letters on a green background, though either foreground or background may be set to any one of nine colours, and the format can be altered.

Facilities for sound generation are provided, but with only one channel and no envelope control or 'white noise' generation this machine is less flexible than others.

The Tandy Color Computer has the same type of ROM cartridge slot as the Dragon, and a wide range of software is available in this format. There is the usual variety of games cartridges: chess, cards, draughts, oil-prospecting, and pinball. The available software includes music, arithmetic and typing cartridges. There is also a good range of utility programs for budgeting, filing and letter writing, as well as some program development aids for BASIC or machine code. In addition there is a very handy diagnostic ROM, designed to ensure that the machine is working correctly.

An RS232 serial interface at the back of the machine allows for the use of a range of external devices, including serial printers. This port can also be used for communication with other computers using a modem (see page 216). With such a device and the videotex cartridge, various databases can be searched, or electronic mail sent.

Two joystick connectors are provided on the back of the machine, each with two axes of movement and a fire button. This seems to present a small problem in Tandy Color BASIC: a stream of characters is generated when the button is pressed, but Tandy say this can be ignored.

The joysticks are much better than many others, with variable movement instead of the usual simple push-pull type of mechanism, and could be used to read other analogue (variable value) inputs, such as those from physics experiments.

Expansion of the machine is through the cartridge port, and up to four 5¼ inch disk drives can be connected — giving a respectable total store of 626 Kbytes.
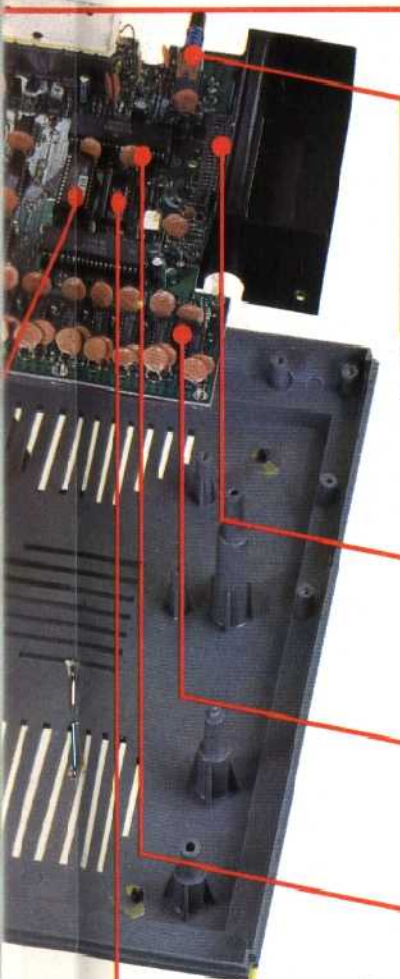
Video Clock
The size and number of characters on the screen is set by the frequency generated by this crystal, which is also used in the actual production of the image

Reset Switch
Pressing this will clear the machine and restart it

Cartridge Slot
Used to connect disk drives and operating software as well as ordinary game and program cartridges

RAM
This machine has 16K of dynamic RAM in 8 chips, each chip comprising one bit from the 8-bit byte

6809E CPU
An advanced chip with internal 16-bit arithmetic, operating on an 8-bit databus, it can address 64K of memory

Spare 8K ROM Socket
Could be used for additional utilities or extensions to BASIC

CHRIS STEVENS

BASIC

BASIC

TANDY COLOR COMPUTER

PRICE
£179.95 standard to £299.95 with 32K RAM

SIZE
369 × 344 × 94mm

CLOCK SPEED
0.895MHz

MEMORY
4 Kbytes of RAM; 8 Kbytes of ROM, expandable to 32 Kbytes

VIDEO DISPLAY
16 lines of 32 characters. 9 colours with independent background and foreground setting. 127 pre-defined characters and 127 user-definable characters

INTERFACES
RS232 serial, cassette, two proportional joysticks, TV interface on two channels

LANGUAGES SUPPLIED
BASIC

OTHER LANGUAGES AVAILABLE
6809 machine code with Assembler packages

COMES WITH
Installation and BASIC manuals, TV lead

KEYBOARD
53 individual keys, with typewriter spacing

DOCUMENTATION
The user's manual is uneven in presentation, but is very comprehensive and a perfectly adequate guide to the machine

Tandy Printers
The Tandy Color Computer is well supported by a range of printers marketed by Tandy themselves. The CGP-220, for example, uses the ink-jet principle to produce seven colours, and is silent in operation. The cost is just under £500. At the other end of the scale, the CGP-115 at £150 uses four miniature ballpoint pens to produce colour printing and graph plotting

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