SYCARD TECHNOLOGY

PCCextend 100
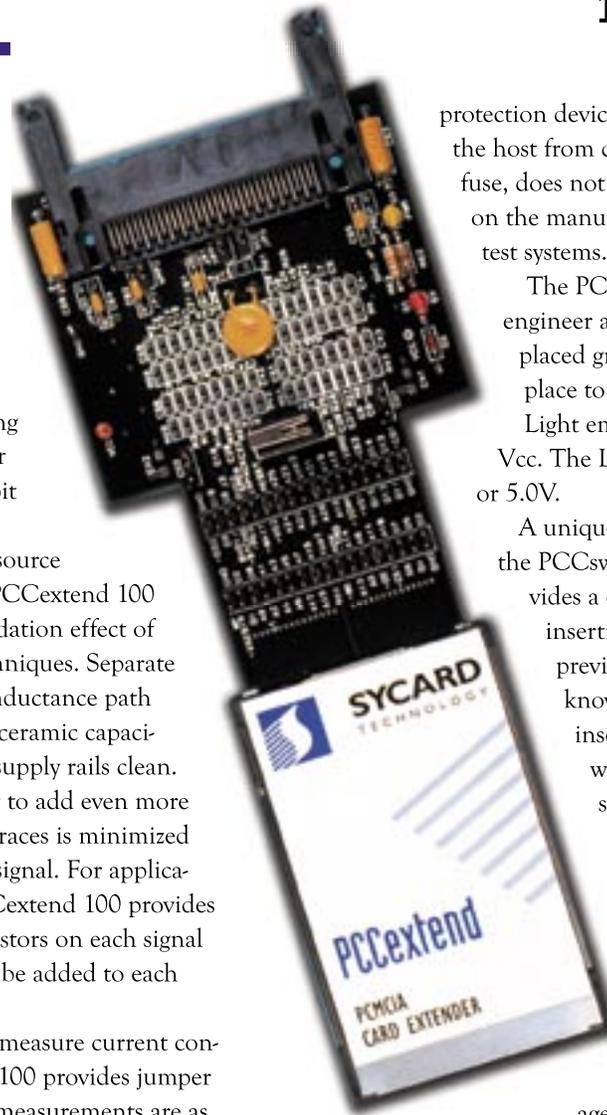### 16-bit PC Card Extender

Overview

Sycard Technology's PCCextend 100 is the ultimate design in extender cards. After using many of the existing extender cards, the engineers at Sycard decided to put all the good features (and some new ones) into a single card. The PCCextend 100 is a culmination of that design effort.

The PCCextend 100 includes all the standard extender card features, including access to all 68 signal pins, multiple layer design and support for type I, II, III 16-bit PC Cards.

All too often, extender cards are the source of many signal integrity problems. The PCCextend 100 is designed to minimize the signal degradation effect of the extender by using proven design techniques. Separate Vcc and Ground planes provide a low inductance path to the host socket. High frequency X7R ceramic capacitors and bulk tantalum capacitors keep supply rails clean. Additional SMT pads allow the designer to add even more caps if needed. Crosstalk between long traces is minimized by grounding conductors between each signal. For applications that are sensitive to noise, the PCCextend 100 provides surface mount (SMT) pads for series resistors on each signal line. SMT capacitors to ground can also be added to each signal line.

PC Card extenders are often used to measure current consumption of a card and the PCCextend 100 provides jumper blocks to isolate Vcc and Vpp. Current measurements are as simple as inserting a series Amp meter.

Most PC Card host sockets do not provide current limiting on Vcc. A damaged PC Card or accidents in the lab can "smoke" your host socket. The PCCextend 100 includes a current protection device on Vcc. This resettable fuse protects the host from damage and, unlike a conventional fuse, does not need replacing. The unit can be used on the manufacturing floor to protect expensive test systems.

The PCCextend 100 was designed with the engineer and technician in mind. Thoughtfully placed grounding posts provide a convenient place to ground a scope or analyzer. Dual Light emitting diodes indicate the status of Vcc. The LEDs will indicate if Vcc is at 3.3V or 5.0V.

A unique feature found on our PCCextend is the PCCswap switch. The PCCswap switch provides a quick and easy way to simulate a card insertion/removal cycle. Those who have previously developed PC Card products, know how awkward it is to remove and insert a card to test PC Card client software. With just a push of the PCCswap switch, the PCCextend 100 simulates a PC Card insertion and removal which can save wear and tear on your connectors (and fingers).

The PCCextend 100 is designed for use in all 16-bit PC Card slots. The side that plugs into the host is 5V keyed. The unit will fit into both 5V and LV (3.3V Low Voltage) keyed slots, including CardBus slots. The PC Card connector, where the card plugs in, is a low-voltage keyed connector. All current 5V and 3.3V Type I, II, III 16-bit PC Cards can be plugged in. *For debugging CardBus PC Cards, use Sycard's PCCextend 140.*

Key Features

- PCCswap simulates card insertion/removal
- Compatible with type I, II, III 16-bit PC Cards
- Works in type I, II, III slots
- Vcc and Vpp current measurement test points
- Over-current protection built in
- LEDs indicate 3.3V or 5V Vcc
- All 68 pins brought out to test points
- Vcc and Ground test points
- Current Protection Device protects host socket
- Quality AMP sockets for long service life
- Multiple layer design
- SMT pads for series resistors
- SMT pads for filter capacitors

Mechanical Specfications

Width	3.0" (7.6mm)	Weight	3.0 oz
Length	8.313" (21.1mm)	Thickness	0.5" Max (12.7mm)

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