

# T515A Introduction

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## SDTV system video Decoder

### ■2D Comb Filter video Decoder

- Accepts NTSC(M), PAL(B,D,G,H,I,N,CN), and SECAM video data
- Accepts Composite and S-video signals

### ■Versatile VBI Data Decoder

- Supports Close Caption, Wide Screen Signaling and Teletext

### ■Cost Effective Highly Integrated Dual ADC + 2D Video Decoder + VBI Data Decoder

- Integrates 9-bit Dual Analog to Digital Converters (ADC) & Phase Locked Loop (PLL)
- Multi-standard color decoder with 2D adaptive comb filter
- Innovative and flexible design to reduce total system cost
- Power down mode available

## Triple 9-bit Analog to Digital Converters (ADC)

### ■27MSPS Conversion Rate

- Built-in Pre-amp, mid-level & ground clamp circuit
- Automatic Clamp Control for CVBS, Y and C
- Programmable Static Gain Control or Automatic Gain Control for CVBS or Y/C
- Max Input configuration up to 4xCVBS, 2xS-video inputs

## Digital Video Enhancement

### ■Separate Luminance and Chroma Enhancer

- Y Supports Luminance Peaking, Contrast and Brightness adjustment
- C Supports DCTI, Saturation and Hue adjustment.
- Horizontal active data adjustment and black color insertion

### ■Flexible Data Output Format

- 2 configurable output modes:
  5. 27Mhz 8-bit ITUR BT.-656 mode
  6. 27Mhz 8-bit 4:2:2 data with sync signals

## System Interface

### ■Crystal Oscillator Circuit

- Direct interface to a (27.0MHz) Crystal
- Also provide a buffered clock output for ITU656 decoder.

### ■Serial Bus Interface

- Supports 2-wire I<sup>2</sup>C interface

### ■Design For Testability

- Scan chain insertion
- Separated analog & digital test modes

### ■Power Supply:

- +1.8V for digital core power
- +3.3V for analog and pad power

### ■Package: 32-pin TQFP