Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

GENLINX™ GS9007A
Quad Serial Digital Cable Driver

DATA SHEET

FEATURES

- **two output pairs (four outputs total) meeting SMPTE 259M**
- **nominal 550 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**
- **250mW power dissipation**
- **Pb-free and Green**

APPLICATIONS

- $4f_{SC}$, 4:2:2 and 360Mb/s Serial Digital Interfaces.

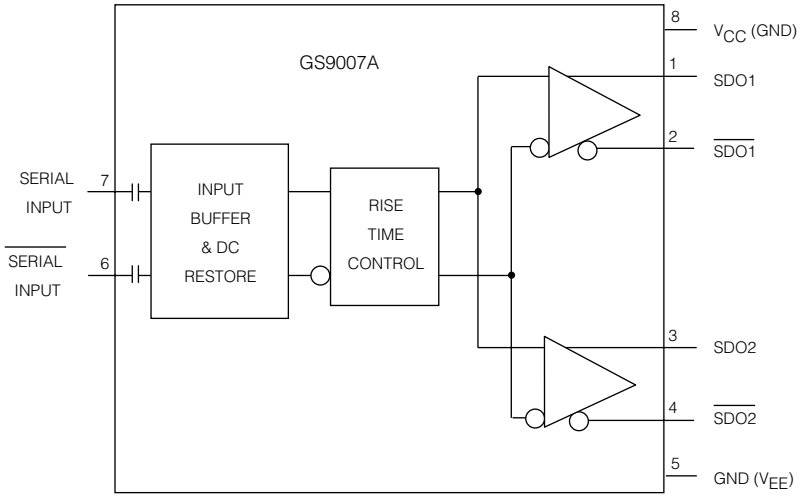
The ***GENLINX*** ™ GS9007A is a bipolar intergrated circuit designed to drive four 75Ω co-axial cables with SMPTE level serial digital video signals at data rates up to 360Mb/s. It directly interfaces with other ***GENLINX*** ™ devices and can also be used as a general purpose high speed cable driver.

The differential inputs are AC-coupled and internally DC-restored wich 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.

The GS9007A is packaged in an 8 pin SOIC, and operates from a single +5 or -5 volt supply consuming typically only 250mW of power.

ORDERING INFORMATION

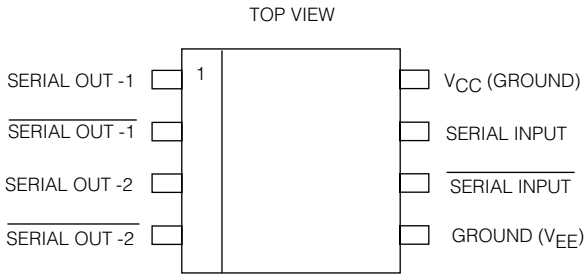
PART NUMBER	PACKAGE TYPE	TEMPERATURE RANGE	Pb-FREE AND GREEN
GS9007ACKA	8 Pin SOIC	0°C to 70°C	No
GS9007ACKAE3	8 Pin SOIC	0°C to 70°C	Yes



FUNCTIONAL BLOCK DIAGRAM

GENNUM CORPORATION P.O. Box 489, Stn. A, Burlington, Ontario, Canada L7R 3Y3
Tel. +1 (905) 632-2996 Fax. +1 (905) 632-5946 E-mail: info@gennum.com
www.gennum.com

PIN CONNECTIONS



DC ELECTRICAL CHARACTERISTICS

V_S = 5V, T_A = 0°C to 70°C, R_L = 150Ω to GND and 143Ω AC coupled unless otherwise shown.

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS	NOTES
Supply Voltage	V_S	Operating Range	4.5	5.0	5.5	V	
Power Consumption	P_D	4x15W Loads DC 1% Accurancy, TA = 25°C	-	250	290	mW	
Supply Current	I_{S1}		-	105	110	mA	
	I_{S2}	DC No Loads, TA = 25°C	-	17.2	22	mA	

AC ELECTRICAL CHARACTERITICS

V_S = 5V, T_A = 0°C to 70°C, R_L = 150Ω to GND and 143Ω AC coupled unless otherwise shown.

PARAMETER		SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS	NOTES
SERIAL DIGITAL SIGNALS	Signal Swing	V_{IN}		700	800	1000	mVp-p	
	Rise/Fall Times	t_R, t_F		-	-	750	ps	measured at 20% and 80%
SERIAL DIGITAL OUTPUTS	Rise/Fall Times	t_R, t_F		400	550	800	ps	measured at 20% and 80%
	Jitter	t_J	at 270Mb/s	-	-	±25	ps	
	Propagation Delay	t_P		-	1	-	ns	
	Output Overshoot		$t_R = t_J$ = 600 ps	-	0	-	%	see Figure 4
	Signal Swing	V_{OUT}	Across 75Ω Load	720	800	880	mVp-p	

ABSOLUTE MAXIMUM RATINGS

PARAMETER	VALUES/UNITS
Supply Voltage (V_S)	5.5V
Input Voltage Range (any input)	V_S -0.5V
Power Dissipation	300mW
Operating Tempature Range	0°C ≤ T_A ≤ 70°C
Storage Temperature Range	-65°C ≤ T_S ≤ 150°C
Lead Tempature (Soldering, 10.sec)	260°C

INPUT / OUTPUT CIRCUITS

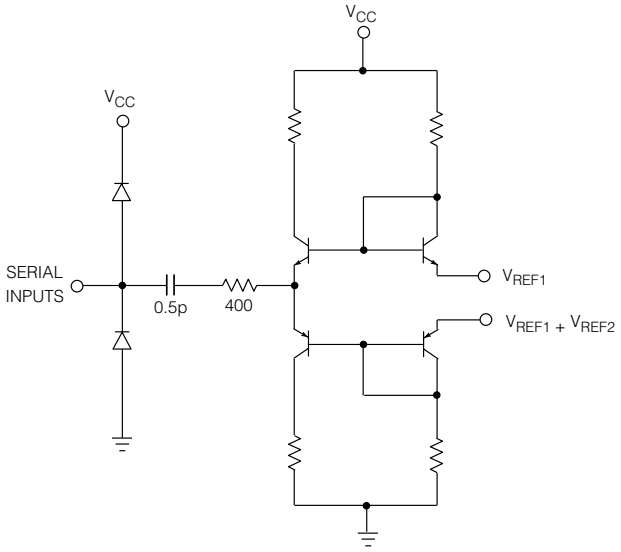


Fig. 1 Input Circuit (Pins 6 and 7)

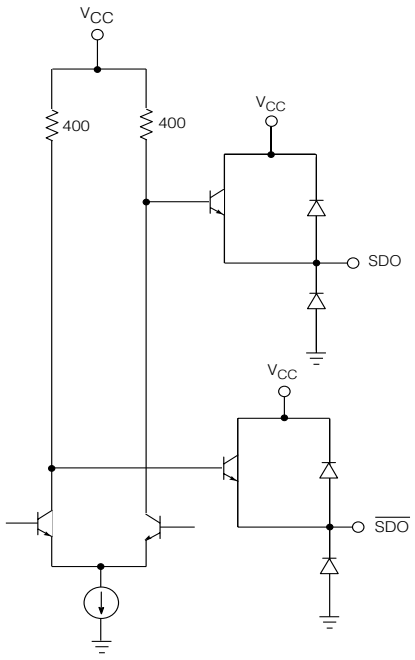


Fig. 2 Output Circuit (Pins 1, 2 and 3, 4)

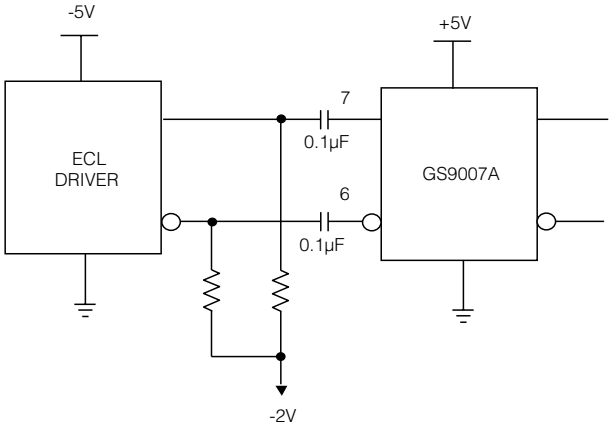


Fig. 3 Split Supply Interfacing

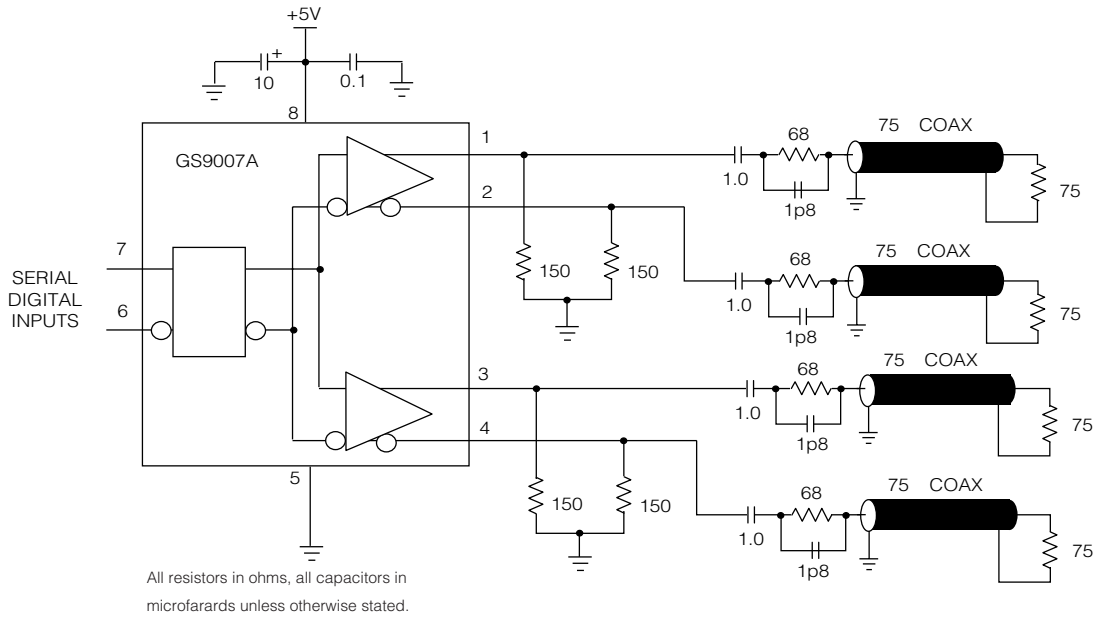


Fig. 4 Typical Application Circuit

CAUTION
ELECTROSTATIC
SENSITIVE DEVICES

DO NOT OPEN PACKAGES OR HANDLE
EXCEPT AT A STATIC-FREE WORKSTATION

DOCUMENT IDENTIFICATION
DATA SHEET
The product is in production. Gennum reserves the right to make changes at any time to improve reliability, function or design, in order to provide the best product possible.

REVISION NOTES:
Version 1 - Adding lead-free and green information.
Version 2 - Adding minimum Rise / Fall time.

GENNUM CORPORATION

MAILING ADDRESS:
P.O. Box 489, Stn. A, Burlington, Ontario, Canada L7R 3Y3
Tel. +1 (905) 632-2996 Fax. +1 (905) 632-5946

SHIPPING ADDRESS:
970 Fraser Drive, Burlington, Ontario, Canada L7L 5P5

GENNUM JAPAN CORPORATION
Shinjuku Green Tower Building 27F 6-14-1, Nishi Shinjuku Shinjuku-ku,
Tokyo 160-0023 Japan
Tel: +81 (03) 3349-5501 Fax: +81 (03) 3349-5505

GENNUM UK LIMITED
25 Long Garden Walk, Farnham, Surrey, England GU9 7HX
Tel. +44 (0)1252 747 000 Fax +44 (0)1252 726 523