

Automotive Qualification Results Summary for ADuM3210W/ADuM3211W Die Revision and Data Sheet Change

QUALIFICATION PLAN / STATUS			
TEST	SPECIFICATION	SAMPLE SIZE	RESULTS
High Temperature Operating Life (HTOL)*	JEDEC <i>JESD22-A108</i>	9x77	Pass
Highly Accelerated Stress Test (HAST)*	JEDEC <i>JESD22-A110</i>	9x77	Pass
Temperature Cycle (TC)*	JEDEC <i>JESD22-A104</i>	4x77 4x45	Pass
Autoclave (AC)*	JEDEC <i>JESD22-A102</i>	5x77 4x45	Pass
High Temperature Storage Life (HTSL)	JEDEC <i>JESD22-A103</i>	2x77 5x45	Pass
Solder Heat Resistance (SHR)*	JEDEC/IPC <i>J-STD-020</i>	1x30	Pass
Latch-Up	JEDEC <i>JESD78</i>	1x9	Pass ±150mA @ +8.25V
Electrostatic Discharge <i>Human Body Model</i>	ESDA/JEDEC <i>JS-001</i>	1x18	Pass ±4000V
Electrostatic Discharge <i>Field-Induced Charged Device Model</i>	JEDEC <i>JESD22-C101</i>	1x18	Pass ±1250V

* Pre- and post-stress electrical test was performed at room and hot temperatures.

These samples were subjected to preconditioning (per J-STD-020 Level 3) prior to the start of the stress test. Level 3 preconditioning consists of the following: Bake: 24 hrs @ 125°C, Unbiased Soak: 192 hrs @ 30°C, 60%RH, Reflow: 3 passes through an oven with a peak temperature of 260°C.

Yellow denotes an increase in specification

Current Data Sheet IDD Specifications

ADUM3210W, 5.0V/5.0V Operation (From:)

Specification	Min	Typ	Max	Unit
I _{DD1} - 10Mbps		3.5	4.6	mA
I _{DD2} - 10Mbps		1.7	2.8	mA
I _{DD1} - 25Mbps		6.6	9.0	mA
I _{DD2} - 25Mbps		3.8	4.5	mA

ADUM3210W, 3.3V/3.3V Operation (From:)

Specification	Min	Typ	Max	Unit
I _{DD1} - 10Mbps		2.0	3.2	mA
I _{DD2} - 10Mbps		1.1	1.7	mA
I _{DD1} - 25Mbps		3.9	5.5	mA
I _{DD2} - 25Mbps		2.4	3.0	mA

ADUM3210W, 5.0V/3.3V Operation (From:)

Specification	Min	Typ	Max	Unit
I _{DD1} - 10Mbps		3.5	4.6	mA
I _{DD2} - 10Mbps		1.1	1.7	mA
I _{DD1} - 25Mbps		6.6	9.0	mA
I _{DD2} - 25Mbps		2.4	3.0	mA

ADUM3210W, 3.3V/5.0V Operation (From:)

Specification	Min	Typ	Max	Unit
I _{DD1} - 10Mbps		2.0	3.2	mA
I _{DD2} - 10Mbps		1.7	2.8	mA
I _{DD1} - 25Mbps		3.9	5.5	mA
I _{DD2} - 25Mbps		3.7	4.5	mA

Revised Data Sheet IDD Specifications

ADUM3210W, 5.0V/5.0V Operation (To:)

Specification	Min	Typ	Max	Unit
I _{DD1} - 10Mbps		3.5	4.8	mA
I _{DD2} - 10Mbps		2.0	2.8	mA
I _{DD1} - 25Mbps		7.6	9.9	mA
I _{DD2} - 25Mbps		3.8	5.1	mA

ADUM3210W, 3.3V/3.3V Operation (To:)

Specification	Min	Typ	Max	Unit
I _{DD1} - 10Mbps		2.1	3.2	mA
I _{DD2} - 10Mbps		1.3	1.9	mA
I _{DD1} - 25Mbps		4.6	6.1	mA
I _{DD2} - 25Mbps		2.4	3.4	mA

ADUM3210W, 5.0V/3.3V Operation (To:)

Specification	Min	Typ	Max	Unit
I _{DD1} - 10Mbps		3.5	4.8	mA
I _{DD2} - 10Mbps		1.3	1.9	mA
I _{DD1} - 25Mbps		7.6	9.9	mA
I _{DD2} - 25Mbps		2.4	3.4	mA

ADUM3210W, 3.3V/5.0V Operation (To:)

Specification	Min	Typ	Max	Unit
I _{DD1} - 10Mbps		2.1	3.2	mA
I _{DD2} - 10Mbps		2.0	2.8	mA
I _{DD1} - 25Mbps		4.6	6.1	mA
I _{DD2} - 25Mbps		3.7	5.1	mA

Yellow denotes an increase in specification

Current Data Sheet IDD Specifications

ADUM3211W, 5.0V/5.0V Operation (**From:**)

Specification	Min	Typ	Max	Unit
I _{DD1} - 10Mbps		2.6	3.4	mA
I _{DD2} - 10Mbps		3.1	4.0	mA
I _{DD1} - 25Mbps		5.3	7.5	mA
I _{DD2} - 25Mbps		5.9	8.0	mA

ADUM3211W, 3.3V/3.3V Operation (**From:**)

Specification	Min	Typ	Max	Unit
I _{DD1} - 10Mbps		1.5	2.1	mA
I _{DD2} - 10Mbps		1.9	2.4	mA
I _{DD1} - 25Mbps		3.1	4.5	mA
I _{DD2} - 25Mbps		3.5	5.0	mA

ADUM3211W, 5.0V/3.3V Operation (**From:**)

Specification	Min	Typ	Max	Unit
I _{DD1} - 10Mbps		2.6	3.4	mA
I _{DD2} - 10Mbps		1.9	2.4	mA
I _{DD1} - 25Mbps		5.3	7.5	mA
I _{DD2} - 25Mbps		3.5	5.0	mA

ADUM3211W, 3.3V/5.0V Operation (**From:**)

Specification	Min	Typ	Max	Unit
I _{DD1} - 10Mbps		1.5	2.1	mA
I _{DD2} - 10Mbps		3.1	4.0	mA
I _{DD1} - 25Mbps		3.1	4.5	mA
I _{DD2} - 25Mbps		5.9	8.0	mA

Revised Data Sheet IDD Specifications

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I _{DD2} - 10Mbps		3.1	4.1	mA
I _{DD1} - 25Mbps		6.4	8.7	mA
I _{DD2} - 25Mbps		6.1	8.0	mA

ADUM3211W, 3.3V/3.3V Operation (**To:**)

Specification	Min	Typ	Max	Unit
I _{DD1} - 10Mbps		1.8	2.6	mA
I _{DD2} - 10Mbps		1.9	2.5	mA
I _{DD1} - 25Mbps		3.8	5.4	mA
I _{DD2} - 25Mbps		3.7	5.0	mA

ADUM3211W, 5.0V/3.3V Operation (**To:**)

Specification	Min	Typ	Max	Unit
I _{DD1} - 10Mbps		2.9	4.0	mA
I _{DD2} - 10Mbps		1.9	2.5	mA
I _{DD1} - 25Mbps		6.4	8.7	mA
I _{DD2} - 25Mbps		3.7	5.0	mA

ADUM3211W, 3.3V/5.0V Operation (**To:**)

Specification	Min	Typ	Max	Unit
I _{DD1} - 10Mbps		1.8	2.6	mA
I _{DD2} - 10Mbps		3.1	4.1	mA
I _{DD1} - 25Mbps		3.8	5.4	mA
I _{DD2} - 25Mbps		6.1	8.0	mA