

IFSYS-7001 IrDA SIR Endec Chip (SOIC16)

Product Brief

The IFSYS-7001 is designed to be used as an add on peripheral IC for any SIR IrDA™ compliant optoelectronic transceiver. It is ideally suited to applications requiring low cost and low power communication based on the IrDA™ specification. IFSYS-7001 can be flexibly used in designs in which an external 16X baud rate clock can be supplied, or it can be used with a low cost 3.6864MHz crystal to provide modulation independent of the host system. Any IrDA™ compatible baud rate can be set by configuring three baud rate control pins. To minimize power consumption, the IFSYS-7001 can be operated on a 1.63µs fixed pulse width. All this functionality is available in a small form factor 16-pin SOIC package.

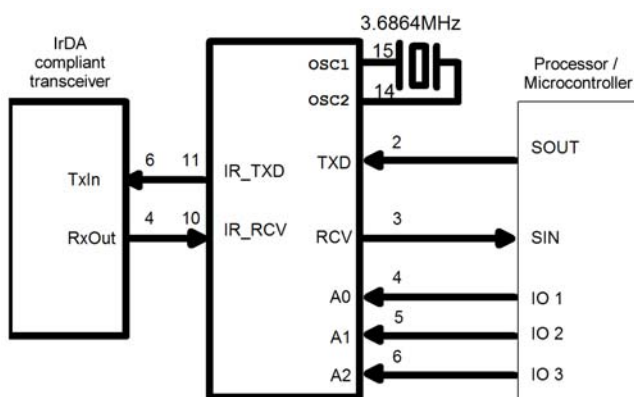


IFSYS-7001

Key features

- ❑ Wide voltage operating range (2.7V – 5.5V). Single power supply input.
- ❑ 16-pin small form factor SOIC package.
- ❑ Operates from a 3.6864MHz crystal, or from an external 16X clock input from the host processor.
- ❑ Transmit pulse width can be configured for 3/16th mode or fixed pulse width mode of 1.63µs, for optimal current consumption.
- ❑ Three speed control signals supports all IrDA™ V1.1 baud rates - 9,600bps, 19,200bps, 38,400bps, 57,600bps, 115,200bps.

Sample Block Diagram



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Product Brief

SPECIFICATIONS

Hardware features

- 16-pin SOIC (surface mount) package
- Single power supply (2.7V – 5.5V supply)
- Operates off a 3.6864MHz crystal or a external 16X clock

Supported speeds

- Supports the following communication speeds:
 - 9,600bps
 - 19,200bps
 - 38,400bps
 - 57,600bps
 - 115,200bps

Electrical characteristics

- Temperature:
 - Operating: -40°C to +85°C
 - Storage: -65°C to +150°C
- Current consumption:
 - VCC = 5.5V:
 - Active: 2mA (typ.), 3mA (max.)
 - Static: 80µA (typ.), 110µA (max.)
 - VCC = 2.7V:
 - Active: 2mA (typ.), 3mA (max.)
 - Static: 40µA (typ.), 54µA (max.)

Dimensions/Weight

- 16 pin SOIC
- Weight: 0.2g

Packaging options

- Tape & Reel
- Tube

Ordering Information

Order Number	Order Description
IFSYS-7001A:6101	IC in Tube packaging
IFSYS-7001A:7101	IC in tape and reel packaging

IrDA™ is a trademark of the Infrared Data Association.

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