



**Reliability Report
(Q2016-003)**

**CPC7524 Product Qualification
Quad High Voltage Isolated Analog Switch Array**

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Summary

The CPC7524 product has successfully passed IXYS ICD's requirements for product qualification.

Table 1: Device Information

Product Number	CPC7524
Package Type	28L SOICN
Assembly Site	Greatek, Taiwan
Test Site	IXYS ICD BEV, Beverly, MA, USA (XFAB XDH10 Process)

Table 2: Reliability Test Result

Stress Test	Stress Conditions	Applicable Specs	Product/Package	Sample Size (SS)	# of Failures
HTRB	125°C, 80% WVDC, 1000 hrs	Mil-Std-883 M1005 JESD22-A-108	CPC7524 GE0060 GE0066 GE0067	240	1
HAST	130°C, 85%, 18.8PSI, 96 hrs	JESD22- A110-C	CPC7524 GE0061 GE0066 GE0067	180	0
Thermal Shock	0 to 100°C, 10/10 dwells, 15 cycles	Mil-Std-883, M1011	CPC7524 GE0061 GE0066 GE0067	165	0
Temperature Cycle	-55 to 125°C, 10/10 dwells, 300 cycles	Mil-Std-883, M1010, "B"	CPC7524 GE0061 GE0066 GE0067	165	0
Hot Storage	125C, 1000 hrs	JESD22-A103-C	CPC7524 GE0060 GE0061 GE0066 GE0067	200	0
MSL	IR Reflow, Level 3	J-STD-020D.1	CPC7524 GE0066 GE0067	75	0

Table 3: ESD Results – 28L SOIC

Stress Test	Stress Conditions	Applicable Specs	Product/Package	Highest Passed	Class
HBM	All Pins, 1.5kΩ, 100pF	JESD22- A114-E	CPC7524 GE0067	+/-800V	1B

Table 4: FIT Rate Summary

Qual Lot #	Stress Test	# of Devices	# of Fail	Hours Tested	Equivalent Dev. Hours	FIT Rate @ 60% CL
1	HTRB	240	1	1000	61,297,432	33.12
1	HAST	180	0	96	20,452,678	44.98

Approvals

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