Digital Isolators Selection Tables

The following selection table contains information for *i*Coupler Digital Isolators.

Product	Model	No. Channels	Channel Config.*	Insulation Rating (KVrms)	Max. Data Rate, 5V (Mbps)	Max. Prop. Delay, 5V (ns)	Output Voltage (V)	Max. Oper. Temp. (deg. C)	Package	Price/ Unit (1K pcs.)
				Single and Multichannel Digital Isolators						
ADuM1100	ADuM1100ARZ	1	1/0	2.5	25	18	3.0 - 5.5	105	8-Lead Narrow Body SOIC	$1.61
	ADuM1100BRZ	1	1/0	2.5	100	18	3.0 - 5.5	105	8-Lead Narrow Body SOIC	$1.84
	ADuM1100URZ	1	1/0	2.5	100	18	3.0 - 5.5	125	8-Lead Narrow Body SOIC	$2.76
ADuM120x	ADuM1200ARZ	2	2/0	2.5	1	150	2.7 - 5.5	105	8-Lead Narrow Body SOIC	$1.21
	ADuM1200BRZ	2	2/0	2.5	10	50	2.7 - 5.5	105	8-Lead Narrow Body SOIC	$1.76
	ADuM1200CRZ	2	2/0	2.5	25	45	2.7 - 5.5	105	8-Lead Narrow Body SOIC	$2.44
	ADuM1201ARZ	2	1/1	2.5	1	150	2.7 - 5.5	105	8-Lead Narrow Body SOIC	$1.21
	ADuM1201BRZ	2	1/1	2.5	10	50	2.7 - 5.5	105	8-Lead Narrow Body SOIC	$1.76
	ADuM1201CRZ	2	1/1	2.5	25	45	2.7 - 5.5	105	8-Lead Narrow Body SOIC	$2.44
ADuM130x	ADuM1300ARWZ	3	3/0	2.5	1	100	2.7 - 5.5	105	16-Lead Wide Body SOIC	$1.61
	ADuM1300BRWZ	3	3/0	2.5	10	50	2.7 - 5.5	105	16-Lead Wide Body SOIC	$2.42
	ADuM1300CRWZ	3	3/0	2.5	90	32	2.7 - 5.5	105	16-Lead Wide Body SOIC	$3.65
	ADuM1301ARWZ	3	2/1	2.5	1	100	2.7 - 5.5	105	16-Lead Wide Body SOIC	$1.61
	ADuM1301BRWZ	3	2/1	2.5	10	50	2.7 - 5.5	105	16-Lead Wide Body SOIC	$2.42
	ADuM1301CRWZ	3	2/1	2.5	90	32	2.7 - 5.5	105	16-Lead Wide Body SOIC	$3.65
ADuM140x	ADuM1400ARWZ	4	4/0	2.5	1	100	2.7 - 5.5	105	16-Lead Wide Body SOIC	$2.15
	ADuM1400BRWZ	4	4/0	2.5	10	50	2.7 - 5.5	105	16-Lead Wide Body SOIC	$3.22
	ADuM1400CRWZ	4	4/0	2.5	90	32	2.7 - 5.5	105	16-Lead Wide Body SOIC	$4.31
	ADuM1401ARWZ	4	3/1	2.5	1	100	2.7 - 5.5	105	16-Lead Wide Body SOIC	$2.15
	ADuM1401BRWZ	4	3/1	2.5	10	50	2.7 - 5.5	105	16-Lead Wide Body SOIC	$3.22

	Model	No. Channels	Channel Config.*	Insulation Rating (KVrms)	Max. Data Rate, 5V (Mbps)	Max. Prop. Delay, 5V (ns)	Output Voltage (V)	Max. Oper. Temp. (deg. C)	Package	Price/Unit (1K pcs.)
	ADuM1401CRWZ	4	3/1	2.5	90	32	2.7 - 5.5	105	16-Lead Wide Body SOIC	$4.31
	ADuM1402ARWZ	4	2/2	2.5	1	100	2.7 - 5.5	105	16-Lead Wide Body SOIC	$2.15
	ADuM1402BRWZ	4	2/2	2.5	10	50	2.7 - 5.5	105	16-Lead Wide Body SOIC	$3.22
	ADuM1402CRWZ	4	2/2	2.5	90	32	2.7 - 5.5	105	16-Lead Wide Body SOIC	$4.31
ADuM240x	ADuM2400ARWZ	4	4/0	5	1	100	2.7 - 5.5	105	16-Lead Wide Body SOIC	$3.16
	ADuM2400BRWZ	4	4/0	5	10	50	2.7 - 5.5	105	16-Lead Wide Body SOIC	$4.60
	ADuM2400CRWZ	4	4/0	5	90	32	2.7 - 5.5	105	16-Lead Wide Body SOIC	$5.95
	ADuM2401ARWZ	4	3/1	5	1	100	2.7 - 5.5	105	16-Lead Wide Body SOIC	$3.16
	ADuM2401BRWZ	4	3/1	5	10	50	2.7 - 5.5	105	16-Lead Wide Body SOIC	$4.60
	ADuM2401CRWZ	4	3/1	5	90	32	2.7 - 5.5	105	16-Lead Wide Body SOIC	$5.95
	ADuM2402ARWZ	4	2/2	5	1	100	2.7 - 5.5	105	16-Lead Wide Body SOIC	$3.16
	ADuM2402BRWZ	4	2/2	5	10	50	2.7 - 5.5	105	16-Lead Wide Body SOIC	$4.60
	ADuM2402CRWZ	4	2/2	5	90	32	2.7 - 5.5	105	16-Lead Wide Body SOIC	$5.95

* Channel configuration refers to the directionality of the isolation channels. For products with integrated, isolated power, the second number corresponds to the number of inputs on the side with the isolated power. For example, "2/1" means two channels communicate in one direction while the third channel communicates in the reverse direction, with two inputs on the non-isolated supply side, and one input on the isolated supply side.

The following selection table contains information for *i*Coupler Digital Isolators with Default Output Low or Programmable.

Product	Model	No. Channels	Channel Config.*	Insulation Rating (KVrms)	Max. Data Rate, 5V (Mbps)	Max. Prop. Delay, 5V (ns)	Output Voltage (V)	Max. Oper. Temp. (deg. C)	Package	Price/Unit (1K pcs.)
				Single and Multichannel Digital Isolators with Default Output Low or Programmable						
ADuM1210	ADuM1210BRZ	2	2/0	2.5	10	50	2.7 - 5.5	105	8-Lead Narrow Body SOIC	$1.76
ADuM131x	ADuM1310ARWZ	3	3/0	2.5	1	100	2.7 - 5.5	105	16-Lead Wide Body SOIC	$1.61
	ADuM1310BRWZ	3	3/0	2.5	10	50	2.7 - 5.5	105	16-Lead Wide Body SOIC	$2.42
	ADuM1311ARWZ	3	2/1	2.5	1	100	2.7 - 5.5	105	16-Lead Wide Body SOIC	$1.61
	ADuM1311BRWZ	3	2/1	2.5	10	50	2.7 - 5.5	105	16-Lead Wide Body SOIC	$2.42
	ADuM1410ARWZ	4	4/0	2.5	1	100	2.7 - 5.5	105	16-Lead Wide Body SOIC	$2.15

Product	Model	No. Channels	Channel Config.* (implied)	Insulation Rating (KVrms)	Max Data Rate (Mbps)	Max Prop Delay	Output Voltage	Max Oper. Temp. (deg. C)	Package	Price
	ADuM1410BRWZ	4	4/0	2.5	10	50	2.7 - 5.5	105	16-Lead Wide Body SOIC	$3.22
	ADuM1411ARWZ	4	3/1	2.5	1	100	2.7 - 5.5	105	16-Lead Wide Body SOIC	$2.15
ADuM141x	ADuM1411BRWZ	4	3/1	2.5	10	50	2.7 - 5.5	105	16-Lead Wide Body SOIC	$3.22
	ADuM1412ARWZ	4	2/2	2.5	1	100	2.7 - 5.5	105	16-Lead Wide Body SOIC	$2.15
	ADuM1412BRWZ	4	2/2	2.5	10	50	2.7 - 5.5	105	16-Lead Wide Body SOIC	$3.22
										back to top

* Channel configuration refers to the directionality of the isolation channels. For products with integrated, isolated power, the second number corresponds to the number of inputs on the side with the isolated power. For example, "2/1" means two channels communicate in one direction while the third channel communicates in the reverse direction, with two inputs on the non-isolated supply side, and one input on the isolated supply side.

The following selection table contains information for Bidirectional *i*Coupler Digital Isolators

Product	Model	No. Channels	Serial Data	Serial Clock	Insulation Rating (KVrms)	Data Rate (Mbps)	Max. Oper. Temp. (deg. C)	Package	Price/ Unit (1K pcs.)
I^{2}C Compliant Bidirectional Digital Isolators									
ADuM1250	ADuM1250BRZ	2	Bidirectional	Bidirectional	2.5	1	105	8-Lead Narrow Body SOIC	$3.38
ADuM1251	ADuM1251BRZ	2	Bidirectional	Unidirectional	2.5	1	105	8-Lead Narrow Body SOIC	$3.05
ADuM2250	ADuM2250BRWZ	2	Bidirectional	Bidirectional	5.0	1	105	16-Lead Wide Body SOIC	$3.99
ADuM2251	ADuM2251BRWZ	2	Bidirectional	Unidirectional	5.0	1	105	16-Lead Wide Body SOIC	$3.59
									back to top

The following selection table contains information for ruggedized *i*Coupler Digital Isolators subject to harsh system-level ESD conditions *

Product	Model	No. Channels	Channel Config.*	Insulation Rating (KVrms)	Max. Data Rate, 5V (Mbps)	Max. Prop. Delay, 5V (ns)	Output Voltage (V)	Max. Oper. Temp. (deg. C)	Package	Price/ Unit (1K pcs.)
Single and Multichannel Digital Isolators Ruggedized for System-Level ESD										
ADuM3100	ADuM3100ARZ	1	1/0	2.5	25	18	3.0 - 5.5	105	8-Lead Narrow Body SOIC	$1.69
	ADuM3100BRZ	1	1/0	2.5	100	18	3.0 - 5.5	105	8-Lead Narrow Body SOIC	$1.93
	ADuM3200ARZ	2	2/0	2.5	1	150	2.7 - 5.5	105	8-Lead Narrow Body SOIC	$1.27
	ADuM3200BRZ	2	2/0	2.5	10	50	2.7 - 5.5	105	8-Lead Narrow Body SOIC	$1.85
	ADuM3200CRZ	2	2/0	2.5	25	45	2.7 - 5.5	105	8-Lead Narrow Body SOIC	$2.56
ADuM320x	ADuM3201ARZ	2	1/1	2.5	1	150	2.7 - 5.5	105	8-Lead Narrow Body SOIC	$1.27
	ADuM3201BRZ	2	1/1	2.5	10	50	2.7 - 5.5	105	8-Lead Narrow Body SOIC	$1.85
	ADuM3201CRZ	2	1/1	2.5	25	45	2.7 - 5.5	105	8-Lead Narrow	$2.56

Product	Model									
									Body SOIC	
ADuM330x	ADuM3300ARWZ	3	3/0	2.5	1	100	2.7 - 5.5	105	16-Lead Wide Body SOIC	$1.69
	ADuM3300BRWZ	3	3/0	2.5	10	50	2.7 - 5.5	105	16-Lead Wide Body SOIC	$2.54
	ADuM3300CRWZ	3	3/0	2.5	90	32	2.7 - 5.5	105	16-Lead Wide Body SOIC	$3.83
	ADuM3301ARWZ	3	2/1	2.5	1	100	2.7 - 5.5	105	16-Lead Wide Body SOIC	$1.69
	ADuM3301BRWZ	3	2/1	2.5	10	50	2.7 - 5.5	105	16-Lead Wide Body SOIC	$2.54
	ADuM3301CRWZ	3	2/1	2.5	90	32	2.7 - 5.5	105	16-Lead Wide Body SOIC	$3.83
ADuM340x	ADuM3400ARWZ	4	4/0	2.5	1	100	2.7 - 5.5	105	16-Lead Wide Body SOIC	$2.25
	ADuM3400BRWZ	4	4/0	2.5	10	50	2.7 - 5.5	105	16-Lead Wide Body SOIC	$3.38
	ADuM3400CRWZ	4	4/0	2.5	90	32	2.7 - 5.5	105	16-Lead Wide Body SOIC	$4.53
	ADuM3401ARWZ	4	3/1	2.5	1	100	2.7 - 5.5	105	16-Lead Wide Body SOIC	$2.15
	ADuM3401BRWZ	4	3/1	2.5	10	50	2.7 - 5.5	105	16-Lead Wide Body SOIC	$3.38
	ADuM3401CRWZ	4	3/1	2.5	90	32	2.7 - 5.5	105	16-Lead Wide Body SOIC	$4.53
	ADuM3402ARWZ	4	2/2	2.5	1	100	2.7 - 5.5	105	16-Lead Wide Body SOIC	$2.15
	ADuM3402BRWZ	4	2/2	2.5	10	50	2.7 - 5.5	105	16-Lead Wide Body SOIC	$3.38
	ADuM3402CRWZ	4	2/2	2.5	90	32	2.7 - 5.5	105	16-Lead Wide Body SOIC	$4.53

* Please refer to application note AN-793. These parts are intended for use in systems deployed in environments subject to extreme ESD conditions, e.g., per IEC-61000-4-x. Most applications do not require the extra protection provided by these devices and will meet ESD, fast transient, etc. reliability requirements through careful board layout, as explained in AN-793.

** Channel configuration refers to the directionality of the isolation channels. For products with integrated, isolated power, the second number corresponds to the number of inputs on the side with the isolated power. For example, "2/1" means two channels communicate in one direction while the third channel communicates in the reverse direction, with two inputs on the non-isolated supply side, and one input on the isolated supply side.

The following selection table contains information for *i*Coupler Digital Isolators with isoPower Integrated, Isolated Power.

Product	Model	Channel Config.*	UL Insulation Rating (KV)	Max. Data Rate, 5V (Mbps)	Data Output Voltage (V)	Isolated Output Supply Voltage (V)	Max. Isolated Output Supply Current (mA)	Max. Oper. Temp. (deg. C)	Package	Price/ Unit (1K pcs.)
				Digital Isolators with *Power Integrated, Isolated Power*						
ADuM524x	ADuM5240ARZ	2/0	2.5	1	2.7 - 5.5	5.0 - 5.5	10	105	8-Lead Narrow Body SOIC	$2.95
	ADuM5241ARZ	1/1	2.5	1	2.7 - 5.5	5.0 - 5.5	10	105	8-Lead Narrow Body SOIC	$2.95

	ADuM5242ARZ	0/2	2.5	1	2.7 - 5.5	5.0 - 5.5	10	105	8-Lead Narrow Body SOIC	$2.95

<div align="right">back to top</div>

* Channel Config Note: Channel configuration refers to the directionality of the isolation channels. The first number corresponds to the number of inputs on the side with the non-isolated supply, and the second number corresponds to the number of inputs on the side with the isolated power output. For example, "0/2" means the inputs of the two data channels are on the same side as the isolated power output.

The following selection table contains information for *i*Coupler isolated gate drivers.

Product	Model	No. Channels	Insulation Rating (KVrms)	Output Voltage Range (V)	Max Peak Output Current (A)	Max Channel-to-Channel Matching (ns)	Max Working Insulation Voltage Input-Output / Output-Output (Vpeak)	Package	Price/ Unit (1K pcs.)
Isolated Gate Drivers									
ADuM1230*	ADuM1230BRWZ	2	2.5	12 to 18	0.1	5	700/700	16-Lead Wide Body SOIC	$1.84
ADuM1233	ADuM1233BRWZ	2	2.5	12 to 18	0.1	5	700/700	16-Lead Wide Body SOIC	$1.84

<div align="right">back to top</div>

* The ADuM1230 is no longer recommended for new designs.

The following selection table contains information for Isolated Σ-Δ Modulators.

Part #	Resolution (Bits)	Throughput (MSPS)	Digital Isolation Voltage (kV)	Clock Source	Output Data Format	Power Dissipation (mV)	Power Supply Voltage (V)	Package	Price (1k Pcs)
Σ-Δ Modulators									
AD7400	16	10	3.75	Internal	SPI	90	5	16-Pin SOIC	$4.00
AD7401	16	18	3.75	External	SPI	90	5	16-Pin SOIC	$4.00

<div align="right">back to top</div>

The following selection table contains information for Isolated RS-485 Transceivers.

Part	FD/HD	Data Rate	Isolation Rating (V rms)	Temperature Range (C)	Package	Integrated Transformer Driver	Price@1KU
RS-485 Transceivers							
ADM2483	HD	500 Kbps	2500	-40 to +85	16 Wide SO	--	$3.00
ADM2485	HD	16 Mbps	2500	-40 to +85	16 Wide SO	Yes	$5.50
ADM2486	HD	20 Mbps	2500	-40 to +85	16 Wide SO	--	$4.98
ADM2490E	FD	16 Mbps	5000	-40 to +105	16 Wide SO	--	$4.50

<div align="right">back to top</div>

Last Updated: 4/2007