



# FMS6143

## Low Cost Three Channel 4th Order Standard Definition Video Filter Driver

### Features

- Three fourth-order 8MHz (SD) filters
- Transparent input clamping
- Dual video load drive (2Vpp, 75Ω)
- AC or DC-coupled inputs
- AC or DC-coupled outputs
- DC-coupled outputs eliminate AC-coupling capacitors 5V only
- Lead Free package - SOIC-8

### Applications

- Cable set top boxes
- Satellite set top boxes
- DVD players
- HDTV
- Personal video recorders (PVR)
- Video on demand (VOD)

### Description

The FMS6143 Low Cost Video Filter (LCVF) is intended to replace passive LC filters and drivers with a low-cost integrated device. Three 4th order filters provide improved image quality compared to typical 2nd or 3rd order passive solutions.

The FMS6143 may be directly driven by a DC-coupled DAC output or an AC-coupled signal. Internal diode clamps and bias circuitry may be used if AC-coupled inputs are required (see applications section for details).

The outputs can drive AC or DC-coupled single (150Ω) or dual (75Ω) loads. DC-coupling the outputs removes the need for output coupling capacitors. The input DC levels will be offset approximately +280mV at the output (see applications section for details).

### Ordering Information

Model	Part Number	Lead Free	Package	Container	Pack Qty
FMS6143	FMS6143CS_NL		SOIC-8	Tube	95
FMS6143	FMS6143CSX_NL		SOIC-8	Tape and Reel	2500

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

**Contact your local Fairchild Semiconductor distributor for additional product information**

#### DISCLAIMER

FAIRCHILD SEMICONDUCTOR RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICES 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 THE PRESIDENT OF FAIRCHILD SEMICONDUCTOR CORPORATION. As used herein:

1. The support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and (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 a significant injury of the user.

2. A critical component in 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.

