Automotive Qualification Results Summary for ADSP-SC57x and ADSP-2157x Products

QUALIFICATION RESULTS			
TEST	SPECIFICATION	SAMPLE SIZE	RESULTS
Solder Heat Resistance (SHR) ¹	JEDEC/IPC J-STD-020	3x10	Pass
Latch-Up ²	JEDEC <i>JESD78</i>	1x18	Pass +/-200mA
Electrostatic Discharge Human Body Model(ESD-HBM) ²	ESDA/JEDEC JS-001	1x18	Pass +/-2000V
Electrostatic Discharge Field-Induced Charged Device Model(ESD-FICDM) ²	ESDA/JEDEC JS-002	1x15	Pass ³ +/-750V

¹These 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: 1. Bake – 24 hours at 125°C; 2. Soak – unbiased soak for 192 hours at 30°C, 60%RH; 3. Reflow – three passes through a reflow oven with a peak temperature of 260°C. TC samples were subjected to wire-pull test after 1000 cycles with results within specification limits.

² Pre- and post-stress electrical test was performed at room and hot temperatures.

³ Passing level for FICDM is +/-750 V for 400 CSP BGA. Passing level for FICDM is +/-500 all pins and +/-700 corner pins for 176 LQFP-EP and meets AEC Q100 requirements.