

## INTRODUCTION

The new GENLINX™ II GS9025A Serial Digital Receiver offers automatic cable equalization and high performance clock and data recovery for all high-speed serial digital interface applications. It operates in either automatic or manual modes making it ideal for both single-rate and multi-rate serial digital video systems. It performs auto rate selection for five SMPTE data rates: 143, 177, 270, 360 and 540Mb/s. The GS9025A is packaged as a 44 pin MQFP and is a drop-in compatible replacement for the GS9025.

The GS9025A is based on its predecessor - the GS9025 - and shares common features including:

- Automatic cable equalization
- Large input jitter tolerance
- A single external VCO resistor for operation with 5 SMPTE data rates
- Low jitter and low power consumption
- A common PCB footprint

Gennum intends to replace the GS9025 with the new GS9025A by December 2000. We recommend that customers begin qualifying the GS9025A in both new and existing applications. Pre-production samples of the GS9025A are now available.

## OPTIMIZING GS9025A PERFORMANCE

For optimal device performance, implement loop filter component values for the GS9025 and GS9025A as shown in Table 1.

TABLE 1: Recommended Loop Filter Component Values

COMPONENT	GS9025	GS9025A
$R_{LF}$	1k $\Omega$	1.8k $\Omega$
$C_{LF1}$	15nF	15nF
$C_{LF2}$	5.6pF	3.3pF

*For further information, refer to the GS9025A Preliminary Data Sheet or visit [www.gennum.com](http://www.gennum.com)*