

## Qualification Results Summary of 0.35um BCD at Vanguard International Semiconductor

QUALIFICATION STATUS – LT8640 20L QFN			
TEST	SPECIFICATION	SAMPLE SIZE	RESULTS
High Temperature Operating Life (HTOL)	JEDEC <i>JESD22-A108</i>	<b>3*77</b>	<b>Pass</b>
Highly Accelerated Stress Test (HAST)*	JEDEC <i>JESD22-A110</i>	<b>3*77</b>	<b>Pass</b>
Temperature Cycle (TC)*	JEDEC <i>JESD22-A104</i>	<b>3*77</b>	<b>Pass</b>
Autoclave (AC)*	JEDEC <i>JESD22-A102</i>	<b>3*77</b>	<b>Pass</b>
High Temperature Storage Life (HTSL)	JEDEC <i>JESD22-A103</i>	<b>3*45</b>	<b>Pass</b>
Solder Heat Resistance (SHR)*	JEDEC/IPC <i>J-STD-020</i>	<b>3*231</b>	<b>Pass</b>
Early Life Failure Rate (ELF)	<i>AEC Q100-008</i>	<b>3*800</b>	<b>Pass</b>
Latch-Up	JEDEC <i>JESD78</i>	<b>&gt; ±100mA</b>	<b>Pass</b>
Electrostatic Discharge <i>Human Body Model</i>	ESDA/JEDEC <i>JS-001</i>	<b>3/voltage</b>	<b>Pass 3000V</b>
Electrostatic Discharge <i>Field-Induced Charged Device Model</i>	JEDEC <i>JESD22-C101</i>	<b>3/voltage</b>	<b>Pass 2000V</b>

\*Preconditioned per JEDEC/IPC J-STD-020

## Qualification Results Summary of 0.35um BCD at Vanguard International Semiconductor

QUALIFICATION STATUS – LT8612 28L QFN			
TEST	SPECIFICATION	SAMPLE SIZE	RESULTS
High Temperature Operating Life (HTOL)	JEDEC <i>JESD22-A108</i>	<b>3*77</b>	<b>Pass</b>
Highly Accelerated Stress Test (HAST)*	JEDEC <i>JESD22-A110</i>	<b>3*77</b>	<b>Pass</b>
Temperature Cycle (TC)*	JEDEC <i>JESD22-A104</i>	<b>3*77</b>	<b>Pass</b>
Autoclave (AC)*	JEDEC <i>JESD22-A102</i>	<b>3*77</b>	<b>Pass</b>
High Temperature Storage Life (HTSL)	JEDEC <i>JESD22-A103</i>	<b>3*45</b>	<b>Pass</b>
Solder Heat Resistance (SHR)*	JEDEC/IPC <i>J-STD-020</i>	<b>3*231</b>	<b>Pass</b>
Latch-Up	JEDEC <i>JESD78</i>	<b>&gt; ±100mA</b>	<b>Pass</b>
Electrostatic Discharge <i>Human Body Model</i>	ESDA/JEDEC <i>JS-001</i>	<b>3/voltage</b>	<b>Pass 1500V</b>
Electrostatic Discharge <i>Field-Induced Charged Device Model</i>	JEDEC <i>JESD22-C101</i>	<b>3/voltage</b>	<b>Pass 1000V</b>

\*Preconditioned per JEDEC/IPC J-STD-020

## Qualification Results Summary of 0.35um BCD at Vanguard International Semiconductor

QUALIFICATION STATUS – LT8331 16L MSE			
TEST	SPECIFICATION	SAMPLE SIZE	RESULTS
High Temperature Operating Life (HTOL)*	JEDEC <i>JESD22-A108</i>	<b>3*77</b>	<b>Pass</b>
Highly Accelerated Stress Test (HAST)*	JEDEC <i>JESD22-A110</i>	<b>3*77</b>	<b>Pass</b>
Temperature Cycle (TC)*	JEDEC <i>JESD22-A104</i>	<b>3*77</b>	<b>Pass</b>
Autoclave (AC)*	JEDEC <i>JESD22-A102</i>	<b>3*77</b>	<b>Pass</b>
High Temperature Storage Life (HTSL)	JEDEC <i>JESD22-A103</i>	<b>3*50</b>	<b>Pass</b>
Solder Heat Resistance (SHR)*	JEDEC/IPC <i>J-STD-020</i>	<b>3*231</b>	<b>Pass</b>
Early Life Failure Rate (ELF)	<i>AEC Q100-008</i>	<b>3*800</b>	<b>2 lots Pass. 3<sup>rd</sup> lot In-process Expected completion (June 2019)</b>
Latch-Up	JEDEC <i>JESD78</i>	<b>&gt; ±100mA</b>	<b>Pass</b>
Electrostatic Discharge <i>Human Body Model</i>	ESDA/JEDEC <i>JS-001</i>	<b>3/voltage</b>	<b>Pass 3500V</b>
Electrostatic Discharge <i>Field-Induced Charged Device Model</i>	JEDEC <i>JESD22-C101</i>	<b>3/voltage</b>	<b>Pass 1500V</b>

\*Preconditioned per JEDEC/IPC J-STD-020

## Qualification Results Summary of 0.35um BCD at Vanguard International Semiconductor

QUALIFICATION STATUS – LT8302 8L SOIC			
TEST	SPECIFICATION	SAMPLE SIZE	RESULTS
High Temperature Operating Life (HTOL)*	JEDEC <i>JESD22-A108</i>	<b>3*77</b>	<b>Pass</b>
Highly Accelerated Stress Test (HAST)*	JEDEC <i>JESD22-A110</i>	<b>3*77</b>	<b>Pass</b>
Temperature Cycle (TC)*	JEDEC <i>JESD22-A104</i>	<b>3*77</b>	<b>Pass</b>
Autoclave (AC)*	JEDEC <i>JESD22-A102</i>	<b>3*77</b>	<b>Pass</b>
High Temperature Storage Life (HTSL)	JEDEC <i>JESD22-A103</i>	<b>1*45</b>	<b>Pass</b>
Solder Heat Resistance (SHR)*	JEDEC/IPC <i>J-STD-020</i>	<b>3*231</b>	<b>Pass</b>
Early Life Failure Rate (ELF)	<i>AEC Q100-008</i>	<b>3*800</b>	<b>Pass</b>
Latch-Up	JEDEC <i>JESD78</i>	<b>&gt; ±200mA</b>	<b>Pass</b>
Electrostatic Discharge <i>Human Body Model</i>	ESDA/JEDEC <i>JS-001</i>	<b>3/voltage</b>	<b>Pass 4000V</b>
Electrostatic Discharge <i>Field-Induced Charged Device Model</i>	JEDEC <i>JESD22-C101</i>	<b>3/voltage</b>	<b>Pass 2000V</b>

\*Preconditioned per JEDEC/IPC J-STD-020

## Qualification Results Summary of 0.35um BCD at Vanguard International Semiconductor

QUALIFICATION STATUS – LT8603 40L QFN			
TEST	SPECIFICATION	SAMPLE SIZE	RESULTS
High Temperature Operating Life (HTOL)*	JEDEC <i>JESD22-A108</i>	<b>3*77</b>	<b>Pass</b>
Highly Accelerated Stress Test (HAST)*	JEDEC <i>JESD22-A110</i>	<b>3*77</b>	<b>Pass</b>
Temperature Cycle (TC)*	JEDEC <i>JESD22-A104</i>	<b>3*77</b>	<b>Pass</b>
Autoclave (AC)*	JEDEC <i>JESD22-A102</i>	<b>3*77</b>	<b>Pass</b>
High Temperature Storage Life (HTSL)	JEDEC <i>JESD22-A103</i>	<b>3*45</b>	<b>Pass</b>
Solder Heat Resistance (SHR)*	JEDEC/IPC <i>J-STD-020</i>	<b>3*231</b>	<b>Pass</b>
Early Life Failure Rate (ELF)	<i>AEC Q100-008</i>	<b>3*800</b>	<b>Pass</b>
Latch-Up	JEDEC <i>JESD78</i>	<b>&gt; ±100mA</b>	<b>Pass</b>
Electrostatic Discharge <i>Human Body Model</i>	ESDA/JEDEC <i>JS-001</i>	<b>3/voltage</b>	<b>Pass 3000V</b>
Electrostatic Discharge <i>Field-Induced Charged Device Model</i>	JEDEC <i>JESD22-C101</i>	<b>3/voltage</b>	<b>Pass 1500V</b>

\*Preconditioned per JEDEC/IPC J-STD-020