

For rules and details of the IECQ visit www.iecq.org

Schedule of Scope to Certificate of Approval Independent Testing Laboratory

IECQ Certificate No.: IECQ-L CEP 20.0003
CB Certificate No.: IECQ-L 2020.003

Schedule Number: IECQ-L CEP 20.0003-S Rev No.: 4 Revision Date: 2024/10/25 Page 1 of 7

Nº	Products, Materials	Items,Parameter		Title, Code of specification,
		NO	Name	standard or method used
	IC (MOS random access memories)	1	ALL "0 "and"1 "functi on test	Semiconductor devices Integrated circuits Part 2:Digital integrated circuits GB/T 17574-1998
		2	Function test of calibration board	Semiconductor devices Integrated circuits Part 2:Digital integrated circuits GB/T 17574-1998
		3	Output high level voltage V _{OH}	Semiconductor devices Integrated circuits Part 2:Digital integrated circuits GB/T 17574-1998
1		4	Output low level Voltage V _{OL}	Semiconductor devices Integrated circuits Part 2:Digital integrated circuits GB/T 17574-1998
		5	Input load current	Semiconductor devices Integrated circuits Part 2:Digital integrated circuits GB/T 17574-1998
		6	Operative state power current I _{cc}	Semiconductor devices Integrated circuits Part 2:Digital integrated circuits GB/T 17574-1998
		7	Maintain state power current Iccs	Semiconductor devices Integrated circuits Part 2:Digital integrated circuits GB/T 17574-1998
	IC (voltage regulators)	1	Output voltage V _o	Semiconductor integrated circuits.Measuring method of voltage regulators GB/T 4377-2018
2		2	Voltage regulation rate S _V	Semiconductor integrated circuits.Measuring method of voltage regulators GB/T 4377-2018
		3	Current regulation Rate S _T	Semiconductor integrated circuits.Measuring method of voltage regulators GB/T 4377-2018
3	IC (analogue switch)	1	Analog switch operating range V_A	Semiconductor integrated circuits.Measuring method of analogue switch GB/T 14028-2018

This schedule is only valid in conjunction with the referenced Certificate of Approval

This approval and any schedule(s) may only be reproduced in full.

This approval is not transferable and remains the property of the issuing body.

The Status and authenticity of this approval and any schedule(s) may be verified by visiting theOfficial IECQ Website.

www.iecq.org





For rules and details of the IECQ visit www.iecq.org

Schedule of Scope to Certificate of Approval Independent Testing Laboratory

IECQ Certificate No.: IECQ-L CEP 20.0003
CB Certificate No.: IECQ-L 2020.003

Schedule Number: IECQ-L CEP 20.0003-S Rev No.: 4 Revision Date: 2024/10/25 Page 2 of 7

s for hybrid
s for hybrid
6 1 1 1 1
s for hybrid
s for hybrid
Ž
cuits
euits
cuits
cuits
euits
cuits
cuits
euits
euits
, u110

This schedule is only valid in conjunction with the referenced Certificate of Approval

This approval and any schedule(s) may only be reproduced in full.

This approval is not transferable and remains the property of the issuing body.

The Status and authenticity of this approval and any schedule(s) may be verified by visiting theOfficial IECQ Website.

www.iecq.org



China Electronic Product Reliability and Environmental Testing Research Institute (CEPREI)



For rules and details of the IECQ visit www.iecq.org

Schedule of Scope to Certificate of Approval Independent Testing Laboratory

IECQ Certificate No.: IECQ-L CEP 20.0003
CB Certificate No.: IECQ-L 2020.003

Schedule Number: IECQ-L CEP 20.0003-S Rev No.: 4 Revision Date: 2024/10/25 Page 3 of 7

6	Resistance (Fixed resistor) Metalster, Film resistor, Wire-wound resistor, Potentiometer)	1	Resistance value	Finxed resistors for use in electronic equipment Part 1: Generic specification GB/T 5729-2003
		2	Terminal resistance	Potentiometers for electronic equipment Part 1: General specification GB/T 15298-1994
	Diode (Zener diode) Switch-diode, Rectifier diode, Schottky Diode, TVS, LED, Silicon power switching diode)	1	Forward voltage	Semiconductor devices discrete devices and integrated circuits Part 2:Rectifier diodes GB/T 4023-2015
		2	Reverse current	Semiconductor devices discrete devices and integrated circuits Part 2:Rectifier diodes GB/T 4023-2015
7		3	Breakdown voltage	Semiconductor devices discrete devices and integrated circuits Part 2:Rectifier diodes GB/T 4023-2015
		4	Working voltage	Semiconductor devices-Discrete devices. part3:singal (including switching) and regulator diodes GB/T 6571-1995
		5	Differential resistance	Semiconductor devices-Discrete devices. part3:singal (including switching) and regulator diodes GB/T 6571-1995
	Triode (Switching triode, Power Transisitor)	1	Collector- Base electrode breakdown voltage	Semiconductor discrete devices and dntegrated circuits. Part 7: Bipolar transistors GB/T 4587-1994
		2	Emitter -Base electrode breakdown voltage	Semiconductor discrete devices and dntegrated circuits. Part 7: Bipolar transistors GB/T 4587-1994
		3	Collector-Base electrode cutoff current	Semiconductor discrete devices and dntegrated circuits. Part 7: Bipolar transistors GB/T 4587-1994
8		4	Collector-Emitter Saturation voltage	Semiconductor discrete devices and dntegrated circuits. Part 7: Bipolar transistors GB/T 4587-1994
		5	Emitter-Base electrode cutoff current	Semiconductor discrete devices and dntegrated circuits. Part 7: Bipolar transistors GB/T 4587-1994
		6	Collector-Emitter Cutoff current	Semiconductor discrete devices and dntegrated circuits. Part 7: Bipolar transistors GB/T 4587-1994
		7	Forward current transfer ratio of common-emitter	Semiconductor discrete devices and dntegrated circuits. Part 7: Bipolar transistors GB/T 4587-1994

This schedule is only valid in conjunction with the referenced Certificate of Approval

This approval and any schedule(s) may only be reproduced in full.

This approval is not transferable and remains the property of the issuing body.

The Status and authenticity of this approval and any schedule(s) may be verified by visiting theOfficial IECQ Website.

www.iecq.org



China Electronic Product Reliability and Environmental Testing Research Institute (CEPREI)



For rules and details of the IECQ visit www.iecq.org

Schedule of Scope to Certificate of Approval Independent Testing Laboratory

IECQ Certificate No.: IECQ-L CEP 20.0003
CB Certificate No.: IECQ-L 2020.003

Schedule Number: IECQ-L CEP 20.0003-S Rev No.: 4 Revision Date: 2024/10/25 Page 4 of 7

				Transistor Electrical Test Methods For Semiconductor
		1	Drain-source	Devices
			breakdown	Part 3: Test Methods 3000 Through 3999 MIL-STD-750-3-
			voltage	2019
			voltage	Method 3407.1
				Semiconductor devices.Discrete devices.
		2	Threshold voltage	Part 8:Field-effect transistors
				GB/T 4586-1994
				Chapter IV Article 6 Semiconductor devices. Discrete devices.
9	Field effect transistor		G	Part 8:Field-effect transistors
9	(JFET, JGFET)	3	Gate cutoff	-
			current	GB/T 4586-1994
				Chapter IV Article 2
				Semiconductor devices.Discrete devices.
		4	Drain current	Part 8:Field-effect transistors
		4	Bruin Guirens	GB/T 4586-1994
				Chapter IV Article 3
		5		Semiconductor devices.Discrete devices.
			On-state-drain	Part 8:Field-effect transistors
			source resistance	GB/T 4586-1994
				Chapter IV Article 16
	AECQ-100 Integrated circuits Test	1	Preconditioning	Moisture/Reflow Sensitivity Classification fot
				Nonhermetic Surface Mount Devices
				JEDEC J-STD-020F-2022
				Preconditioning of Nonhermetic Surface Mount Devices Prior to Reliability Testing
				JEDEC JESD22-A113I-2020
		2	Biased steady-	Steady-state temperature-humidity bias life test
			state damp heat	JEDEC JESD22-A101D.01-2021
			State damp from	Highly Accelerated Temperature and Humidity Stress
10		3	Biased-HAST	Test(HAST)
				JEDEC JESD22-A110E.01-2021
		4	Autoclave	Accelerated Moisture Resistance-Unbiased Autoclave
				JEDEC JESD22-A102E-2015
		5	Unbiased-HAST	Accelerated Moisture Resistance-Unbiased HAST
				JEDEC JESD22-A118B.01-2021
			Temperature-	Charles Charles Transportered III 11/2 Di 11/2 Ti
		6	Humidity	Steady-State Temperature-Humidity Bias Life Test JEDEC JESD22-A101D.01-2021
			(without Bias)	JEDEC JESD22-A101D.01-2021

This schedule is only valid in conjunction with the referenced Certificate of Approval

This approval and any schedule(s) may only be reproduced in full.

This approval is not transferable and remains the property of the issuing body.

The Status and authenticity of this approval and any schedule(s) may be verified by visiting theOfficial IECQ Website.

www.iecq.org



China Electronic Product Reliability and Environmental Testing Research Institute (CEPREI)



For rules and details of the IECQ visit www.iecq.org

Schedule of Scope to Certificate of Approval Independent Testing Laboratory

IECQ Certificate No.: IECQ-L CEP 20.0003
CB Certificate No.: IECQ-L 2020.003

Schedule Number: IECQ-L CEP 20.0003-S Rev No.: 4 Revision Date: 2024/10/25 Page 5 of 7

7	Temperature Cycling	Temperature Cycling JEDEC JESD22-A104F.01-2023
8	High Temperature Storage Life	High Temperature Storage Life JEDEC JESD22-A103E.01-2021
9	High Temperature operating Life	Temperatue,Bias,and Operating Life JEDEC JESD22- A108G-2022
10	Early Life Failure Rate	Early Life Failure Rate AEC-Q100-008A-2003
11	NVM Endurance,Data Retention,and Operational Life	Non-Volatile Memory Program/Erase Endurance, Data Retention, and Operational life test AEC-Q100-005D1-2012
12	Wire Bond Shear	Wire Bond Shear Test AEC-Q100-001C-1998
13	Wire Pond Pull	Test Method Standard Microcircuits MIL-STD-883L-2019 Method 2011.10
14	Solderability	Solderability Tests for Component Leads, Terminations, Lugs, Terminals and Wires J-STD-002E-2017
15	Physical Dimensions	Physical Dimensions JEDEC JESD22-B100B-2003
16	Solder Ball Shear	Solder Ball Shear Test AEC-Q100-010A-2003
17	Lead Integrity	Lead Integrity JEDEC JESD22-B105E-2017
18	Mechanical Shock	Mechanical Shock-Device and Subassembly JEDEC JESD22-B110B.01-2019
19	Variable Frequency Vibration	Vibration, Variable Frequency JEDEC JESD22-B103B.01-2016
20	Constant Acceleration test	Test Method Standard Microcircuits MIL-STD-883L-2019 Method 2001.4
21	Sealing test	Test Method Standard Microcircuits MIL-STD-883L-2019 Method 1014.17
22	Die Shear	Test Method Standard Microcircuits MIL-STD-883L-2019 Method 2019.10

This schedule is only valid in conjunction with the referenced Certificate of Approval

This approval and any schedule(s) may only be reproduced in full.

This approval is not transferable and remains the property of the issuing body.

The Status and authenticity of this approval and any schedule(s) may be verified by visiting theOfficial IECQ Website.

www.iecq.org



China Electronic Product Reliability and Environmental Testing Research Institute (CEPREI)



For rules and details of the IECQ visit www.iecq.org

Schedule of Scope to Certificate of Approval Independent Testing Laboratory

IECQ Certificate No.: IECQ-L CEP 20.0003
CB Certificate No.: IECQ-L 2020.003

Schedule Number: IECQ-L CEP 20.0003-S Rev No.: 4 Revision Date: 2024/10/25 Page 6 of 7

	AECQ-101 Discrete devices Test	1	Preconditioning	Preconditioning of Nonhermetic Surface Mount Devices Prior to Reliability Testing JEDEC JESD22-A113I-2020 Moisture/Reflow Sensitivity Classification fot
				Nonhermetic Surface Mount Devices JEDEC J-STD-020F-2022
		2	Visual	External Visual JEDEC JESD22- B101D-2022
		3	High Temperature Revere Bias test	Test Method Standard Environmental Test Methods For Semiconductor Devices. Part 1:Test Methods 1000 Through 1999 MIL-STD-750-1A -2016 Method 1038.5 \(\) 1039.4
		4	High Temperature Gate Bias test	Temperatue, Bias, and Operating Life JEDEC JESD22 A108G-2022
		5	Temperature Cycling	Temperature Cycling JEDEC JESD22-A104F.01-2023
11		6	Unbiased Highly Accelerated Stress Test	Acceelerated Moisture Resistance-Unbiased HAST JEDEC JESD22-A118B.01-2021
		7	Highly Accelerated Stress Test	Highly Accelerated Temperature and Humidity Stress Test(HAST) JEDEC JESD22-A110E.01-2021
		8	High Humidity High Tem. Reverse Bias	Steady-State Temperature-Humidity Bias Life Test JEDEC JESD22-A101D.01-2021
		9	Intermittent Operational Life	Test Method Standard Environmental Test Methods For Semiconductor Devices. Part 1:Test Methods 1000 Through 1999 MIL-STD-750- 1A-2016 Method 1037.3
		10	Physical Dimension	Physical Dimensions JEDEC JESD22-B100B-2003
		11	Terminal Strength	Test Method Standard Mechanical Test Methods For Semiconductor Devices Part 2: Test Methods 2001 Through 2999 MIL-STD-750- 2A-2018 Method 2036.5

This schedule is only valid in conjunction with the referenced Certificate of Approval

This approval and any schedule(s) may only be reproduced in full.

This approval is not transferable and remains the property of the issuing body.

The Status and authenticity of this approval and any schedule(s) may be verified by visiting theOfficial IECQ Website.

www.iecq.org



China Electronic Product Reliability and Environmental Testing Research Institute (CEPREI)



For rules and details of the IECQ visit www.iecq.org

Schedule of Scope to Certificate of Approval Independent Testing Laboratory

IECQ Certificate No.: IECQ-L CEP 20.0003
CB Certificate No.: IECQ-L 2020.003

Schedule Number: IECQ-L CEP 20.0003-S Rev No.: 4 Revision Date: 2024/10/25 Page 7 of 7

	12	Resistance to	Mark Permanency
		Solvents	JEDEC JESD22-B107D-2011
	13	Constant Acceleration	Test Method Standard Mechanical Test Methods For Semiconductor Devices Part 2: Test Methods 2001 Through 2999 MIL-STD-750- 2A-2018 Method 2006.2
	14	Variable Frequency Vibration	Vibration, Variable Frequency JEDEC JESD22-B103B.01-2016
	15	Mechanical Shock	Mechanical Shock-Device and Subassembly JEDEC JESD22-B110B.01-2019
	16	Sealing test	Hermiticity JEDEC JESD22-A109B-2011
	17	Resistance to Solder Heat	Evaluation Procedure for Determing Capability Bottom Side Board Attach by Full Body Solder Immersion of Small Surface Mount SOLID state Devices JEDEC JESD22-A111B-2018
			Resistance to Solder Shock for Through-Hole Mounted Devices JEDEC JESD22-B106E-2016
	18	Solderrability	Solderability Tests for Component Leads, Terminations, Lugs, Terminals and Wires J-STD-002E-2017
	19	Wire Bond pull	Test Method Standard Mechanical Test Methods For Semiconductor Devices Part 2: Test Methods 2001 Through 2999 MIL-STD-750- 2A-2018 Method 2037.1
	20	Wire Bond Shear	Wire Bond Shear Test AEC-Q101-003A-2005
	21	Die Shear	Test Method Standard Mechanical Test Methods For Semiconductor Devices Part 2: Test Methods 2001 Through 2999 MIL-STD-750- 2A-2018 Method 2017.3

This schedule is only valid in conjunction with the referenced Certificate of Approval

This approval and any schedule(s) may only be reproduced in full.

This approval is not transferable and remains the property of the issuing body.

The Status and authenticity of this approval and any schedule(s) may be verified by visiting theOfficial IECQ Website.

www.iecq.org



China Electronic Product Reliability and Environmental Testing Research Institute (CEPREI)