

## Features

- HDMI V1.3 and V1.4 category 2 (3.4Gbps) active cable solution
- No external power required
- Integrated equalizer
- Cable skew correction
- 16-bit color resolution at 1080p
- Internal voltage regulator
- On-chip 50 Ohm input termination
- Auto self-test for cable production

## Applications

- Ultra thin HDMI cables supporting data rates up to 3.4Gbps
- Embedded cable booster requiring no external power

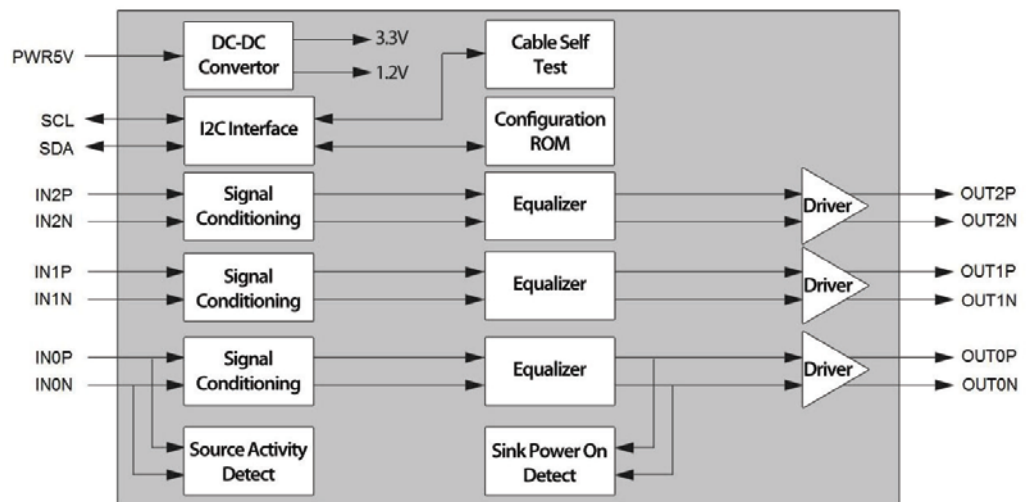


## Product Overview

The RM1689 is an embedded cable booster utilizing RedMere's unique chip technology incorporating V1.3 and V1.4 HDMI category 2 cables. It can be easily integrated onto a compact module to fit neatly into the sink side of a HDMI cable.

The RM1689 supports data rates up to 3.4Gbps, achieving category 2 compliant eyes (ATC Cable Test ID 5-3) over a wide range of highly attenuated cable types. Additionally, the RM1689 ensures active cables comply with the +5V 5mA (5-11) compliance test, without requiring an external power supply. The RM1689 is available as a 32 QFN IC. Limited samples of the RM1689 and its reference sink-side modules are also available on request.

**Fig. 1 – RM1689 Functional Block Diagram**



## Ordering Information:

Part Number: RM1689  
 Description: Embedded cable booster incorporating RedMere's chip technology