

MODEL 6073 VMEbus VIDEO SCANLINE DECODER/DIGITIZER

FEATURES

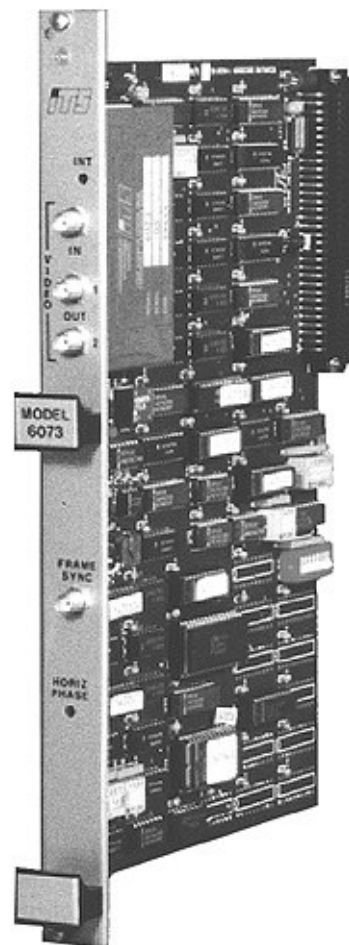
- Decodes Scanline (Data in Video) information at a rate of up to 114 Kbytes per second.
- Generates and inserts a movable crosshair/reticle symbol.
- Includes 4 Kbyte data buffer.
- Automatically performs bit error correction.
- Automatically synchronizes with composite video input.
- Operates on RS-170 and NTSC video.

DESCRIPTION

The ITS Model 6073 Video Scanline Decoder/Digitizer is a two function device designed to read video data which has been encoded into an RS-170 or NTSC video signal by an ITS Video Scanline Encoder or equivalent, and also quantize the relative position of points of interest within a viewed scene. The 6073 is a single board memory mapped slave subsystem operating on the VME bus. The unit decodes and unpacks the encoded data which then may be accessed via the VMEbus. The data is buffered by an on board 4 Kbyte FIFO to allow the system to accommodate bursts of data that exceed the data handling capability of a given host system.

A video insertion generator mixes a reticle into the video signal with the position controlled via the bus. The reticle coordinates are therefore known by the host and are used to digitize the coordinates of the viewed location.

The 6073 is contained in a dual high 6U VME card and occupies a single 0.8 inch slot.



Model 6073 VMEbus Video Scanline Decoder/Digitizer

SPECIFICATIONS

Video In	Composite, 525/60 interlaced, 2:1 black negative, one volt peak-to-peak, in accordance with EIA RS-170 or NTSC; connector is coaxial SMA series.
Input Impedance	75 ohms
Video Amplifier Bandwidth	>20 MHz \pm 1dB
Video Out (1 and 2)	Same as video in except with graphics added and DC restored; connectors are coaxial SMA series (output as specified when terminated with a 75 ohm load)
Data Decoder	Decodes scanline encoded data formatted IAW Optical Systems Group Document 452-86, Section 8. Compatible with ITS Model 6020 Video Scanline Encoder.
Data Buffer	Four Kbyte FIFO
Reticle Format	Four selectable formats: closed crosshair, open center crosshair, open center crosshair with dot, closed box.
Reticle Coordinate Resolution	640 x 480 pixels.
Video Insertion Mode	Selectable via bus, constant contrast or black.
VMEbus Compatibility	A16:D16 Slave, Bus Address switch-selectable within 64K short I/O address space; occupies four (4) consecutive word address space with supervisory/nonprivileged address switch selection. Interrupter is switch-selectable, I (1) to I (7) or off; switch-selectable vector
Interrupts	Vectored interrupt generated each video frame and/or each decoded data byte; may be disabled under program control
Power Requirements	5 volts @ 350 ma nominal +12 volts @ 24 ma nominal -12 volts @ 60 ma nominal
Temperature	
Operating	0° to 50°C (32° to 122°F)
Non-operating	-20° to 70°C (-4° to 158°F)
Humidity	95% non-condensing
Size	Dual-high VME card (6U form factor) occupies one slot (0.8 inch spacing)