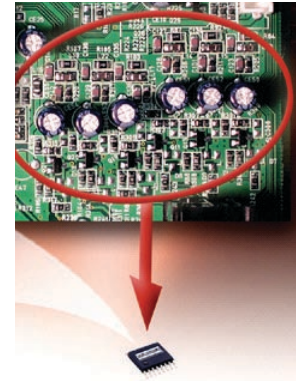


Switch Matrix and Video Filter Driver Products

Video Filter Drivers

Fairchild's video filter drivers have many integrated building blocks including:

- Transparent clamp that automatically clamps or sets a bias voltage level according to table listed in the Video Filter Driver Block Diagram
- Low Pass Filters that in many cases are selectable for SD/PS/HD video formats or can be bypassed (BP)
- Video Drivers with fixed or selectable gains that also offer high ESD protection

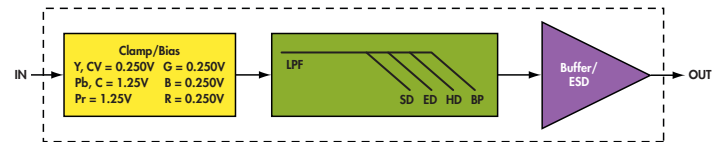


Reduce board space with Fairchild's integrated video filter drivers

Features and Benefits

- Used for anti-aliasing or reconstruction filtering
- Variety of filter bandwidths for every application (8, 16, or 32MHz)
- Complete video output solution with various features including: filters, drivers, input clamps, DC restore, sound notch, and group delay compensation
- Outputs that drive single (150Ω) or dual (75Ω) video loads
- Outputs that provide S-Video, composite video, GBR, and YPbPr
- Integrated solution replaces multiple discrete components
- Robust ESD protection
- Group delay predistortion and sound notch for RF modulation

Video Filter Driver Block Diagram



1 Channel Video Filter Drivers

Video Filter Drivers	Number of Filters/ Drivers	Input Format			Output Format				Video Format			Cutoff (MHz) / = Switchable	Coupling In/Out	Output Driver Gain (dB)
		CV	Y/C S-Video	RGB/ YPbPr	CV	Y/C S-Video	RGB/ YPbPr	Sound Notch	SD	ED	HD			
FMS6141	1/1	X			X				X			7.1	AC/AC	6
FMS6151	1/1	X			X				X			8	DC/AC, DC	6

3 and 4 Channel Video Filter Drivers

Video Filter Drivers	Number of Filters/ Drivers	Input Format			Output Format				Video Format			Cutoff (MHz) / = Switchable	Coupling In/Out	Output Driver Gain (dB)
		CV	Y/C S-Video	RGB/ YPbPr	CV	Y/C S-Video	RGB/ YPbPr	Sound Notch	SD	ED	HD			
FHP6152*	2/3		X		X	X			X			9	AC,DC/ AC,DC	6
FMS6400	2/3		X		X	X			X			7.1	AC/AC,DC	0, 6
FMS6400-1	2/3		X		X	X			X			8	AC/AC,DC	0, 6
FMS6410B	2/3		X		X	X			X			7.1	AC/AC	6
FMS6143	3/3	X	X	X	X	X	X		X			8	AC,DC/ AC,DC	6

*In Development



Switch Matrix and Video Filter Driver Products

3 and 4 Channel Video Filter Drivers (Continued)

Video Filter Drivers	Number of Filters/ Drivers	Input Format			Output Format				Video Format			Cutoff (MHz) / = Switchable	Coupling In/Out	Output Driver Gain (dB)
		CV	Y/C S-Video	RGB/ YPbPr	CV	Y/C S-Video	RGB/ YPbPr	Sound Notch	SD	ED	HD			
FMS6203	3/3	X	X	X	X	X	X		X	X	X	8/16/32/BP	AC, AC/DC, AC	0, 6
FMS6243**	3/3	X	X	X	X	X	X		X			8	AC, DC/AC, DC	6
FMS6213*	3/3			X			X				X	30/60	AC/AC, DC	6
FMS6363	3/3			X			X				X	30	AC, AC/DC, AC	6
FMS6403	3/3			X			X		X	X	X	8/15/30/BP	AC/AC, DC	0, 6
FMS6407	3/3	X	X	X	X	X	X		X	X	X	8/15/30/BP	AC/AC, DC	0, 6
FMS6408	3/3	X	X	X	X	X	X		X			7.1	DC/AC	6
FMS6418B	3/3			X			X		X		X	8/32	DC/AC	6
FMS6406	2/4		X		X	X		X	X			7.1	AC/DC	6

*In Development; **Group Delay Compensation; BP = Bypass Mode

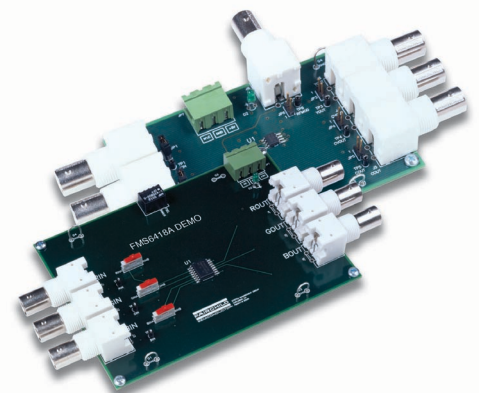
5, 6, and 7 Channel Video Filter Drivers

Video Filter Drivers	Number of Filters/ Drivers	Input Format			Output Format				Video Format			Cutoff (MHz) / = Switchable	Coupling In/Out	Output Driver Gain (dB)
		CV	Y/C S-Video	RGB/ YPbPr	CV	Y/C S-Video	RGB/ YPbPr	Sound Notch	SD	ED	HD			
FMS6145	5/5	X	X	X	X	X	X		X			8	AC,DC/AC,DC	6
FMS6366*	5/6	X	X	X	X	X	X		X		X	8, 4/15, 8/30	DC/AC	6
FMS6419	5/6	X	X	X	X	X	X		X		X	8, 8/30	DC/AC	6
FMS6146	6/6	X	X	X	X	X	X		X			7.1	AC,DC/AC,DC	6
FMS6246	6/5	X	X	X	X	X	X		X	X		8, 8/15	AC,DC/AC,DC	6
FMS6346	6/6	X	X	X	X	X	X		X		X	8, 8/32	AC,DC/AC,DC	6
FMS6690	6/6	X	X	X	X	X	X		X	X	X	8, 15/32	AC,DC/AC,DC	6
FMS6417A	6/7	X	X	X	X	X	X	X	X		X	8, 8/30	AC/DC	6

*4:2:2 capable

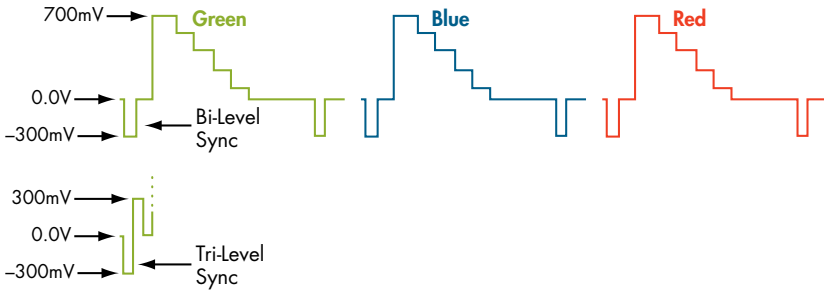
Video Filter/Switch Matrix Demo Boards

Fully populated demo/evaluation boards are available to aid in the characterization of our video filter driver and switch matrix products.

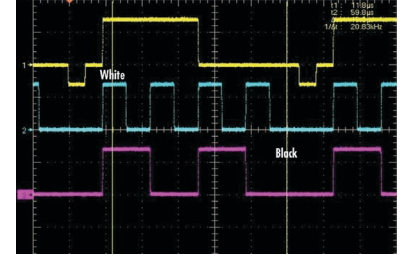


Video Formats and Signal Levels

GBR Video

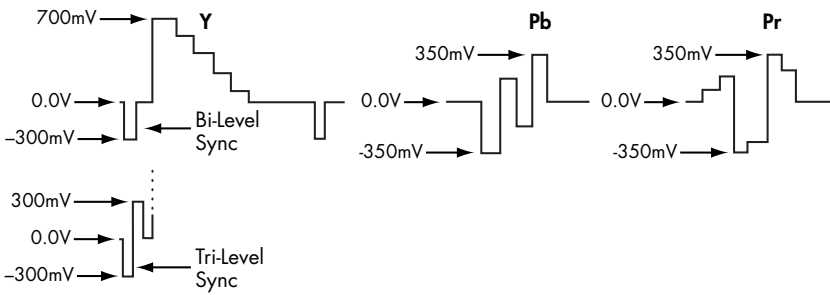


Component Video 480i or 480p

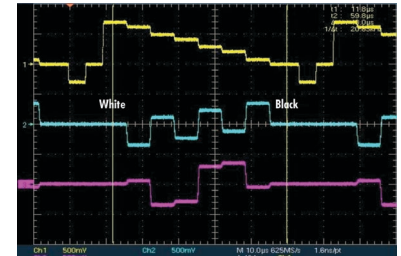


GBR Color Bars

Component Video (YPbPr)

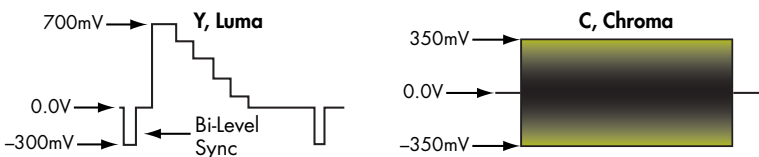


Component Video 480i or 480p

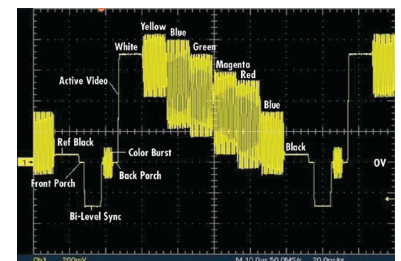


YPbPr Color Bars

S-Video

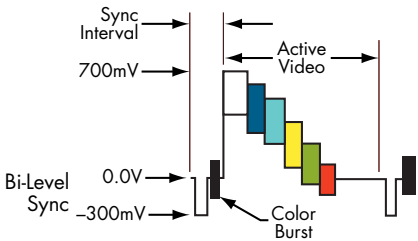


Standard Definition NTSC



Color Bars Waveforms (CVBS)

Composite Video (CVBS)



Standard Video Color Bar



* Bi-Level Sync is used in 480i and 480p
Tri-Level Sync is used in 720p, 1080i, and 1080p