



AL244 Flyer

4-in-1 Video Decoder

Version 1.1

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Doc Number: 1-F-PMK244-0001

Amendments

09.25.08 Version 1.0

03.23.09 Version 1.1

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1 FEATURES

◆ Analog Input:

- Four 10-bit ADC, AGC & ACC (Automatic Clamping Control)
- Supports Auto Multi-Standard NTSC/PAL/SECAM mode detection
- Supports 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

- Supports four digital ITU-R 656 format 8-bit 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

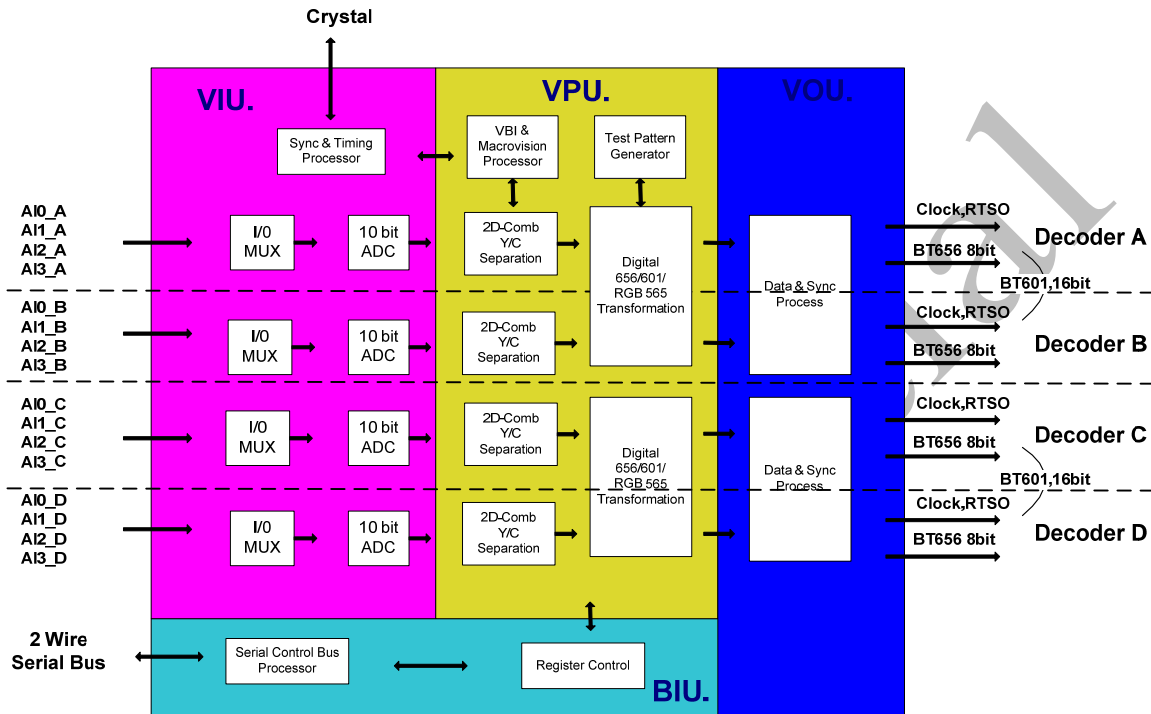
◆ 2-Decoder Mode (A and C)

- 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 (6-bit for Green channel, 5-bit for Red and Blue channels)
- 4 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
- Supports interrupt output pin for hardware mode detection
- Built-in Test Pattern Generator
- Low power consumption
- Small-size package LQFP-128 or LQFP-80

2 FUNCTION BLOCK DIAGRAM



3 APPLICATIONS

- Video Security & Surveillance Systems
- Video Editing Systems

4 ORDERING INFORMATION

Part number	Package	PB Free	Power Supply.
AL244C-LF1-PBF	128-pin LQFP (14x14mm)	Yes	+1.8/3.3V
AL244C-LF2-PBF	80-pin LQFP (10x10mm)	Yes	+1.8/3.3V

Note: AverLogic Technologies PB-free products employ special PB-free material sets; molding compounds/die that 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."