

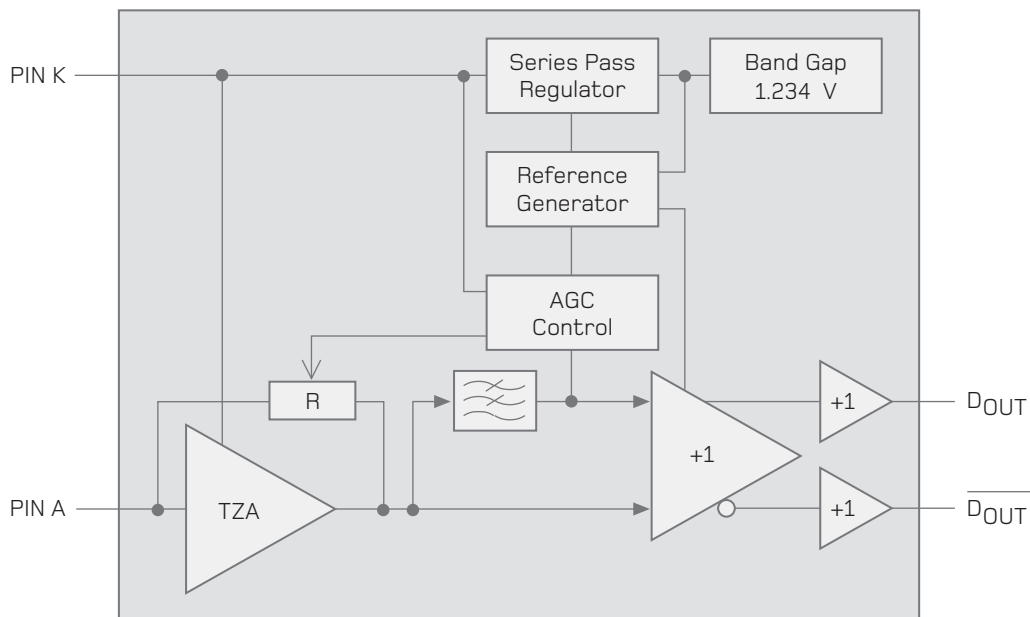
## 200 Mbps Pre-Amplifier

# MC2007

The MC2007 is a low-noise, transimpedance amplifier with automatic gain control (AGC), manufactured in an advanced, low-cost, submicron CMOS process. Its wide dynamic range, differential output and high PIN bias make it well-suited for telecommunications, especially OC-3/STM-1. However, the MC2007 is intended to meet the needs of both telecom and datacom users. The MC2007 is designed to be used with the Mindspeed Technologies™ MC2045 post-amplifier IC. When combined with a photodiode, the chipset forms a high-performance, low-cost 3.3 V receiver.

### KEY FEATURES

- Low-cost IC, fabricated in advanced sub-micron pure CMOS process
- Receiver sensitivity better than -39 dBm at 155 Mbps when integrated into a module with suitable photodiode and post-amplifier
- 140 MHz bandwidth allows wide range of operation; suitable for 100, 125, 155 and 200 Mbps
- Typical differential gain of 62kohms at low signal levels
- AGC gives continuous operation to +3 dBm
- >35 dB power supply noise rejection
- 65 mW power consumption at +3.3 V supply
- Available as die or in an 8-pin SOIC package



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