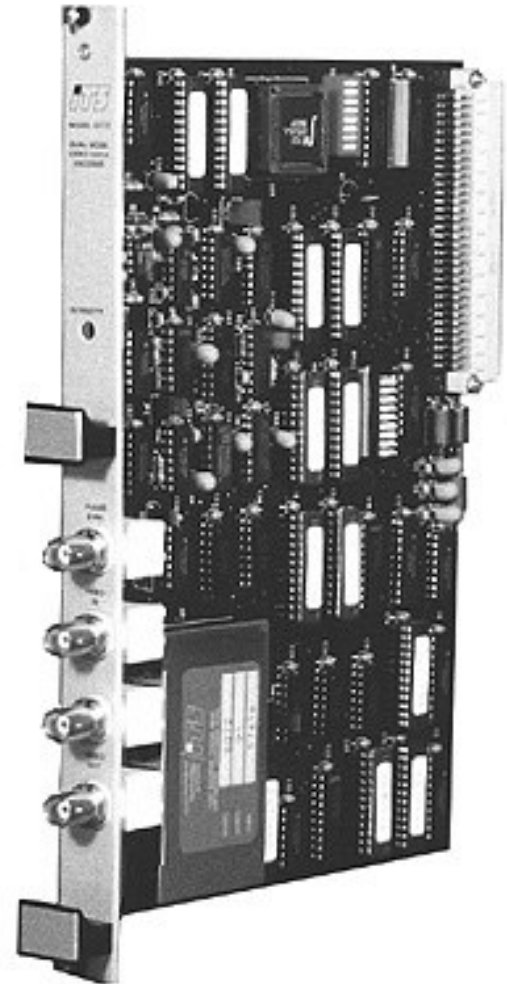


MODEL 6072 VMEbus DUAL MODE VIDEO DATA ENCODER

FEATURES

- Inserts both Scanline and Edge encoded data simultaneously.
- Inserts up to 63 bytes of scanline encoded data per field into standard 525 line RS-170 or RS-170A (NTSC) video.
- Inserts up to 21 bytes of edge encoded data per field into standard 525 line RS-170 or RS-170A (NTSC) video
- On board error correction (hamming) code and LRCC generation.
- Inserts up to 30 lines of 32 alphanumeric characters or 30 lines of 64 alphanumeric characters, selectable via bus.
- Automatically synchronizes with composite video input, no external vertical or horizontal sync required.
- Generates and inserts Boresight Reticle



DESCRIPTION

The ITS Model 6072 can simultaneously encode data in two different formats, scanline and left edge, into standard RS170 or RS-170A video. The 6072 also provides for the insertion of two sizes of alphanumeric characters, 32 or 64 characters per line. A Boresight reticle fixed to the center of the raster is also inserted. All inserted data is controlled via the VMEbus.

The character generator produces the full 96 character ASCII set plus an additional 32 special characters. Generated characters are positioned in the video image in direct relation to the position of the character code in a 960/1920 location memory map. Dual port memory allows addressing the map at any time. The entire character display may be blanked by activating a single control register bit.

The 6072 is contained on a dual high 6U VME card and occupies a single 0.8 inch slot.

Model 6072 VMEbus Dual Mode Video Data Encoder

SPECIFICATIONS

Video In	Composite, 525/60 interlaced, 2:1 black negative, one volt peak-to peak, in accordance with EIA RS-170 or RS-170A (NTSC). Connector is BNC.
Input Impedance	75 ohms, differential input.
Video Signal Degradation	Exceeds requirements of EIA RS-250B, Short Haul.
Video Out (1 and 2)	Same as video in except with character and encoded data added. Connectors are coaxial BNC (output as specified when terminated with a 75 ohm load).
Frame Sync (Out)	Vertical sync/blanking reference pulse derived from incoming video; TTL level, low true.
VMEbus Compatibility	A16:D16 Slave, Bus Address switch-selectable within 64K short I/O address space; occupies 2K consecutive word address space with supervisory/nonprivileged address switch selection. Interrupter is switch-selectable, I (1) to I (7) or off; switch-selectable vector.
Character Generator	96-character ASCII set plus 32 special characters displayed in a 5 X 7 pixel format. Insertion mode is constant contrast.
Boresight Reticle	91 x 91 pixel open centered fixed crosshair, with center dot. Enabled/Disabled via bus.
Scanline Encoded Data	Scan Line, Data-Into-Video IAW RCC Optical Systems Group Document 452-86, Section 8. Maximum encoded data per field is 504 bits (63 bytes).
Edge Encoded Data	Left edge encoded, method and format IAW Optical Systems Group Document 452-86, Section 7. Maximum encoded data is 168 bits, (21 bytes).
Interrupts	Vectored interrupt generated each video frame; may be disabled under program control.
Display Update	Full update, alphanumeric and encoded data can occur each video field. Inserted data remains until overwritten or turned off by inputs over the VMEbus.
Power Requirements	5 volts @ 250ma nominal. +12 volts @ 80 ma nominal. -12 volts @ 70 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).