

Automotive Qualification Results Summary for ADuM1300W/ADuM1301W Die Revision, Assembly Site Transfer, Data Sheet and MLS Rating Change

QUALIFICATION PLAN / STATUS			
TEST	SPECIFICATION	SAMPLE SIZE	RESULTS
High Temperature Operating Life (HTOL)*	JEDEC <i>JESD22-A108</i>	8x77 1x45	Pass
Highly Accelerated Stress Test (HAST)*	JEDEC <i>JESD22-A110</i>	9x77	Pass
Temperature Cycle (TC)*	JEDEC <i>JESD22-A104</i>	9x77	Pass
Autoclave (AC)*	JEDEC <i>JESD22-A102</i>	9x77	Pass
High Temperature Storage Life (HTSL)	JEDEC <i>JESD22-A103</i>	9x77	Pass
Solder Heat Resistance (SHR)*	JEDEC/IPC <i>J-STD-020</i>	3x10	Pass
Latch-Up	JEDEC <i>JESD78</i>	1x9	Pass ±100mA @ +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.

Material Set Change:

Package Material Set		Carsem	ASE Chungli
SOIC_W	Die Attach	Ablestik 84-1LMISR4	Hitachi EN4900GC
	Mold Compound	Sumitomo 6600H	Sumitomo G700LY
	Wire	1.3 mil Gold Wire	1.3mil Gold Wire