



AL244 Flyer

(4-in-1 Video Decoder)

Preliminary
Version 0.10

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Amendments

05.08.06 Preliminary version 0.10

Confidential

1 FEATURES

◆ **Analog Input:**

- Four 10bit ADC, AGC & ACC (Automatic Clamping Control)
- Support Auto Multi-Standard NTSC/PAL/SECAM mode detection
- Support Weak & Non-Standard Signal mode detection
- Adaptive 2D Comb-Filter video decoding for Y/C separation

◆ **Video Processing:**

- Closed Caption/V-Chip/WSS/WSS-J VBI decoding
- Macrovision copy protection detection
- Contrast/Brightness/Hue/Saturation adjustment
- Digital Chrominance Transient Improvement (DCTI)

◆ **Digital Video Output**

- Support Four digital ITU-R 656-8bit output

◆ **4-Decoder Mode (A, B, C and D)**

- 4 analog CVBS inputs for each of the 4 Video Decoders
- Standard ITU-R BT 656 format 8-bit outputs
- 4 RTSO(Real Time Status Output) signals for each of the 4 Video Decoders

- Fast Channel-Switching among each of the 4 analog channels

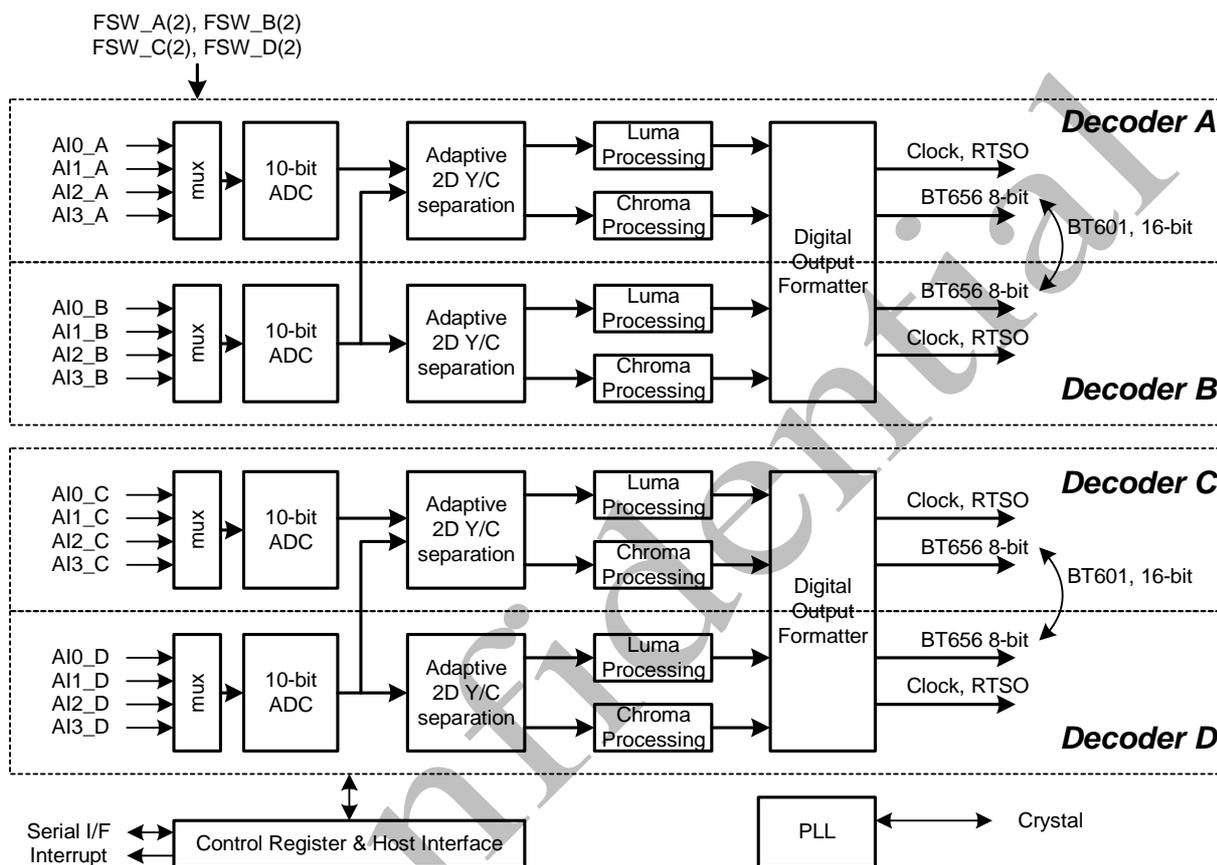
◆ **2-Decoder Mode (A and C)**

- Each of the 2 Video Decoders support CVBS, S-Video and Component inputs
- Standard ITU-R BT 656 format 8-bit outputs
- Standard ITU-R BT 601 format 16-bit outputs
- Digital RGB output (8-bit for Green channel, 6-bit for Red and Blue channels)
- 2 RTSO (Real Time Status Output) signals for each of the 2 Video Decoders

◆ **Miscellaneous**

- 1.8V core logic. 3.3V I/O with 5V tolerance
- Controlled via 2-wire serial-bus interfaces. All 4 video decoders require only one serial-bus interface and share one slave address
- Requires only one crystal for all 4 video decoders
- Support interrupt output pin for hardware mode detection
- Built-in Test Pattern Generator
- Low power consumption
- Small-size package LQFP-128

2 FUNCTION BLOCK DIAGRAM



3 APPLICATIONS

- Video Security & Surveillance Systems
- Video Editing Systems

4 ORDERING INFORMATION

Part number	Package	PB Free	Operating Temp.
AL244A-LF-PBF	128-pin LQFP (14x20mm)	Yes	0°C ~ +70°C
AL244A-LF (By Request)	128-pin LQFP (14x20mm)	No	0°C ~ +70°C

Note: AverLogic Technologies PB-free products employ special PB-free material sets; molding compounds/die attach materials and 100% matte tin plate termination finish do not use materials containing PBB, PBDE or red phosphorus for green-product chips. AverLogic's PB-free products are MSL classified at PB-free peak reflow temperatures that meet or exceed the PB-free requirements of IPC/JEDEC J Std-020C."