

Qualification Results Summary, Automotive Grade 1 at ADLK Fab

QUALIFICATION RESULTS			
TEST	SPECIFICATION	SAMPLE SIZE	RESULTS
Autoclave (AC) ^{1,2}	JEDEC JESD22-A102	1*77	Pass
Highly Accelerated Stress Test (HAST) ^{1,2}	JEDEC JESD22-A110	1*77	Pass
Temperature Cycle (TC) ^{1,2}	JEDEC JESD22-A104	1*77	Pass
Solder Heat Resistance (SHR) ^{1,2}	JEDEC/IPC J-STD-020	1*30	Pass
High Temperature Storage Life (HTSL) ²	JEDEC JESD22-A103	1*45	Pass
High Temperature Operating Life (HTOL) ^{1,2}	JEDEC JESD22-A108	1*77	Pass
Early Life Failure (ELF) ²	AEC AEC-Q100-008	3*800	Pass
Electrostatic Discharge ² <i>Field-Induced Charged Device Model</i>	JEDEC JESD22-C101	3/voltage	Pass 1250V
Electrostatic Discharge ² <i>Human Body Model</i>	ESDA/JEDEC JS-001	3/voltage	Pass 3500V
Electrostatic Discharge ² <i>Machine Model</i>	JEDEC JESD22-A115	3/voltage	Pass 100V
Latch Up ²	JEDEC JESD78	3/current	Pass 200mA

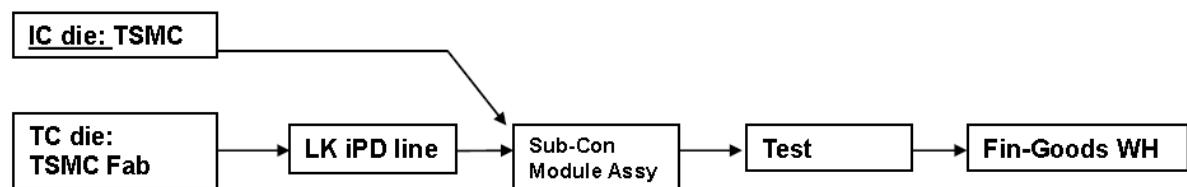
¹ These samples were subjected to preconditioning (per J-STD-020 Level 1) prior to the start of the stress test. Level 3 preconditioning consists of the following: 1. Bake – 24 hours at 125°C; 2. Soak – unbiased soak for 168 hours at 85°C, 85%RH; 3. Reflow – three passes through a reflow oven with a peak temperature of 260°C. TC samples were subjected to wire-pull test after 500 cycles with results within specification limits.

² These samples were tested per AECQ-100.

PCN 15_0032:

**Alternate fab source for ISO TC start silicon die.
To enable additional wafer fabrication capacity.**

Current Flow:



Alternate Flow:

