

GS9064 SD SDI Adaptive Cable Equalizer

PRODUCT BRIEF

FEATURES

- SMPTE 259M-C compliant
- · automatic cable equalization
- supports DVB-ASI at 270Mb/s
- manual bypass (useful for low data rates with slow rise/fall times)
- typical maximum equalized length of Belden 1694A cable at 270Mb/s is greater than 350m
- 50Ω differential output (with internal 50Ω pull-ups)
- · cable length indicator
- output mute based on maximum cable length adjust or manual override
- single 3.3V power supply operation
- operating temperature range: 0°C to +70°C
- pin compatible with HDLINX™ II GS1524 multirate SDI adaptive cable equalizer

APPLICATIONS

SMPTE 259M-C Coaxial Cable Serial Digital Interfaces

CIRCUIT DESCRIPTION

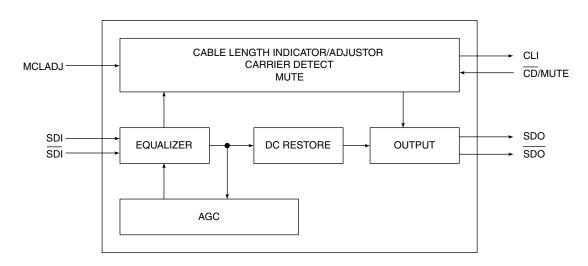
The GS9064 is a second-generation high-speed bipolar integrated circuit designed to equalize and restore 270Mb/s signals received over 75 Ω co-axial cable. The GS9064 is designed to support both SMPTE 259M-C and DVB-ASI at 270Mb/s.

The GS9064 features DC restoration to compensate for the DC content of SMPTE pathological test patterns, and incorporates a Cable Length Indicator that provides a linear indication of the amount of cable being equalized.

A voltage programmable mute threshold (MCLADJ) is included to allow muting of the GS9064 output when a selected cable length is reached. This feature allows the GS9064 to distinguish between low amplitude SDI signals and noise at the input of the device. The MUTE/CD pin provides an indication of the GS9064 mute status in addition to functioning as a mute control input. The output of the GS9064 may be forced to an active or a mute condition by applying a voltage to the MUTE/CD pin.

ORDERING INFORMATION

PART NUMBER	PACKAGE	TEMPERATURE
TBD	TBD	0°C to 70°C



FUNCTIONAL BLOCK DIAGRAM

Revision Date: February 2002 Document No. 22553 - O