



# ASEDrive IIIe Technology

PC/SC, CCID, USB and microSD Card Readers and Keyboards

ASEDrive IIIe technology is the core of Athena's most advanced family of smart card readers/writers, keyboards and keys. The ASEDrive IIIe offers outstanding performance for its cost while providing the highest level of compatibility. ASEDrive IIIe is certified by both USB Implementers Forum, Microsoft WHQL and NIST. ASEDrive IIIe provides the quality and functionality that professionals require making it ideal for consumer use, corporate and government smart card applications.

- Complying with all major standards including; PC/SC, ISO7816 (T=0, T=1),
- Compatible with EMV, JIS X6303/6304, PC/SC, CAC and memory cards.
- Available with CCID or ASE device driver
- High speed communication through USB 2.0 (full speed) or Serial Port.
- On-board flash memory for easy upgrading.
- Ability to assign unique registration data to a single reader or batch using a special EEPROM area.
- OEM options
- Support of high card-reader communication speed.
- Certified by USB Implementers Forum, Microsoft WHQL and NIST.
- Supports all major PC operating systems Windows 7, Vista, XP, 2003/2008/2008 R2 Server, Linux, MAC OS X.

**High performance and low cost**

ASEDrive IIIe devices are a high performance but low cost Smart Card reader solution for contact or contactless cards. Adopting state-of-the art technologies, ASEDrive IIIe provides the highest level of performance in a small package. ASEDrive IIIe fully complies with the PC/SC standard and can be seamlessly integrated within the Windows, Linux or MAC environments. It supports CPU smartcards based on international and industry standards such as ISO, EMV, and JICSAP, as well as CAC, Java Cards and memory cards. All readers Support for both 32 bit and 64 bit systems

**Complies with all major standards and certifications**

ASEDrive IIIe complies with all major international and industry standards such as ISO7816, Microsoft PC/SC, EMV, JIS X6303/6304, FIPS201 and is suitable for any smart card application without exception. ASEDrive IIIe is certified as Designed for XP, Working with Vista logo and "Compatible with Windows 7" by Microsoft. Certified by USB Implementers Forum as a USB Full 2.0 Speed device. ASEDrive IIIe appears on the FIPS021 APL.

**The highest level of performance**

ASEDrive IIIe is designed for computationally intensive security applications, such as Digital Signature and PKI. ASEDrive IIIe can communicate with the smart card at up to 412Kbps and with personal computers at up to 12Mbps (USB 2.0 Full Speed). It also achieves higher performance by driving the smart card chip at up to four times the default frequency (when supported by the card). This feature is a significant performance advantage for intensive applications such as Digital Signature. The ASEDrive IIIe design is based on Athena's extensive experience in the manufacture of smart card readers and cards. Athena's firmware and ASE or CCID drivers ensure it will provide an excellent level of performance.



# Technical Specification



	ASEDrive IIIe USB V2	ASEDrive IIIe Serial	ASEDrive IIIe USB V3C	ASEDrive IIIe V3C USB Internal	ASEDrive IIIe USB Keyboard	IDProtect Key	IDProtect Key V2J	ASEDrive IIIe SIM Reader	ASEDrive IIIe Flash Token	NFC CL Reader	Athena MicroSD Crypto
<b>Host interface</b>	USB 2.0/CCID	RS232	USB 2.0/CCID	USB 2.0/CCID	USB 2.0/CCID	USB 2.0/CCID	USB 2.0/CCID	USB 2.0/CCID	USB 2.0/CCID/HID	USB 2.0/CCID	SD
<b>Host communication speed</b>	USB 12 MBPS	115,200 bps	USB 12 MBPS	USB 12 MBPS	USB 12 MBPS	USB 12 MBPS	USB 12 MBPS	USB 12 MBPS	USB High Speed 480 MBPS	USB 12 MBPS	SD
<b>Acceptor</b>	Landing	Landing	Friction	Friction	Landing	-	-	-	-	-	-
<b>Insert / remove cycles</b>	200,000 (500,000 optional)	200,000 (500,000 optional)	200,000	200,000	200,000	-	-	-	-	-	-
<b>Power Source</b>	USB	PS-2	USB	USB	USB	USB	USB	USB	USB	USB	SD
<b>Security Certification</b>	FIPS 201 Cert# 510			-	FIPS 201 Cert# 512	FIPS 140-2/IP58	FIPS 140-2/IP68	-	-	Compliant with NFC tag type 4	-
<b>Card/Reader communication at 4MHz</b>	Up to 250 Kbps	Up to 250 Kbps	Up to 412 Kbps	Up to 412 Kbps	Up to 250 Kbps	Up to 1 Mbps at	Up to 1 Mbps at	Up to 250 Kbps	Up to 250 Kbps	Up to 848 Kbps	Up to 250 Kbps
<b>Smart Card Support</b>	ISO 7816 T=0, T=1, CAC, EMV										
<b>Card Operating Voltage</b>	5V (ISO 7816 Class A), 3V (ISO 7816 Class B), 1.8V (ISO 7816 Class C, excluding Tokens)										
<b>Card Operating Frequency</b>	Up to 16 MHz										
<b>Operating System Support</b>	Windows XP, Vista, 7, Server 2003/R2, Server 2008/R2 Linux, Mac OS X. Support for both 32 bit and 64 bit systems										
<b>Smart Card Reader Approvals</b>	Microsoft WHQL, 2003/R2, 2008/R2, XP, Vista, 7, PC/SC Compliant, USB Logo, EMV Level 1.										
<b>Safety &amp; Environment Standards</b>	FCC Class B, VCCI, CE., RoHS										

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