

OpenSynergy's Infrared Data Association Software Development Kit (IrDA SDK), provides a very fast and efficient way to add reliable IrDA compliant infrared communications to an embedded device. OpenSynergy's IrDA software is designed for use in portable office equipment, adapters, mobile phones, PDAs, pagers, digital cameras, medical equipment, industrial automation products and more. OpenSynergy's IrDA expertise, extensive involvement in the IrDA standards organization, and large customer base assure you of quality code written to the IrDA specifications, industry proven reliability, and complete IrDA functionality.

**Features**

- Complete IrDA
  - protocol stack
  - IrLAP
  - IrLMP
  - IAS
  - Tiny TP
  - IrLPT (3-wire raw)
- Compatible with OpenSynergy's Blue SDK (Bluetooth protocol stack)
- Optional Add-in products
  - IrCOMM
  - IrOBEX
  - IrFM
- Up to 16 Mbps Fast IR
- Data window size of 7 for maximum throughput
- Less than 20K code size
- Portable source code SDK
- Provides IR for all types of embedded devices

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**Portable, Easy to Use Code**

OpenSynergy's IrDA SDK is delivered as a well-documented, portable source code solution so that engineers have both an easy to use product as well as complete control over their infrared implementation.

**Fastest Embedded IrDA Stack**

OpenSynergy's IrDA SDK provides the fastest speed and throughput available for an IrDA stack. The stack communicates at IrDA's maximum data transfer rate of 16 Mbps and also maximizes throughput by using a data transfer window size of seven. This implementation improves IrDA performance, especially at higher data rates.

**Complete IrDA Functionality in a Small Footprint**

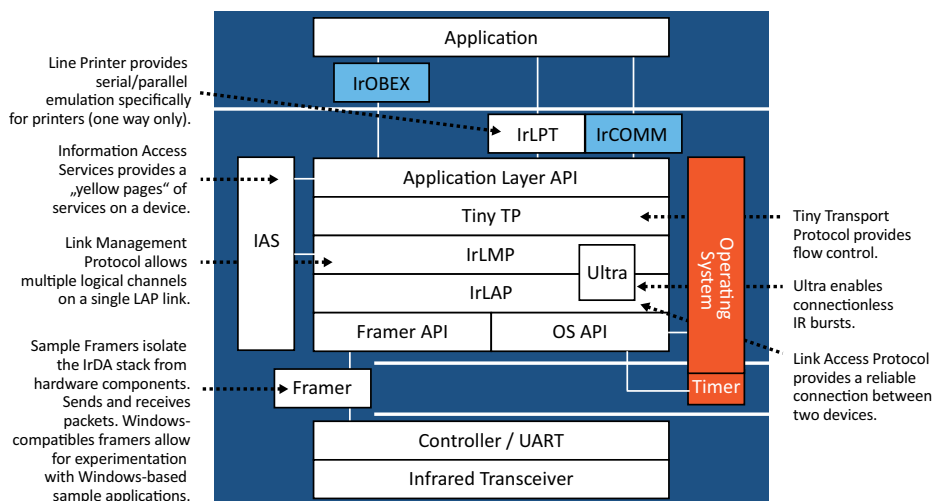
The stack is a complete IrDA development kit. The SDK provides both an IrDA stack and framer code for 115Kbps and 4Mbps IR controllers. Additional source code framers are available for many popular IR controllers. The IrDA stack includes IrLAP, IrLMP, IAS, Tiny TP, and IrLPT (3-wire raw). The stack supports both primary (initiate) and secondary (respond) connections, and by setting a compile-time switch the stack can become a

secondary only. Also available for this stack are the optional application add-in products IrCOMM, IrOBEX, and IrFM to further extend infrared functionality.

**Fast Connect Support**

Applications such as the IrFM Point-and-Pay Profile require faster connection time than IrDA protocols provide. The OpenSynergy IrDA SDK now supports fast connect features which allow IrDA device discovery and connection in less than 100 ms. Both initiator and responder roles are supported.

- Framer library allows customers to pick and choose from a set of sample framers
- Windows-compatible framer for experimentation with Windows-based sample applications
- Optional support for unreliable expedited data transfers
- Compatible with OpenSynergy's Blue SDK. Both Protocol stacks share common code libraries and operating system
- integration functions for further code savings
- Support for seamless integration with OpenSynergy's Multi-transport OBEX Add-In



OpenSynergy's IrDA SDK stack architecture