



General Description

The EN5520 is part of Maxlinear's second generation low power CMOS digital Channel Stacking Switch (dCSS) product family for MDU switch applications. The EN5520 enables aggregating up to 8.4 GHz of satellite content from four wideband RF inputs to single or dual L-band IF outputs.

The device integrates a 32-channel stacking engine that is controlled by an embedded microcontroller. The 32 configurable Channel Select Filters (CSFs) can be allocated to any of the two IF outputs to offer complete flexibility to the operators for distributing multi-channel content over coaxial cable to a single family home or to two Multiple Dwelling Units (MDUs) at the lowest system cost.

Each IF output is configurable in channel stacking mode or in legacy L-band bypass mode, and features a dedicated DiSEqC2.x compatible modem for remote control by the subscriber STBs.

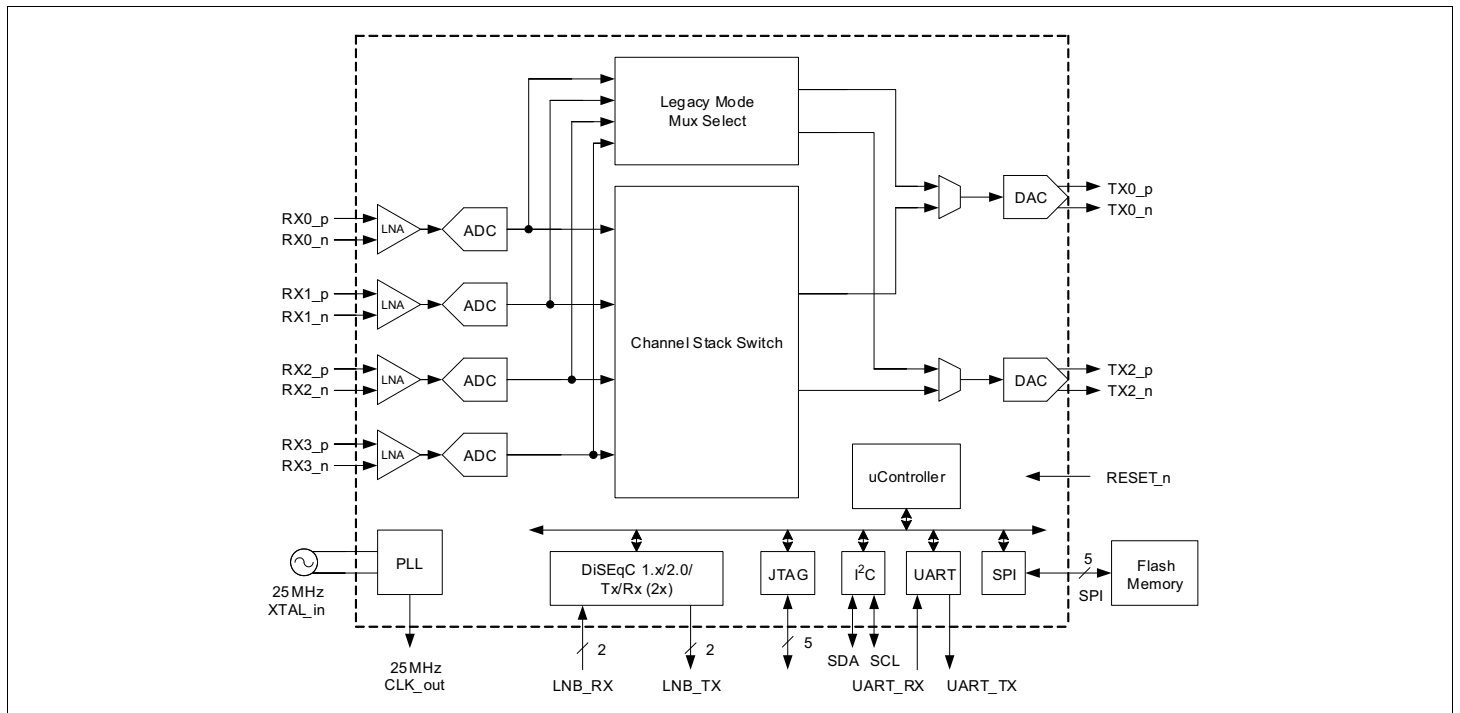
Applications

- Digital channel stacking multi-switches

Features

- Four wideband RF inputs with bandwidth from 250 MHz to 2350 MHz
- Two L-band IF outputs with bandwidth from 950 MHz to 2150 MHz
 - CSS or legacy L-band bypass modes
 - Positive/negative IF tilt correction
- Configurable 32-channel stacking engine
 - Programmable channel select filters
 - Fully flexible user bands allocation
 - Spectral inversion
- Integrated microcontroller and control APIs for customer application software
 - DiSEqC 2.x compatible modems with support for *EN50494* and *EN50607* standards
 - I²C interface
 - Multiple GPIO pins
 - SPI flash interface
 - UART debug port
- Single external 25 MHz reference crystal
- Low power consumption
- Small 9 x 9 mm² QFN, 76-pin package

Block Diagram



Ordering Information

Ordering Part Number	Description
EN5520-01-1	<ul style="list-style-type: none"> ■ 9 mm x 9 mm² QFN Package ■ RoHS Green Compliant



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