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FAIRCHILD

SEMICONDUCTOR®

FMS6407 Triple Video Drivers with Selectable HD/Progressive/SD/Bypass Filters

Features

- Three video anti-aliasing or reconstruction filters
- 2:1 Mux inputs for YPbPr / RGB or YPbPr / YC-CV inputs
- Supports D1, D2, D3 and D4 video D-connector (EIAJ CP-4120)
- Selectable 8MHz/15MHz/30MHz 6th order filters plus bypass for SD (480i), Progressive (480p) and HD (1080i/ 720p)
- AC-coupled inputs include DC restore /bias circuitry
- All outputs can drive AC or DC coupled 75Ω loads and provide either 0dB or 6dB of gain
- 0.6% differential gain, 0.4° differential phase
- · Lead-free packaging

Applications

- Progressive scan
- · Cable set top boxes
- Satellite set top boxes
- DVD players
- HDTV
- Personal Video Recorders (PVR)

Ordering Information

• Video On Demand (VOD)

Description

The FMS6407 offers comprehensive filtering for TV, set top box or DVD applications. This part consists of a triple 6th order filter with selectable 30MHz, 15MHz, or 8MHz cutoff frequencies. The filters may also be bypassed so that the bandwidth is limited only by the output amplifiers.

A 2 to 1 multiplexer is provided on each filter channel. The triple filters are intended for YPbPr, RGB and YC-CV signals. The DC clamp levels are set according to the input mux selection and the CV_SEL control input. YPbPr sync tips are clamped to 250mV, 1.125V and 1.125V respectively while RGB sync tips are all clamped to 250mV. CV mode clamps Y and CV to 250mV while C is clamped to 1.125V. Sync clamp timing can be derived from the Y or Green input channel or from the external SYNC_IN pin.

All channels nominally accept AC coupled 1Vpp signals. Selectable 0dB or 6dB gain allows the outputs to drive 1Vpp or 2Vpp signals into AC or DC coupled terminated loads with a 1Vpp input. Input signals cannot exceed 1.5Vpp and outputs cannot exceed 2.5Vpp.

The FMS6407 draws 525mW from a single 5.0V supply.

Model	Part Number	Lead Free	Package	Container	Pack Qty
FMS6407	FMS6407MTC20_NL	Ø	TSSOP-20	Tube	94
FMS6407	FMS6407MTC20X_NL	Ø	TSSOP-20	Tape and Reel	2500

Temperature range for all parts: 0°C to +70°C.

Contact your local Fairchild Semiconductor distributor for additional product information

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