TEST REPORT

Report No. : DST-QA-2005-001

1. Test Purpose : Quality Assurance of Wide temperature

2. Test Sample : AD BOARD [Model No. VENUS2 V0.8]

3. Test Date : May. 04. 2020. ~ May. 07. 2020.

4. Test Object : -30℃ - 80℃ Temperature Storage

-30℃ - 80℃ Temperature Start-Up

-30℃ - 80℃ Temperature Operating

5. Lab. Environment : Temp. (22.5 ±2.5) ℃ , Humid. (45 ± 5) % R.H.

6. Test Results : Refer to the analysis report

Tested & Prepared by :				
Department	Designation	Name	Signature	Date
Q.C.	Engineer	HYUN-JONG YANG		May.11.2020
Review & Approved by :				
Department	Designation	Name	Signature	Date
Q.C.	Certification Manager	HEE-SIK SONG		May.12.2020

REVISION HISTORY

Rev	Change Number/Description	Date	Change Originator
1.0	Approved	May. 12. 2020	

Table of Content

2 Introduction

2.1 Executive Summary

The tested sample fully complies with the requirements set forth in;

- IEC 60068-2-1
- IEC 60068-2-2
- IEC 60068-2-14

2.2 General, Purpose and objective

This document describes the environmental test procedures, test assembly and device under test (DUT) with the affiliated results and photographs.

2.3 Terminology, Definitions and Abbreviations

- DUT Device Under Test
- Vdc Voltage Direct Current
- Vin Input Voltage
- mA Milli Ampere
- Ch Channel

3 Performed tests and results

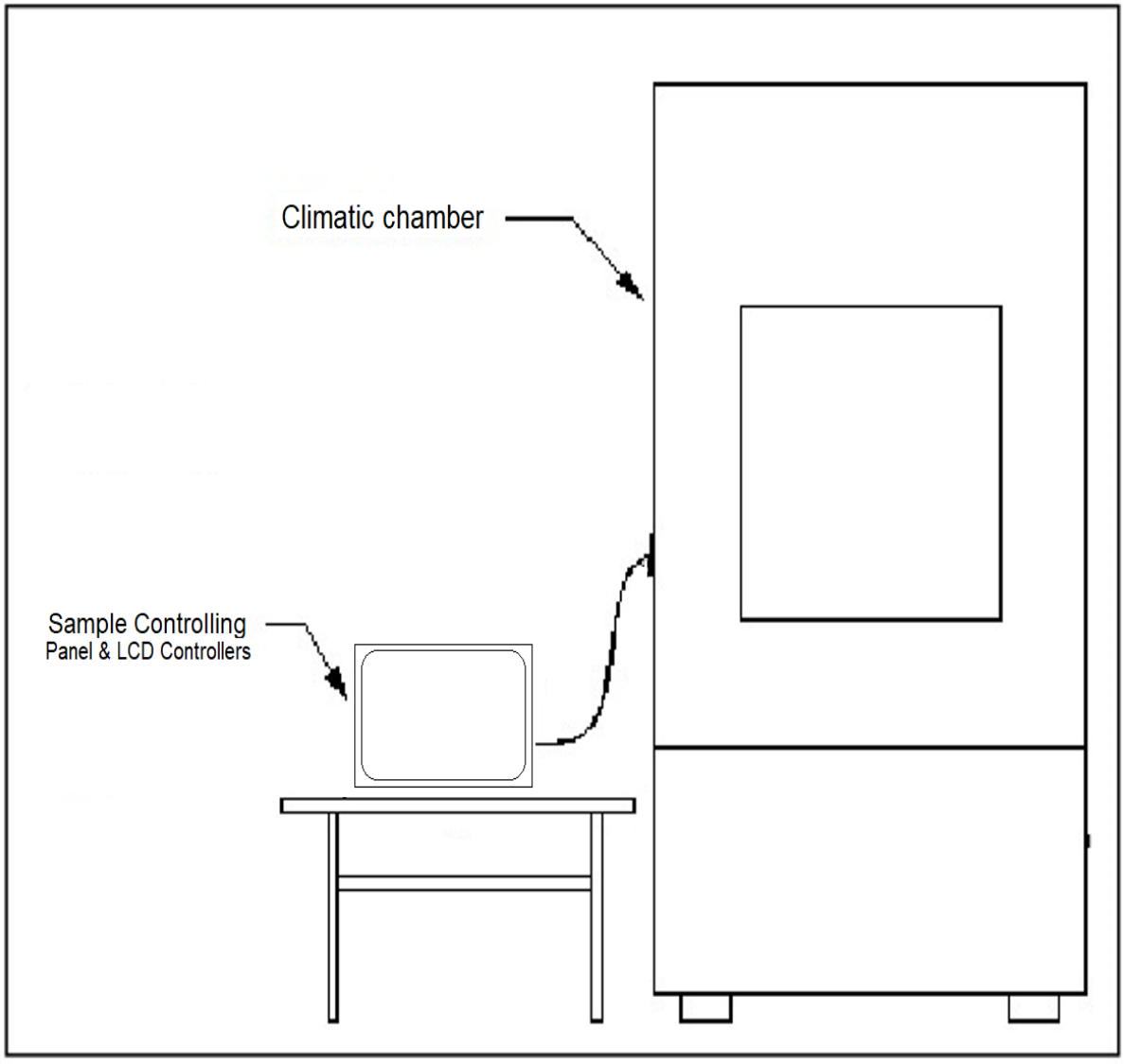
Test overview

No	Test	Parameters	Start Temp.	End Temp.	Duration
1	Low Temperature Storage	Temperature	-30°C	-30°C	15H, 3Time
2	Low Temperature Start-Up	Temperature	-30°C	-30°C	10Time
3	Low Temperature, Operating	Temperature	-30°C	-30°C	3min
4	High Temperature Storage	Temperature	80°C	80°C	9H, 3Time
5	High Temperature, Start-Up	Temperature	80°C	80°C	10Time
6	High Temperature, Operating	Temperature	80°C	80°C	3min

No	Test	Results	Remark
1	Low Temperature, Operating	PASS	The complete DUT works as designed during and after the test.
2	High Temperature, Operating	PASS	-The complete DUT works as designed during and after the test.

4 Configuration

4.1 Test Environment



4.2 Test measurement equipment

No	Component	Model	Manufacturer	Ser No	Cal. Date
1	Climatic chamber	TEMI-770	HAN YOUNG	00003-00027	10.01.2019
2	Sample Controller Panel	G190EAN01.0	AUO		

4.3 Device under Test

Name	AD BOARD
Part number	VENUS2 V0.8
Serial Number	
Spec	Input Voltage : 11.5V ~13V 5.0V Output Voltage : 4.8V ~ 5.2V 3.3V Output Voltage : 3.25V ~ 3.45V 1.8V Output Voltage : 1.75V ~ 1.85V 1.2V Output Voltage : 1.15V ~ 1.3V
Electrical Test Conditions	Input Voltage : 11.87V 5.0V Output Voltage : 5.06V 3.3V Output Voltage : 3.39V 1.8V Output Voltage : 1.77V 1.2V Output Voltage : 1.195V

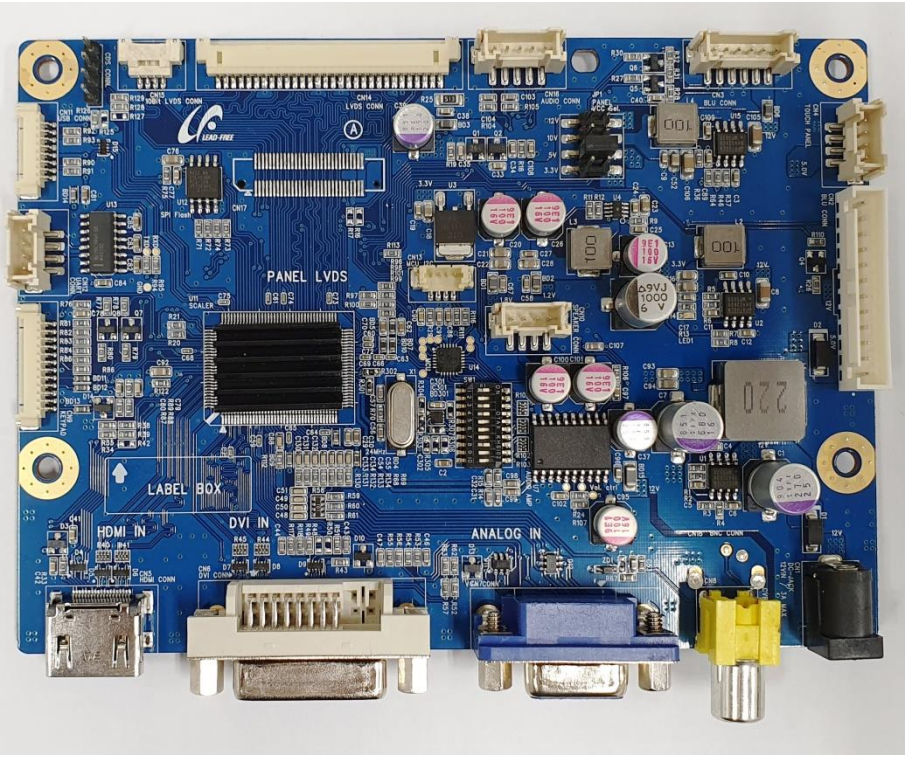
Input Interfaces

No	Interface	Description
1	VIN	Power supply, 12V
2	Video IN Signal	HDMI
3	LED Driver	Internal LED Driver
4	White Luminance	300cd

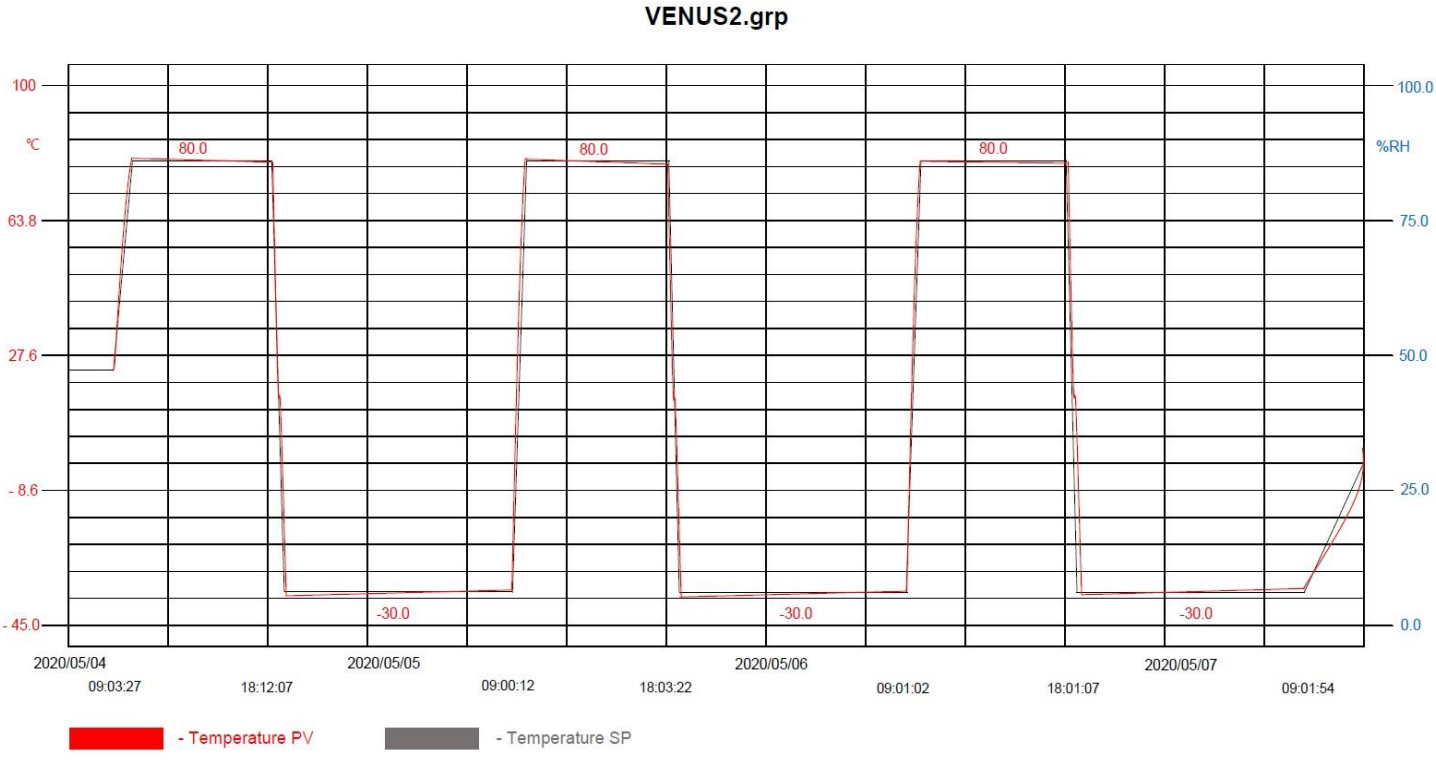
Output Connection Interfaces

No	Interface	Description
1	Video OUT Signal	8bit 2CH LVDS
2	LVDS VCC	5V
3	LED Driver IN Voltage	12V

4.4 Test sample



4.5 Test Temperature Diagram



5 Test Results

5.1 Low Temperature, Storage

Parameter	Values (References)	Results	Remark
Conditions	Temperature: -30°C Duration : 15h, 3Time	-	
Sample status	Non-Operating State	-	
Checks, measurements	-	-	

5.2 Low Temperature, Start-Up

Parameter	Values (References)	Results	Remark
Conditions	Temperature: -30°C Duration : 0h	-	
Sample status	Turn on the external power supply(10Time)	PASS	Operating is normally.
Checks, measurements	Check the Operation on the panel.	PASS	Operating is normally.

5.3 Low Temperature, Operating

Parameter	Values (References)	Results	Remark
Conditions	Temperature: -30°C Duration : 3min	-	
Sample status	Operating (12Vin)	-	
Checks, measurements	Check the Operation on the panel.	PASS	Operating is normally.

5.4 High Temperature, Storage

Parameter	Values (References)	Results	Remark
Conditions	Temperature: 80°C Duration : 9h, 3Time	-	
Sample status	Non-Operating State	-	
Checks, measurements	-	-	

5.5 High Temperature, Start-Up

Parameter	Values (References)	Results	Remark
Conditions	Temperature: 80°C Duration : 0h	-	
Sample status	Turn on the external power supply(10Time)	PASS	Operating is normally.
Checks, measurements	Check the Operation on the panel.	PASS	Operating is normally.

5.6 High Temperature, Operating

Parameter	Values (References)	Results	Remark
Conditions	Temperature: 80°C Duration : 3min	-	
Sample status	Operating (12Vin)	-	
Checks, measurements	Check the Operation on the panel.	PASS	Operating is normally.

6 Appendix

6.1 Picture of Test environment

Figure 1 : Climatic chamber

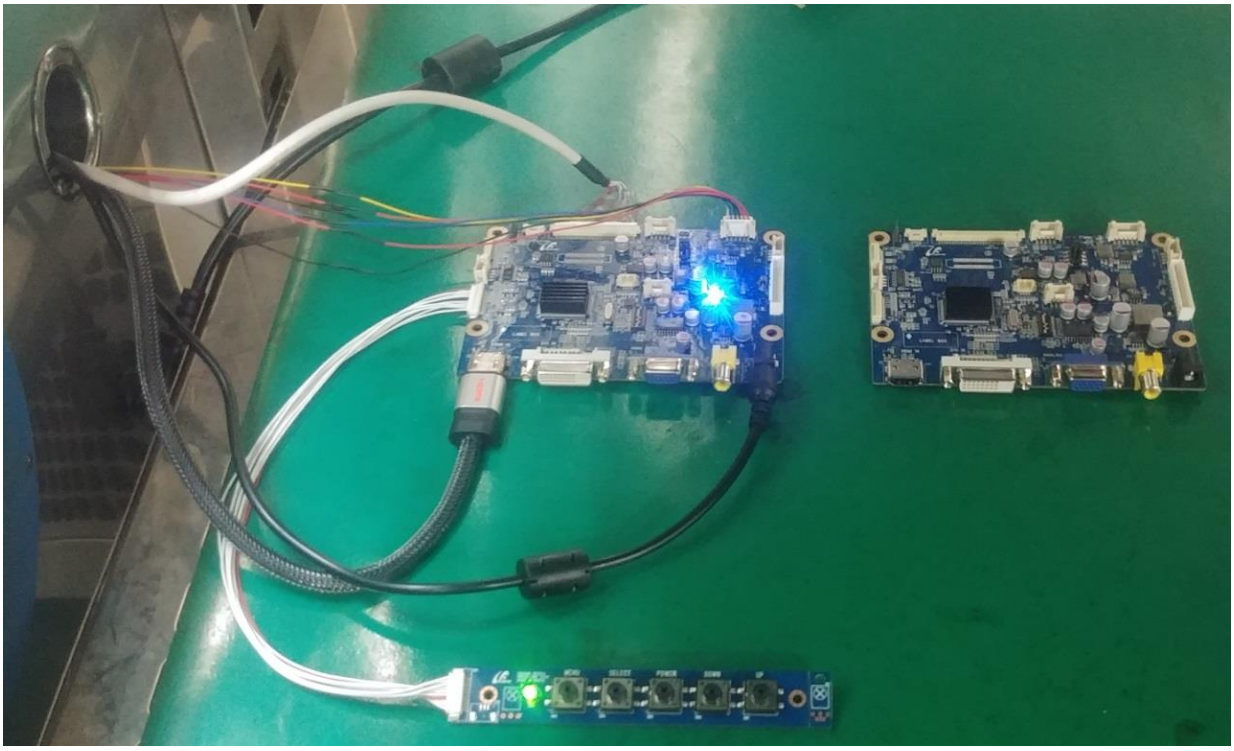


Figure 2 : DUT in climatic chamber

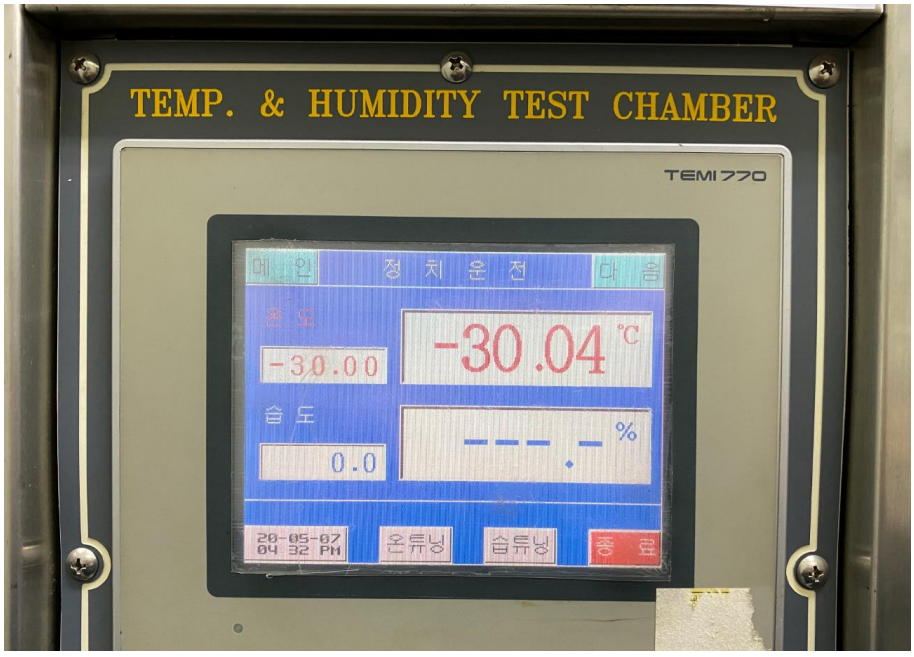


Figure 3 : Low temperature Setting

Figure 4 : High temperature Setting