

TSB2598 Smart Card ASIC

– make your product e-commerce ready

Infineer's TSB2598 smart card interface ASIC will facilitate smart card implementation in a number of devices including digital cable and satellite set-top boxes, internet appliances, as well as parking and utility meters and kiosks. With the increasing demand for e-commerce over the internet, television, and wireless media the EMV Level 1 certification of the TSB2598 will allow for smart card financial transactions in compliance with the strict standards developed by Europay, Mastercard, and Visa. This single chip solution is easily incorporated into your design, and eliminates the need for the added integration of EMV software. As an end result, the TSB2598 leads to faster time-to-market so that your product will be at the peak of the smart card and e-commerce explosion.

The Infineer TSB2598 offers:

- ▶ **EMV Compliance**

for certified financial transactions with Europay, Mastercard, and Visa

- ▶ **Serial and SPI interfaces**

so multiple ICs can be supported on a single serial bus

- ▶ **High speed, 8-bit RISC processor**

for high-speed financial transactions

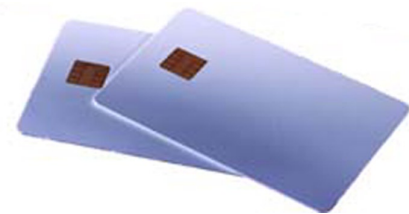
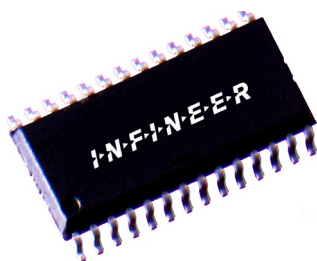
- ▶ **In-circuit programmability**

so you can upgrade without replacing the equipment

- ▶ **Software tools included**

to help reduce program development time and cost.

- ▶ **Engineering and development assistance**



INFINEER

TSB2598 Serial Smart Card ASIC

Features Common To All Infineer Smart Card Interface Solutions

- ▶ T=0, T=1 and synchronous cards supported
- ▶ Full Protocol Parameter Selection (PPS) support
- ▶ Full guard time and block time support
- ▶ High level driver and support available
- ▶ Evaluation/development board available
- ▶ Microsoft PC/SC compliant
- ▶ Single clock for smart card and microcontroller operation
- ▶ Fully compatible with the entire family of Infineer smart card interface chips
- ▶ EMV Compliant
- ▶ Embedded RISC micro-processor

TSB2598 Specifications

The TSB2598 ASIC is an integrated low cost serial smart card interface solution for set-top boxes, vending machines, and any other intelligent device. The TSB2598 offers a fully certified intelligent ISO7816 interface for synchronous, asynchronous, I²C, and extended I²C cards through a standard serial interface. The TSB2598's intelligence gives it the capability to handle all aspects of the smart card transaction (including exception and error handling) without intervention. As a result, the upstream host is relieved of virtually all ISO 7816 protocol overhead. The upstream host simply generates the ISO command APDU and waits for the ISO response APDU to be returned by the TSB2598.

The TSB2598 also provides extra features required for consumer products such as short circuit protection, card movement protection, and support for 3.3V and 5V cards.

- ▶ Short circuit protection
- ▶ Support for 3.3 V and 5V smart cards
- ▶ Fully certified in the Windows PC/SC environment
- ▶ Available in 28-pin SOIC package
- ▶ Application Development Environment-SCDE
- ▶ Serial port interface UART
- ▶ Low 1.8mA operational current draw
- ▶ 115K baud data transfer speed
- ▶ LED status pins with direct drive capability

