

ATARI 80CVC
TECHNICAL SPECIFICATION
4/17/84

1.0 INTRODUCTION

The ATARI 80CVC (80 column video card) is a monochrome eighty column by twenty-five row video display generator, which will drive any standard monitor which has a video bandwidth of 15 Megahertz.

2.0 Power Consumption

The ATARI 80CVC draws 450 mA from the +10v supply.

3.0 Functional Description

The ATARI 80CVC contains 1) a screen handler for the display, 2) a programable location for the screen buffer, and 3) an open interface for application programs which may want to directly access the screen buffer.

3.1 The Screen Handler

The screen handler resides on the 80CVC. It intercepts the normal screen handler calls and implements them on the 80 column display. It also initializes the 6845 crt controller on power on and locates the buffer location.

3.2 The Screen Buffer

The screen buffer is located at an address of a two kilobyte boundary specified by writing the five most significant address bits in data bits D7 to D3 at location \$D1FC. Normally this information is not needed, because the screen buffer will process the I/O calls, but an application can access this buffer directly. The physical memory on the card is not readable, but an automatic shadowing occurs in main memory.

3.3 The CRT Controller

The 80CVC uses a 6845 crt controller and this controller can be directly accessed from an application, although this is not necessary. The crt controller resides at addresses \$D1FA and \$D1FB. \$D1FA is the register address latch and \$D1FB is the data