Extended Access Technologies RFID and Contact Technology Embedded and Desktop
How to Order Guide

PLT-04888, Rev A.8
April 2023

HID

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Contacts

For technical support, please visit: **https://support.hidglobal.com.**

What's new

Date	Description	Revision
April 2023	Updated minimum order quantity values for the iCLASS SE Reader Module.	A.8

A complete list of revisions is available in **Revision history**.

Contents

1. Overview

Welcome to Extended Access Technologies by HID.

HID offers a variety of Desktop readers, reader boards and embedded modules designed to meet a variety of requirements for form, fit, and function. Use this How To Order Guide or speak with one of our integration specialists (refer to the following email addresses) to find the housed Reader, Reader Board or module that best meets your requirements across a number of design and use criteria.

1.1 Integration specialist contact:

EMEA	Americas	APAC
Connect_Europe@hidglobal.com	Connect_Americas@hidglobal.com	Connect_APAC@hidglobal.com

1.2 Secure Identity and general purpose Ssolutions

HID is the trusted, worldwide leader in providing RFID solutions for the delivery of Secure Identity. The HID Extended Access Technologies embedded and desktop solutions provide OEMs and end-customers with a unique platform to extend the use of HID technology beyond traditional access control to include applications in banking, cashless payment, biometrics, alarm system control, HVAC, medical devices, laptops, secure print and much more. We offer a wide range of desktop readers, Reader Boards and embedded modules designed to meet a variety of requirements for form, fit, and function.

1.3 Logical Access/PC applications

Logical access encompasses a number of PC- and network-related applications including secure authentication and/or log-in to the PC or network, secure email, secure printing, data encryption, file/folder encryption, single sign-on, and remote VPN access. By collaborating with IT industry leaders, HID has complemented its Physical Access Control System (PACS) offerings with an extensive portfolio of logical access offerings and enabling a wide range of logical/physical convergence solutions.
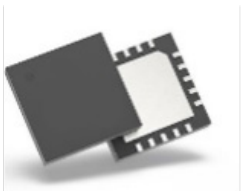
1.4 Contactless Embedded Transponders

iCLASS® eUnit - The HID iCLASS 13.56 MHz transponder can be used in diverse tagging applications such as long-range gate transmitters, containers and key fobs. The iCLASS eUnit is easy to add to any device by gluing, molding or fastening the eUnit Tag transponder to any non-metallic housing

eProx Tag - HID's eProx 125 kHz transponder assists third party manufacturers with embedding HID proximity technology into applications such as gate transmitters, key heads, and badges. The eProx transponder comes in a number of form factors with and without a clear poly covering, depending on the coil diameter. The transponder can be easily glued, molded or fastened into any non-metallic housing.

2. Product selector guide - secure identity and general purpose applications

13.56 MHz contactless and contact reader technology

DTK	3134ANM0000	Not applicable		3134BNK0000
Embedded Module	iCLASS SE® Reader Module	MIFARE Easy Reader Core	MIFARE Easy Reader Board	OMNIKEY Secure Element
Features	• iCLASS SE Reader Platform • Ultra low power for battery applications	• MIFARE smart cards		• OMNIKEY Secure Element Platform • Seos Credentials
Image				
Interface(s)	TTL, UART, Wiegand, Clock-and-Data	CMOS TTL	RS-232	ISO7816 -3 (T=1)
Power	3.5 to 10 V DC (HF) 5 to 10 V DC (HF + LF) (4 or 6 × 1.5 V AA or 1 × 9 V battery / line power)	5 V DC + or -10% regulated		Voltage classes A, B, and C (5 V and 3 V respectively) supported
Current	<10 µA during sleep <120 mA during card read	150 mA <10 mA in power down mode		Normal Operation - 25mA Max Standby Operation - 100uA (2.7V<Vcc<3.3V) Hibernate Operation - 1uA (1.62V<Vcc<1.98)
Antenna(s)[1]	Single External HF, off-the-shelf Single External LF, off-the-shelf	Single External	Single Integrated	Not applicable
Contact Slot	None	None	None	Not applicable
Protocol	Wiegand, HID custom and pass-through	Custom ASCII and binary protocol		ISO7816 -3 (T=1)
Integration Difficulty	Medium Embedded in host system, Antenna optimization required	Medium	Medium	Difficult
Size	**Small form factor:** 1.1 × 1.2 × 0.272 in 27.94 × 30.48 × 6.91 mm **Medium form factor:** 1.3 × 1.7 × 0.281 in 33.02 × 43.18 × 7.13 mm	1.0 × 1.18 × 0.19 in 2.0 × 25.5. × 30.0 mm	2.76 × 1.77 × 0.48 in 70.0 × 45.0 × 12.1 mm	4 mm x 4 mm Surface Mount Device VFQFN 20 Pin package

Note: Custom tuning and custom size of antenna available - contact your HID representative for further information

3. iCLASS SE Reader Module

> **Note:** The iCLASS SE Reader Module is not recommended for new design-ins. Please talk to your local HID representative who can advise on availability of the replacement product.

The iCLASS SE Reader Module is part of HID's open iCLASS SE® platform that goes beyond the traditional smart card model to offer a secure, standards based technology-independent and flexible solution based on Secure Identity Object® (SIO®), a new portable and open credential methodology. Building on the success of the existing OEM modules, including OEM50, the iCLASS SE Reader Module enhances existing functionality with new features that enable the use of NFC smart phones and other devices for mobile access while also providing increased levels of security. HID's iCLASS SE Reader Module allows integrators to design third party solutions that support a full range of contactless card technologies, including Seos®, iCLASS®, MIFARE and HID Prox as well as integration into U.S. Government applications. The iCLASS SE Reader Module's dual frequency capability allows the use of both high frequency and low frequency credentials with the same reader, providing a solution for mixed credential and credential migration applications.

Description	Base Part #	Current Rev #	Module API functionality and 125 kHz Interpreter[1]	Security[2]		Optional Config Suffix	Product Image
iCLASS SE Reader Module Read/Write Module Standard iCLASS, iCLASS SE/SR, iCLASS Seos, SIO on MIFARE Classic, SIO on MIFARE DESFire EV1 Dimensions: 1.1 × 1.2 × 0.31 in 28 × 30 × 8 mm	SE3200[3]	B	**Read/Write** 0 - HF Only P - Standard Prox L - Custom Prox **Read Only (Datamapper)[4]** 1 - HF Only S - Standard Prox T - Custom Prox	0 - Standard-V1	-	- xxxxxx	
iCLASS SE Reader Module Read/Write Module Circuit card Assembly Standard iCLASS Seos, iCLASS (iCLASS Standard, SE and SR), SIO on MIFARE Classic, SIO on MIFARE DESFire EV1 Dimensions: 1.3 × 1.7 × 0.31 in 33 × 43 × 8 mm	SE3210[3]	B	**Read/Write** 0 - HF Only P - Standard Prox L - Custom Prox **Read Only (Datamapper)[4]** 1 - HF Only S - Standard Prox T - Custom Prox	0 - Standard-V1	-	- xxxxxx	

[1] 125 kHz Prox Interpreters:
 0 = HF Only - No Prox support
 P or S = Standard format support = HID Prox, AWID, EM4102, and Indala Prox (10022 - 26 bit)
 L or T = Custom Prox = HID Prox, EM4102 and Indala Prox Custom (provide reader format number with order)

[2] Security Options:
 0 = Standard Security (Version 1) Keyset - coupled with the Standard 13.56 MHz interpreter provides compatibility with iCLASS SE, iCLASS SR, standard iCLASS, SE for MIFARE Classic and SE for MIFARE DESFire EV1 credentials.

[3] Minimum orders of 20 pieces, supplied in trays of 20 pieces. Orders for quantities other than multiples of 20 pieces are not possible.

[4] Read Only Modules have the Datamapper application loaded which replaces the Card Edge APIs that allow full Read/Write capability.

Model Description	Base Part Number
iCLASS SE Reader Module BT Xtender for SE Reader Module Rev B, includes BT Antenna and Cable Minimum Order Quantity 100 pieces and in multiples of 100.	4092A02[1]
iCLASS SE Reader Module HF Antenna (Air Tuned) 34 x 48 mm (1.34 x 1.89 in) Minimum Order Quantity 100 pieces and in multiples of 100.	4090A10[1]
iCLASS SE Reader Module HF Antenna (Air Tuned) 38 x 83 mm (1.5 x 3.26 in) Minimum Order Quantity 100 pieces and in multiples of 100.	4090A11[1]
iCLASS SE Reader Module HF + LF Antenna (Air Tuned) 34 x 48 mm (1.34 x 1.89 in) Minimum Order Quantity 100 pieces and in multiples of 100.	4090A16[1]
iCLASS SE Reader Module Antenna Cable (Pack of 20) 51 mm (2 in) For use with SE3200 Antenna Connector on one end, bare wire connection on other end.	4091A10
iCLASS SE Reader Module Antenna Cable (Pack of 20) 51mm (2in) For use with SE3210 Antenna Connector on one end, iCLASS SE Reader Module Connector on other end.	4091A11
iCLASS SE Reader Module LF Antenna 65 x 28 x 1.3 mm (2.56 x 1.10 x .050 in) Minimum Order Quantity 200 pieces and in multiples of 200.	6500-101-03
iCLASS SE Reader Module Developer Tool Kit	3134ANM0000
iCLASS SE Test Card Pack Pre-programmed card set to test data output from iCLASS SE Readers.	3156-700
iCLASS SE Reader Module DTK Credential Pack for full testing of technology support.	MMP-00060

1 Supplied in trays of 20 pieces packed in boxes of 5 trays (100 pieces in total). Orders for quantities other than multiples of 100 pieces are not possible.

Description	Part Number		
	Base Part Number	Elite (E) or Standard Security (0 or 2)	Configuration Settings[1]
Elite Upgrade Cards[2] Setup iCLASS SE Platform readers for Elite credential keys or reader admin keys.	SEC9X-CRD-	E = Elite Key[3]	-P000 = Standard to Elite reader admin keys
		E = Elite Key[3]	-P001 = Elite credential keys
Elite Downgrade Cards[2] Setup iCLASS SE Platform readers for standard credential keys or reader admin keys.	SEC9X-CRD-	E = Elite Key[1]	-P002 = Elite to Standard reader admin keys
		0 = Standard-1 key or standard-2 key	-P003 = Standard-1 credential keys -P004 = Standard-2 credential keys

[1] Keys
Specify Elite "E" or Standard-1/Standard-2 "0" based upon keys ALREADY LOADED in the reader that needs to be configured.

[2] Elite Upgrade and Downgrade Cards
Reader admin keys and reader credential keys must both be changed to upgrade or downgrade to or from Elite. A separate card is required for reader admin keys and reader credential keys. To complete an Elite upgrade or downgrade a Reader Configuration Card with specific configuration extension may also be required to modify configuration options other than Elite keys, for example modification of 125 kHz or 13.56 MHz interpreters.

[3] Keys
Specify Elite "E" based upon Elite keys TO BE LOADED in the reader that needs to be configured.

4. HID Mobile Access
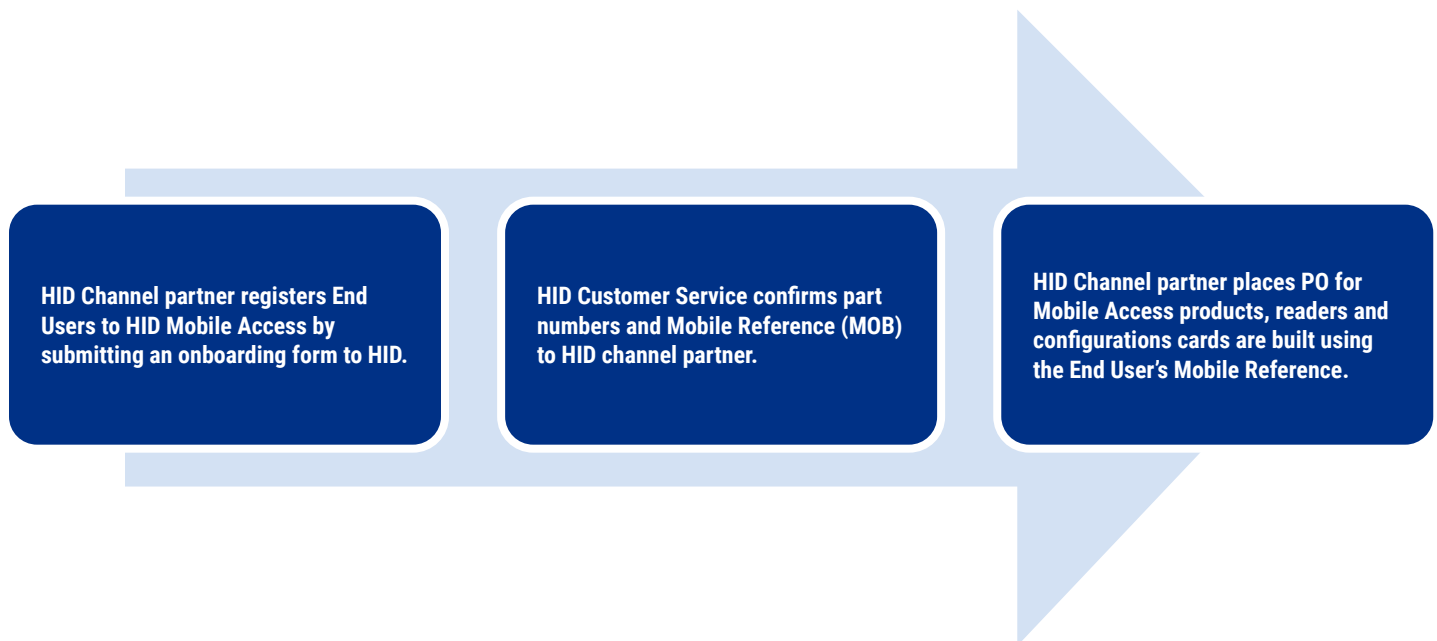
What is HID Mobile Access?

HID Mobile Access® complements your existing credentials based solution. In addition to using cards or fobs, staff can now securely access facilities using their Android or iOS mobile device.

HID Mobile Access, powered by Seos, consists of the following components:

- HID Mobile Access Portal: A management portal that allows you to manage users and securely issue or revoke Mobile IDs to users' handsets. The portal is available as a hosted service.
- HID Mobile Access Application: This app is available for Android and iOS devices, free of charge.
- Mobile IDs: The Mobile IDs with integrated Seos technology are for management of trusted identities.
- iCLASS SE mobile-enabled Readers.

Onboarding and ordering

The following steps are required to complete onboarding, to be able to order products for use with HID Mobile Access:

HID Channel partner registers End Users to HID Mobile Access by submitting an onboarding form to HID.	HID Customer Service confirms part numbers and Mobile Reference (MOB) to HID channel partner.	HID Channel partner places PO for Mobile Access products, readers and configurations cards are built using the End User's Mobile Reference.

To get more information on how to register for HID Mobile Access please contact you HID Sales Representative or HID Customer Service.

Contact information is available at: **http://www.hidglobal.com/customer-service**

Solution component overview

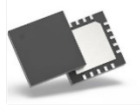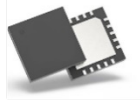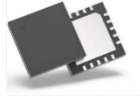| Component	Details	Supplemental information needed for order
Mobile Reference (MOB)	Mobile References are specific to a given organization and are confirmed during account setup. The correct Mobile Reference must be supplied when ordering HID Mobile Access Reader, Configuration Cards, and Mobile IDs.	
Mobile IDs	Mobile IDs are virtual credentials electronically delivered to the Organizations Mobile Access Portal account. Part number: CRD633ZZ-xxxxx Custom Mobile ID, xxxxx specific to organization and issued at time of part number creation.	xxxxx specific to organization
Mobile-Ready Readers	Mobile-Ready readers are prepared to support HID Mobile Access, but lack the personalized configuration to read an organization's specific Mobile IDs. These readers can be ordered at any time but will require field activation after the organization has completed registration for HID Mobile Access. To support a specific organization's Mobile IDs, these readers need to be personalized using a Mobile Key Card. Mobile-Ready readers can be ordered with NFC support only, or NFC and Bluetooth Smart support.	
Mobile-Enabled Reader	Mobile-Enabled readers are fully activated and personalized to support an organization's specific Mobile IDs. These readers can only be ordered after the organization has completed registration for HID Mobile Access and assigned a Mobile Reference (MOB) or HID Elite Reference (ICE). MOB or ICE will be required at time of order. Mobile-Enabled readers can be ordered with NFC support only, or NFC and Bluetooth Smart support.	Mobile Reference
Mobile Key Card	Configuration card used to personalize and activate a Mobile-Ready reader; converting it to a Mobile-Enabled reader. **For iCLASS SE Reader Module and OMNIKEY 5x27CK Readers:** Part number: SEC9X-CRD-E-MKYD **For OMNIKEY SE Platform Readers:** Part number: SEC-OK-CRD-E-MKYD	Mobile Reference
Mobile Admin Card	Configuration card used to enable reader to communicate with Mobile app to adjust Bluetooth range settings on Mobile-Enabled Readers. Custom part number: SEC9X-CRD-MAD-xxxx xxxx specific to organization and issued at time of part number creation.	For SEC9X-CRD-xxxx: - xxxx specific to organization

5. OMNIKEY Secure Element

The OMNIKEY® Secure Element is HID's next generation secure element replacing the iCLASS SE processor, which has been used in a multitude of different devices in various industries as a key to the HID Ecosystem. So, the story of simple to use, high-end security will continue to the next level.

The OMNIKEY Secure Element enables OEM partners to become part of the HID Ecosystem. This single chip represents a tamper-proof key to leverage all the advantages of Seos® and other technologies from HID, such as iCLASS® and iCLASS SE®. It can also be used for other card technologies like MIFARE DESFire. It enables reader manufacturers, developers, and system integrators to quickly and easily integrate SIO and allows them to make their devices TIP nodes.

In addition to the enablement of the HID Ecosystem, the feature-rich OMNIKEY Secure Element can also be used for true random number generation, secure key storage, and security enhanced encryption support.

The OMNIKEY Secure Element enhances security with a device and technology-independent layer of additional security on top of device-specific security, acting as a digital data wrapper for additional key diversification, authentication and encryption.

Description	Base Part #		Optional Custom Suffix	Product Image
OMNIKEY Secure Element Chip Surface Mount Device, 4 mm x 4 mm VFQFN 20 Pin package Reel of 200 chips	SEL55100001	-	xxxxxx	
OMNIKEY Secure Element Chip Surface Mount Device, 4 mm x 4 mm VFQFN 20 Pin package Reel of 1,000 chips	SEL55100000	-	xxxxxx	
OMNIKEY Secure Element Accessories OMNIKEY Secure Element sample pack of 10 chips	SEL55100000-SAMPLE	-	xxxxxx	
OMNIKEY Secure Element Developer Toolkit	3134BNK0000	-	xxxxxx	

Description	Part Number		
	Base Part Number	**Elite (E) or Standard Security**	**Configuration Settings[1]**
Elite Upgrade Cards[2] Setup OMNIKEY SE Platform readers for Elite credential keys or reader admin keys.	SEC-OK-CRD	E = Elite Key[3]	-P000 = Standard to Elite reader admin keys
		E = Elite Key[3]	-P001 = Elite credential keys
Elite Downgrade Cards[2] Setup OMNIKEY SE Platform readers for standard credential keys or reader admin keys.	SEC-OK-CRD	E = Elite Key[3]	-P002 = Elite to Standard reader admin keys
		E = Elite Key[3]	-P003 = Standard-1 credential keys

[1] Keys
Specify Elite "E" or Standard-1/Standard-2 "0" based upon keys ALREADY LOADED in the reader that needs to be configured.

[2] Elite Upgrade and Downgrade Cards
 Reader admin keys and reader credential keys must both be changed to upgrade or downgrade to or from Elite. A separate card is required for reader admin keys and reader credential keys. To complete an Elite upgrade or downgrade a Reader Configuration Card with specific configuration extension may also be required to modify configuration options other than Elite keys, for example modification of 125 kHz or 13.56 MHz interpreters.

[3] Keys
Specify Elite "E" based upon Elite keys TO BE LOADED in the reader that needs to be configured.

Product selector guide – general purpose applications

13.56 MHz contactless and contact reader technology

DTK	Not applicable		Not applicable	
Embedded Module	Multi-ISO Reader Core	Multi-ISO Reader Board	MIFARE-Easy Reader Core	MIFARE-Easy Reader Board
Features	13.56 MHz Smart Cards, RF and Contact Payment Card		13.56 MHz Smart Cards,	
Image				
Interface(s)	CMOS TTL	RS-232	CMOS TTL	RS-232
Power	5 V DC + or - 10% regulated		5 V DC + or - 10% regulated	
Current	90 - 200 mA depending on antenna (without connected SAM) < 10 mA at power down mode	< 150 mA (without SAM) < 10 mA at power down mode	90 - 150 mA depending on antenna (without connected SAM) < 10 mA at power down mode	150 mA < 10 mA at power down mode
Antenna(s)[1]	Single External Integrator must develop	Single External	Single External Integrator must develop	Single External
Contact Slot	Support for single external socket	1 × integrated ID-000 socket	Not applicable	
Protocol	Custom ASCII and Binary Protocol		Custom ASCII and Binary Protocol	
Integration Difficulty	Medium		Medium	
Size	1.0 × 1.18 × 0.19 in 2.0 × 25.5 × 30.0 mm	2.76 × 1.77 × 0.48 in 70.0 × 45.0 × 12.1 mm	1.0 × 1.18 × 0.19 in 4.8 × 25.5 × 30.0 mm	2.76 × 1.77 × 0.48 in 70.0 × 45.0 × 12.1 mm

Multi-ISO - embedded reader family

The family of 13.56 MHz Multi-ISO Reader Boards supports one of the broadest ranges of transmission protocols and transponder ICs available on the market. Featuring integrated SAM support that enables state of the art security, the highly interoperable reader boards support a wide range of industry standards including ISO 14443A/B, ISO 15693, ISO 18000-3, and EPC, allowing the reader to be easily used for public transport, financial transaction, and many other applications. The reader board is also optimized for maximum data throughput times on both the air and serial interface, and is available with a variety of antenna size options for easy integration in virtually any mobile or compact application.

Model	Description	Part Number	Product Image
Multi-ISO Reader Core	Multi-ISO Reader Core, (F/W V1.2)	0701800159-1	
Multi-ISO Reader Board	Multi-ISO Reader Board, RS-232 (F/W V1.2)	0701800160	
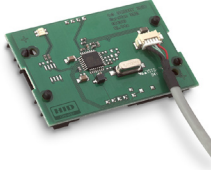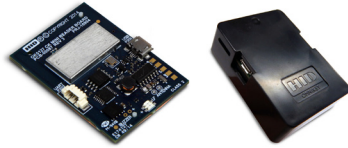
MIFARE Easy embedded readers

The MIFARE Easy embedded readers are a convenient and cost-efficient solution for systems integrators and terminal manufacturers looking for a secure and scalable solution for use in various general purpose solutions featuring read/write capability, MIFARE Easy reader boards are designed to be easily integrated into compact terminals or mobile units, making them ideal solutions for use in Automatic Fare Collection (AFC) ticket vending machines, card validators, card printers, mobile solutions, and various general purpose devices.

Model	Description	Part Number	Product Image
MIFARE-Easy Reader Core	MIFARE Easy Reader Core, TTL (F/W V1.2)	0701800133-1	
MIFARE-Easy Reader Board	MIFARE Easy Reader Board Compact (70 x 45 x 12 mm), RS-232 (F/W V1.2)	0701800029	

6. Product selector guide – Logical Access/PC applications
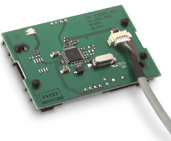
13.56 MHz contactless and contact reader technology

DTK		3134ANL0000	
Embedded Module	OMNIKEY 5122	OMNIKEY 5127CK-Mini	OMNIKEY 5127CK Reader Core
Features	• iCLASS®, MIFARE & Contact • USB with PC/SC	• HID Prox, iCLASS, iCLASS SE®, iCLASS Seos®, MIFARE & DESFire EV1 CCID, Bluetooth Smart & Key Board Wedge	
Image			
Interface(s)	USB 2.0 PC/SC Drivers	USB 2.0 CCID, Key Board Wedge & UART (5127CK-Mini only)	
Power	USB Bus Powered	USB Bus Powered	
Current	USB Bus Powered	USB Bus Powered	
Antenna(s)[1]	Integrated on Board	Integrated on Board	External HF/LF Antenna External Bluetooth Antenna
Contact Slot	1 × Integrated ID-1 Slot	None	
Protocol	CCID ISO7816 T=0, T=1 ISO14443A+B, T=CL HID Custom for iCLASS	PC/SC (ready for 2.01, in CCID mode) Human Interface Device (in Keyboard Wedge Mode)	
Integration Difficulty	Easy	Easy	Medium Embedded in host system, antenna optimization required
Size	**5121** 2.6 × 2.16 × 0.43 in (66 × 55 × 11 mm) **5321** 3.1 × 2.6 × 0.3 in (96 × 78 × 8 mm)	**5127CK Mini Reader Board** 1.96 × 1.38 × 0.35 in (50 × 35 × 8.94 mm) **5127CK Mini Reader Board with Industrial Housing** 2.2 × 1.6 × 0.63 in (55 × 40 × 16 mm)	**5127CK Reader Core** 1.06 x 102 x 0.21 in (27 x 26 x 5.3 mm)

7. Logical Access/PC applications

OMNIKEY Embedded Smart Card Readers, boards, and accessories

OMNIKEY® Embedded Readers are designed to enable integrators to build solutions for contact and contactless security, loyalty and government applications. They are ideal devices for organizations that need to integrate a highly secure contact and/or contactless PC connected smart card reader board, which in turn enables end-users to use advanced security applications to experience the convenience of contactless technology. The OMNIKEY Embedded Readers were developed as an easy design-in device; just mount the reader board in the product away from metal, connect the USB interface, build an application based on CCID or Keyboard wedge standard and you are up and running in no time.

Model	Description	Part Number	Product Image
5x27 CK Reader Accessory	Cable Management Accessory Pack for OMNIKEY 5127 Mini & 5427 CK Gen 2	A54270002	
5127CK-Mini Reader Board	OK 5127CK Mini contactless CCID and Keyboard Wedge Reader Board MOQ 20 units and must be ordered in multiples of 20	R51270010 R51270010-Elite R51270010-Indala R51270010-UART R51270010-UNI R51270010-UART-UNI	
5127CK-Mini Reader Board	OK 5127CK-Mini contactless CCID and Keyboard Wedge Reader Board with Industrial Housing and integrated buzzer MOQ 20 units and must be ordered in multiples of 20	R51270020 R51270020-Elite R51270020-Indala R51270020-UNI R51270020-UNI-Elite	
5127CK Reader Core	OK 5127CK Reader Core Contactless CCID and Keyboard Wedge Reader Core with optional external Bluetooth Smart and HF/LF Antennas MOQ 20 units and must be ordered in multiples of 20	R51270030 R51270030-Elite R51270030-Elite-Indala R51270030-Indala	
5127CK Reader Core Antenna	OK 5127CK Reader Core HF/LF Antenna MOQ 20 units and must be ordered in multiples of 20	A51270030	
5127CK Reader Core Antenna	OK 5127CK Reader Core Bluetooth Smart Antenna MOQ 20 units and must be ordered in multiples of 20	A51270031	Image coming soon
5122 Reader Board	OK 5122 contact and contactless reader board MOQ 100 units and must be ordered in multiples of 100	R51220349	
3121 Reader Board	OK 3121 Contact Smart Card Reader Board with USB Interface MOQ 100 units and must be ordered in multiples of 100	R31210375-1 (with Cable) R31210376 (Flash Memory with Cable) R31210374 (Landing contacts and confprom with Cable)	

OMNIKEY Embedded Technology Chipsets

Description	Base Part Number	Product Image
OMNIKEY Smart@Link Chipset (FW 1.3.1) USB Support Pre-certified (EMV2000, CCID) 32-pin QFN chip Standard MOQ 1,000pieces[1]	C30210310	

[1] Supplied in four individually vacuum packed trays, each tray containing 250 pieces. For quantities less than the MOQ or multiples thereof an additional packing fee is applicable. (Individual trays of 250 cannot be split into smaller quantities.)

8. OMNIKEY Desktop Smart Card Readers

Each OMNIKEY® Smart Card Reader has a unique part number. These numbers are 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 The HID order entry system.

Due to organizational changes, product improvements, and firmware changes, part numbers of OMNIKEY Smart Card Readers can be subject to change.

The following ordering is available for OMNIKEY Readers.

*TAA - 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	Customization Options	Description	Part Number	TAA* Part Number	Solution Compatibility	Product Image
3021 USB	• Logo • Housing Color • Cable	• USB 2.0 • EMV, CCID • Transparent/ gray housing • MOQ 100 • Order quantity multiples of 100	R30210315-1		• Crescendo®	
3121 USB	• Logo • Housing Color • Cable • Landing Contacts	• USB 2.0 • EMV, CCID • Standard standing base • MOQ 100 • Order quantity multiples of 100	R31210320-01	R31210349-1	• Crescendo	
3121 USB (TAA)	• Logo • Housing Color • Cable • Landing Contacts	• USB 2.0 • EMV, CCID • Standard standing base • MOQ 10 • Order quantity multiples of 10 • TAA compliant	R31210349-1	Not applicable	• Crescendo	
5022 CL USB	• Logo • Housing Color • Cable	• Contactless (13.56 MHz) Desktop Reader • Available in various color options • Optional Card Retainer & Mounting Accessories • MOQ 10 • Order quantity multiples of 10	**R50220318-DB (Dark Blue)** **R50220318-GR (Gray)** (See **Mounting Accessory Pack** and **Card Retainer**)	N/A	• iCLASS	

OMNIKEY Model PC Interface	Customization Options	Description	Part Number	TAA* Part Number	Solution Compatibility	Product Image
5023 USB	• Logo • Housing Color • Cable	• Contactless (13.56 MHz) Desktop Reader with integrated Secure Element • Optional Card Retainer & Mounting Accessories • MOQ 10 • Order quantity multiples of 10	**R50230318-DB (Dark Blue)** (See **Mounting Accessory Pack** and **Card Retainer**)	Not applicable	• iCLASS • iCLASS SE® • iCLASS Elite • Seos®	
5025 CL USB	• Logo • Housing Color • Cable	• Contactless (125 kHz) Desktop Reader for HID Prox Credentials • Full CCID compatibility • For Thin- and Zeroclients • 5325CL compatibility mode • Available in various color options • Optional Card Retainer & Mounting Accessories • MOQ 10 • Order quantity multiples of 10	**R50250001-GR (Gray)** (See **Mounting Accessory Pack** and **Card Retainer**)	Not applicable	• HID Prox	
5027 CL USB	• Logo • Housing Color • Cable	• Contactless (13.56 MHz) Desktop Reader with integrated Secure Element • Keyboard Wedge Operation • Optional Card Retainer & Mounting Accessories • MOQ 10 • Order quantity multiples of 10	**R50270001 (Dark Blue)** (See **Mounting Accessory Pack** and **Card Retainer**)	Not applicable	• iCLASS • iCLASS SE® • iCLASS Elite • Seos®	
5422 USB	• Logo • Housing Color • Cable	• Dual Interface (13.56 MHz Contactless and Contact Reader) • Compatible with all major smart card technologies, tags and new technologies such as NFC • Supports HID iCLASS, MIFARE and MIFARE DESFire as well as ISO 7816 and ISO 14443 A/B	**R54220301** (See **Vertical Standing Base (black)**, **Mounting Accessory Pack**, and **Card Retainer**)	Not applicable	• Crescendo • iCLASS	
5427CK Gen 2 (USB Interface)	• Logo • Housing Color • Cable	• Contactless (13.56 MHz & 125 kHz HID Prox) Smart Card Reader • Mobile Access support only over NFC • Seos support • CCID or Keyboard Wedge Operation Mode • Closed Housing • Web-based configuration interface • Transparent card retainer	**R54270101** **R54270101-Elite** **R54270101-Elite-Indala** **R54270101-Indala** (See **Vertical Standing Base (black)**, **Mounting Accessory Pack**, and **Card Retainer**)	Not applicable	• HID Prox • Indala • iCLASS • iCLASS SE • iCLASS Elite • Seos • Mobile Access (NFC only)	
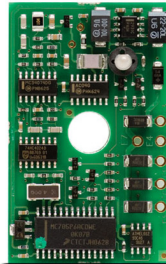
OMNIKEY Model PC Interface	Customization Options	Description	Part Number	TAA* Part Number	Solution Compatibility	Product Image
5427 CK Gen 2 (USB Interface/ PC Interface) with Bluetooth support	• Logo • Housing Color • Cable	• Contactless (13.56 MHz & 125 kHz HID Prox) Smart Card Reader • Mobile Access support over Bluetooth and NFC • Seos support • CCID or Keyboard Wedge Operation Mode • Closed Housing • Web-based configuration interface • Transparent card retainer	**R54270111** (Mobile ready reader) **R54270111-Elite** (Mobile enabled reader) **R54270111-Elite-Indala** (Mobile enabled reader) **R54270111-Indala** (Mobile ready reader) (See **Vertical Standing Base (black)** and **Mounting Accessory Pack**) **R54270111-UNI** **R54270111-UNI-Elite**	Not applicable	• HID Prox • Indala • iCLASS • iCLASS SE • iCLASS Elite • Seos • Mobile Access (Bluetooth & NFC)	
6121 USB Dongle	• Logo • Housing Color	• EMV, CCID • ISO 7816 SIM-Size (ID-000) contact slot • USB 2.0 Key-ring attachable • EMV, CCID • MOQ 100 • Order quantity multiples of 100	R61210320-2	Not applicable		

Accessories ordering guide

Accessory	Description	Part Number	TAA* Part Number	Solution Compatibility	Product Image
Heavy standing base 31xx	• Heavy standing base • Middle piece • Weight includes middle piece • 100 gram	Not applicable	A00000002	• OMNIKEY 3121	
Mounting Accessory Pack	• Packaging size 10 pcs. • Mounting Jacket for Screw-on mount • Mounting Jacket Camera mounting screw use (hex nut) • Adhesive Strip for mounting jacket	A50210001	Not applicable	• OMNIKEY 5021 • OMNIKEY 5022 • OMNIKEY 5023 • OMNIKEY 5025 • OMNIKEY 5027 • OMNIKEY 5421 OMNIKEY 5422 • OMNIKEY 5427	
Card Retainer	• Packaging size 10 pcs. • Card Retainer for card-present operation	A50210002	Not applicable	• OMNIKEY 5021 • OMNIKEY 5022 • OMNIKEY 5023 • OMNIKEY 5025 • OMNIKEY 5027	
Card Retainer	• Packaging size 10 pcs. • Card Retainer for card-present operation	A54210001	Not applicable	• OMNIKEY 5421 • OMNIKEY 5422 • OMNIKEY 5427	
Vertical Standing Base (black)	• Standing base for vertical reader • Supports card-present operation • Weight approx. 90 gram • Packaging size 1 pcs.	A54270001	Not applicable	• OMNIKEY 5427	
Vertical Standing Base (gray)	• Standing base for vertical reader • Supports card-present operation • Weight approx. 90 gram • Packaging size 1 pcs.	A54210002	Not applicable	• OMNIKEY 5421 • OMNIKEY 5422	
Configuration Card for OK5427 CK	• Packaging size 1 pcs. • Configuration Card for OK5427CK • 8K Bytes MIFARE DESFire EV1 • Not programmed	1450cnggnn	Not applicable	• OMNIKEY 5427CK	

9. Product selector guide − 125 kHz proximity reader technology

Embedded reader selector chart - 125 kHz proximity reader technology

DTK	3134BNC0000	3134AND0000
Embedded Module	MCM	ProxPoint™ Plus
Features	• HID Prox • Board Mounted Component	• HID Prox • Full Prox Reader Capabilities - Just Connect and Go
Image		
Interface(s)	• Wiegand • Clock-and-Data	• Wiegand • Clock-and-Data
Power	+4.5 - 5.5 V DC Voltage Regulation	+5 - 16 V DC
Current	<150 mA	<100 mA
Integration Difficulty	Difficult	Easy
Size	0.85 × 0.85 × 0.16 in (21.59 × 21.59 × 4.06 mm)	2.3 x 1.4 × 0.311 in (58.4 × 35.6 × 7.9 mm)

10. 125 kHz contactless embedded reader module ordering

ProxPoint™ Plus - The HID ProxPoint Plus OEM Module is a full-featured HID Proximity reader board that provides access to the industry's largest 125 kHz contactless card population. Ideal for OEM application developers who need to interface to HID proximity cards to implement third-party applications, ProxPoint Plus is HID's first proximity OEM Module that comes fully equipped with beeper, LED, and stock antenna to deliver full reader functionality. Simple interface and installation allows OEM applications access to all HID proximity card formats, including both short and long card formats.

eProx MCM - The Multi-Chip Module (MCM) provides the functions of an HID proximity reader on a single integrated circuit. The Prox by HID technology easily integrates to an existing electronic module and is able to be surface mounted to an existing PCB. The MCM enables adding RFID technology to a wide array of electronic devices, including alarm panels, electronic door locks, biometric readers, logical access devices, and process control equipment.

Card Reader Description	Base Part #	Current Rev #	Module Options	Hardware Options	Configuration Setting Options[1]	Custom[2]
Multi Chip Module (MCM)[3]	4025	A	1 = None	205 = Clock-and-Data w/ Standard Start-up 401 = Wiegand w/Quick Start-up (Quick start disabled) 402 = Wiegand w/Quick Start-up (Quick start enabled)		XXXX Y
ProxPoint OEM Module[4] • With Wiegand output • With Clock and Data output	4065 4068	A	L = Board only A = Board and Antenna[5]	N = None	LED Options: 00 (Default) 05 07 **Note:** No beeper options are available.	XXXX Y
ProxPoint Plus OEM Module[4] • With Wiegand output • With Clock and Data output	4065 4068	B	L = Board only A = Board and Antenna[5]	N = LED Only B = LED and Beeper	LED/Beeper Options 00 01 02 04 05 06 07	XXXX Y

* Revision numbers and availability are subject to change without notice. Some product may require a signed Non-Disclosure agreement.

[1] Configuration Setting Options for ProxGuts & ProxPoint OEM Modules are as follows (factory programmed):
  00 = Beep on, LED normally red, reader flashes green on tag read.   01 = Beep off, LED normally red, reader flashes green on tag read.
  02 = Beep on, LED normally off, reader flashes green on tag read.   04 = Beep on, LED normally red, host must flash green.
  05 = Beep off, LED normally red, host must flash green.   06 = Beep on, LED normally off, host must flash red and/or green.
  07 = Beep off, LED normally off, host must flash red and/or green.

[2] Consult the factory for lead times and availability - for AWID read capability use BXN01.

[3] Multi Chip Modules (MCM) are packaged in multiples of 25. Minimum order quantity is 25 pieces; orders will be accepted in multiples of 25 or 100 pieces thereafter.

[4] Only pre-existing ProxPoint customers can order the ProxPoint OEM Module Revision A (4065A and 4068A).
  All new customers looking to embed HID Proximity technology with a ProxPoint solution must order the ProxPoint Plus OEM Module Revision B (4065B and 4068B).

[5] OEM module board and antenna are shipped disconnected.

Note: Custom tuning and custom size of antenna available - contact your HID representative for further information

125 kHz embedded reader module antennas

Part Number	Description
40-0008-01	125 kHz, Air Tuned Antenna, 3.75 × 1.20 in (95.3 × 30.5 mm), use with eProx Lock
40-0032-02	125 kHz, Air Tuned Antenna, 2.22 × 1.43 in (56.4 × 36.3 mm), use with ProxPoint OEM & MCM

11. Indala Proximity

OMR module ordering guide

Part Number	Description
FP5110	OMR-705+
FP5120	OMR-705+, board w/ antenna
FP0500A	Flexpass MR reader module – 18" pigtail
FP0500A/L	Flexpass MR reader module – 120" pigtail

12. 13.56 MHz contactless embedded transponder ordering

207 - iCLASS eUnit ordering guide part numbers and options

The iCLASS® eUnit Contactless Smart Embedded Tag offers read/write capability.
There is a minimum order of 100 units, and thereafter in multiples of 25.
Make sure to select the appropriate choices and complete the full order form.

☒ **207 Base Model**

iCLASS memory size and allocation (check one)
☐ **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 (check one)
☐ **C** - Configured, for use with iCLASS SE® Encoder (legacy iCLASS encoding) Programming Information Not Required.
☐ **V** - Configured, for use with iCLASS SE Encoder. (iCLASS SE encoding) Programming Information Not Required.
☐ **M** - Programmed with Secure Identity Object™ (SIO®). Specify Programming Information.
☐ **H** - Programmed with Secure Identity Object (SIO) and iCLASS Legacy encoding. Specify Programming Information.
☐ **P** - Programmed iCLASS. Specify Programming Information.
☐ **V** - Configured for use with iCLASS SE Encoder – SIO ready – Programming Information Not Required.

Coil option
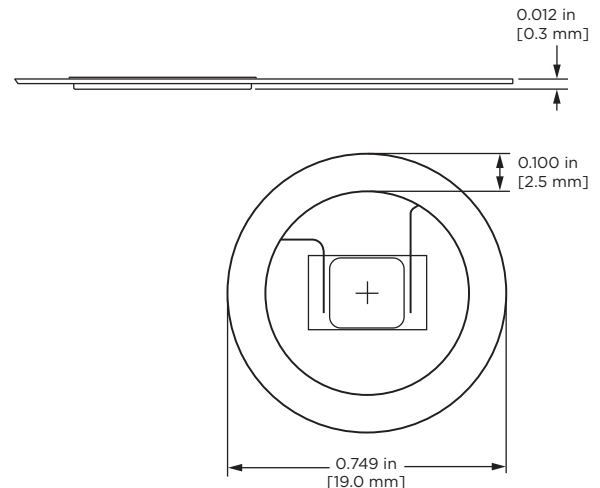☒ **N** - Max diameter: 0.749 in (19.0 mm) / Max thickness: 0.012 in (0.3 mm)

Packaging option
☒ **N** - None

Tag numbering
☒ **N** - None

Hardware option
☒ **N** - None

0.012 in
[0.3 mm]

0.100 in
[2.5 mm]

0.749 in
[19.0 mm]

Enter your final card options from the above selections. Example: 2071PNNNN

Final Part Number	207			N	N	N	N

iCLASS 13.56 MHz Programming Information

Bit Numbers (e.g. 26 bit)	Format Number (e.g. H10301)	Facility Code	Custom Formats		
			Site Code	City Code	OEM Code

Internal Card Number		External Card Number		PIN (2-12 digits): ☐	
Start	Stop	Start	Stop	Sequential: Start #	Random: Length

Special Instructions:	

507 – iCLASS Seos eUnit part numbers and options

The iCLASS® Seos eUnit Contactless Smart Embedded Tag offers read/write capability.
There is a Minimum order of 500 units, and thereafter in multiples of 500.
Make sure to select the appropriate choices and complete the full order form.

☒ **507 Base Model**

iCLASS Seos memory size and allocation
☒ **6** - 8K Bytes)

Programming
☒ **V** - Configured for use with iCLASS SE Encoder – Programming
        Information Not Required.

Coil option
☒ **N** - Max diameter: 1.06 in (26.9 mm)
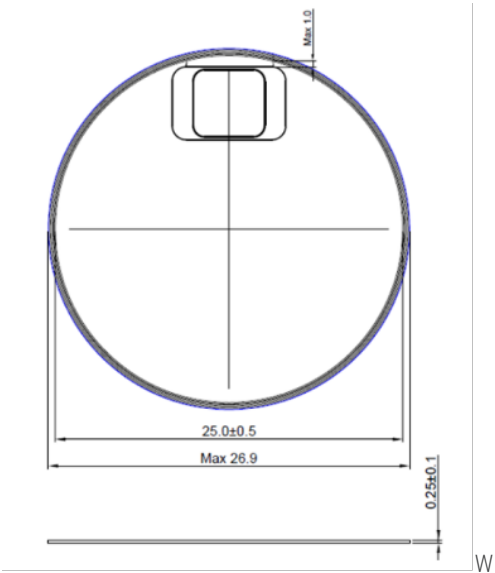   Max thickness: 0.002 in (0.26 mm)

Packaging option
☒ **N** - None

Tag numbering
☒ **N** - None

Hardware option
☒ **N** - None

Final Part Number	507	6	V	N	N	N	N

13. 125 kHz contactless embedded transponder ordering

1390 - eProx Tag Embedded Proximity part numbers and options

Make sure to select the appropriate choices and complete the full order form.
Coils must be ordered in multiples of 100.

☒ **1390 Base Model**

Programming (check one)
☐ **L** - Programmed, Low Frequency (125 kHz). Specify Programming Information.
☐ **N** - Non-Programmed, Low Frequency (125 kHz). Programming Information Not Required.

Coil option (check one)
☐ **N** - Standard, 0.866 in (22mm) Round Coil, Direct Connect Chip
☐ **A** - 0.984 in (25 mm) Round Coil, Direct Connect Chip
☐ **B** - 0.677 in (17 mm) Round Coil, Direct Connect Chip
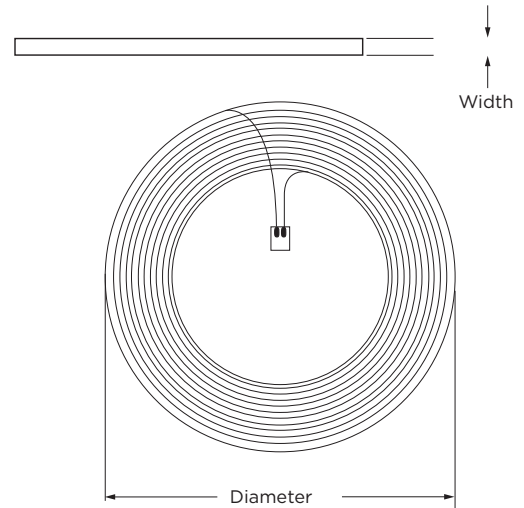
Packaging option (check one)
☐ **N** - None (bare coil)
☐ **C** - Clear Tag, Clear Polyester Covering (option not available for Standard 22mm Round coil)

Tag numbering
☒ **N** - None

Hardware option
☒ **N** - None

Width

Diameter

Enter your final tag options from the above selections. Example: 1390NNNNN

Final Part Number	1390				N	N

Size Table

Coil Option	Packaging Option N - Bare Coil		Packaging Option C - Clear Tag	
	Max Diameter	**Max Thickness**	**Max Diameter**	**Max Thickness**
N	0.866 in (22 mm)	0.033 in (0.8 mm)	Not applicable	Not applicable
A	0.984 in (25 mm)	0.015 in (0.39 mm)	1.200 in (30.5 mm)	0.031 in (0.8 mm)
B	0.677 in (17.2 mm)	0.015 in (0.39 mm)	0.886 in (22.5 mm)	0.031 in (0.8 mm)
E	Not applicable	Not applicable	0.807 in (20.5 mm)	0.031 in (0.8 mm)

125 kHz Tag Programming Information

Bit Numbers (e.g. 26 bit)	Format Number (e.g. H10301)	Facility Code	Custom Formats		
			Site Code	**City Code**	**OEM Code**

Internal Tag Number	
Start	**Stop**

Special Instructions:	

Appendix A - Extended Access Technologies Service Modules

Summary

The HID Extended Access Technologies (EAT) business unit depends on the successful integration of its many products and technologies into OEM and partner products in order to have a successful finished product and/or service that supports the needs of the end customer. To ensure these integrations happen successfully, the EAT Pre-Sales and Technical Support team support a wide variety of identification and authentication devices, which can be integrated into 3rd party hardware, and software, environments. The depth of the integration varies depending on the desired end-product, the skills and capabilities of the partner/customer, the application, and the targeted use-case. A perfect integration is necessary for the finished solution to achieve the desired technical and business results.

To support this objective, the HID EAT business unit offers a variety of consulting packages, to assist our integration partner in defining, implementing, deploying, and supporting these projects, ensuring a quality product or solution is achieved that meets the end customers' needs.

A.1 Definitions

Below is a summary of key terms related to these technical support packages:

Content
- What is the service deliverable from HID?
- What does the customer receive?
- What are the benefits for the customer?

Efforts

What efforts are required from the EAT technical support team? This also includes set-up and preparation times.

A.2 Antenna integration

Part-No.

EAT-TS-ANT

Content
- Workshop (on-site, remote) about antenna integration (HF, LF, BLE), requirements for optimized performance, do's and don'ts, measurement methods.
- Remote support answering occurring questions.
- On-site antenna integration check-up, performance measurement.
- Documentation about the performance measurement results, confirmation that integration follows HID specifications, advises how to increase performance.

Package delivery

Workshop:	**1 day**
Remote support:	**0.5 day**
Check-up:	**1 day**
Documentation	**2 days**

A.3 DTK Support

Part-No.
EAT-TS-DTK

Content
The main purpose of this technical support package is to separate pricing of the DTK (Developer Tool Kit) from the additional support services being offered by HID.

- Allows for flexible pricing of the DTK product, to meet different partner needs.
- Allows partners to purchase the DTK for a lower price without support.

The package provides a training overview of the DTK including its contents and how to use it. Additionally remote support (phone/web) is provided.

Package delivery

Training	**0.5 day**
Remote Support:	**2 days** (16 hrs, distributed over several days)

A.4 Project Management

Part-No.
EAT-TS-PRJ

Content
Provides a named contact to the customer for all technical communications and an interface between the customer and HID EAT field applications engineers, technical support and engineering. Project Management controls and drives the progress of the project. The engagement starts with a project kick-off workshop from which a design specification document will be created. This document contains:

- Definition of the project target
- Identified gaps
- Integration steps and timelines
- Test conditions to evaluate project achievement

Package delivery

Workshop	**1 day**
Documentation:	**2 days**
Project Management:	**5 days** (split over several days during the project duration)

A.5 Ad-hoc Support

Part-No.
EAT-TS-ADH

Content
Flexible package to provide on-site or remote support on partner/customer request on a daily basis. Package may provide, but is not limited to:

- Technical training
- Configuration assistance
- Integration review

Package delivery:

On-site/remote:	**Per day**

Appendix B - Development Tool Kits

Part Number	Description
3134BNK0000	OMNIKEY Secure Element Development Tool Kit
3134ANL0000	5x27 CK Development Tool Kit
3134BNC0000	MCM2 Development Tool Kit
3134AND0000	Prox Point Plus Development Tool Kit

B.1 OMNIKEY Secure Element - 3134BNK0000

Developer tools
The DTK License key provides access to the Developer Portal where all Drivers, Software, Documentation and Release Notes can be downloaded.

| Reader Boards and Accessories	Sample Credentials
10 - OMNIKEY Secure Element	1 – HID MIFARE DESFire EV1 Card 8K
1 - 3121 Desktop Reader	1 - iCLASS SE Card 32K
1 - 5022 Desktop Reader	1 – HID MIFARE Classic Card 4K
1 - OMNIKEY Secure Element Mother board	1 – HID iCLASS Seos Card 8K
1 - OMNIKEY Secure Element Daughter board (QFN20 socket)	

B.2 OMNIKEY 5x27CK - 3134ANL0000

Developer tools

The DTK License key provides access to the Developer Centre where all Drivers, Software, Documentation and Release Notes can be downloaded.

Reader Boards and Accessories	Sample Credentials
1 - 5427CK Reader (With Bluetooth Low Energy Support for Mobile Access)	1 - MIFARE Classic 4K Card
1 – 5127CK-Mini Reader Board	1 - MIFARE DESFire EV1 Card
1 – 5127CK Mini Reader Board + Industrial Housing	1 - iCLASS 16K/16 Card
1 – 5127CK Reader Core	1 - HID ISOPROX II Card
1 – 5127CK Reader Core HF/LF Antenna	1 - iCLASS Seos 8K Card
1 – 5127CK Reader Core HF/LF Antenna + Spacer	1 - Indala Flexpass Card
1 - 5127CK Reader Core Bluetooth Antenna	
1 - 5127CK Reader Core USB Adapter	

B.3 MCM - 3134BNC0000
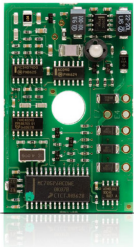
Developer Tools	Multi-Chip Reader Modules	Access Cards
1 - USB Flash Drive	2 - ProxPoint™ Plus Modules with Antenna	3 - ISOProx II Cards
		3 - Microprox Tags
		3 - Proxkey II Cards
		3 - Multi-technology HID Prox & iCLASS 16K/16 Programmed Cards

B.4 ProxPoint Plus - 3134AND0000

Developer Tools	Multi-Chip Reader Modules	Access Cards
1 - USB Flash Drive	3 - MCM	3 - ISOProx® II Cards
		3 - Microprox Tags
		3 - Proxkey II Cards
		3 - Multi-technology HID Prox & iCLASS® 16K/16 Programmed Cards

Revision history

Date	Description	Revision
April 2023	Updated minimum order quantity values for the iCLASS SE Reader Module.	A.8
January 2023	Removed iCLASS SE Processor section. Added Configuration Card information for OMNIKEY Secure Element,	A.7
March 2022	Added OMNIKEY SE Module and removed iCLASS SE Processor (Section 2). Added new part number options (Sections 5 and 6).	A.6
January 2022	Updated minimum order quantity and order quantity multiple values for 5022 CL USB, 5023 USB, and 5025 CL USB.	A.5
November 2021	Added OMNIKEY Secure Element. Updated to latest HID branding.	A.4
July 2021	Updated OMNIKEY Desktop Smart Card Readers section.	A.3
January 2021	Added iCLASS Seos eUnit.	A.2
July 2020	Added 5127CK Reader Core. Revised OMNIKEY DTK. Removed eProx Lock.	A.1
February 2020	Amalgamation of Embedded Solutions and OMNIKEY How to Order Guides	A.0

HID

hidglobal.com

For technical support, please visit: https://support.hidglobal.com

Part of ASSA ABLOY