

Next Generation High Performance Analog Broadcast Video Solutions

M21202 SD-SDI Broadcast Video Co-axial Cable Driver

The M21202 is a next generation high performance analog SD-SDI video co-axial cable driver solution that is pin-to-pin, electrically, and functionally compatible with existing legacy single channel cable drivers.

Superior next generation cable driving and output return loss (>20dB) performance of the M21202 is complemented with a complete serial routing chipset that includes equalization (M21204) and reclocking (M21205) devices. These new devices further complement Mindspeed's unique HD/SD and SD-SDI quad channel reclocking and asynchronous switching devices:

- M21252 quad channel multi-rate video reclocker
- M21260 4x4 1.6 Gbps video crosspoint switch with quad multi rate reclockers
- M21261 1:4 1.6 Gbps video fanout with HD/SD multi-rate reclocking
- M21262 4:1 1.6 Gbps video selector with HD/SD multi-rate reclocker

In addition to being drop in compatible with the GS9068/9068A SD-SDI cable driver, the M21202 provides enhanced performance such as improved differential input sensitivity (100mVpp to 2000mVpp) and a typical device output return loss (ORL) of 20dB for easier board development and increased margin or headroom to the SMPTE specs.

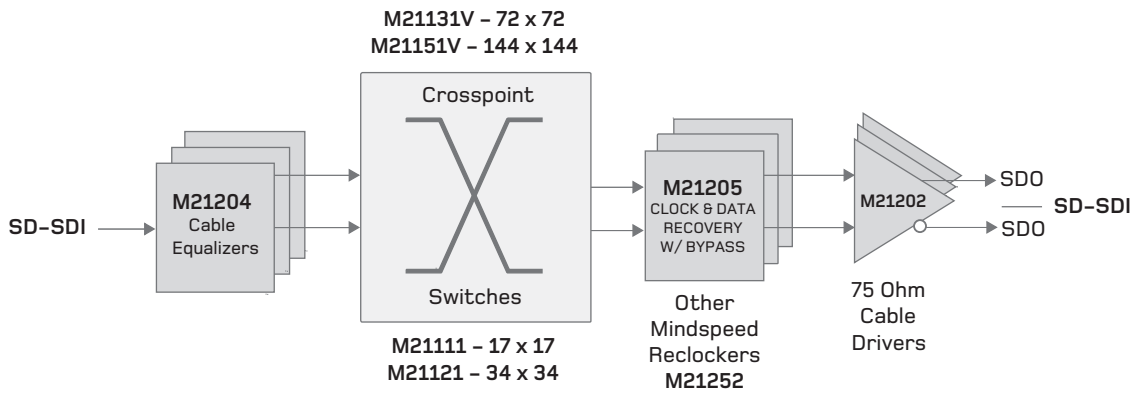
KEY FEATURES

- > SMPTE 259M and SMPTE 344M compliant
- > Supports data rate operation of 143, 177, 270, 360, 540 Mbps and DVB-ASI at 270 Mbps
- > Fully differential signal paths
- > LVPECL compatible input
- > >20dB output return loss
- > Pin-to-pin, electrically, and functionally compatible with M21212, GS9068, GS9068A
- > 2.5V or 3.3V Operation
- > Reduced power dissipation
 - 90mW typical @ 2.5V
 - 120mW typical @ 3.3V
- > 100mVp-p differential input voltage sensitivity
- > Increased operating temperature range:
 - 10°C to +85°C
- > 500-1200mVpp output amplitude range

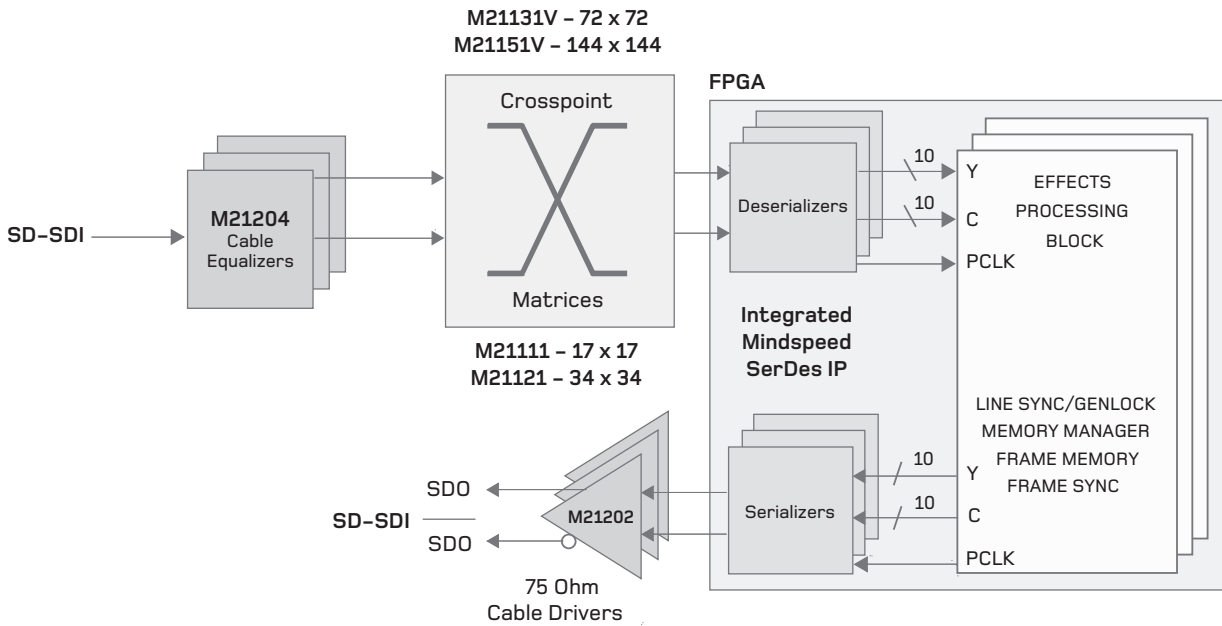
The M21202 is also pin-to-pin compatible with Mindspeed's M21212/21218 cable driver but has a reduced maximum output swing of 1200 mVp-p single ended vs. 1800 mVp-p for the M21218.

Mindspeed's innovative circuit architecture enables next generation systems with flexible power supply operation of 2.5V or 3.3V and a wider operating temperature range (-10° to + 85°C). Power dissipation is significantly reduced @ 3.3V (25%-42% typ/max) with further reductions possible @ 2.5V supply (40%-50% typ/max).





SD Routing Switcher Application



SD Production & Master Control Switcher Application

Product Features

Applications

- Small to large serial routing switchers
- Master control switchers
- Productions switchers
- Distribution amplifiers
- SD-SDI processing gear

Ordering Information

- M21202-14: SD video cable driver
[143 Mbps – 540Mbps]
- M21202G-14: SD video cable driver
[143 Mbps – 540Mbps]
[RoHS compliant package]

Package: 8 pin SOIC
8 pin SOIC [RoHS compliant package]

www.mindspeed.com/salesoffices
General Information: (949) 579-3000
Headquarters – Newport Beach
4000 MacArthur Blvd., East Tower
Newport Beach, CA 92660-3007
21202-BRF-001-B.PDF

© 2005 Mindspeed Technologies™. 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™