

## 2.1 Hardware Configuration

Figure 1 is a diagram of the VGA graphics adapters. Board features are listed.

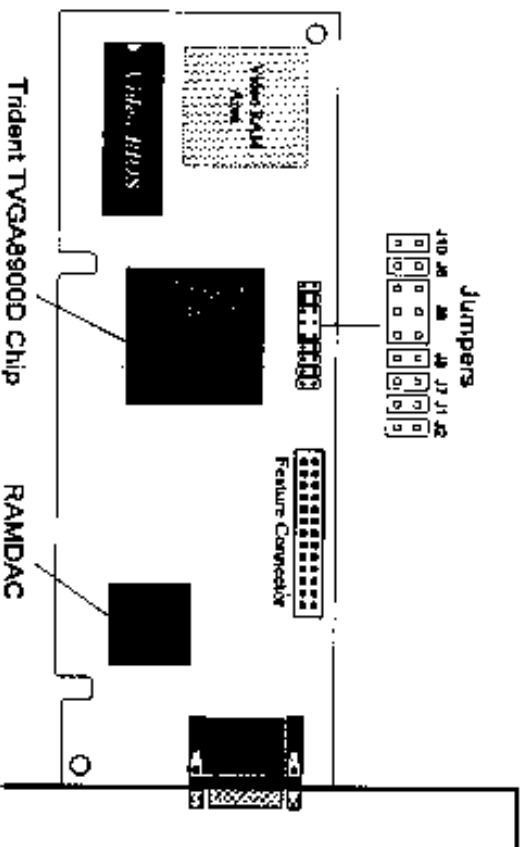


FIGURE 1. 256K-512K-1.0MB Jumpers & Component Locations

### 2.2 Jumper Settings

You can adapt the VGA adapter for special hardware configurations using the given jumpers on the card.

#### 2.2.1 Enable/Disable Zero-Wait State

J1 and J2 allows you to enable/disable the adapter's ISA bus zero-wait state feature. When enabled (default), the CPU can transfer data to the VGA adapter at the zero-wait state rate through ISA bus. There are two zero-wait state stages that can be enabled or disabled. If your display exhibits pixel drop outs or the system hangs, use Jumper J2 to disable the first zero-wait state stage. If you still encounter problems, use Jumper J1 to disable the second zero-wait state stage. Figures 2-A and 2-B show how to enable/disable the zero-wait state stages.



J2: Enable First Stage Zero-Wait State  
(Default: Pin 1 and 2 connected) (Pin 1 and 2 open)

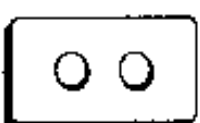


FIGURE 2-B. J1 Enable/Disable Second Stage Zero-Wait State

J1: Enable Second Stage Zero-Wait State  
(Default: Pin 1 and 2 open) (Pin 1 and 2 connected)



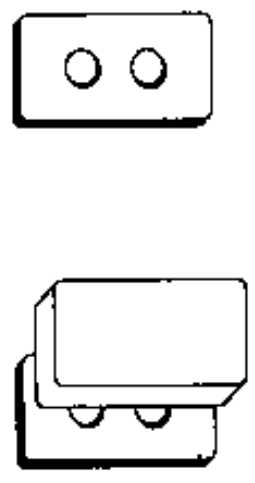
#### 2.2.2 Select Scan Rate: J7

J7 allows you to configure the scan rates of extended VGA modes to be compatible with your multi-scanning monitor. J7 is operational for 4 DRAM (512K) and 8 DRAM (1 MB) configurations only. If your monitor can scan at 48.7 KHz, remove the Jumper pin across J7. J7 in the open position will allow non-interlaced display for 1024x768 modes and higher horizontal and vertical scan rates for 800x600-16 color (4 DRAM and 8 DRAM) and 800x600-256 (8 DRAM only). If your monitor cannot scan at 48.7KHz, leave the Jumper pin for J7 in the default position. This will give interlaced display for 1024x768 modes and reduced horizontal and vertical scan rates for the 800x600-16 color (4

DRAM and 8 DRAM) and 800x600-256 (8 DRAM). Reference Table 1 (page 3-4), Table 4 (Appendix A-4), and your monitor specifications for more detail on scan rates. Figure 3 illustrates the two settings for Jumper J7.

FIGURE 3. J7 Setting for Selecting Scan Rate

- J7: 48.7 KHz Scan Rate (Pin 1 and 2 open)
- J7: Default Scan Rate (Pin 1 and 2 connected)



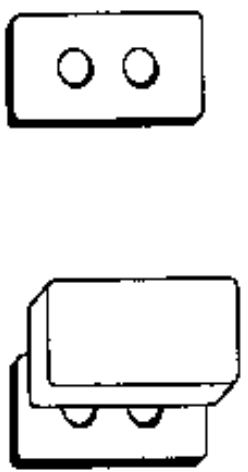
### 2.2.3 Enable/Disable Autodetect: J8

J8 allows you to enable/disable the BIOS Autodetect feature. When enabled (default) the BIOS will determine whether the Graphics Adapter can operate with an 8-bit or 16-bit BIOS interface, and will configure the BIOS interface accordingly. When disabled, the board will boot up in its default BIOS interface setting (generally 8-bit).

**NOTE:** If you have problems booting your system, set Jumper J8 to disable autodetect, or place the card in an 8-bit slot and set J6, J9 and J10 jumpers according to Figure 5-B.

FIGURE 4. J8 Settings to Enable/Disable Autodetect

- J8: Enable Autodetect
- J8: Disable Autodetect



### 2.2.4 8- or 16-Bit ISA Bus Slot Select

J6, J9 and J10 are used to select whether the VGA adapter is seated in a 8-bit or 16-bit slot.

FIGURES-A. J6, J9 and J10 setting for 16-bit slot

- J10
- J6
- J9

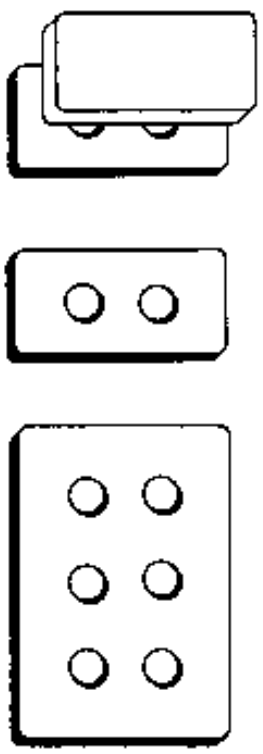


FIGURE 5-B. J6, J9 and J10 setting for 8 bit slot

- J10
- J6
- J9

