

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
<ul style="list-style-type: none"> SMPTE 424M, 292, 259M compliant, DVB-ASI (270 Mbps) 	Robust standard compliant equalizers
<ul style="list-style-type: none"> Dual Differential outputs with individual mute control 	High speed outputs with low cost integration
<ul style="list-style-type: none"> 800 mVp-p single ended output swing (typical) 	SMPTE compliant swing supporting cable reach
<ul style="list-style-type: none"> 1600 mVp-p maximum output swing 	Offers router cascade applications through output splitting
<ul style="list-style-type: none"> Slew Rate control 	SMPTE compliant SD and 3G/HD operations
<ul style="list-style-type: none"> Low power dissipation (122 mW at 2.5V, and 144 mW at 3.3V) 	Low power and thermal management costs
<ul style="list-style-type: none"> Output disable 	Power Down capability when not in use
<ul style="list-style-type: none"> 2.5V or 3.3V Supply 	Standard voltage supplies supported
<ul style="list-style-type: none"> Small form factor (3x3mm, 16-pin QFN package) 	Saves board area
<ul style="list-style-type: none"> Extended operating temperature range: -10°C to +85 °C 	Provides additional margin for most applications



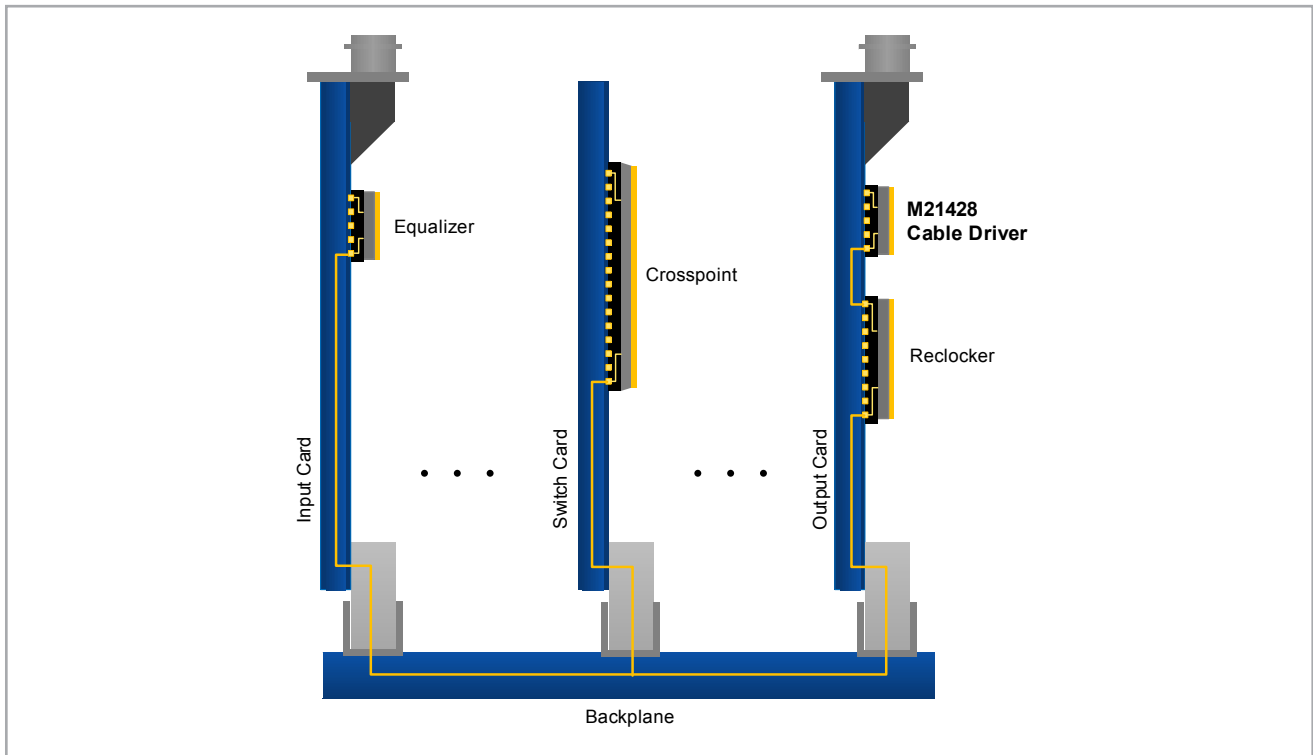


Fig. 1 - Routing Switcher Application Diagram

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

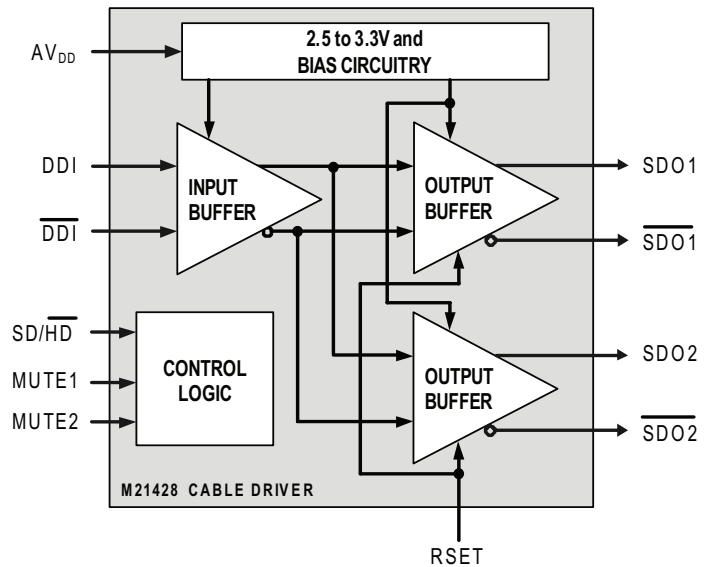


Fig. 2 - M21428 Block Diagram

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

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