▪ EMV, CCID ▪ TAA compliant 			R53250001-1	Crescendo Prox on the Desktop Crescendo on the Desktop
5325 CL USB PROX	USB	<ul style="list-style-type: none"> ▪ Contactless Only Reader (125 kHz HID® Prox) ▪ Closed Housing ▪ Transparent card retainer ▪ TAA compliant 			R53250002-1	Prox on the Desktop
Jumbo standing base 31xx	-	<ul style="list-style-type: none"> ▪ Jumbo standing base ▪ Middle piece ▪ Weight includes middle piece 431Gramm 			A00000003	OMNIKEY 3121 OMNIKEY 3111

Appendix

Custom Cards

Artwork Checklist

Company Name: _____ PO No. _____ Date _____
 Quantity: _____ Card Artwork File No. _____

Minimum order quantity for Custom Artwork is 500 cards per order. Some Custom Artworks may be higher.



This form, accompanied with the "Custom Artwork placement and Inkjet Location Form" MUST be filled out, SIGNED and returned to HID so that your order can be processed.

Credential Type: Composite PVC/Polyester¹ Cards (Additional fee and longer lead-time)

- | | |
|---|---|
| <input type="checkbox"/> 402/407 Crescendo Card | <input type="checkbox"/> 400 Combo Contact/Contactless Card |
| <input type="checkbox"/> 1597 Smart ISOProx II Card | <input type="checkbox"/> 1598 Smart DuoProx II Card |
| <input type="checkbox"/> 211 - iCLASS Embeddable Card | <input type="checkbox"/> 213 - iCLASS Prox embeddable Card |
| <input type="checkbox"/> 1436/1446 - HID MIFARE® | <input type="checkbox"/> 1437/1447 - HID Prox & MIFARE |
| <input type="checkbox"/> 1456 - HID DESFire® | <input type="checkbox"/> 1457 - HID DESFire® & Prox |

Artwork Placement, Font styles and Colors:

- Artwork Placement on Front Side of card
 Artwork Placement on Back Side of card.
 Font Style(s): _____
 Front Side Colors: _____
 Back Side Colors _____

Do you plan to print over or around the custom artwork with a dye sublimation printer? Yes No

"Surface" or "Laminated" Lithographic Printing (Refer to the "Anti-Counterfeiting Descriptions" page in this guide for details)


Card Options:

- Slot Punch ^{2,5}: Yes No Horizontal Vertical
 Signature Panel: Yes No Size: _____
 Front Card Finish: Gloss
 Back Card Finish: Gloss
 Magnetic Stripe Coercivity: High (ISO7811-6) Low (ISO 7811-2)
 Magnetic Stripe Type: Standard 3 Track Debitek 1/8" Other: _____

Anti-Counterfeiting Options:

- Invisible Ink: Red Yellow Blue Green Glow in the Dark
 Micro-fine Print: Yes No
 Hologram ⁷: Surface Embedded

Notes:

- Standard Composite Card is 25% Polyester and 75% PVC. A .035" thick card with 35% Polyester is also available. Contact Customer Service for details.
- Some cards will have printed "indicators" on the back of the card to show the vertical slot punch location.
- Some cards will have a small "HID logo"  and reference number, custom artwork file number, and external number (optional) printed on the card.
- Do not order slot punched cards for use in dye sublimation printers. Slot edge may damage the printer ribbon. Slot should be punched after dye sublimation printing.
- Some video imaging printers cannot accommodate pre-slot punched cards. Please consult with the printer manufacturer prior to ordering
- Surface Holograms cannot be placed over internal electronics.
- Representation, Warranty and Indemnity. Customer represents and warrants to HID that it owns, controls, or otherwise has the full and unrestricted right to use the custom artwork provided to HID for use in connection with this Custom Artwork Checklist Form (the "Custom Artwork") and to authorize and license HID to use and apply the Custom Artwork to the cards in the manner provided in this Custom Artwork Checklist Form. Customer agrees to indemnify HID and hold it harmless from and against any claims, liabilities, losses and/or expenses (including reasonable attorney fees and costs of suit) arising out of the use by HID of the Custom Artwork in the manner provided by this Custom Artwork Checklist Form or by any custom artwork proofs approved by the Customer."
- HID does not recommend placing custom graphics on either side of the Contact Smart Chip area.

Name: _____ Signature: _____ Date: _____

Electronic Artwork Checklist

File Submission & Preparation

This document gives digital artwork specifications from our press department. Use these guidelines and your project should go smoothly through the pre-press department.

MEDIA:

Please submit files via E-Mail or on CD. Compressed files should be self extracting. Submitted media will not be returned to the customer. FTP site available upon request.

PLATFORM: MS WINDOWS®/Macintosh®

Projects that are set up in any of the major applications (listed below under "Graphic Applications") generally translate to Macintosh® smoothly. Please save your final file with pictures embedded, outlined fonts and EPS Vector editable file.

FONTS:

Use Type 1 fonts and include screen and printer fonts on disk. Type may be converted to paths or outlines, but we cannot make copy changes to text submitted in this form. In addition, converted type loses the benefits of PostScript font definitions; hence, type quality may suffer. This is more noticeable in small type (-18 point).

PLACED GRAPHICS:

All placed graphics, saved as TIFF or EPS, should be included in their native program. If a Photoshop image is placed in a Quark document, we need the Photoshop image to produce the job. Sizing, cropping, rotation, etc. should all be done to the element in its native program and placed in Quark. Color images should be converted from RGB to CMYK. Special colors should be designated using PMS or provide color sample to be matched. Resolution of color images, B&W halftones, or duotones should be 300 dpi.

GRAPHIC APPLICATIONS (latest version):

Adobe Photoshop® - Adobe Illustrator® - QuarkXpress®

BITMAPS AND TRACING:

Scanned line art converted to bitmaps should have a resolution of 1200 - 2400 dpi. Lower resolutions will result in jagged curves. Many programs can convert (trace) bitmaps to vector drawings. Smoothing a traced image can be time consuming, but once completed yields a resolution independent graphic that will provide crisp reproduction for all future uses. We can provide this service for you at our regular file intervention rate. Minimum required DPI (dots per inch) is 300.

BLEEDS:

Please incorporate 0.125" of overwork for all bleed images. Any portion of the image that extends to the edge of the product is considered a bleed. Minimum required size with bleed is 2.227" x 3.477" for standard card size file.

MARGINS:

Elements that do not bleed should be at least 0.125" from the edge.

Anti-Counterfeiting Descriptions

Printing Types

- 1) **Laminated Lithographic Printing:** High resolution (>3600 dpi) offset printing technology yields photographic quality images. Laminated printing places the ink layer under a rigid clear plastic overlay which protects the printed image from abrasion and allows you to re-print over the existing artwork on the card. The cards are compatible with all Photo ID printing methods: dye-sub, reverse transfer and resin transfer.
- 2) **Surface Lithographic Printing:** This process is identical to the Laminated Lithographic Printing, but the ink layer is applied to the outer surface of the finished card and may include a clear coat. You may not be able to re-print on the card. The inks and clear coat are not compatible with D2T2 printing (Dye Diffusion Thermal Transfer, AKA dye-sublimation). The surface printing is durable enough for normal handling and use, but may wear more quickly in heavy use or swipe (magnetic stripe) applications. It is not recommended for high use applications, or for printing critical data such as emergency information. This process is often used for quick turnaround of simple text and graphics on card backs.

Surface Hologram

Holograms are one of the most recognizable anti-counterfeiting devices on the market. The optically variable image cannot be duplicated with standard printing. Surface holograms are applied via hot stamping to the exterior of the card surface. This style of application is common to all financial transaction cards.

Embedded Hologram

Embedded holograms are positioned under the rigid clear outer layer of the card surface. Unlike surface holograms, embedded holograms are amenable to dye sublimation – allowing the entire card surface to be personalized. This application style furthers the effectiveness of the anti-counterfeiting feature by requiring expensive specialized equipment during manufacture.

Embedded Advantage™ Security Seal

The Advantage™ product is a specialized optically variable device that is manufactured in only one plant worldwide. It has been the OVD of choice for many government identity documents, including many states driver licenses and the INS card. Like the embedded hologram, this device is placed under the rigid clear outer layer and is not subject to surface abrasion and wear. Advantage™ images shift from orange to green at different viewing angles.

Invisible Ultra-Violet (UV) Fluorescing Images

Common on credit card, currency and travel documents, invisible ink images provide a covert anti-counterfeiting mechanism. Though blue/violet fluorescing ink is readily available and inexpensive, red, green, yellow and orange fluorescing pigments remain difficult to acquire. This covert anti-counterfeiting device remains popular because of its relatively easy implementation in the field.

Micro-fine Printing

Very small spot color printing that exploits the limitations of inkjet, toner based (laser) and dye sublimation printers. Counterfeit reproductions can be determined with a handheld magnification tool.

Guilloche Printing

Fine line interlocking spot color patterns that are extremely difficult to scan and reproduce. These design elements are often multicolor and are commonly used on currency and travel documents.

Composite Formulations

Composite formulations are designed for durable applications and for use in dye sublimation printers that employ re-transfer technology and/or polyester laminate patches. Composite cards will minimize the warping caused by such processes. These formulations derive their strength from combining biaxial oriented polyester (OPET) with traditional polyvinyl chloride (PVC).



Custom Card Artwork Placement and Inkjet Location Guides

Standard PVC and Composite PVC/Polyester Cards

Company Name:		PO No.		Date	
Quantity:		Card and Artwork File No.			

1. External Number:

- Standard Location: The standard external # location is shown on the template below. The external # can only be printed on the back of the card. The external # will be printed in the standard location, unless otherwise specified.
- Custom Location: Please indicate the desired external # location by writing "12345" on the appropriate template. The external # can only be printed on the back of the card.

2. An Artwork File Number is placed on each card. The standard location is indicated by the "CCCCC". The standard location for the custom artwork number is on the back side of the card. Please indicate/incorporate the artwork number on the artwork. *If there will be front side printing only, the custom artwork number will be placed on the printed side, opposite the standard location.*

3. Artwork Placement: Please indicate the placement of your artwork on the template below. Custom artwork must clear the slot punch locations and edges by a min. of 0.125".

4. Magnetic Stripe (Optional): If the location of the magnetic stripe is custom (other than standard) and/or if other types of magnetic stripes are to be added to the card (i.e. Debitek stripe), indicate the locations of the magnetic stripe(s) on the template.

- Standard Location
- Custom Location

Card Artwork Templates

Slot Punch Indicators

12345 = Card ID Number
 YYYYYYYY-YY = Sales Order Number

Back

Front

Contact Smart Chip location to be embedded compliant with ISO 7816 on front or back side.
HID does not recommend placing custom graphics on either side of the Contact Smart Chip area.

Optional Magnetic Stripe
(1/2" HICO/High Energy OE)

12345 12345 YYYYYYYY-YY

↑ ↑

125 kHz # 13.56 MHz #

- Notes:
1. External # location reads in the direction as shown. External # character height is approximately 0.1".
 2. Cards will have a small "HID logo" and reference number printed in the lower left-hand corner and a slot punch target printed on the back of the card.
 3. A standard custom artwork file number is printed on the back side of the card. Front side printing of this same number is an option.
 4. Slot punch location "indicators" will appear on the back side of the card only.
 5. Do not order slot punched cards for use in dye sublimation printers.
Slot edge may damage the printer ribbon. Slot should be punched after dye sublimation printing.
 6. Some video imaging printers cannot accommodate pre-slot punched cards. Please consult with the printer manufacturer prior to ordering.

Name: _____ Signature: _____ Date: _____

Identity & Access Management Evaluation Kit Questionnaire

Thank you for your interest in HID's Crescendo evaluation kit.

So that we may send you the most appropriate evaluation kit we would be grateful if you could spare a few moments to fill in this questionnaire - answering as many questions as you can.

Please send your completed questionnaire to the following email address:
oneidentity@hidglobal.com

Thanks for taking the time to complete this form!

NOTE: Questions marked * are mandatory.



CONTACT DETAILS

- 1a. *Your name: _____
- 1b. *Name of your organisation: _____
- 1c. *Phone number: _____
- 1d. *E-mail address: _____

- 1e. *Eval Kit Delivery address:
- Address 1: _____
- Address 2: _____
- Address 3: _____
- Town/City: _____
- ZIP/Postcode: _____
- Country: _____

- 1f. *Nature of your business / organisation
- Systems Integrator: VAR:
- Distributor: Installer:
- Reseller: Consultant:
- End-user: Other - please specify: _____

PROJECT INFORMATION

Do you have an upcoming project in mind - if so what type of business / organisation will the cards be deployed in?

- 2a. End-user business
- Local/central government: Healthcare:
- Defence: Education:
- Police: Energy:
- Utilities: Manufacturing:
- Financial services: Enterprise:
- Other - please specify: _____

- 2b. Potential number of users in first year: _____
- 2c. Potential number of users over next 5 years: _____
- 2d. Likely timescales for deployment:

- < 6 months < 12 months
- < 2 years Unknown:





CARD REQUIREMENTS – CONTACTLESS CHIP

- 3a. *Physical smart card applications please tick all that apply:
- | | | | |
|------------------------|--------------------------|------------------------------|--------------------------|
| Door Access: | <input type="checkbox"/> | ePurse / eVending / eTicket: | <input type="checkbox"/> |
| Time and Attendance: | <input type="checkbox"/> | Secure Print Release: | <input type="checkbox"/> |
| Mustering: | <input type="checkbox"/> | Car Park Access: | <input type="checkbox"/> |
| Loyalty/Reward scheme: | <input type="checkbox"/> | Event Management: | <input type="checkbox"/> |

Other - please specify: _____

- 3b. *Contactless technologies, please tick all that apply:
- | | | | |
|-----------|--------------------------|--------------|--------------------------|
| HID Prox: | <input type="checkbox"/> | Indala Prox: | <input type="checkbox"/> |
| iClass: | <input type="checkbox"/> | MIFARE: | <input type="checkbox"/> |
| Legic: | <input type="checkbox"/> | | |

Other - please specify _____

3c. Do you have any particular contactless chip coding requirements?

3d. Do you have any particular contactless chip programming requirements?



CARD REQUIREMENTS – CONTACT CHIP

- 4a.*Logical smart card applications please tick all that apply:
- | | | | |
|---------------------------------|--------------------------|-------------------------|--------------------------|
| Secure PC / Network Logon: | <input type="checkbox"/> | Digital Signature: | <input type="checkbox"/> |
| Secure E-mail: | <input type="checkbox"/> | Secure VPN/SSL: | <input type="checkbox"/> |
| Secure Web Access: | <input type="checkbox"/> | Secure Single Sign On: | <input type="checkbox"/> |
| Secure Pre-boot Authentication: | <input type="checkbox"/> | Secure Disk Encryption: | <input type="checkbox"/> |

Other - please specify: _____

- 4b.*Contact standards support, please tick all that apply:
- | | | | |
|---------------------------------|--------------------------|----------------------|--------------------------|
| CryptoAPI / MSCAPI: | <input type="checkbox"/> | PKCS#11: | <input type="checkbox"/> |
| Microsoft BaseCSP / Minidriver: | <input type="checkbox"/> | PKCS#15: | <input type="checkbox"/> |
| FIPS140-2: | <input type="checkbox"/> | Common Criteria EAL: | <input type="checkbox"/> |
| FIPS 201 (PIV): | <input type="checkbox"/> | BAC/EAC: | <input type="checkbox"/> |
| EMV: | <input type="checkbox"/> | | |

Other - please specify: _____

END-USER ENVIRONMENT

5a. Which operating system(s) will the cards be used with – please specify:
Server (example: Windows 2003 Server): _____

Client (example: Windows XP or Vista): _____

5b Certificate authority – Please specify: _____
(example Microsoft CA)

- 5c.* Do you intend to use a Card Management system. If so which one:
- | | | | |
|---------------------|--------------------------|--------------|--------------------------|
| Microsoft ILM 2007: | <input type="checkbox"/> | Bell ID CMS: | <input type="checkbox"/> |
| Intercede MyID: | <input type="checkbox"/> | AET BlueX: | <input type="checkbox"/> |
| ActivIdentity CMS: | <input type="checkbox"/> | None: | <input type="checkbox"/> |
- Other - please specify: _____



CARD PERSONALISATION

6a. Are you interested in having your cards graphically personalized by HID?
Yes: No:

6b. If yes, please state any requirements you may have



READERS

7a. Do you have any requirements for contact/contactless readers.
If so please specify.

For more information, click [here](#).



PRINTERS

8a. Do you have any requirements for printers.
If so please specify.

For more information, click [here](#).



ACCESSORIES

9a. Do you have any requirements for card accessories as card holders, yoyo's or lanyards.
If so please specify.

GENERAL

10a. Where did you hear about Crescendo:
Salesperson: Website:
Conference: Advert:
Existing customer:

Other - please specify:

10b. When may we contact you?

10c. Please feel free to include any other relevant information here.

