# 73S1215F
# Evaluation Board Lite

Simplifying System Integration™

**QUICK START GUIDE**

**QS_1215F_047** **August 2009**

## Introduction

The 73S1215F Evaluation Board Lite is a turnkey smart card reader that can be used in conjunction with any Windows® or Linux® based host system that has an available USB port (USB host, Full Speed 2.0).

When plugged into a system with the appropriate driver loaded, the 73S1215F Evaluation Board Lite can be used as a smart card reader. Any host application can operate the smart card reader through the PC/SC commands to communicate with asynchronous smart cards, following T-0 and T-1 protocols, in compliance with ISO7816-3 and EMV 4.1 standards.

## System Requirements

- A PC running Microsoft® Windows XP or Vista®, or a workstation running Linux, with a USB port.
- 24 megabytes of disk storage for the application and documentation.

## Package Contents

- 73S1215F Evaluation Board Lite pre-loaded with the Teridian CCID-USB firmware.
- USB cable, A-B, male/male, 2 meters.
- A 7 – 12 VDC power adapter with 2.1 mm plug ID.
- A CD containing the CCID drivers, Teridian host applications and documentation.

## Default Setup

The 73S1215F Evaluation Board Lite ships with a default configuration suitable for use as a turnkey Transparent Smart Card Reader using a CCID USB connection to communicate with a host PC application. The board's hardware and firmware are pre-configured by Teridian to work in this state and the information in this document assumes this default configuration.

Refer to the *73S1215F Evaluation Board Lite User Guide* for details on alternate hardware configurations and uses.

## Demonstration Host Application

Included on the CD is a demonstration application named CCID-USB.exe which is located in the "***x***:***yyy***\12xxF V**z.zz**\Host Applications\Windows App\Bin\Release" directory (where ***x*** refers to the drive, yyy refers to the directory the installation .zip file was expanded to and ***z.zz*** is the latest version of the firmware release). This is a host application that allows:

- Smart card activation and deactivation, in ISO or EMV mode.
- Smart card APDU commands to be exchanged with the smart card inserted in the board.
- Starting a test sequence in order to test and evaluate the board performance against an EMV test environment.




**THIS EVALUATION SYSTEM IS ESD SENSITIVE! ESD PRECAUTIONS SHOULD BE TAKEN WHEN HANDLING THE BOARD!**

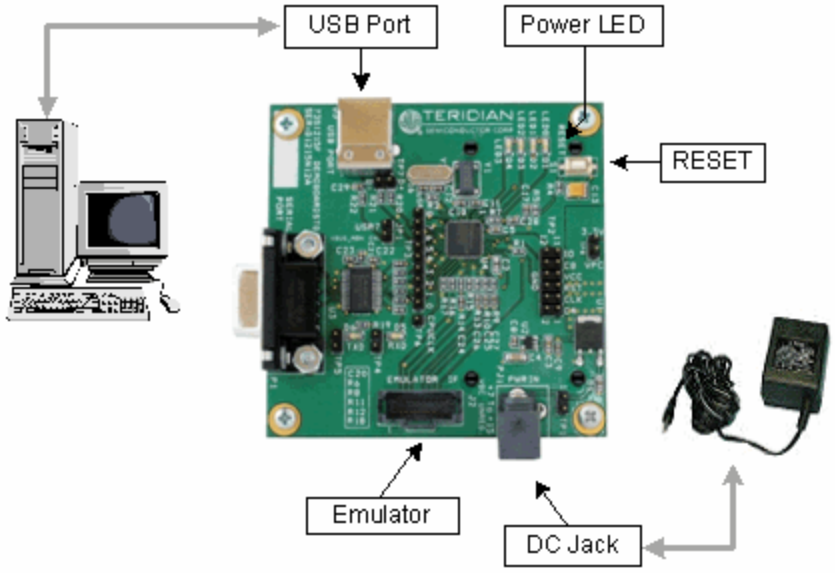

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## Driver and Software Installation on Windows XP

Follow these steps to install the software on a PC running Windows XP:

- Extract "12xxF CCID+DFU V***z.zz*** Release.zip" (where ***z.zz*** is the latest version of the firmware release).
  - Create an install directory. For example: "C:\TSC\".
  - Unzip "12xxF CCID+DFU V***z.zz*** Release.zip" to the just created folder. All applications and documentation needed to run the board with a Windows PC will be loaded to this folder.
- Plug the supplied power adaptor into the DC Jack and a wall outlet. LED0 should now come on.
- Connect the USB cable between the host system and the 73S1215F Evaluation Board Lite.
- The host system should recognize the board and start the Add New Hardware Installation wizard. When the wizard prompts, select the Microsoft standard Windows driver:
  - Select the usbccid.inf file located in the "***x***:***yyy***\12xxF CCID+DFU V***z.zz*** Release\USB-CCID Firmware\CCID USB\CCID+DFU USB Drivers\MS Generic" subdirectory. The uscccid.inf and usbccid.sys files must be in the same directory on the host.
- Follow the prompts until the process is completed.
- Run "CCID-DFU_USB_v***z.zz***.exe" (located in the path ***x***:***yyy***\12xxF CCID+DFU V***z.zz*** Release\Host Applications\Windows App\Bin\Release Release\Host Applications\Windows App\Bin\Release) on the host system to execute the host demonstration application.

At this point the application window should appear. For additional information regarding the use of the Teridian Host application, refer to the *73S12xxF USB-CCID Host GUI Users Guide* (UG_12xxF_037).




## Driver and Software Installation on a Linux System

Teridian has tested this board with the Linux CCID driver v1.3.2 and PCSC-Lite v.1.4.4 (middleware) on Linux. Refer to the *73S1215F, 73S1217F CCID USB Linux Driver Installation Guide* (UG_12xxF_041) for details on the Linux software installation and usage.

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