

# EMV Level 1 Software Library & EMV Level 2 Kernels

## Contact and Contactless

Creditcall has been the source for contact & contactless EMV software since 2003, offering reliable & secure EMV Level 1 Software Libraries and EMV Level 2 Kernels to payment device manufacturers.

### Supported EMV Level 1 Chipsets



### Supported EMV Level 2 Platforms



*Creditcall's EMV solutions minimize project complexity, risk, and cost for manufacturers of:*

- ⌚ PIN pads
- ⌚ Card readers
- ⌚ POS devices
- ⌚ Mobile POS
- ⌚ Contactless POS
- ⌚ Vending machines
- ⌚ ATMs
- ⌚ Kiosks
- ⌚ Parking meters
- ⌚ Ticketing machines

## Benefits



Over 2 million Kernels deployed worldwide



250+ EMVCo certifications



All EMV certifications passed 1<sup>st</sup> time



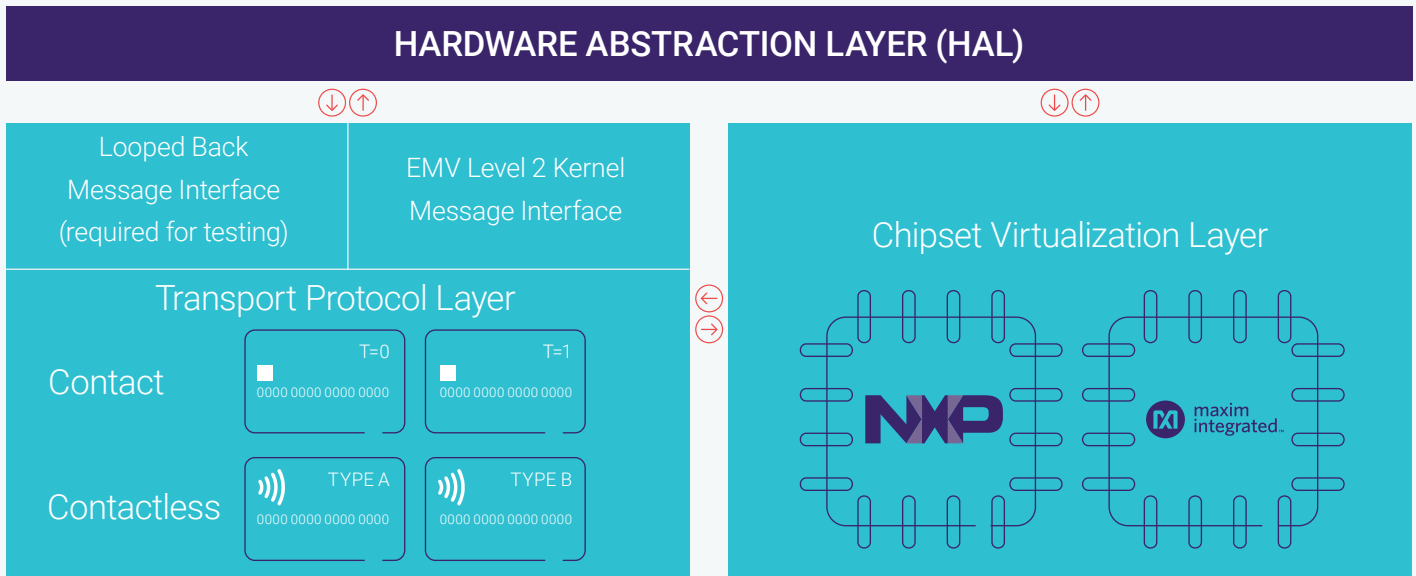
Over 15 years of EMV experience

- ⌚ Minimized project risk and cost
- ⌚ Fast track route to EMV certification
- ⌚ Comprehensive technical support
- ⌚ Reduced development cycles by up to 18 months
- ⌚ No manufacturer lock-ins
- ⌚ No need to buy expensive test tools
- ⌚ Multiple platforms: Embedded, Contactless, Windows, Java

# EMV Level 1 Software Library

The EMVL1.LIB Software Library for embedded systems is designed to provide a compact, highly portable software solution for the implementation of the terminal requirements of EMV Book 1 and the smart card interface requirements of ISO 7816.

## EMVL1.LIB and ContactlessL1.LIB Software Library Architecture



## EMV Level 2 Kernels

Creditcall's Level 2 Kernels are uniquely versatile transaction software modules for terminal manufacturers and systems integrators. Four variations are available to suit most hardware platforms. The flexibility of our Level 2 Contactless Kernels makes it possible to add card schemes/brands as you progress with your project.

## EMV Level 2 Kernel Range

	EMV.LIB	CONTACTLESS.LIB	EmvX	EmvJ
<b>Operating Systems</b>	Any platform that has a C compiler	Any platform that has a C compiler	Windows or Windows CE	Any Java Virtual Machine
<b>Supported Development Languages</b>	C, C++	C, C++	Any language that supports Windows COM interfaces or .NET (e.g. C++, C#, Visual Basic)	Java
<b>Library Format</b>	Dependent on the toolset (object files or static library)	Depends on the toolset (object files or static library)	Windows .DLL using COM interface	Jar package
<b>Advantages</b>	Fully ANSI-C compliant and hardware independent, custom built for each platform	Fully ANSI-C compliant and hardware independent, custom built for each target platform	Easy to use, handles platform specific functionality automatically	Easily portable to any Java platform
<b>Suited For</b>	Embedded platforms with limited resources and custom hardware	NFC enabled devices & embedded platforms with limited resources and custom hardware	Retail and kiosk payment applications running on Windows	Java based payment applications and serverbased solutions