

IrDA[®] Standard Encoder/Decoder Product Brief

Features

- Pinout compatible with HSDL-7000
- Compliant with IrDA[®] Physical Layer Specification (Version 1.3)
- UART to IrDA Standard Encoder/Decoder
 - Interfaces with IrDA Compliant Transceiver
- Baud Rates:
 - Up to IrDA Standard 115.2 Kbaud Operation
- Transmit/Receive Formats (Bit Width) Supported:
 - 1.63 μ s
- Low-power Mode: 2 μ A at 1.8V, +125°C

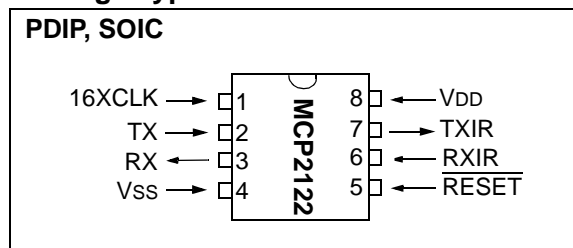
CMOS Technology

- Low-voltage operation: 1.8V to 5.5V
- Extended temperature range
- Low-power consumption

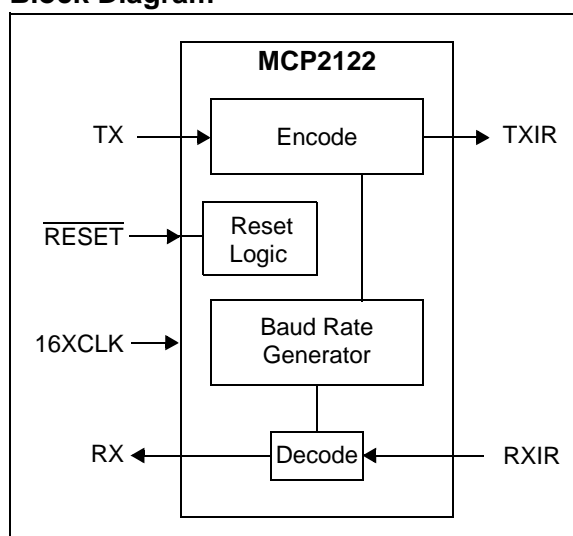
Overview

The MCP2122 is an IrDA standard encoder/decoder device. The MCP2122 device is pin compatible with the Agilent™ HSDL-7000 encoder/decoder and interfaces to standard optical transceivers.

Package Type



Block Diagram



IrDA Family Selection

Device	Baud Rate		Encoder/Decoder	Protocol Layer Handler	Clock Source	Host UART Baud Rate Selection	Comment
	Host UART	IR					
MCP2120	2400 - 312,500 ⁽¹⁾	2400 - 312,500 ⁽¹⁾	Yes	No	XTAL	HW/SW	
MCP2122	2400 - 115,200 ⁽¹⁾	2400 - 115,200 ⁽¹⁾	Yes	No	16XCLK	By 16XCLK	Extended Temperature Range (-40°C to +125°C)
MCP2140	9600	9600	Yes	IrCOMM ⁽³⁾	XTAL	None -Fixed	
MCP2150	9600 - 115,200 ⁽²⁾	9600 - 115,200 ⁽²⁾	Yes	IrCOMM ⁽³⁾	XTAL	HW	Host UART easily interfaces to a PC's serial port (DTE)
MCP2155	9600 - 115,200 ⁽²⁾	9600 - 115,200 ⁽²⁾	Yes	IrCOMM ⁽³⁾	XTAL	HW	Host UART easily interfaces to a modem's serial port (DCE)

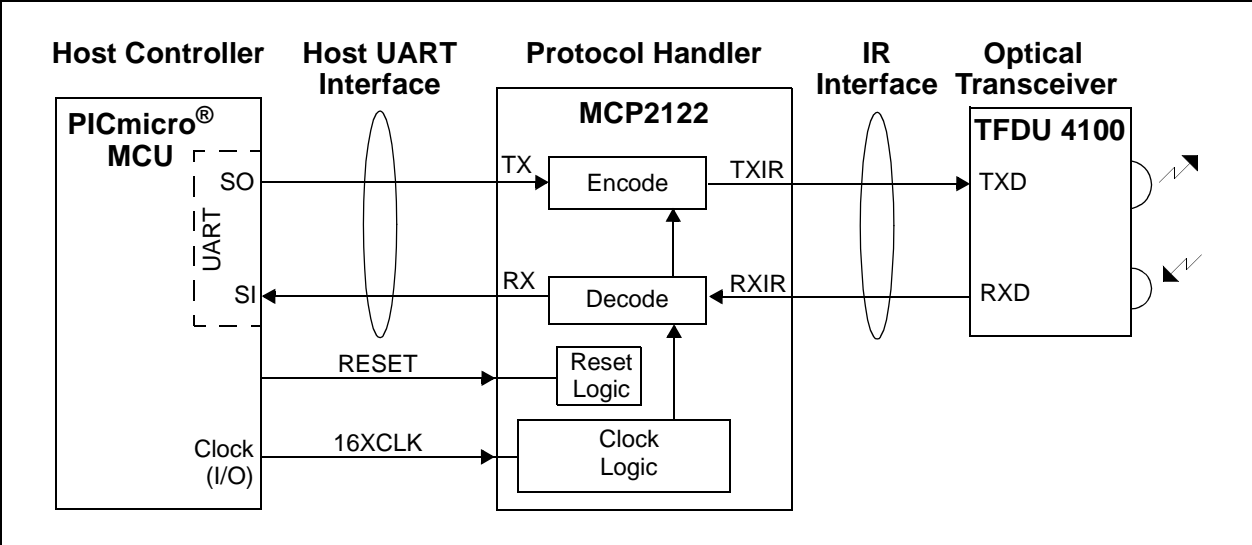
Note 1: The host UART and the IR operate at the same baud rates.

2: The host UART baud rate and the IR baud rates operate independent of each other.

3: Supports the 9-wire "cooked" service class of the IrCOMM application layer protocol.

MCP2122

MCP2122 System Block Diagram



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