## Commodore's 3-for-2 deal pays off

The trend-setting "three-for-two" educational-grant program started by Commodore in 1979 has given away more than 13,000 microcomputers, the company recently reported.

PET 2000 and 4000 series micros, plus CBM 8000 machines, have been delivered free to public and private institutions, from elementary schools to colleges and universities. The program grants a free Commodore computer to educational institutions that buy two Commodore micros from authorized dealers. Including the units that were purchased in order to qualify for free microcomputers, the program has provided nearly 40,000 micros that are currently being used for education, the company said.

'We don't need an act of Congress to get Commodores in the schools,' said Kit Spencer, Commodore vice-president of marketing, alluding to the bill recently introduced by U.S. Rep. Fortney H. Stark of California that would allow tax write-offs for companies that donate computers to schools. The bill came about after Stark met with Apple Computer Chairman Steven P.

# Enhancements for Commodore

Small Systems Engineering has introduced three enhancements for the Commodore computer line.

The SoftBox permits Commodore users to run CP/M packages and interface with up to four Corvus Winchester hard-disk drives. It contains a Z80-based 64K RAM board. CP/M 2.2 and RS-232 interfacing capability are also included.

The HardBox, teamed one to a computer, allows up to 64 users to access the same Corvus hard-disk storage simultaneously.

The Petspeed compiler allows Commodore BASIC programs to run up to 30 times their normal interpretive speed.

The SoftBox costs \$895; the Hard-Box, \$695; and the Pet-speed compiler, \$350.Small Systems Engineering is located at 71 Park Lane, Brisbane, CA

Small Systems Engineering's Hardbox, Softbox and Petspeed compiler for Commodore PET and CBM computers



## Assembly



Fairchild "fault finders" inspect boards resting on a special "bed of nails" to detect any problems in circuitry.

continued from page 18 boards then go to the "bed of nails" where Fairchild "fault finders" analyze the continuity of the boards' circuitry. All boards are then "burned in' for 24 hours.

Other parts for the computers arrive from the warehouse and the computers are assembled and burned in again. The interface chip for the keyboards undergoes a separate burn-in

The factory produces systems a hundred or two hundred at a time. The metal parts that go into the main frame of the machine are manufactured in Canada and the plastic components and CRTs come "from various vendors," according to Crockett. Commodore is also manufacturing printers and some disk drives in Ja-

"The bulk of the technology is in the board," Crockett said. Other problems are comparatively easy next to this one, he added.

Crockett said the facility has no real safety problems; gases near the wavesoldering machinery are quickly vented away. He said warehouse workers do have to be careful to avoid having things fall on them.

"As I talk to people, there's no question they think Commodore has the top technical facilities," Crockett said. If it wasn't for the current recession, he conjectured, the plant would be even busier than it already is, and even more people would be buying Commodore computers.

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### THE Southeast OMPUTER SHOW

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