

# M08018

DEVICE OVERVIEW

## HD/SD Serial Digital Video Cable Driver

The M08018 is a high-speed, low-power, low-jitter cable driver that is designed to drive serial digital video data through commonly used bandwidth-limiting 75Ω coaxial cable applications. The device is optimized for data rates at 1.485 Gb/s and 270 Mb/s to support serial digital video transmission for standard definition (525i and 625i) and high definition (720p, 1080i, and 1080p) component video. The M08018 also supports 8-bit or 10-bit component digital video (RGB or YCbCr 4:4:4 sampled and YCbCr 4:2:2 or 4:2:0 sampled).

The M08018 has selectable slew rates for HD and SD applications. The typical output rise/fall time of the device is 100 ps at 1.485 Gb/s, and 600 ps at 270 Mb/s. It also supports a maximum single ended output swing of 1600 mVp-p with appropriate configurations which can be used in cascade applications.

The M08018 is available in a small outline RoHS-compliant SOIC package, which is backwards compatible with standard JEDEC SnPb processes. The device supports both 2.5V and 3.3V power supply operations with low power dissipation of 122mW at 2.5V and 144mW at 3.3V.

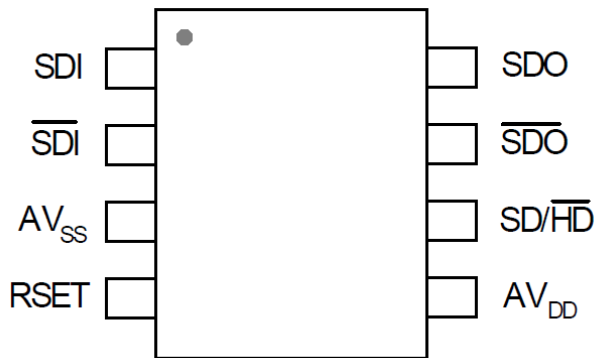


Figure 1 – M08018 Pin-out diagram



### M08018

Serial Digital Video  
Cable Driver for  
1.485 Gb/s,  
and 270 Mb/s  
data rates

#### > Applications

- Surveillance / CCTV Cameras
- Industrial and Professional Cameras
- Digital Video Recorders (DVR)
- Video Mixers and Switchers
- Digital Image Transmitter Devices
- Distribution Amplifiers
- Repeaters

Features	Benefits
Optimized data rates at 270 Mb/s and 1.485 Gb/s	Single Chip Solution for multiple data rates
800 mVp-p single ended output swing (typical) and 1600 mVp-p maximum single ended output swing	Offers router cascade applications through output splitting
Slew rate control	Application specific HD and SD operations
2.5V and 3.3V power supply	Standard voltage supply supported
Small form factor and foot print (8-pin SOIC package)	Industry standard package (variations provided)
Low power dissipation (122mW at 2.5V and 144mW at 3.3V)	Low power and thermal management costs
Extended operating temperature range: -10°C to +85 °C	Provides additional margin for various applications

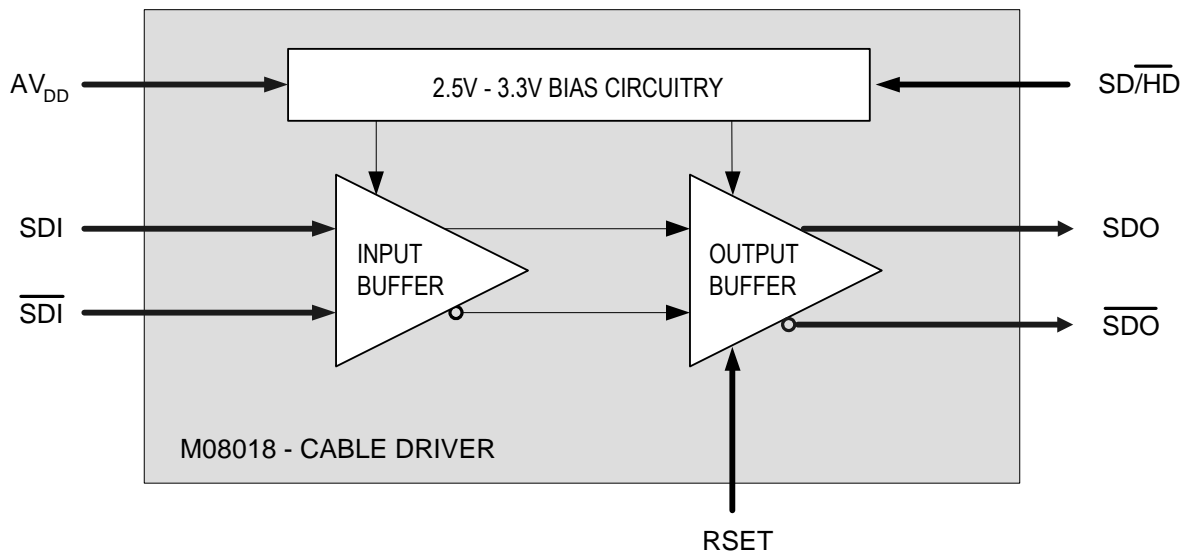


Figure 2 – M08018 Functional Block Diagram

### Package (RoHS Compliant)

- 8-pin SOIC



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### MINDSPEED

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