

# SiVi-SV18002

TSMC/SMIC 180nm (1P5M)



## MAIN FEATURES

- Designed on SMIC/TSMC 180nm
- 10-bit, HDTV fully integrated front end
- 150Mpixel/s conversion rate with 10-bit ADCs
- Automatic gain and offset calibration
- 1.0 Vp-p differential input range
- Low Power Consumption 120 mW/channel
- Fully integrated anti-alias filter
- Low jitter fully integrated clock generator PLL
- Regenerated H-sync output
- RGB/YprPb graphic processing
- Resolution up to UXGA@75Hz
- Low jitter fully integrated clock generator PLL
- 32 interpixel sampling positions
- Operational temperature range from -40°C to 125°C

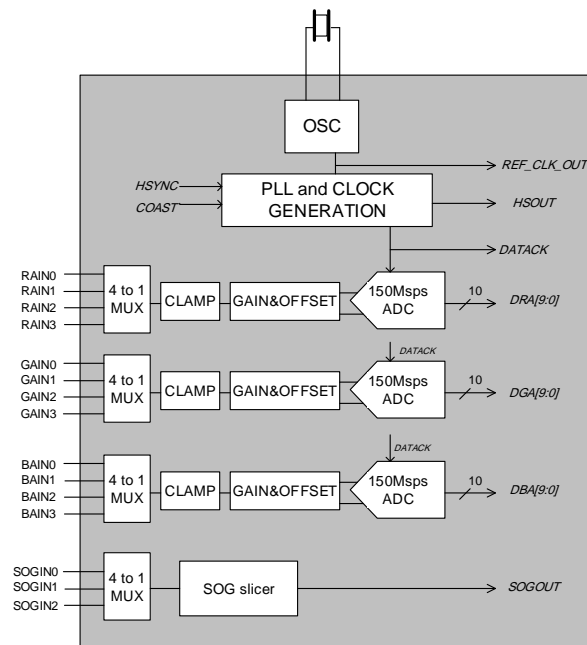
## IP DESCRIPTION

Silicon Vision SiVi-SV18002 is a fully integrated fully programmable HDTV analog front end decoder. The chip composes of three channels 150Mps 10bit ADCs with 4 inputs multiplexer, clamping function, gain and offset programming, Sync On Green slicer and clock generator supporting all standards up to 150Mps pixel clock frequency for HDTV digital video applications. An on chip ADC calibration is included to guarantee best performance.

SiVi-SV18002 is silicon proven in 180nm TSMC and SMIC process technologies

## APPLICATIONS

- Plasma display panels
- LCDTV/HDTV
- Scan Converters



**Block Diagram for SiVi-SV18002**



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