ADVANCE INFORMATION

All information in this data sheet is preliminary and subject to change. 8/97

FORMATION
ta sheet is preliminaryImage: Channel350MHz/250MHz, 4-Channel/8-Channel

Video Multiplexer-Amplifiers

General Description

The MAX4160/MAX4161/MAX4260/MAX4261 are wideband 4-channel/8-channel noninverting video amplifiers with input multiplexing, capable of driving ±2.5V signals into 50 Ω or 75 Ω loads. These devices are currentfeedback amplifiers; gain is set by external feedback resistors. The MAX4160/MAX4161 are optimized for unity gain (0dB) with a 350MHz -3dB bandwidth. The MAX4260/MAX4261 are optimized for gains of two (6dB) or more with a 250MHz -3dB bandwidth. These devices have low (0.01%/0.01°) differential gain and phase errors and operate from ±5V supplies.

These amplifiers are ideal for use in broadcast and graphics video systems because of their low 2pF input capacitance, channel-to-channel switching time of only 20ns, and wide 130MHz 0.1dB bandwidth. In addition, the combination of ultra-high speed and low power makes them suitable for use in general-purpose, high-speed applications such as medical imaging, industrial instrumentation, and communications systems.

These parts have address latching and high-impedance output disabling, allowing them to be incorporated into large arrays. The MAX4160/MAX4260 are available in 16-pin QSOP and narrow SO packages. The MAX4161/ MAX4261 are available in 28-pin SSOP and wide SO packages.

Applications

- Video Signal Multiplexing
- Video Crosspoint Switches
- Pixel Switching
- Coaxial Cable Drivers
- Workstations

- High Definition TV
- Broadcast Video
- Multimedia Products
- High-Speed Signal Processing

_Features

- Excellent Video Specifications: 0.1dB Gain Flatness to 130MHz 0.01%/0.01° Differential Gain/Phase Error
- High Speed: 350MHz -3dB Bandwidth (MAX4160/MAX4161) 250MHz -3dB Bandwidth (MAX4260/MAX4261) 700V/µs Slew Rate (MAX4160/MAX4161) 1000V/µs Slew Rate (MAX4260/MAX4261) 20ns Settling Time to 0.1%
- Fast Switching: 20ns Channel-Switching Time <70mV Switching Transient
- Low Power: 120mW (MAX4160/MAX4260) 310mW (MAX4161/MAX4261)
- Directly Drives 75Ω or 50Ω Cables
- >70mA Output Current Drive
- Address Latch and High-Z Output Disable

Ordering Information

Maxim Integrated Products 1

PART	TEMP. RANGE	PIN-PACKAGE
MAX4160ESE	-40°C to +85°C	16 Narrow SO
MAX4160EEE	-40°C to +85°C	16 QSOP
MAX4161EWI	-40°C to +85°C	28 Wide SO
MAX4161EAI	-40°C to +85°C	28 SSOP
MAX4260ESE	-40°C to +85°C	16 Narrow SO
MAX4260EEE	-40°C to +85°C	16 QSOP
MAX4261EWI	-40°C to +85°C	28 Wide SO
MAX4261EAI	-40°C to +85°C	28 SSOP

MAX4160/MAX4161/MAX4260/MAX4261

For free samples & the latest literature: http://www.maxim-ic.com, or phone 1-800-998-8800. For small orders, phone 408-737-7600 ext. 3468.

350MHz/250MHz, 4-Channel/8-Channel Video Multiplexer-Amplifiers

_Pin Configurations/Functional Diagrams/Truth Tables

TOP VIEW



EN	OUTPUT			
0	ON			

OFF (HI-Z)

	MAX4160/MAX4260						
	LE	A1	A0	INPUT			
	1	Х	Х	LAST			
	0	0	0	IN0			
	0	0	1	IN1			
	0	1	0	IN2			
	0	1	1	IN3			
X = DON'T CARE							

MAX4161/MAX4261						
LE	A2	A1	A0	INPUT		
1	Х	Х	Х	LAST		
0	0	0	0	IN0		
0	0	0	1	IN1		
0	0	1	0	IN2		
0	0	1	1	IN3		
0	1	0	0	IN4		
0	1	0	1	IN5		
0	1	1	0	IN6		
0	1	1	1	IN7		
X = DON'T CARE						



N.C. = NOT INTERNALLY CONNECTED

M/XI/M