

Next Generation High Performance Analog Broadcast Video Solutions

M21232

HD/SD Broadcast Video Co-axial Cable Drivers

The M21232 is an evolution of Mindspeed's single channel HD/SD video co-axial cable drivers that provide significant power savings with superior performance and flexible power supply options when compared to other competing single channel cable drivers.

The devices are packaged in a new 3x3mm high performance MLF package for improved output return loss (ORL) performance and extremely close placement to the output BNC. Both cable drivers will be available in a GREEN (RoHS) compliant package option.

The M21232 provides nominal 800mVp-p SMPTE output swings with a fixed resistor value but has additional output swing headroom to provide 1200mVp-p maximum amplitude single-ended output swings.

The M21232 is complemented by the M21235 HD/SD video multi-rate reclocker, the M21245 HD/SD reclocker/cable driver in 7x7 MLF packaging, and the M21234 HD/SD video cable equalizer in a 5x5mm MLF package to optimize performance and density in new multi-rate designs.

Additional unique Mindspeed devices include the HD/SD quad channel reclocking and asynchronous switching families:

- M21250, DS-M21251, DS-M21252 quad channel multi-rate video reclockers



KEY FEATURES

- > SMPTE 292M, SMPTE 259M, SMPTE 344M compliant
 - > Supports data rate operation of 143, 177, 270, 360, 540, 1483.5/1485 Mbps and DVB-ASI at 270 Mbps
 - > Fully differential signal paths
 - > LVPECL compatible input
 - > SD/HD Slew rate control input
 - > RoHS compliant or Recycler Pkg.
 - > 2.5V or 3.3V Operation
- > Reduced power dissipation
 - 90mW typical @ 2.5V
 - 120mW typical @ 3.3V
 - > 50mVp-p differential input voltage sensitivity
 - > Increased operating temperature range: -10°C to +85°C
 - > 1200mVpp Max. output swing

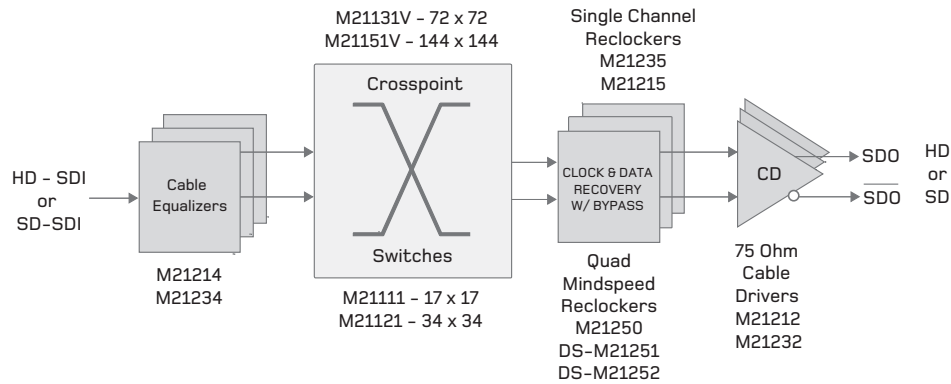
- M21260 4x4 1.6 Gbps video crosspoint switch with quad multi-rate reclockers

- DS-M21261 1:4 1.6 Gbps video fanout with SD/HD multi-rate reclocking

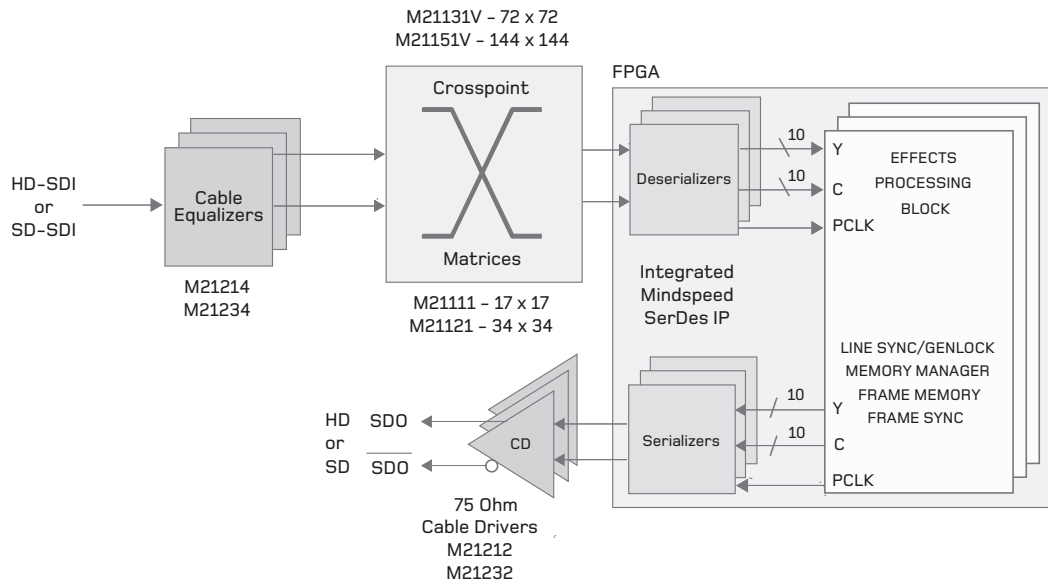
- DS-M21262 4:1 1.6 Gbps video selector with SD/HD multi-rate reclocker

Mindspeed's innovative circuit architecture enables next generation systems with flexible power supply operation of 2.5V to 3.3V with 40% to 50% typical to MAX power reduction @ 2.5V (25% to 42% @ 3.3V) supply rails and a wider operating temperature range (-10° to + 85°C).





HD/SD Serial Routing Switcher Application Diagram



HD/SD Production & Master Control Switcher Application

Product Features

Applications

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

Ordering Information

- M21232-32: HD/SD Video Cable Driver (143M-1600M)
- M21232G-32: HD/SD Video Cable Driver (143M-1600M) (RoHS compliant package)

Package: 3x3mm, 16 pin MLF
3x3mm, 16 pin MLF
(RoHS compliant package)

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