

XTNDAccess IrFM SDK



Software development kit for implementing Infrared for Financial Messaging (IrFM)

Infrared for Financial Messaging (IrFM) is a specification that defines the exchange of financial payment and transaction information between mobile devices such as a cellular phone or PDA to a Point-of-Sale (POS) terminal. The specification is administered by the Infrared Data Association (IrDA) and is backed by leading technology and payment companies such as Extended Systems, Visa International, Harex InfoTech, Palm, Toshiba, NTT DoCoMo, Verifone, CrossCheck and others.

IrFM leverages the existing IrDA specification and relies on the Object Exchange (OBEX) protocol to exchange financial transaction data. Because IR links may connect and disconnect several times throughout a payment transaction, IrFM requires an underlying IrDA stack that supports reliable OBEX sessions. Reliable OBEX is the latest addition to the OBEX specification, which enables OBEX to resume a connection without data loss or retransmission if the underlying transport connection is lost. Extended Systems' IrDA stack version 3.0.1 and its multi-transport OBEX module version 3.3.1 support reliable OBEX sessions. Reliable OBEX sessions are required by the IrFM specification and are needed to use the XTNDAccess IrFM SDK.

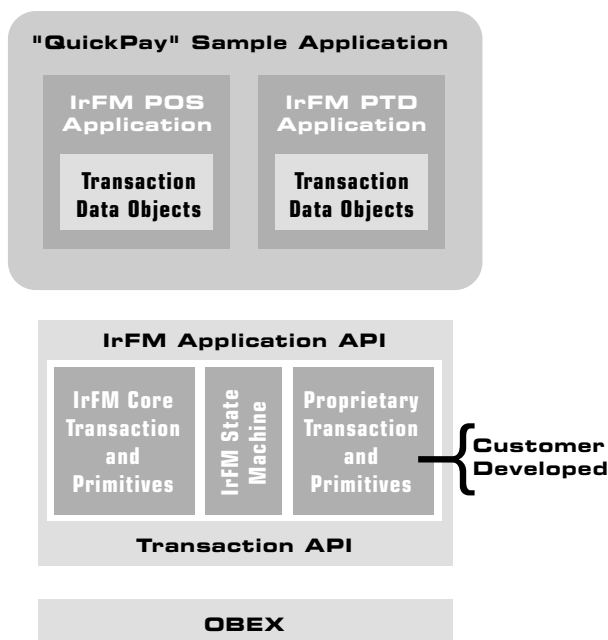
The first profile released by the IrFM working group is the Point-and-Pay profile, which specifies how to conduct basic financial transactions between mobile devices and POS terminals. The Point-and-Pay profile was made available for public review in February 2002 and can be accessed at www.irfm.org.

XTNDAccess IrFM SDK Overview

The XTNDAccess IrFM SDK provides the source code, tools and documentation required to implement IrFM onto a Personal Trusted Device (PTD) or a POS terminal. It allows applications to perform an array of financial messaging transactions defined by the IrFM Point and Pay profile.

Sample Application

The SDK provides a sample application, Quick Pay, which illustrates the implementation of both a PTD and a POS terminal. It provides a graphical user interface (GUI) for visually executing a series of IrFM transactions based on the IrFM Core, Loyalty, and Receipt services. This sample gives developers a starting point for their own application development.



Data Sheet

www.extendedsystems.com

XTNDAccess IrFM SDK



IrFM Application API

The IrFM Application API provides the API's necessary to configure and communicate transactions between IrFM Point of Sale (POS) and Personal Trusted Devices (PTD). This API is not limited to merely sending and receiving transactions but also provides the ability to cancel transactions, parse received IrFM data, and control the auto launch and reliable OBEX Session features.

IrFM Transaction API

The IrFM Transaction API provides the environment where IrFM transactions are executed. The transaction API is used by the IrFM Core, Loyalty and Receipt services to implement their transactions. Other service providers, including private payment providers use this API to implement their transactions.

State Machine

The IrFM State Machine is responsible for integrating and managing the transaction process within the IrFM module. It handles a variety of tasks including current transactions and management of the transaction state. Essentially, it is the glue that binds the transactions and primitives to the rest of the IrFM architecture and OBEX API.

Key Features

- Implements the Core IrFM Protocol (CIP) that implements version 1.0 of the Point and Pay profile
- Supports PTD and POS implementations
- Small code size to fit memory limited devices
- Provided in ANSI-C source code
- Portable to virtually any operating system or hardware platform
- Fully documented
- Requires Extended Systems' XTNDAccess IrDA SDK and multi-transport OBEX with reliable OBEX session support

Key Benefits

- Adds increased value to mobile devices
- Builds brand loyalty by enabling customers to perform convenient financial transactions using their mobile device
- Reduces time-to-market for IrFM-based products
- Reduces development costs for IrFM-based products

Extended Systems

Corporate Office
5777 N. Meeker Ave.
Boise, Idaho 83713

Customer Service Center

800-613-6035
Fax: 541-758-6120

For more information

E-mail: umcinfo@extendsys.com
Web: www.extendsystems.com



800-613-6035

Extended Systems is a global leader in providing mobile infrastructure software that extends enterprise applications to mobile and wireless environments. The company's mobile information management products include data synchronization and management software, mobile application development software, short-range wireless connectivity products (Bluetooth and IrDA-compliant), and client/server database management systems with remote access capabilities.

All trademarks and registered trademarks are the properties of their respective companies.
Information subject to change without notice. 9710-0684-0103