January 2005



FMS6417A Selectable RGB (YUV) HD/SD Video Filter Driver with Y, C, Composite, and Modulator Outputs

Description

by 5.0V.

The FMS6417A offers comprehensive filtering for set top box or DVD applications. This part consists of a triple 6th order filter

with selectable 30MHz to 8MHz frequencies and a dual filter for

filtering Y,C with a composite summer and a modulator channel

with notch and group delay compensation. The modulator provides

2-to-1 multiplexers are provided on the triple filters as well as provisions for auxiliary inputs to the composite channel. The triple

filters are intended for either YUV or RGB signals. All channels

accept AC or DC coupled ground-referenced 1V signals. The filters

output 2Vpp signals into AC coupled terminated loads. The low-

pass filters are powered by 3.3V and the modulator and outputs

notching and group delay compensation for NTSC.

Features

- Three channel video reconstruction filter
- YUV/RGB filters
- 2:1 Mux inputs for multiple RGB/YUV inputs
- Selectable 8MHz to 30MHz 6th order filters for RGB (YUV) applications
- 8MHz 6th order Y, C filters with composite summer
- Modulator output with group delay predistortion
- AC or DC coupled input, AC coupled output
- All outputs can drive AC coupled 75Ω loads and provide 6dB of gain
- Dual multiplexed inputs
- 1% differential gain with 1° differential phase
- 36dB/octave roll-off on all channels
- Pin compatible upgrade to the award winning FMS6417

Applications

- Cable set top boxes
- Satellite set top boxes
- DVD players
- HDTV
- Personal Video Recorders (PVR)
- Video On Demand (VOD)
- Media Centers

Ordering Information

Model	Part Number	Lead Free	Package	Container	Pack Qty.
FMS6417A	FMS6417ACH_NL	Yes	32-pin LQPF	Tray	250
FMS6417A	FMS6417ACHX_NL	Yes	32-pin LQPF	Tape and Reel	1,000

Temperature Range: 0°C to +70°C

DISCLAIMER

FAIRCHILD SEMICONDUCTOR RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY, FUNCTION OR DESIGN. FAIRCHILD DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICENSE UNDER ITS PATENT RIGHTS, NOR THE RIGHTS OF OTHERS.

LIFE SUPPORT POLICY

FAIRCHILD S PRODUCTS ARE NOT AUTHORIZED FOR USE AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES OR SYSTEMS WITHOUT THE EXPRESS WRITTEN APPROVAL OF FAIRCHILD SEMICONDUCTOR CORPORATION.

As used herein:

- Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, or (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.
- A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.