UNIGRAF



PCI Interface

Test Signal Generator for Digital Displays

The VTG-3116 PCI board is a digital video signal generator designed for testing, evaluating and servicing different types of Flat Panel Displays in manufacturing, research & development. It can supply the necessary signals for displaying test pictures on LCD, EL and Plasma Displays or other equipment using digital video inputs, colour or monochrome.

Excellent tools for testing

VTG software comes with a set of commonly-used timings and test patterns. For user's special needs it is simple to edit and modify them and save for further use. It offers complete single pixel control in any timing and pattern including text with bitmap and vector fonts. It is easy to build test sequences for manufacturing, burn-in, quality control and service routines. Also multiple generators can be controlled in one PC.

Unigraf VTG Software and Hardware offer quick, easy and powerful tools designed precisely for various types of video testing applications of today and tomorrow.

Easy & Efficient Interfacing Control

The large variation in the interface signaling required by different types of displays is solved by versatile Digital Interface Adapter bus. Different DIA & VIA-adapters, supporting various display interfaces, can be connected to the VTG-3116. The DIA adapters mount directly to the VTG card and the VIA adapters are connected to the card by a cable. New adapters can be developed as the interfaces and standards improve and change.



High performance UniLink 100 pin Interface controlled by powerful programmability and software support

- Single-Ended double pixel output mode up to 330MHz Pixel Frequency
- Differential ultra clean output mode up to 200MHz Pixel Frequency
- WinVTG.exe User Interface for Windows™ (95, 98, NT, 2000,XP)
- DLL for application programming
- Bitmap support for multiple file formats: .BMP .GIF .JPEG .PCD .PCX .PNG .TIF
- ATE support, VESA DPMS and DDC
- Unlimited number of permanent programmable patterns, timings, colors, palettes, signal formats and sequences

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Video Test Generator VTG-3116

BASIC SPECIFICATIONS

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Pixel Frequency	Single-Ended double pixel output mode up to 330MHz Pixel Frequency	System Requirements and Software Windows [™] operating system (95, 98, NT, 2000,XP) WinVTG .exe User Interface
	Differential mode up to	 Windows DLL software library
	200MHz Pixel Frequency	 Visual Basic and C++ sample programs
	Step: 0,01 Mhz	PCI-bus
	Accuracy <u>+</u> 50 ppm	Power: +5V/3A max, +12V/10mA
		(+ output connector supply for +5V max1A and +12V max2A)
Graphics Display Memory Size		EMI: meets EN 55011, Class B
Resolutions	2048 x 2048 x 8 bit colors out of 16.7 million true color	Dimensions: 272 mm x 107 mm
Horizontal Timing		VTG Interface Adapters and Direct Interface Adapters (DIA Adapters mount directly to the VTG card & VIA mount by cable)
Scan Range	1 - 1000 kHz	 DIA-DVI, serial differential & analog adapter
Period	256 - 4096 pixels	 DIA-LVDS, serial differential adapter
Sync Pulse	2 - 2048 pixels	 DIA-TV, HD& SDTV outputs
Back Porch	0 - 2048 pixels	 VIA-TTL, parallel adapter with 100 pin cable
Display Resolution	16 - 4080 pixels, active	 VIA-TMDS, serial differential adapter with 100 pin cable
Adjust Step	1 pixel for all dot clocks	VIA-LVDS, serial differential adapter with 100 pin cable
Vertical Timing		
Scan Range	10 - 200 Hz	UniLink Configuration
Period	4 - 4500 lines	
Sync Pulse	1 - 4095 lines	GND wiring Differential pair x 8
Back Porch	0 - 4095 lines	RED Differential pair x 8 Single- Ended x 16
Display Resolution	1 - 4200 lines, active	GREEN Differential pair x 8
Adjust Step	1 line for all parameters	Single-Ended X 16
Outputs		
Digital Video	2 x24 bit (3 x 8 bit, RGB)pixels	CLOCK Differential pair Single- Ended x 2 Blank Single - Ended Hsync Single - Ended
	24 bits differential to 200MHz	Blank Single - Ended
	TTL-level, 50 termination	Vsync Single - Ended O DDC IIC
Colors	256 simultaneous colors out of 16.7 million 24 bit palette	Single - Ended x 3
H&Vsync	TTL-level, 50 termination	CTRL BUS Single - Ended x 8
Blank	Composite blanking signal, TTL-level, 50 termination	+12V DCmax1A GND wiring
Pixel Clock	TTL-level, 50 termination	
Connector	DHP-100 Dsub Half Pitch	Timing & Custom
Display Data Forma	t	Image Editors
Scan Modes	Single- or dual-scan	
Pixel Clocking	Data on rising edge, on falling edge or on both edges (DDR)	Minute (CR-000) des 000 V00 Aminute (CR-000) unit 000 V00 Aminute (CR-000) unit 000 V00 Minute (CR-0000) unit 000 V00 Minute (CR-00000) unit 000 V00 Minute (CR-0000000) unit 000 V00 Minute (CR-00000000) unit 000 V00 Minute (CR-000000000000000000000000000000000000
	1, 2 or 4 pixels per clock	H Foregos (2003.200) viet 0.277 Pixel Freq
	Clock Blank 〉Polarity and Phase	ABSOLUTE AND
		Vigno: Time (14299) Inter 3 V Britgenh (14399) Inter 4 (4) CIRCLE MAXX/2 MAXY/2
	Hsync delay adjustment	

ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.



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P Hoyne C Coyne C Low Veyne Output P Voyne C Low C High Coyne Output P Coyne C Low P High Coyne Made C Ster. C H xor V P High

Harv FHarv

CE

H. Polasty F + C -V. Polasty F + C -C. Polasty C + F -

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Sync. in Green

Save <u>A</u>s <u>C</u>lose

r F

Pattern: DEMO Timing: VGA