

M21428 3G/HD/SD-SDI Dual-Output Cable Driver

Product Overview

The M21428 is a high-speed, low-power, low-jitter cable driver, designed to drive serial digital video data through 75Ω coaxial cable typically used in SMPTE and DVB-ASI video applications.

The M21428 cable driver is optimized for performance from 143 Mbps up to 2970 Mbp with a typical rise/fall time of 100ps for HD-SDI and 3G-SDI.

The default output voltage swing in a SMPTE compliant 800mV when set by an external 750Ω ±1% resistor. The M21428 also has the option of providing a signal with double the output swing at 1600mV, which can be used in cascade applications.

The M21428 is provided in a green and RoHS compliant package.

Features	Benefits
➤ SMPTE 424M, 292, 259M compliant, DVB-ASI (270 Mbps)	Robust standard compliant equalizers
➤ Dual Differential outputs with individual mute control	High speed outputs with low cost integration
➤ 800 mVp-p single ended output swing (typical)	SMPTE compliant swing supporting cable reach
➤ 1600 mVp-p maximum output swing	Offers router cascade applications through output splitting
➤ Slew Rate control	SMPTE compliant SD and 3G/HD operations
➤ Low power dissipation (122 mW at 2.5V, and 144 mW at 3.3V)	Low power and thermal management costs
➤ Output disable	Power Down capability when not in use
➤ 2.5V or 3.3V Supply	Standard voltage supplies supported
➤ Small form factor (3x3mm, 16-pin QFN package)	Saves board area
➤ Extended operating temperature range: -10°C to +85 °C	Provides additional margin for most applications



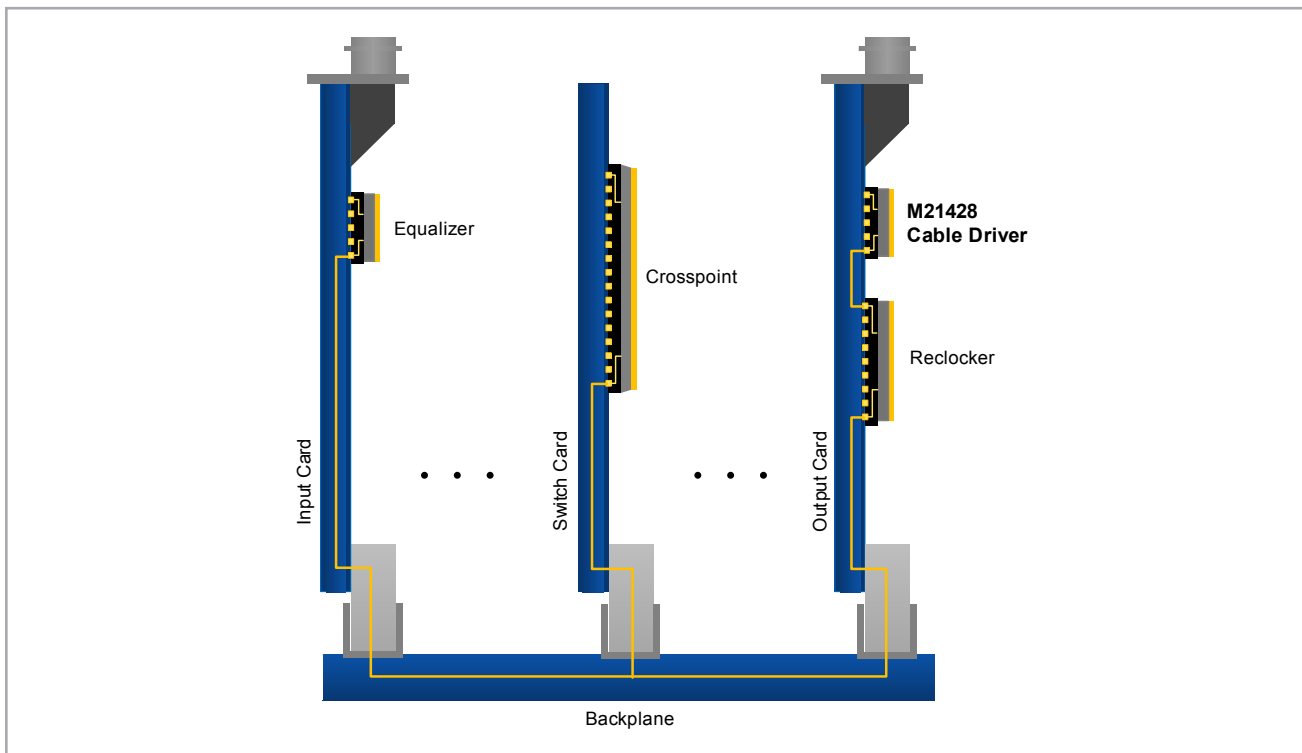


Fig. 1 - Routing Switcher Application Diagram

Product Features

Applications

- 3G/HD/SD-SDI switchers
- 3G/HD/SD-SDI routers
- 3G/HD/SD distribution amplifiers

Standard Compliance

- SMPTE 424M, 292M, and 259M
- DVB-ASI (270 Mbps)

Package (RoHS Compliant)

- 3x3 mm, 72-pin MLF

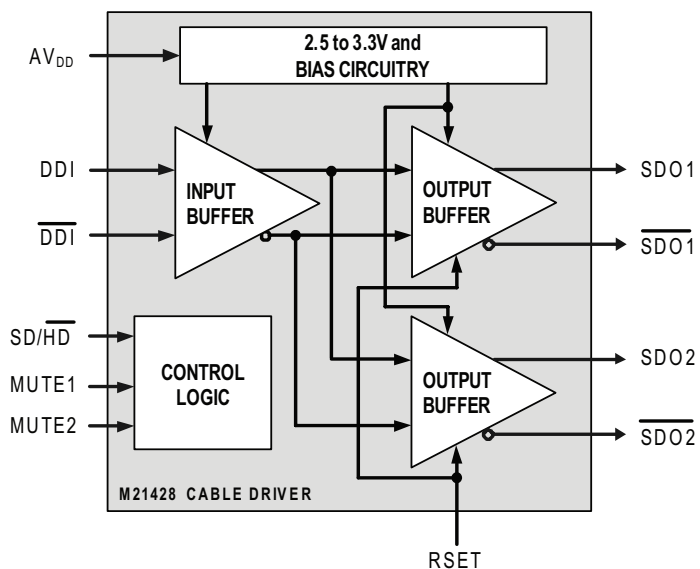


Fig. 2 - M21428 Block Diagram

For more product information, please visit www.mindspeed.com

www.mindspeed.com/salesoffices
 General Information: (949) 579-3000
 Headquarters – Newport Beach
 4000 MacArthur Blvd., East Tower
 Newport Beach, CA 92660-3007
 M21428-BRF-001-D.pdf

© 2010 Mindspeed Technologies, Inc. All rights reserved. Mindspeed and the Mindspeed logo are trademarks of Mindspeed Technologies. All other trademarks are the property of their respective owners. Although Mindspeed Technologies strives for accuracy in all its publications, this material may contain errors or omissions and is subject to change without notice. This material is provided as is and without any express or implied warranties, including merchantability, fitness for a particular purpose and non-infringement. Mindspeed Technologies shall not be liable for any special, indirect, incidental or consequential damages as a result of its use.

MINDSPEED
 BUILD IT FIRST®