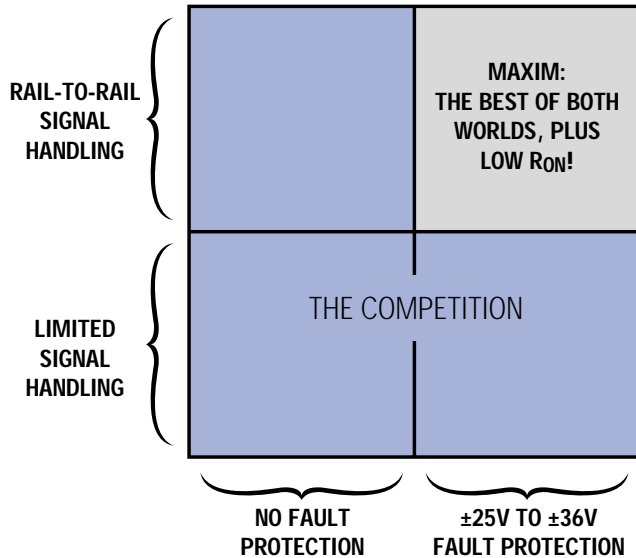


ADD $\pm 36V$ FAULT PROTECTION WITHOUT COMPROM

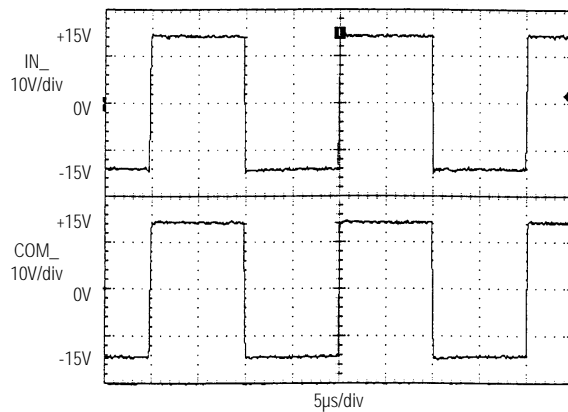
Maxim's Family Features Rail-to-Rail Signal Hand



Maxim's breakthrough architecture delivers fault protection and high performance in industry-standard pinouts, leaving the competition behind!

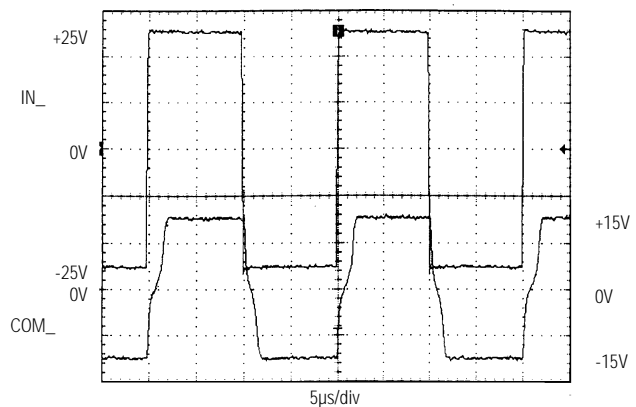
- ◆ Rail-to-Rail® Signal Handling from $\pm 4.5V$ to $\pm 20V$
- ◆ Low R_{ON} of 175Ω Matched to 10Ω (Switches)
- ◆ No Power-Supply Sequencing Required During Power-Up or Power-Down
- ◆ Industry-Standard Configurations
- ◆ Overvoltage Protection (Power On):
 - $\pm 36V$ SPST Switches, Signal-Line Protectors
 - $\pm 25V$ SPDT Switches, Multiplexers
- ◆ Output IC Protection:
 - Output Clamps to Appropriate Supply Voltage During Input Fault Condition
 - $1k\Omega$ typ Output Clamp Resistance During Input Overvoltage
 - All Channels Off with Power Off
 - Only Nanoamps of Fault Current with Mux Power On or Off
- ◆ $\pm 40V$ Overvoltage Input Protection (Power Off)

FAULT-FREE SIGNAL PERFORMANCE



Fault-free rail-to-rail signal handling with $\pm 15V$ supplies.

INPUT OVERVOLTAGE vs. OUTPUT CLAMPING



$\pm 25V$ overvoltage input with the output clamped at $\pm 15V$.

TO YOUR ANALOG SWITCHES USING PERFORMANCE

ing, Low RON, and No Power-Supply Sequencing[†]



See www.edtn.com/analog/prod269.htm for details

Fault-Protected Switches

Part	Function	RON (Ω_{max})	RON Match (Ω_{max})	Input Off-Leakage (nA max)	ICOM(OFF) Leakage (nA max)	ton/toff (ns max)	Supply Voltage Range (V)	Pin-Package	Industry-Standard Pinout
FUTURE MAX4510	SPST NC	175	N/A	± 0.5	± 0.5	250/150	± 4.5 to ± 20	8-pin DIP/SO/ μ MAX	N/A
NEW MAX4511	4 SPST NC	175	10	± 0.5	± 0.5	500/400	± 4.5 to ± 20	16-pin DIP/SO/SSOP	DG211/201/411
NEW MAX4512	4 SPST NO	175	10	± 0.5	± 0.5	500/400	± 4.5 to ± 20	16-pin DIP/SO/SSOP	DG212/202/412
NEW MAX4513	4 SPST NC, NO	175	10	± 0.5	± 0.5	500/400	± 4.5 to ± 20	16-pin DIP/SO/SSOP	DG213/413
FUTURE MAX4520	SPST NO	175	N/A	± 0.5	± 0.5	250/150	± 4.5 to ± 20	8-pin DIP/SO/ μ MAX	N/A
NEW MAX4533	4 SPDT	175	10	± 0.5	± 0.5	250/150	± 4.5 to ± 20	20-pin DIP/SO/SSOP	MAX333
FUTURE MAX4631	2 SPST NO	175	10	± 0.5	± 0.5	500/400	± 4.5 to ± 20	16-pin DIP/SO/SSOP	DG401
FUTURE MAX4632	SPDT	175	10	± 0.5	± 0.5	500/400	± 4.5 to ± 20	16-pin DIP/SO/SSOP	DG403
FUTURE MAX4633	2 SPDT	175	10	± 0.5	± 0.5	500/400	± 4.5 to ± 20	16-pin DIP/SO/SSOP	DG405

Fault-Protected Muxes

Part	Function	RON (Ω_{max})	RON Match (Ω_{max})	Input Off-Leakage (nA max)	ICOM(OFF) Leakage (nA max)	ton/toff (ns max)	Supply Voltage Range (V)	Pin-Package	Industry-Standard Pinout
NEW MAX4508	8 to 1	400	15	± 0.5	± 2	275/200	± 4.5 to ± 20	16-pin DIP/SO/SSOP	DG408/508/438
NEW MAX4509	Dual 4-to-1	400	15	± 0.5	± 1	275/200	± 4.5 to ± 20	16-pin DIP/SO/SSOP	DG409/509/439

Signal-Line Circuit Protectors

Part	Function	RON (Ω_{max})	RON Match (Ω_{max})	ICOM(ON) Leakage (nA max)	Supply Voltage Range (V)	Pin-Package	Industry-Standard Pinout
FUTURE MAX4505	1-Line	100	N/A	± 0.5	± 4.5 to ± 20	6-pin SOT23	N/A
NEW MAX4506	3-Line	100	7	± 0.5	± 4.5 to ± 20	8-pin DIP/SO	MAX366
NEW MAX4507	8-Line	100	7	± 0.5	± 4.5 to ± 20	8-pin DIP/SO	MAX367



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