

Qualification Report

Company Name : WIZnet Inc.
Product Name : W5100
Package Type : 80 LQFP
Reported Date : Aug 20th ,2007





QRTC-D-0707-086

QRT Semiconductor Inc

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Reviewed by : M . G . Kim

Approved by : Y . W . Hwang

1. Qualification Test Summary

DEVICE NO : W5100	PRODUCT TYPE :	PACKAGE TYPE : 80 LQFP	SAMPLE LOTS : 1 LOTS		REPORT NO : QRTC-D-0707-086	
FAB SITE :	ASS'Y SITE :	PURPOSE : W5100 QUALIFICATION			DATE : Aug 20 th , 2007	
TEST RESULTS						
TEST MODE	TEST CONDITION	Test Time	S/S	NO. OF FAIL	FAIL RATE(%)	REMARKS
LOW TEMPERATURE OPERATING LIFE	-40 °C, V0 = 3.3 V, V4=1.8 V, VIH=3.3 V	504 H	77	0	0.00 %	

※ The test results are based on customer's data

2. Qualification Test Item & Results

2.1 LTOL (Low Temperature Operating Life)

This test is intended to look for failures caused by hot carriers, and is typically applied on memory devices or devices with submicron device dimensions.

A total of 77 devices are completed 504 hours with no failure.

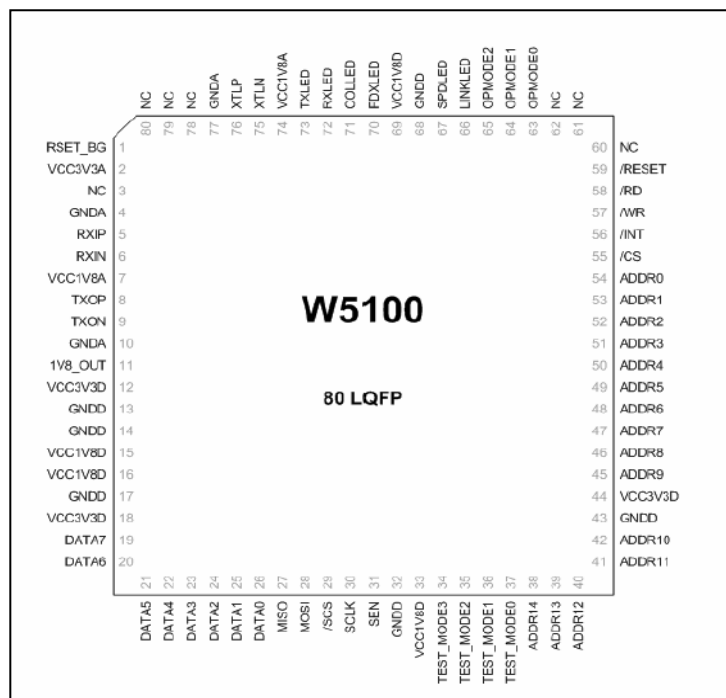


Test Condition	Reference Document	Duration	SS	Results
-40 °C, V0=3.3 V, V4=1.8 V, VIH=3.3 V	JESD22-A108-C	504 Hrs	77	PASS

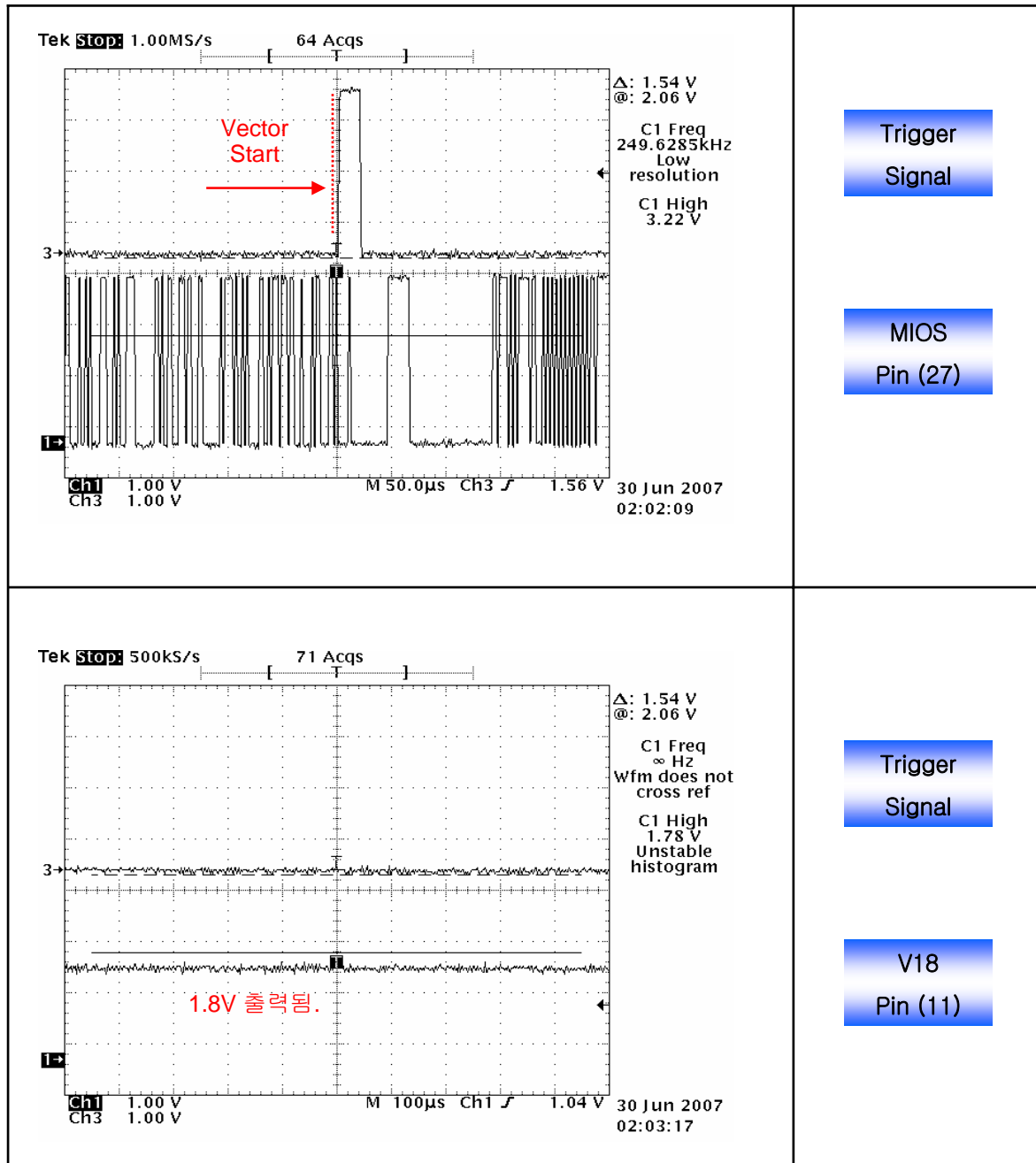
2.2 HTOL Test Conditions

HTOL Board Density : 80 ea / Board	Load S/S : 77 ea / Board
V0 : 3.3 V , V4 : 1.8 V	VIH : 3.3 V VIL : 0 V
Vector Type : SCAN Vector	Cycle Time : 2000 ns
Timing Format Condition	
◆. ADDR<13> => RZ (Start:300 ns , Stop:1000 ns)	
◆. ADDR<12> => RO (Start:300 ns , Stop:1000 ns)	
Remark : Trigger Signal은 Test Vector의 시작점을 표시하기 위한 Signal로 Device 동작과는 무관 함.	

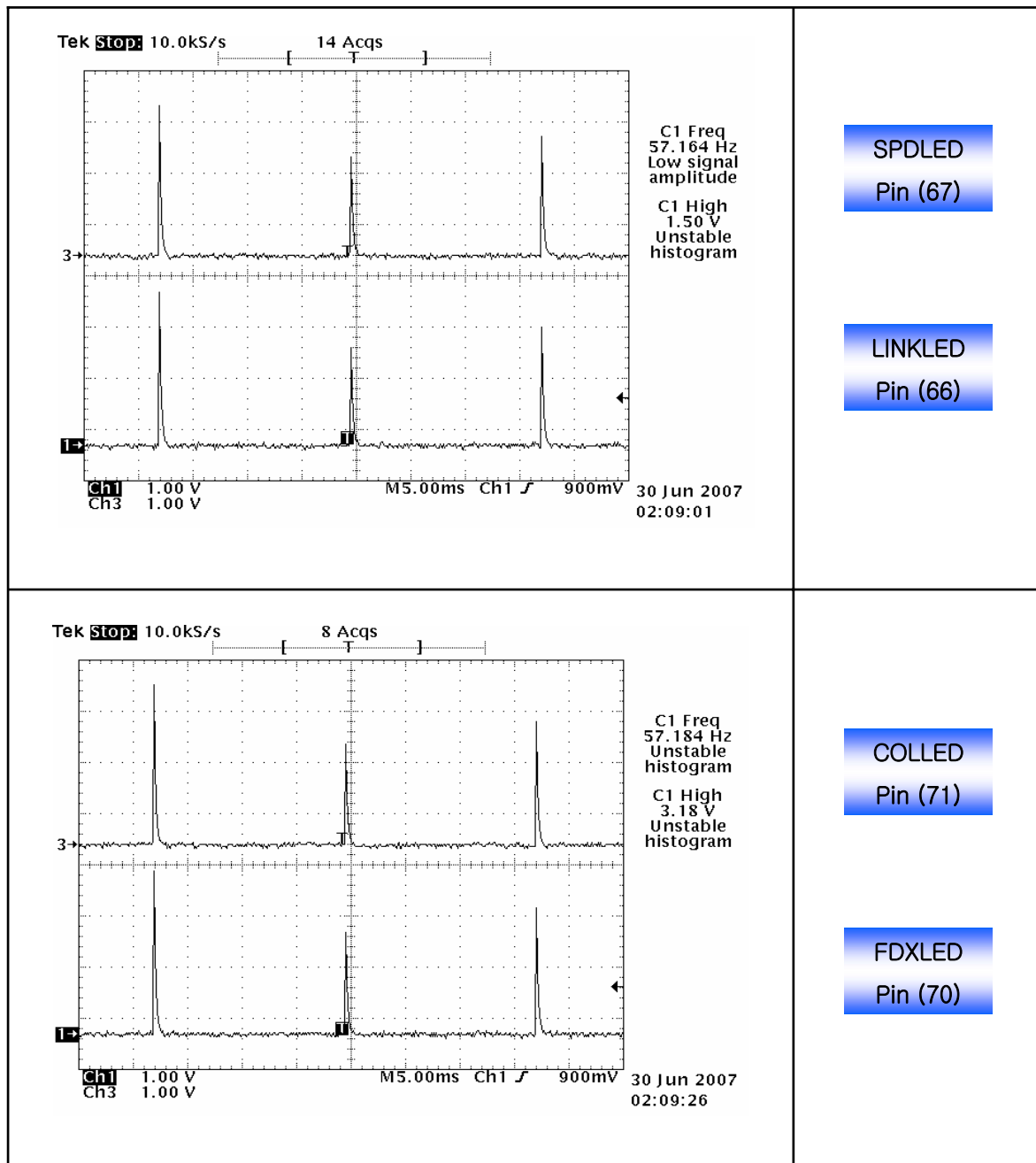
Pin Map



2.3.HTOL Out-Put Timing Sample Chart



2.4 HTOL Out-Put Timing Sample Chart





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Quality Reliability Technology

Semiconductor Inc.



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