

The One Card That Gets It All Together

PerCom's CI-812

With just one card, you can interface your S-100 bus computer to a data terminal and cassettes, and you can choose the data rates: 30, 60, 120, or 240 self-clocking bytes per second cassette interfacing, and 110- to 9600-baud data terminal interfacing.

The CI-812 not only combines both functions on one card, it also out-performs the separate interface cards normally required for cassette/terminal interfacing. The result: you pay less for more.

Available from

PERCOM



- ✓ The CI-812 provides the two most commonly required functions on one PC board: cassette interfacing and data terminal interfacing.
- ✓ The CI-812 provides selectable data rates: 30, 60, 120, or 240 KC/biphase-encoded bytes per second for cassette interfacing, and 110- to 9600-baud RS-232 interfacing.
- ✓ The CI-812 is designed with phase-locked/UART data recovery circuitry for extremely dependable, self-clocking data recovery, even with inexpensive audio cassette recorders.
- ✓ The CI-812's independent record-playback circuits accommodate two recorders for simultaneous operations such as cross-filing. Further, program control of recorders is available with an optional DIP reed relay kit.
- ✓ User software modification is minimal, if needed at all.
- ✓ A comprehensive instruction/application manual, with software, is included with each unit.

SPECIFICATIONS: CI-812

ENCODING METHOD

'Kansas City' (BYTE) - Biphase standard: Serial start-stop asynchronous with two stop bits, non-saturating, self-clocking synchronous frequency shift. The encoding method is the Biphase-M, or Manchester Code, with varying amounts of redundancy. 300 baud uses 8 cycles of 2400-Hz signal to define a logic 'one' bit, and 4 cycles of 1200-Hz signal for a logic 'zero'. At 2400 baud, a logic 'one' is one cycle of 2400-Hz signal and a 'zero' is one half cycle of 1200 Hz.

DATA RATE (cassette)

Selectable: 300, 600, 1200 or 2400 baud. 300 baud is 'Kansas City Standard' rate. Cassette data rate is independent of Data Terminal rate selection.

ERROR RATE

Typically less than one error per million bytes at 300 baud using premium quality audio tape and well-maintained \$50 - \$100 cassette tape units. 2400-baud operation should be regarded as experimental although satisfactory performance will be obtained with moderate quality cassette recorders in non-critical applications.

STORAGE CAPACITY

A C-60 cassette will hold 96K bytes at 300 baud or 750K bytes at 2400 baud. Cassettes longer than C-60 are NOT recommended.

COMPUTER INTERFACE

Compatible electrically and physically with the Altair, IMSAI and other computers using the S-100 bus. The CI-812 is I/O driven with selectable I/O address. Control and status is I/O port xxxx xxx0; data is I/O port xxxx xxx1.

DATA TERMINAL INTERFACE

Full duplex, RS-232 levels at 110, 300, 600, 1200, 2400, 4800, or 9600 baud. Selection of Cassette or Data Terminal input is under program control.

CASSETTE AUDIO INTERFACE

Compatible with the Earplug output and the AUX or MIC inputs on most portable cassette recorder/players.

POWER REQUIREMENTS

+8 Vdc \pm 1 Vdc @ 500 mA (provided by host computer)

-16 Vdc \pm 1 Vdc @ 20 mA (provided by host computer)

PHYSICAL

Altair/IMSAI/S-100 sized circuit card (10" \times 5.375"). PC card is FR4-G10 epoxy glass, double-sided, 2-oz copper, with plated-thru holes. Edge contacts are gold.

CI-812 (kit)	\$99.95.
CI-812 (assembled)	\$129.95.
I.C. Socket Kit	\$14.95.
Remote Control Kit	\$14.95.
Test Cassette (includes operating software)	\$4.95.
Instruction Manual (price refunded with order)	\$4.95.
Operating System Software (2708 EPROM)	\$44.95.



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PerCom 'peripherals for personal computing'

