DESCRIPTION

The Genesis DEC-6002 eurocard module is a precision adaptive comb-filter decoder for use in any application requiring translation from the analog composite format to the digital component format. All processing is carried out in the digital domain to full broadcast quality, maintaining 10-bit accuracy from input to output. This multi-standard decoder accepts analog composite sources in PAL, NTSC, PAL-M and PAL-N standards, with automatic detection of input standard between PAL/NTSC or PAL-M/PAL-N. Error detection and handling signals are inserted onto the output to allow equipment downstream to verify transmission integrity.

ASIC GATE

The DEC-6002 features Leitch’s 134,000 gate ASIC and represents the most comprehensive comb-filter decoding system, able to gracefully adapt between its decoding modes. The digital decoder can accept non-mathematical signals and includes features such as digital 50% sync slicing for robust handling of imperfect sources. The module can auto detect between non-mathematical and mathematical signals.

MOUNTING FRAMES

The DEC-6002 module is part of the Genesis modular range of interface products and can be mounted in the 1RU frame (FR-6001-B, FR-6001-C or FR-6001-G), 2RU frame (FR-6002), or the 4RU frame (FR-6004). The card can be used with the S6/4U rear connector module. The standard width module (S6/4U) has four serial digital outputs and one looping composite analog video input.

SPECIFICATIONS

Specifications and designs are subject to change without notice.

ANALOG VIDEO INPUT

| Quantity   | 1 |
| Connector  | BNC (Looping) |
| Standard   | PAL/NTSC/PAL-M/PAL-N |
| Level      | 1Vp-p |

DIGITAL VIDEO OUTPUTS

| Quantity | 4 |
| Connector | BNC (75 Ohm) |
| Standard | 270Mb/s (S52/S625), (SMPTE259M-C) |

ELECTRICAL

| Power consumption | 11.7W (1.8A @ +6.5V) |

MECHANICAL

| Length       | 220mm (8.70") |
| Width        | 100mm (3.90") |
| Height       | 23mm (0.80") |
| Weight       | 250g (0.65lbs) |

PERFORMANCE

- Delay: 70us
- Freq. response: ± 0.1dB to 5.5MHz
- Return loss: > 40dB
- Subcarrier rejection: > 50dB
- Transient response: < 0.2% K rating
- Diff. phase error: < 1°
- Diff. gain error: < 1%
- Luma/chroma delay inequality: < 2ns
- Jitter: < 1ns

PROCESS CONTROL ADJUSTMENT RANGE

- Video gain: ± 6dB
- Chroma gain: ± 6dB
- Black level: ± 100mV
- NTSC hue: ± 90°
ORDERING INFORMATION

DEC-6002-S6/4 Adaptive Comb Filter Decoder with EDH complete with S6 rear connector. Requires a FR-6004 frame.

DES-6002-S6/4 Digital Comb Filter Decoder, PAL-I, M, N, NTSC 10 bit, procamp with EDH, remote control, looping input, 3 serial digital video outputs, including two S6/4U rear connectors. Requires a FR-6004 frame.

DEC-6002 Digital Comb-filter Decoder with EDH
S6/4U 6 BNC single width rear connector
6000ME Extender card
DEC-6002TM Technical manual

For FR-6002 part codes add /2 after rear connector e.g. DEC-6002-S6/2.