



Texas Instruments Incorporated  
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### ESD & Reliability Testing Data

#### CD4030B / CD4070B

#### ESD

Device: CD4070BPWR Wafer Fab: SHE Technology: CMOS  
MPDREL.03.CD.12001

Test Type	Date Code	A/T Lot#	Die Lot#	Voltage	Read Date	Qty	Fails
ESD - HBM	27EVCTK	2523752	2184462	0 V	12/09/2003	12	0
				500 V	1/26/2004	3	0
				1000 V	1/26/2004	3	0
				1500 V	1/26/2004	3	0
				2000 V	1/26/2004	3	0
ESD - MM	27EVCTK	2523752	2184462	0 V	12/09/2003	12	0
				50 V	1/26/2004	3	0
				100 V	1/26/2004	3	0
				150 V	1/26/2004	3	0
				200 V	1/26/2004	3	0
ESD - CDM	27EVCTK	2523752	2184462	0 V	12/09/2003	9	0
				500 V	1/26/2004	3	0
				1000 V	1/26/2004	3	0
				1500 V	1/26/2004	3	0
				1500 V	1/26/2004	3	0

The following data is for testing completed during the Reliability Monitor on various part number devices with die fabricated using the same die fabrication process as the subject part number device. This data is not specific to the subject device.

Test	Conditions	Quantity Tested	Failures
Static Operating Life	150C, 500 Hours	1390	0
Autoclave	121C, 15psig, 96 hours	584	0
Temperature Cycle	-65/+150C, 1000 cycles	35	0
Thermal Shock	-65/+150C, 1000 cycles	693	0
HAST	130C, 85% RH, 50 hours	1078	0

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Plastic encapsulated TI semiconductor devices are not designed and are not warranted to be suitable for use in some military applications and/or military environments. Use of plastic encapsulated TI semiconductor devices in military applications and/or military environments, in lieu of hermetically sealed ceramic devices, is understood to be fully at the risk of the buyer.

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Quality and reliability data provided by Texas Instruments is intended to be an estimate of product performance based upon history only. It does not imply that any performance levels reflected in such data can be met if the product is operated outside the conditions expressly stated in the latest published data sheet for a device. Device attributes listed in qualification reports may not reflect materials or processes currently being used in the construction of the devices.

Reliability data shows characteristic failure mechanisms of the specific environmental stress as documented in the industry standards for each stress condition.

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