



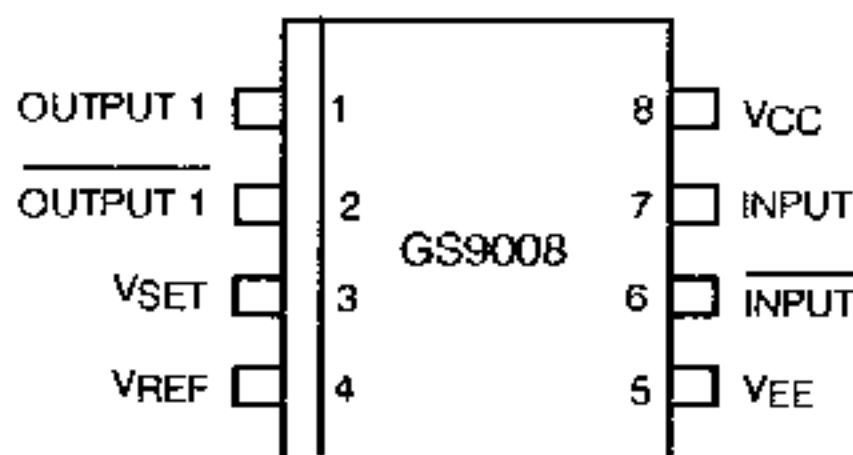
**FEATURES**

- two outputs, adjustable from 0 to 1100 mVp-p into 75 Ω loads
- nominal 600 ps rise and fall times
- accepts SMPTE and standard ECL input levels
- operates from a single +5 or -5 volt supply
- on-chip DC restoration for low jitter
- 170 mW power dissipation
- interfaces with **GENLINX™** GS9002, GS9004A, GS9005A and GS9015A

**APPLICATIONS**

- SMPTE 259M Serial Digital Systems (4:2:2 & 4fsc)
- Other Serial Digital Video Interfaces - 360 Mb/s
- General purpose high speed driver applications

**PIN CONNECTIONS**



**ORDERING INFORMATION**

Part Number	Package Type	Temperature Range
GS9008 - CKA	8 Pin SOIC	0° to 70°C

**DEVICE DESCRIPTION**

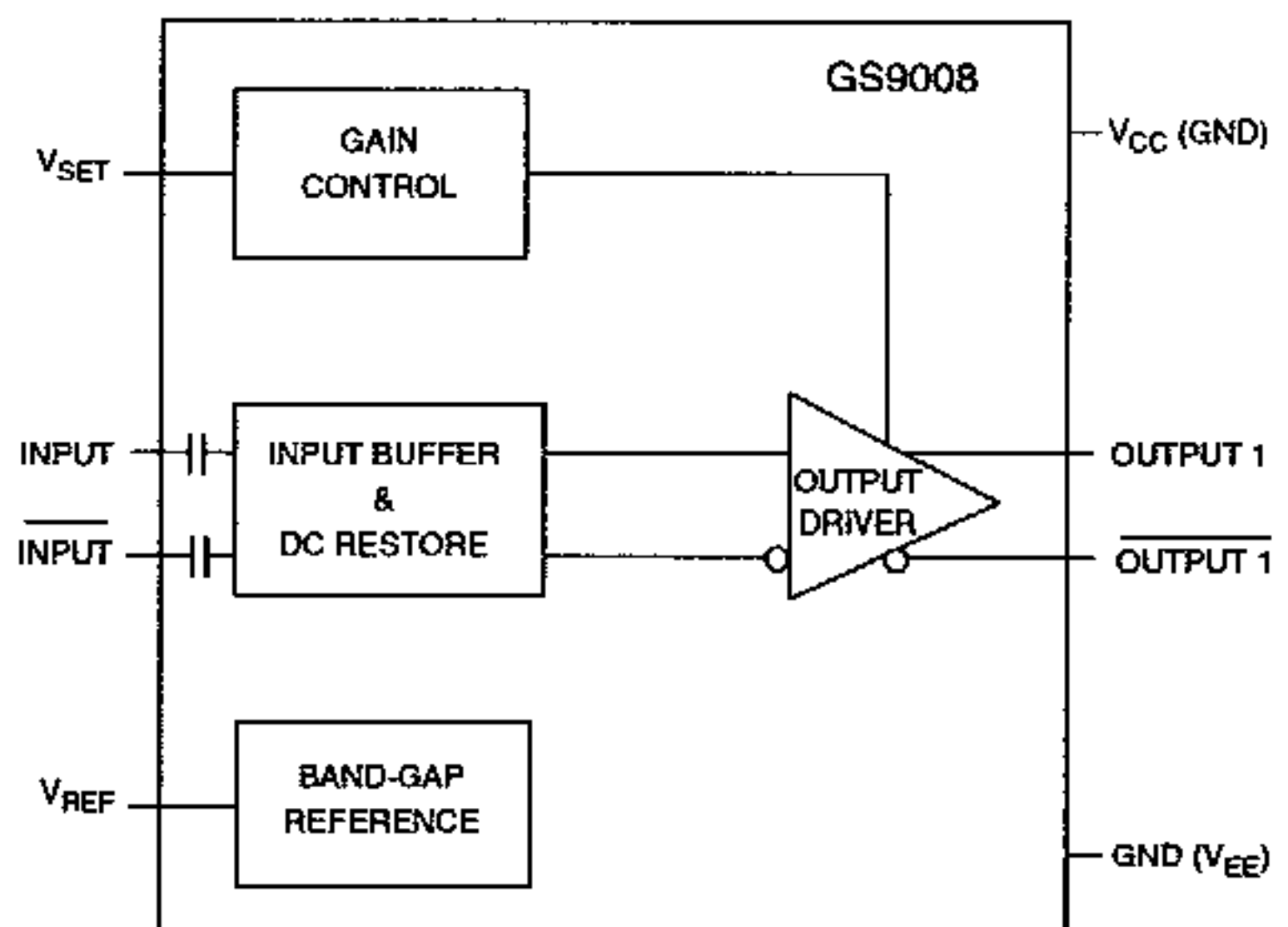
The **GENLINX™** GS9008 is a bipolar integrated circuit designed to drive two 75 Ω co-axial cables at data rates exceeding 400 Mb/s. It directly interfaces with other **GENLINX™** devices and can also be used as a general purpose high speed cable driver.

The differential inputs are AC-coupled and internally DC-restored which allows correct passage of pathological check codes associated with the serial digital standards. Even though the inputs are AC coupled, static protection diodes at each input restrict the DC differential so that if the driving source uses the opposite polarity power supply, external DC blocking capacitors must be used.

Correctly terminated output signal levels are adjustable from as low as 0 mV to as high as 1100 mV with little change in other performance parameters. Performance is guaranteed for output levels between 600 mV and 1000 mV. The gain of the output stages is varied by adjusting the  $V_{SET}$  voltage with respect to an internal band gap reference voltage  $V_{REF}$ .

The GS9008 is packaged in an 8 pin SOIC, and operates from a single +5 or -5 volt supply consuming typically only 170 mW of power.

**FUNCTIONAL BLOCK DIAGRAM**



Patent No. 5,426,389.