

## Introduction

The 73S1215F Evaluation Board platform is a self-contained smart card reader development kit for the evaluation and development of stand-alone, serial or USB connected smart card solutions with an LCD, PINpad, or other peripherals.

The board operates with either a PC or Linux® host system with a USB port. When plugged into a system with the appropriate driver loaded, the 73S1215F Evaluation Board 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 a workstation running Linux with a USB port.
- 24 megabytes of disk storage for the application and documentation.

## Package Contents

- A 73S1215F Evaluation Board (labeled 73S1215F/1209F/1200F EVAL BOARD w/USB-CCID FW).
- A CD containing the associated drivers, applications and documentation.
- A USB cable, A-B, male/male, 2 meters.
- A 7-12 VDC power adapter with 2.1 mm plug ID.

## Default Setup

The 73S1215F Evaluation Board 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 both pre-configured to work in this state and the information in this document assumes this default configuration. Refer to the *73S1215F Evaluation Board 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 Vz.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.



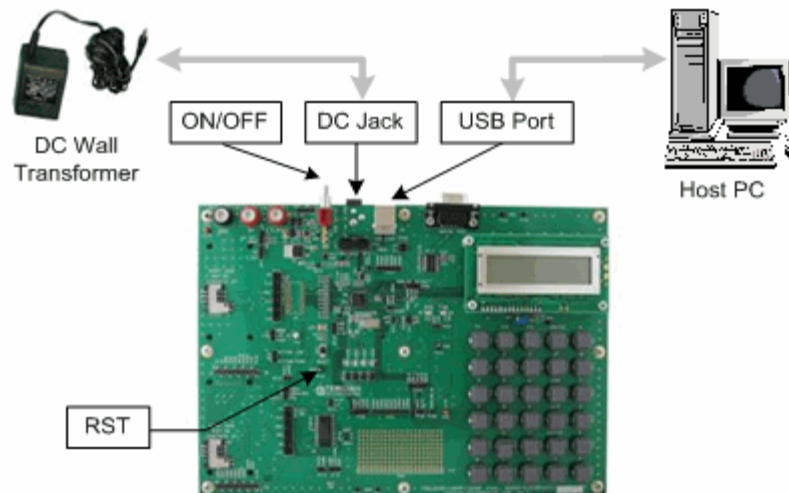
**THIS EVALUATION SYSTEM IS ESD SENSITIVE! ESD PRECAUTIONS SHOULD BE TAKEN WHEN HANDLING THE BOARD!**

## Software Installation and Use on Windows XP

Follow these steps to install the driver and 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) and follow the on-screen instructions.
  - 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 adapter into the PJ1 jack and a wall outlet.
- Flip the ON/OFF switch to ON.
- Connect the USB cable between the host system and the 73S1215F Evaluation Board.
- The host system should recognize the board and start the Add New Hardware Installation Wizard. When the wizard prompts, select the Teridian provided driver file.
  - To use the Teridian supplied driver, select the ccidts-cp.inf file located in the “x:\yyy\12xxF CCID+DFU V $z.zz$  Release\USB-CCID Firmware\CCID USB\CCID+DFU USB Drivers\XP 32 - CCID” subdirectory. The ccidts-cp.inf and ccidts-cp.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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