

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>	3*77	Pass
Highly Accelerated Stress Test (HAST)*	JEDEC <i>JESD22-A110</i>	3*77	Pass
Temperature Cycle (TC)*	JEDEC <i>JESD22-A104</i>	3*77	Pass
Autoclave (AC)*	JEDEC <i>JESD22-A102</i>	3*77	Pass
High Temperature Storage Life (HTSL)	JEDEC <i>JESD22-A103</i>	3*45	Pass
Solder Heat Resistance (SHR)*	JEDEC/IPC <i>J-STD-020</i>	3*231	Pass
Early Life Failure Rate (ELF)	<i>AEC Q100-008</i>	3*800	Pass
Latch-Up	JEDEC <i>JESD78</i>	> ±100mA	Pass
Electrostatic Discharge <i>Human Body Model</i>	ESDA/JEDEC <i>JS-001</i>	3/voltage	Pass 3000V
Electrostatic Discharge <i>Field-Induced Charged Device Model</i>	JEDEC <i>JESD22-C101</i>	3/voltage	Pass 2000V

*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>	3*77	Pass
Highly Accelerated Stress Test (HAST)*	JEDEC <i>JESD22-A110</i>	3*77	Pass
Temperature Cycle (TC)*	JEDEC <i>JESD22-A104</i>	3*77	Pass
Autoclave (AC)*	JEDEC <i>JESD22-A102</i>	3*77	Pass
High Temperature Storage Life (HTSL)	JEDEC <i>JESD22-A103</i>	3*45	Pass
Solder Heat Resistance (SHR)*	JEDEC/IPC <i>J-STD-020</i>	3*231	Pass
Latch-Up	JEDEC <i>JESD78</i>	> ±100mA	Pass
Electrostatic Discharge <i>Human Body Model</i>	ESDA/JEDEC <i>JS-001</i>	3/voltage	Pass 1500V
Electrostatic Discharge <i>Field-Induced Charged Device Model</i>	JEDEC <i>JESD22-C101</i>	3/voltage	Pass 1000V

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

*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>	3*77	Pass
Highly Accelerated Stress Test (HAST)*	JEDEC <i>JESD22-A110</i>	3*77	Pass
Temperature Cycle (TC)*	JEDEC <i>JESD22-A104</i>	3*77	Pass
Autoclave (AC)*	JEDEC <i>JESD22-A102</i>	3*77	Pass
High Temperature Storage Life (HTSL)	JEDEC <i>JESD22-A103</i>	1*45	Pass
Solder Heat Resistance (SHR)*	JEDEC/IPC <i>J-STD-020</i>	3*231	Pass
Early Life Failure Rate (ELF)	<i>AEC Q100-008</i>	3*800	Pass
Latch-Up	JEDEC <i>JESD78</i>	> ±200mA	Pass
Electrostatic Discharge <i>Human Body Model</i>	ESDA/JEDEC <i>JS-001</i>	3/voltage	Pass 4000V
Electrostatic Discharge <i>Field-Induced Charged Device Model</i>	JEDEC <i>JESD22-C101</i>	3/voltage	Pass 2000V

*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>	3*77	Pass
Highly Accelerated Stress Test (HAST)*	JEDEC <i>JESD22-A110</i>	3*77	Pass
Temperature Cycle (TC)*	JEDEC <i>JESD22-A104</i>	3*77	Pass
Autoclave (AC)*	JEDEC <i>JESD22-A102</i>	3*77	Pass
High Temperature Storage Life (HTSL)	JEDEC <i>JESD22-A103</i>	3*45	Pass
Solder Heat Resistance (SHR)*	JEDEC/IPC <i>J-STD-020</i>	3*231	Pass
Early Life Failure Rate (ELF)	<i>AEC Q100-008</i>	3*800	Pass
Latch-Up	JEDEC <i>JESD78</i>	> ±100mA	Pass
Electrostatic Discharge <i>Human Body Model</i>	ESDA/JEDEC <i>JS-001</i>	3/voltage	Pass 3000V
Electrostatic Discharge <i>Field-Induced Charged Device Model</i>	JEDEC <i>JESD22-C101</i>	3/voltage	Pass 1500V

*Preconditioned per JEDEC/IPC J-STD-020



Vanguard International Semiconductor Corporation

Vanguard International Semiconductor Summary

- Plant Address
123, Park Ave-3rd, Science-Based Industrial Park, Hsinchu, Taiwan 30077, R.O.C.
- Headcount
5,200
- Total Building size in sq. ft. and fab size in sq. meters
880,543.3 sq. feet (Building 1)
- Clean room floor space in sq. meters
12,600 sq. meters (Building 1)
- Fab utilization in percent
Fab 1: 100%
- Land Area in sq. meters
41,925 sq. meters
- Wafer capacity for each facility
Fab 1: 87K wafers per month (ADI's material is scheduled to run in Fab 1)
- A list of certifications (i.e. TS16949, ISO-14001, etc.)
 - ISO 9001 Quality Management System (since 1996)
 - ISO 14001 Environment Management System (since 1997)
 - OHSAS 18001 Health & Safety Management System (since 2003)
 - QC 080000 Hazardous Substance Management System (since 2007)
 - ISO 27001 Information Security Management System (since 2015)
 - IATF 16949 Automotive Quality Management System (since 2018)