

DVB-S2 수신기 튜너용 IC의 광대역 CMOS 단일신호-차동신호 변환기

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Broadband CMOS Single-ended to Differential Converter for DVB-S2 Receiver Tuner IC

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Abstract : This paper describes the broadband SDC (Single-ended to Differential Converter) for Digital Video Broadcasting-Satellite 2nd edition (DVB-S2) receiver tuner IC. It is fabricated by using 0.18 μ m CMOS process. In order to obtain high linearity and low phase mismatch, the broadband SDC (Single-ended to Differential Converter) is designed with current mirror structure and cross-coupled capacitor and current source binding differential structure at VDD. The simulation result of SDC shows IIP3 of 11.9 dBm and IIP2 of 38 dBm. It consumes 5mA current with 2.7V supply voltage.

Key Words : CMOS, DVB-S2, Broadband, SDC

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