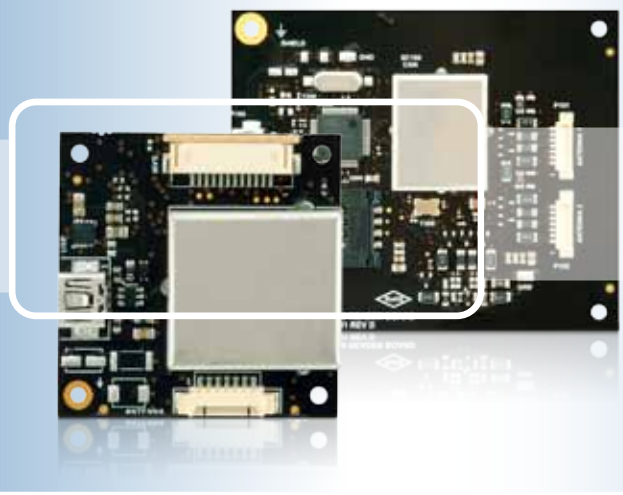
identiCLASS™ e-ID Embedded Reader Platform



identiCLASS™ Developer Tool Kit

ADAPTIVE, GLOBALLY CERTIFIED, FLEXIBLE, e-ID READER BOARDS AND MODULES

- **Faster-to-Market** – global certifications reduce design, implementation and testing phases, accelerate development cycles, and shorten time to revenue
- **Adaptive** – open platform encompasses relevant protocols and operating systems, and addresses virtually every organizational need
- **Scalable** – a single embedded device with multiple features offers a flexible interface to all contactless and contact credentials, with options to support multiple applications

identiCLASS™ Highlights:

- Small footprint reader core optimized for mobile solutions
- Low power consumption with additional sleep functions, ideal for battery operated applications
- External antenna support through standard boards
- Onboard SAM socket and optional external SAM socket support
- Full ICAO compliance with standard HID design-in ready antennas
- A technically detailed, comprehensive developer tool kit, enabling straightforward integration
- CE and modular FCC approvals to accelerate certification processes for EU and US markets
- Simple, straightforward integration into existing or newly designed HID e-government products

The HID Global identiCLASS™ reader platform was developed specifically to offer OEM partners; system integrators; federal, state, and local governments; manufacturers of e-ID authentication systems and state security printers the ultimate flexibility to design-in turnkey solutions for e-ID markets.

The identiCLASS line enables e-government integrators to drastically reduce development cost and time. Modules are ready to integrate quickly and easily into virtually any smart card reader application, while global certifications streamline the compliance review process.

The adaptive identiCLASS design enables manufacturers to easily create secure, reliable finished reader solutions, with the ability to integrate multiple interfaces around a cluster of applications.

Further, identiCLASS reader boards offer scalable integration of contact and contactless high frequency technologies, including full SAM support, USB interface, compliance with ISO144434A/B, ISO15693 and ICAO e-passport standards.

HID's identiCLASS platform offers two reader modules:

- **3300 Reader Core** – ideal for hand-held terminals and other space critical applications
- **3500 Reader Board** – ideal for desktop terminals or kiosks where multiple antennas are required

The state-of-the-art identiCLASS developer tool kit allows hand-held, kiosk and terminal manufacturers and integrators to accelerate their solution design, development and implementation. Low training requirements and thorough documentation yield faster integration cycles. Universally adaptable technology and minimal upgrade requirements assure the long-term viability of solutions, protecting the investment.

SPECIFICATIONS

	identiCLASS™ Reader Core	identiCLASS™ Reader Board
Base Part Numbers	DG3300A00	DG3500A00
Dimensions	1.6″ x 1.6″ x 0.34″ / 40 mm x 40 mm x 8.6 mm	3.4″ x 2.8″ x 0.36″ / 86 mm x 71 mm x 9.1 mm
Weight	0.42 oz / 12 g	1.09 oz / 31 g
Operating Temperature	-4° to 158° F / -20° to 70° C	
Storage Temperature	-40° to 185° F / -40° to 85° C	
Operating Humidity	10 - 90% Non Condensing	
Power Supply	USB Bus powered (5 VDC +/- 10% regulated)	
Current Requirements	180 mA (typical)	250 mA (typical)
	HOST INTERFACE	
Communication Interface	USB 2.0 CCID[1] (via USB mini type B)	
Transmission Speed	12 Mbps (USB 2.0 full speed)	
	CONTACT SMART CARD INTERFACE	
Standards	ISO 7816	
Protocols	T=0, T=1, 2-wire: SLE 4432/42 (S=10), 3-wire: SLE 4418/28 (S=9), I2C (S=8)	
Card Size	ID-000 or ID-1 (Optional external socket)	ID-000 (Integrated socket)
Supported Card Types	5 V, 3 V and 1.8 V Smart Cards, ISO 7816 Class A, B and C	
Power to Smart Card	60 mA	
Smart Card Detection	Movement detection with auto power-off / Automatic detection of smart card type / Short circuit and thermal protection	
	CONTACTLESS SMART CARD INTERFACE	
RF Transmit Frequency	13.56 MHz	
Supported Standards	ISO14443A/B, ISO15693, ISO 18000-3	
Protocols	ISO 14443 A/B with 848 Kbps transmission rate (depending on IC and OS)	
Supported Tag-IC's	NXP: MIFARE®, DESFire®, SMART-MX and ICODE; Texas Instruments: TagIT®, ST Micro: x-ident, SR 176, SR 1X 4K	
Antenna Support	External antenna connection x 1	Integrated with up to 2 additional external antennas
	GENERAL FEATURES	
S/W Driver	USB version PC/SC driver Windows® 2000 (32bit), 2003 Server[3], 2008 Server[3], Windows® CE 5.0 / CE.NET / CE 6.0 (depending on hardware), Windows® XP (32 / 64bit), Windows® Vista (32bit / 64bit), Windows 7 (32bit/64bit), Linux®	
Compliance/certification	ISO 14443A/B, ISO 7816, Microsoft® WHQL2, USB 2.0 (USB 1.1 compatible), CCID1 (contact interface only)	
Approvals/environmental	CE, FCC 47 Part 15 modular approval, ICAO, ISO 7816 Part 3, RoHS, WEEE	

1 = Chip Card Interface Device,
2 = Windows® Hardware Quality Lab
3 = Windows 2003/2008 Server drivers currently are not digitally signed

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