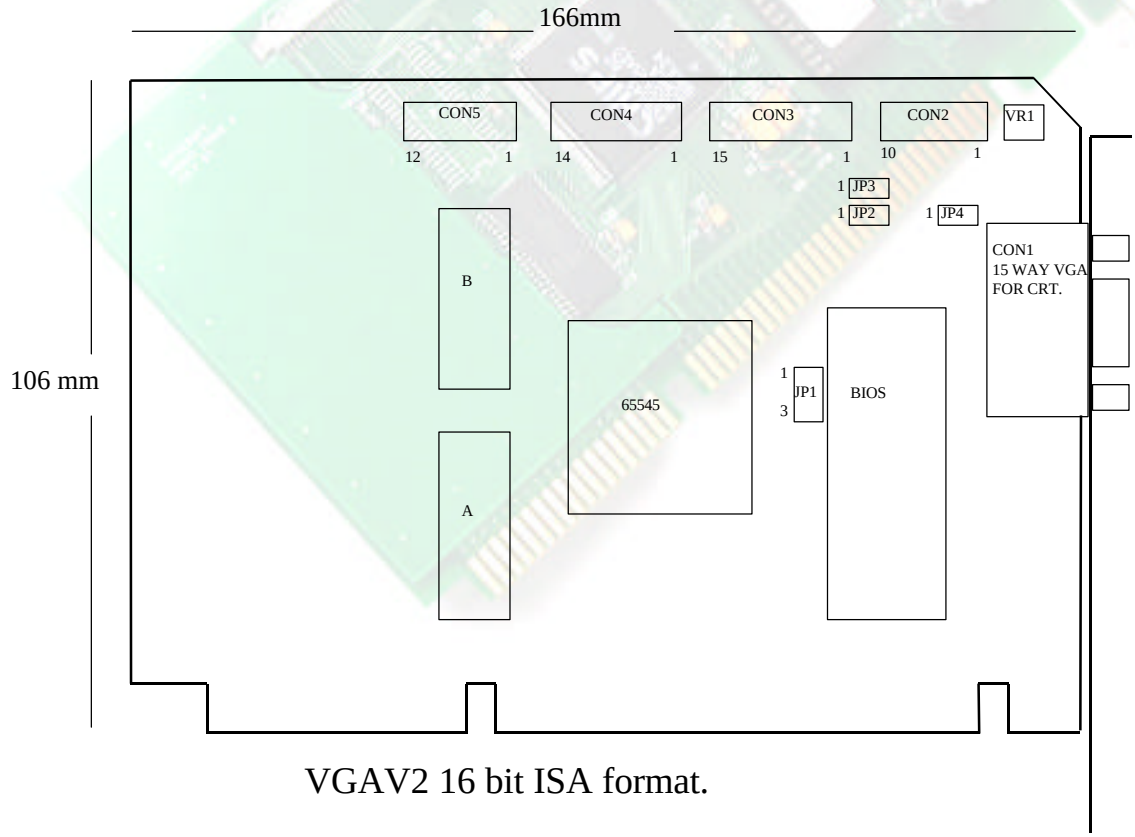
VGAV2

The VGAV2 is a 16 bit ISA half size PC board designed to drive both CRT and LCD displays. It is based on the highly versatile Chips and Technologies 65545 IC and provides a cost effective solution for driving graphics LCD displays.

Features:

Support for a wide range of LCD panels including: TFT , STN dual scan and STN single scan, in both colour and monochrome.
Panel resolutions including : 320x240, 640x480, 800x600 and 1024x768.
Simultaneous driving of both CRT and LCD displays.
Supports all standard VGA video modes.
Full 24 bit colour interface capability.
Optional memory upgrade from 512KB to 1MB.
Optional 3.3V panel interface.
Optional temperature compensation for STN displays.
Includes hardware power up and down sequencing for safe panel operation.
On board -Ve voltage generation for LCD Bias.
Custom cable and interface connections available.



VGAV2 16 bit ISA format.

INTERFACE CONNECTION

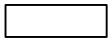
Con2	Signal	Con3	Signal	Con4	Signal	Con5	Signal
1	-15V Safe	1	LD3 (P4)	1	P8	1	P20
2	GND	2	LD2 (P5)	2	P9	2	P21
3	VDD Safe	3	LD1 (P6)	3	P10	3	P22
4	+12V Safe	4	LD0 (P7)	4	P11	4	P23
5	GND	5	UD3 (P0)	5	GND	5	GND
6	Pot -	6	UD2 (P1)	6	P12	6	M
7	Pot Wiper	7	UD1 (P2)	7	P13	7	ENAVEE
8	Pot +	8	UD0 (P3)	8	P14	8	GND
9	Thermistor -	9	VEE/Vcon	9	P15	9	VDD Safe
10	Thermistor +	10	GND	10	GND	10	+12V Safe
		11	VDD Safe	11	P16	11	+5V Out
		12	Disp/Off	12	P17	12	+VEE In
		13	Clock	13	P18		
		14	LP	14	P19		
		15	FLM				

Con2=Molex 53261-1090. Con3=Molex 53261-1590. Con4=Molex 53261-1490. Con5=Molex 53261-1290.

Jumper link Details:

JP1: 

BIOS EPROM IC2 A16 = Low when linked, High when not linked. (1Meg EPROM only).
BIOS EPROM IC2 A15 = Low when linked, High when not linked.
BIOS EPROM IC2 A15 = ISA bus A15 when linked. Required for 40K BIOS.

JP2 : 

Panel interface voltage selection: Link 1&2 for 3.3V or Link 2&3 for 5V (default).

JP3 : 

Panel VEE/Vcon voltage selection: Link 1&2 for -ve VEE or Link 2&3 for +ve VEE.

JP4 : 

Panel VEE/Vcon voltage selection: Link 1&2 for -ve VEE or Link 2&3 for +ve VEE.

Notes:

1) VDD Safe is +5V switched via a Fet. controlled from the ENAVDD signal on the 65545 VGA controller. Max VDD Safe current = 1A.
2) +12V Safe is +12V switched via a Fet. controlled from the ENAVEE signal on the 65545 VGA controller. Max +12V Safe current = 600 mA.
3) -15V Safe is a Zener tap off the on board -22V VEE voltage generator. Max combined -22V and -15V Safe current = 100 mA.
4) The on board Pot. VR1 must be removed if an external Pot. is used (Con2 pins 6 to 8) for VEE bias voltage adjustment.
5) A Thermistor (NTC type on Con2 pins 9 & 10) can be used to provide temperature compensation for STN panels. (Contact supplier for details).
6) +5V Out (Con5 pin 11) is an un-switched direct connection to the ISA bus +5V. For general use.
7) +VEE In (Con5 pin 12) provides the ability to input a high +ve voltage to generate VEE/Vcon bias required by some STN panels. (Contact supplier for details).