

- DESIGN -

BaseBand AFE Chip Preliminary Datasheet

1 Overview

1.1 Scope

This document describes all the specification and description of functional operation of IPs used in TETRA/GMR Base Band AFE(Analog Front End IC for APSC.

1.2 Features

- Rx-LPF : 5th order Elliptic Low-pass Filter
- Rx-PGA : 0~50dB Range, 1dB Step Programmable Gain Amplifier
- DC Offset Cancellation Block
- Rx-ADC : Two Channel(In-phase, Quadrature-phase) 16-bit Sigma Delta ADC
- Tx-DAC : Two Channel(In-phase, Quadrature-phase) 16-bit Sigma Delta DAC(TETRA)
Two Channel(In-phase, Quadrature-phase) 12-bit Current Steering DAC(GMR)
- Auxiliary ADC : Single-ended 10-Input Multiplexed 10-bit ADC,
One Differential Dedicated 10-bit ADC
- Auxiliary DAC : 3 x 12-bit DAC, 2 x 10-bit DAC

1.3 Functional Diagram

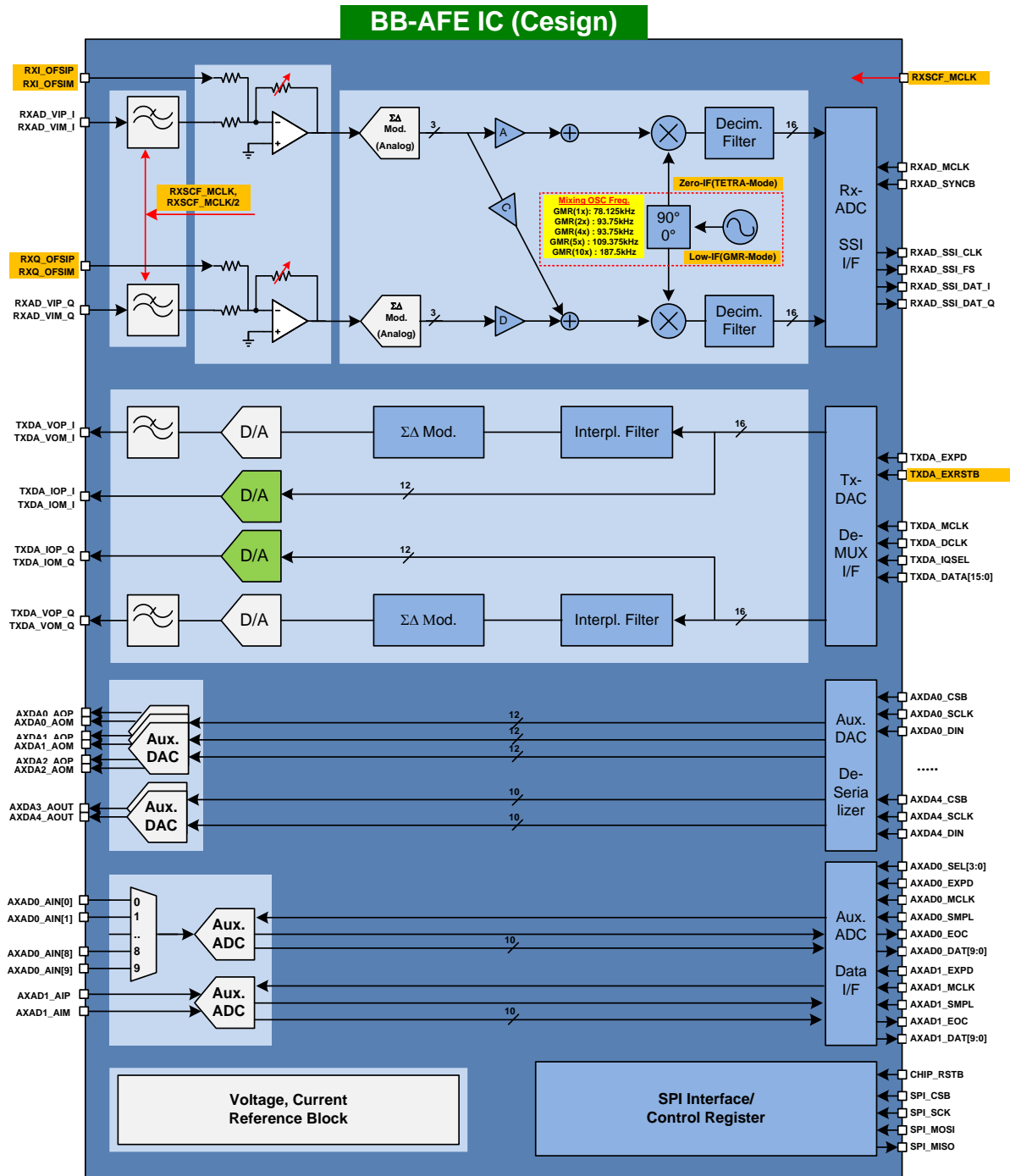


Figure 1 AFE Functional Diagram