

GCI 410-EMV

The OEM Smart Card Reader

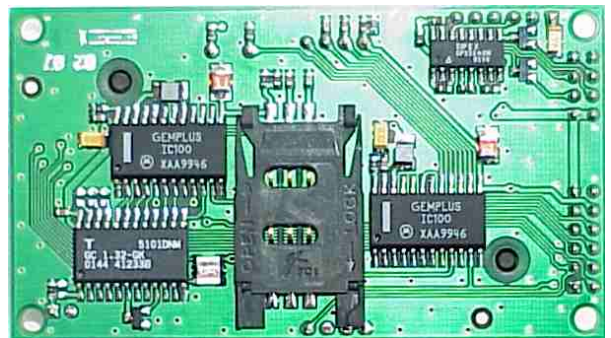
Overview

The GCI410-EMV is a modular, yet very compact coupler. It offers the simplest means of integrating an EMVCo approved smart card reader into different types of electronic devices.

Built around GemCore™ technology, this coupler allows larger systems to easily access all types of smart cards through an on-board or external smart card connector.

A Security Access Module (SAM) can also be connected to the board.

The interface with the host processor is a serial TTL or RS-232 link. The communication protocol is supplied as a C language source code library (GILK). PC/SC drivers are provided for Windows environments.



The GCI410-EMV is physically compatible with its predecessors, the GemCore410 and the GCI400 couplers. Functional evolutions are presented in its technical documentation.

Applications



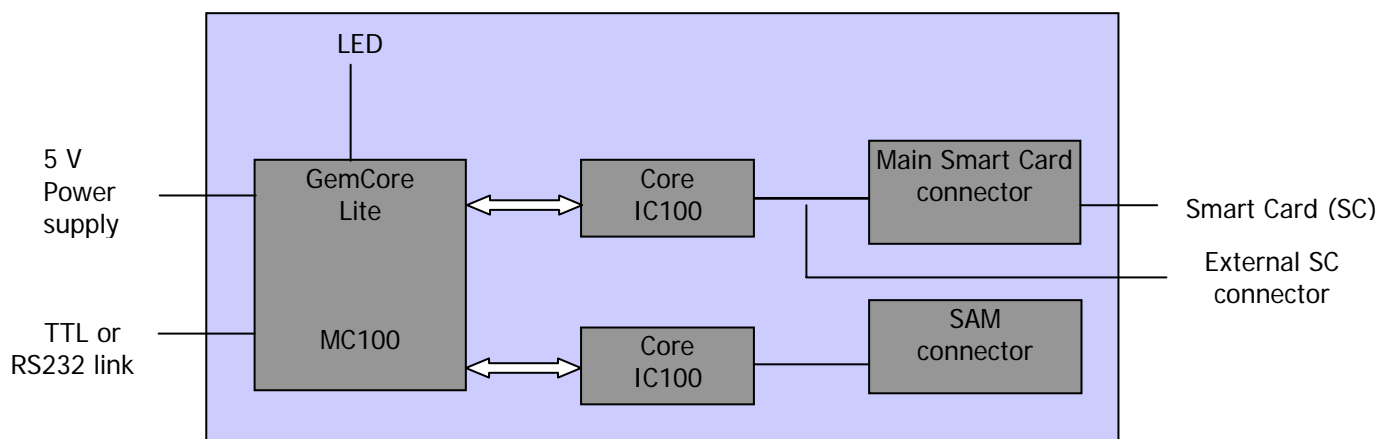
GCI410-EMV is **EMVCo Level 1** (*) and **"CB"** (**) Type Approved; therefore it corresponds to the need of any smart card applications such as:

- Payphones and screen-phones
- Payment terminals, kiosks, electronic purse
- Vending and gaming machines
- Access control, parking meters
- Metering.

(*) EMVCo approval number: 11349 0602 311 10 FIM

(**) Cartes Bancaires approval number: 138C01 2002

Product Architecture





Technical Specifications

Communication interface	Smart Card (SC)	<ul style="list-style-type: none"> • Access to all ISO 7816-1 to -4 microprocessor (T=0, T=1) and memory cards • Reads both EMV and non-EMV ISO cards
	Host	<ul style="list-style-type: none"> • Asynchronous serial link with TTL or RS-232 levels • Programmable transmission speed from 9.6 Kbps to 76.8 Kbps • Plug and Play support
Power supply	Consumption	<ul style="list-style-type: none"> • 25 mA typical with no smart card powered • 60 mA additional consumption by smart card powered • 200 mA max.
	Coupler voltage	<ul style="list-style-type: none"> • 5 V +/-5%
	SC voltage	<ul style="list-style-type: none"> • 3 V or 5 V
Operational conditions	Storage T°	<ul style="list-style-type: none"> • -40°C to +85°C
	Operation T°	<ul style="list-style-type: none"> • 0°C to +70°C
	Humidity	<ul style="list-style-type: none"> • 95 % at +40°C
	EMC	<ul style="list-style-type: none"> • CE 89/336, FCC part 15
	Safety	<ul style="list-style-type: none"> • IEC 950, UL 1950
	Vibration	<ul style="list-style-type: none"> • 10 Hz to 150 Hz, 2 g
On-board smart card connector		<ul style="list-style-type: none"> • Manual insertion, ISO chip location • Landing technology with smart card presence detection • Guaranteed for 80,000 insertion cycles. See note. • The EMVCo Type Approval is valid with this on-board SC connector only.
Physical characteristics	Dimensions	<ul style="list-style-type: none"> • 45 mm x 80 mm x 20 mm
	Weight	<ul style="list-style-type: none"> • 100 g
Card protection		<ul style="list-style-type: none"> • Short circuit • Card removal when powered on • ESD: 4 KV on card pins, Human Body Model

Note: Note: Performance is given according to UTE C93-421 norm. The reliability of the connector depends on conditions of environment and use for which Gemalto is not responsible. For example, for access control, the use of an external high quality connector is recommended.