

# Qualification Report

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





QRTC-D-0707-086

*QRT Semiconductor Inc*

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Prepared by : W . Y . Byun

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 :	ASSY SITE :	PURPOSE : W5100 QUALIFICATION		DATE : Aug 20 <sup>th</sup> , 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.

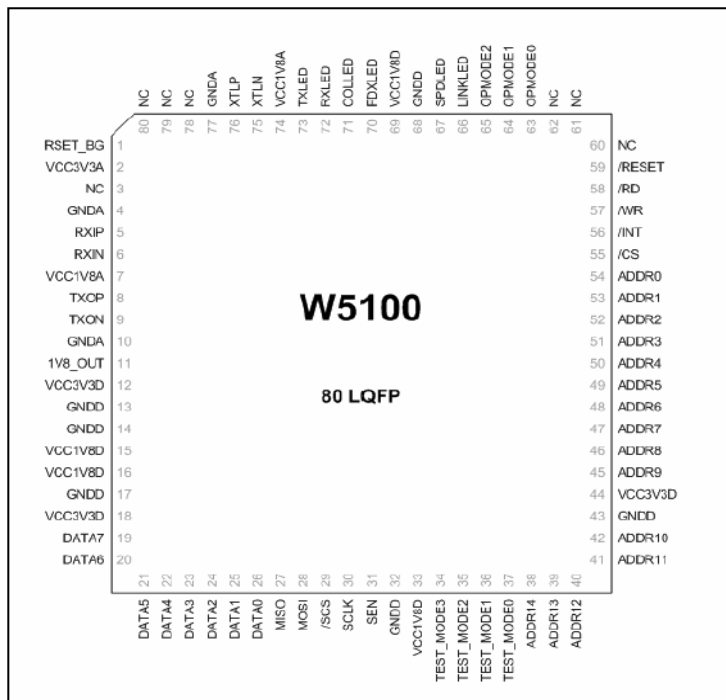


Test Condition	Reference Document	Duration	SS	Results
-40 °C, V0=3.3 V, V4=1.8 V, VIH=3.3 V	JESD22-A108-C	504 Hrs	77	PASS

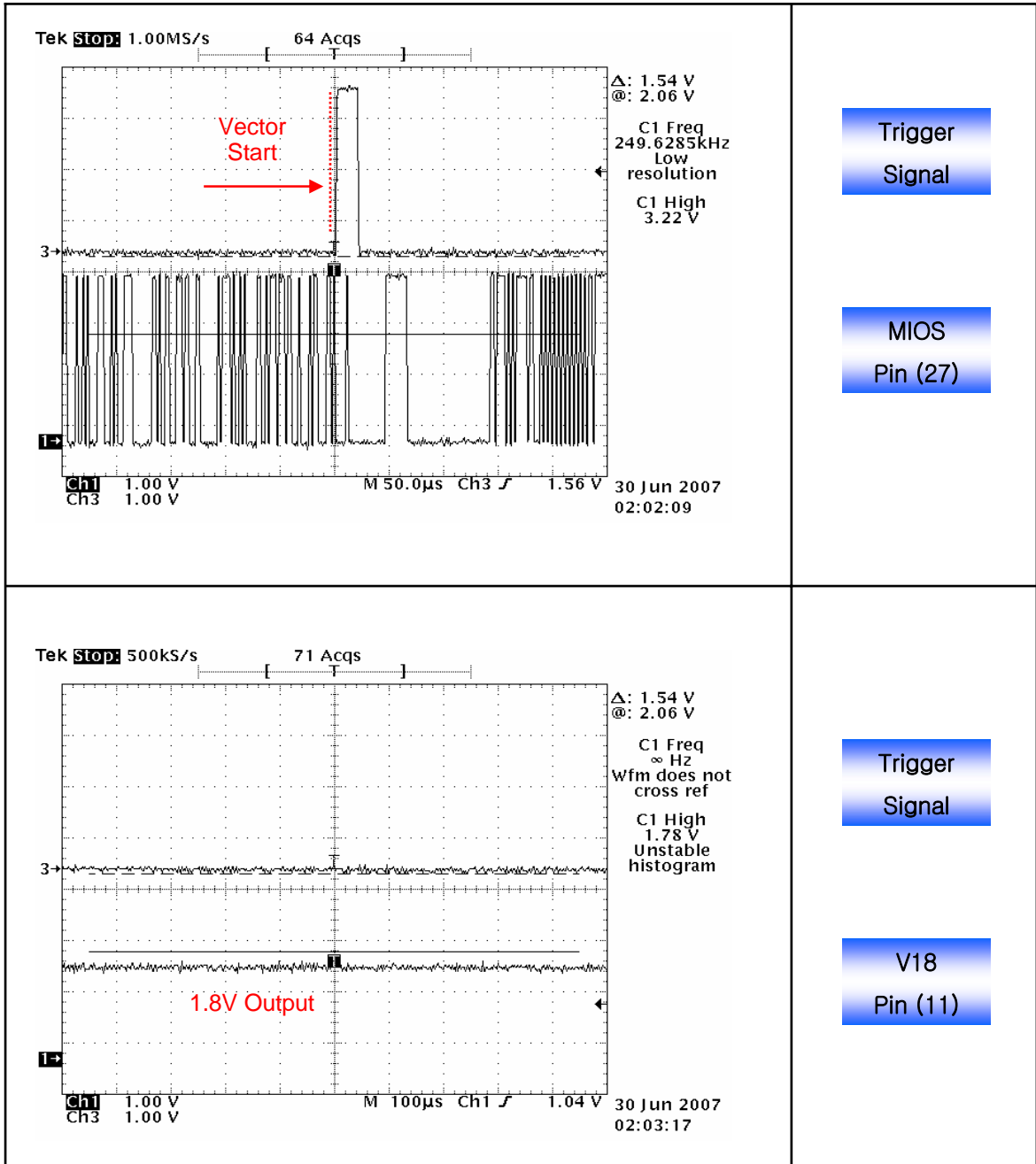
2.2 HTOL Test Conditions

<b>HTOL Board Density : 80 ea / Board</b>	<b>Load S/S : 77 ea / Board</b>
<b>V0 : 3.3 V , V4 : 1.8 V</b>	<b>VIH : 3.3 V</b>
	<b>VIL : 0 V</b>
<b>Vector Type : SCAN Vector</b>	<b>Cycle Time : 2000 ns</b>
<b>Timing Format Condition</b>	
◆. ADDR<13> => RZ ( Start:300 ns , Stop:1000 ns )	
◆. ADDR<12> => RO ( Start:300 ns , Stop:1000 ns )	
<b>Remark : A trigger signal is the signal for marking a start point of test vectors and has no relations with a operation of devices.</b>	

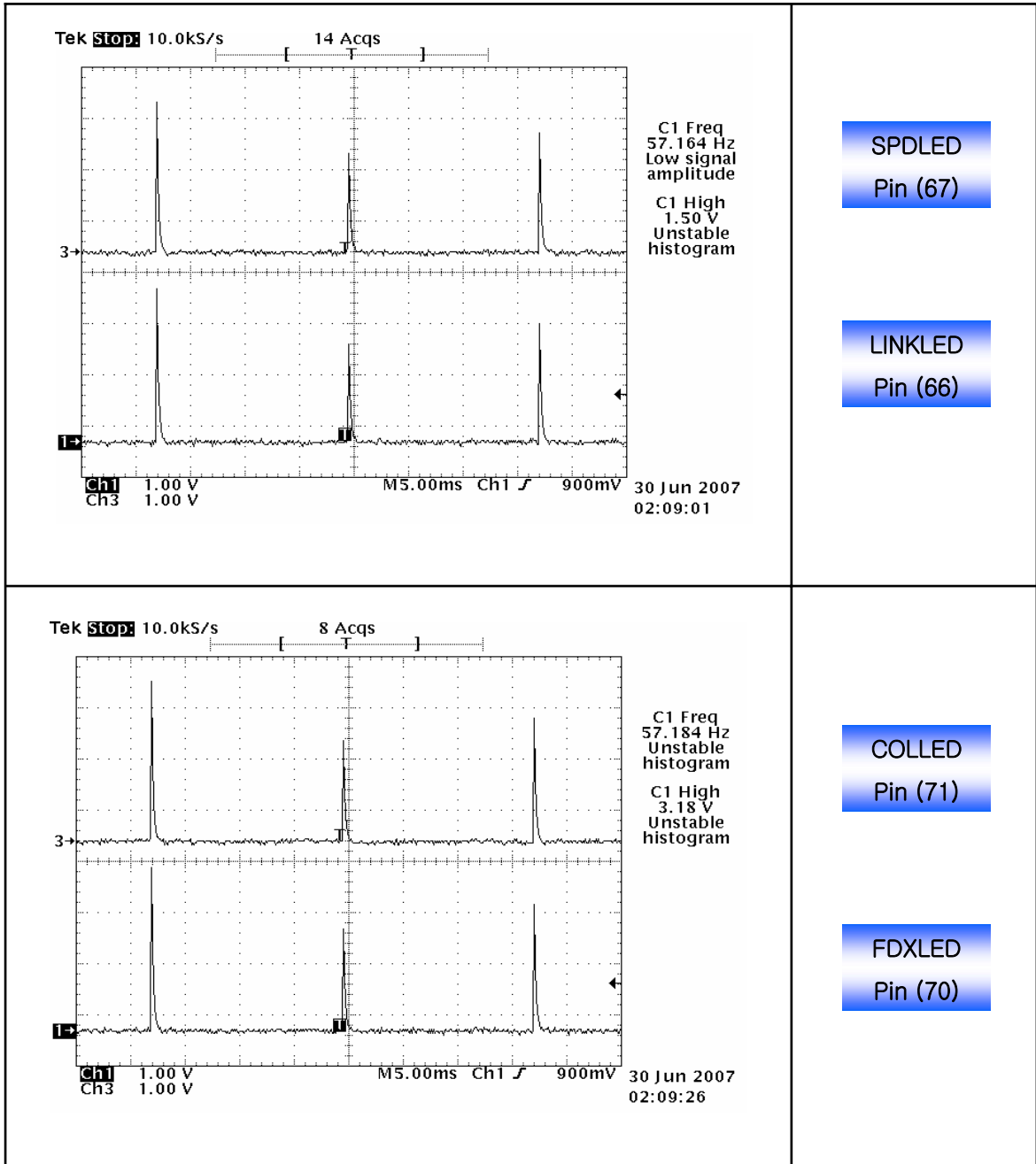
**Pin Map**



2.3.HTOL Out-Put Timing Sample Chart



2.4 HTOL Out-Put Timing Sample Chart





# Quality Reliability Technology

Semiconductor Inc.



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