



**Reliability Report
(Q2016-006)**

**CPC1966YX8 Product Qualification
Rapid Turn On AC Power Switch**

June 1, 2016

**IXYS Integrated Circuits Division
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Summary

The CPC1966YX8 product has successfully passed IXYS ICD's requirements for product qualification.

Table 1: Device Information

Product Number	CPC1966YX8
Package Type	Power SIP
Assembly Site	ATEC Philippines
Test Site	IXYS ICD BEV, Beverly, MA, USA

Table 2: Reliability Test Result

Stress Test	Stress Conditions	Applicable Specs	Product/Package	Sample Size (SS)	# of Failures
HTRB	115°C, 80% WVDC, 1000 hrs	Mil-Std-883 M1005 JESD22-A-108	CPC1966YX8 TE3543	105	0
Thermal Shock	0 to 100°C, 10/10 dwells, 15 cycles	Mil-Std-883, M1011	CPC1966YX8 TE3543	55	0
Temperature Cycle	-55 to 125°C, 10/10 dwells, 300 cycles	Mil-Std-883, M1010, "B"	CPC1966YX8 TE3543	55	0
Hot Storage	125C, 1000 hrs	JESD22-A103-C	CPC1966YX8 TE3543	50	0

Table 4: FIT Rate Summary

Qual Lot #	Stress Test	# of Devices	# of Fail	Hours Tested	Equivalent Dev. Hours	FIT Rate @ 60% CL
1	HTRB	105	0	1000	15,847,460	58.05

* HTRB FIT Rate was calculated based on the Acceleration Factor (AF) and equivalent device hours at 0.7eV of activation energy at 115°C test temperature and 40°C use temperature.

Approvals

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