



Performance Test Report

A large, semi-transparent image of the ROC200-DL device, showing its front panel with various ports and labels like "DC IN 9-30V", "LAN", "USB3.0", and "DP".

ROC200-DL

Product Manager	R&D Leader	Mechanical Engineer	System Engineer	Test Engineer
Honwen Hung	James Chan	Chen, Jie-Tong	Darren Chen	Mike Chen

Performance Test

ROC200-DL



INDEX

1.	SPECIFICATION	3
1-1.	SYSTEM CONFIGURATION	3
2.	TEST PLAN	4
2.1.	THERMAL MEASUREMENT PROCESS	4
2.2.	TEST RESULT <TEST ITEM>	5
2.2.1.	Temperature Cycle.....	5
2.2.2.	Low-temperature & Boot-up.....	6
3.	THERMAL TEST POINT	7
4.	TEST PHOTO IN LAB	8
5.	THERMAL TEST RESULT(-40°C ~ +60°C)	15
6.	I/O FUNCTION TEST	18
6-1.	USB3.0	18
6-2.	1GBPS ETHERNET	20
6-3.	10GBPS ETHERNET	22
6-4.	SERIAL PORT	23
6-5.	DISPLAY PORT	24

Performance Test

ROC200-DL

1. SPECIFICATION

1-1. SYSTEM CONFIGURATION

Motherboard	SK517 COM Express Type 7 Support Intel Ice Lake D-LCC Family Processor Standard MXM Type 3.1 Support NVIDIA® Quadro® RTX/ Intel® Arc™ PCIe/104 Express Expansion Slot for Modular Open Structure Multi-Expansion Slots include Dual Mini PCIe Express Slots, 1x M.2 Slot Extreme Temperature Support -40 to 85°C
CPU	Intel® Xeon® D-1715TER Processor Total Cores: 4 # of Performance-cores: 4 Total Threads: 8 Max Turbo Frequency: 3.50 GHz Processor Base Frequency: 2.40 GHz TDP 50 W
Memory	32GB DDR4 SO-DIMM wide temp.
Storage	256GB SATA SSD wide temperature
GPU	Nvidia RTX A2000 Embedded GPU BIOS Version: 94.07.5E.00.3E CUDA parallel-processing cores: 2560 CUDA® cores GPU base/boost clock: 1117 MHz / 1612 MHz Max Power Consumption: 35 W
Power Module	SK715_9V~36V 400W DC/DC Module Wide Input Range: 9V to 36V 12V DC Output up to 33 Amp Over voltage protection Over current protection Efficiency: typ.(91%) Extended Temperature -40°C to 85°C

Performance Test

ROC200-DL

2. TEST PLAN

2.1. THERMAL MEASUREMENT PROCESS

Test Purpose	<p>The purpose of performing thermal profile testing is to identify potential thermal issues with the EUT. Considering that semiconductor failure rates rise rapidly with increasing junction temperature, it can aid product reliability assessment.</p> <p>As the system cools down, the mode will change with stack selection, temperature/heat.</p> <p>Mapping can help develop the best tracking arrangements.</p>
Test Equipment	1. KSON THS-B4T-150 Chamber.
Quantity Tested	Minimum 1 Set
Test Software	<p>1. Stress CPU: PassMark Burn-in Test Software Ver 9.0</p> <p>2. Stress GPU: AIDA64 extreme690</p>
Test Procedure	<p>1. Thermal pre-scan measurement: Temperature: -40°C~60°C Humidity: 85%RH (Temperature above 25°C)</p> <p>2. Actual thermal measurement: 2-1. Select the test point based on the infrared photo and connect the thermocouple to the hot spot. 2-2. Place the EUT into the hot chamber and set the test temperature curve Specification. 2-3. Open the hot cell and power up the EUT, enter the Windows 11 environment and perform a maximum power test + stress application. 2-4. After the EUT executes the test software for 8 hours, record the maximum heat generation of each thermocouple point. 2-5. Turn off the hot cell and EUT. 2-6. Verify and check that the recorded information for each component complies with the operating temperature range listed in the specification/approval sheet for each component being tested.</p>
Test Diagram of Curves	<p>Environment defines for 60 hours.</p>

Performance Test

ROC200-DL

2.2. TEST RESULT <TEST ITEM>

2.2.1. Temperature Cycle

Aging test of various parts at different temperatures under maximum load and full load conditions.

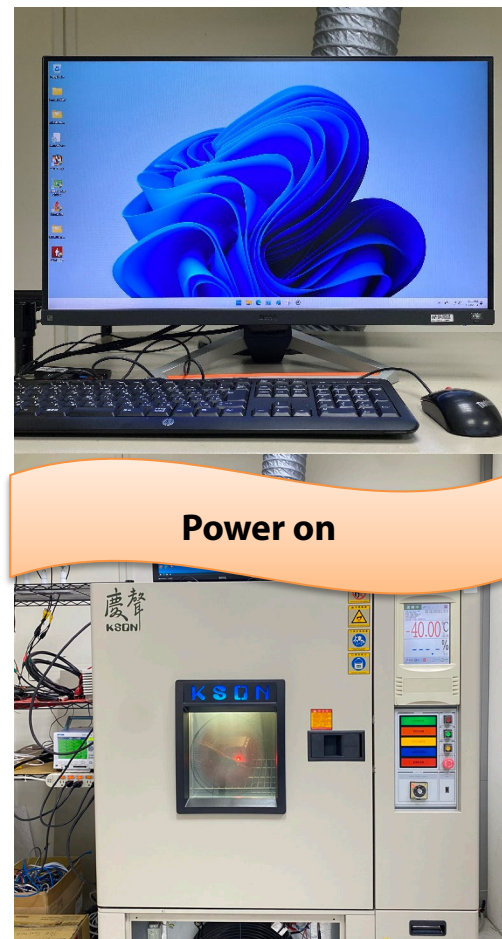
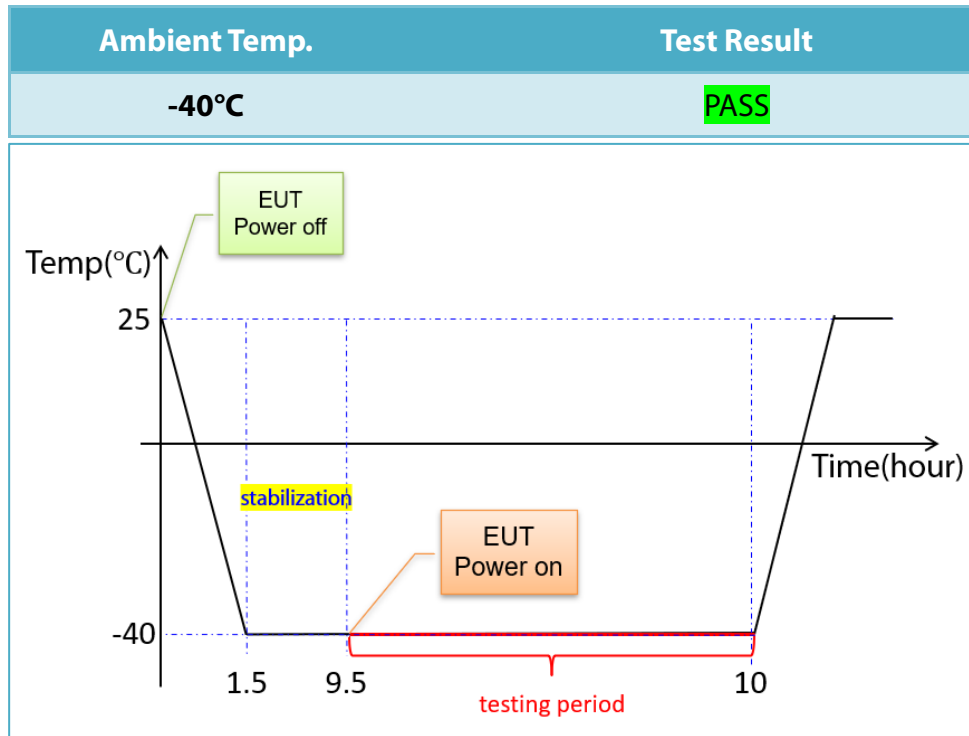
Test Temperature	Test Result
-40°C	PASS
-20°C	PASS
0°C	PASS
25°C / 85%RH	PASS
40°C / 85%RH	PASS
50°C / 85%RH	PASS
60°C / 85%RH	PASS

Performance Test

ROC200-DL

2.2.2. Low-temperature & Boot-up

#Power supply under -40°C and ensure that the system boot up properly



Performance Test

ROC200-DL

3. THERMAL TEST POINT

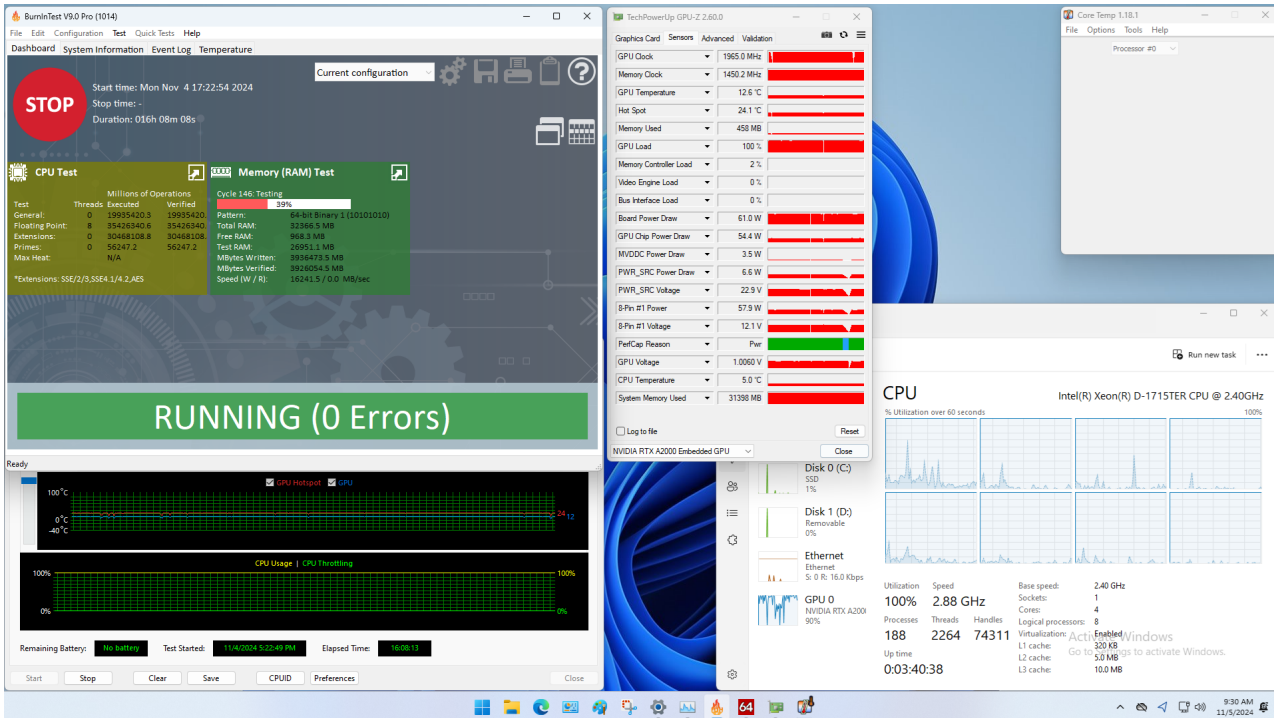
1	CPU	7	SK715 Power Module	13	N/A	19	N/A
2	DRAM	8	TOP Heatsink	14	N/A	20	N/A
3	GPU	9	N/A	15	N/A	21	N/A
4	GPU RAM	10	N/A	16	N/A	22	N/A
5	CPU Heatsink	11	N/A	17	N/A	23	N/A
6	GPU Heatsink	12	N/A	18	N/A	24	N/A

Performance Test

ROC200-DL

4. TEST PHOTO IN LAB

- Chamber in -40°C



OVERVIEW				
2024/11/05 09:32:31				
1	7	13	19	
1.5	7.4	-Over	-Over	
2	8	14	20	
5.4	9.0	-Over	-Over	
3	9	15	21	
2.0	-Over	-Over	-Over	
4	10	16	22	
2.3	-Over	-Over	-Over	
5	11	17	23	
6.5	-Over	-Over	-Over	
6	12	18	24	
4.2	-Over	-Over	-Over	

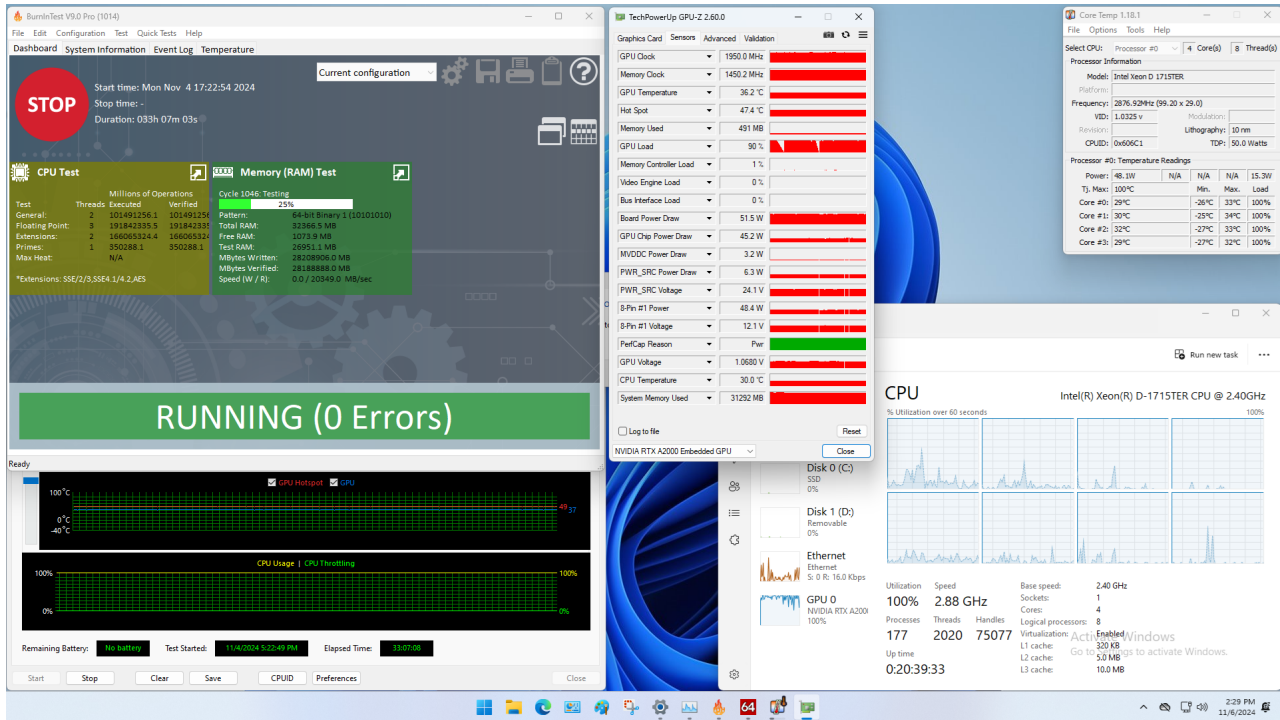
Measuring Point	Ambient Temp.	-40°C
	CPU Cores Max Temperature	15.0 °C
	CPU Cores Frequency (Unit: GHz)	2.88 GHz
	GPU Temperature	12.6 °C
	GPU Hot Spot Temperature	24.1 °C
	GPU Frequency (Unit: MHz)	1965 MHz
CH1	CPU	1.5 °C
CH2	DRAM	5.4 °C
CH3	GPU	2.0 °C
CH4	GPU RAM	2.3 °C
CH5	CPU Heatsink	6.5 °C
CH6	GPU Heatsink	4.2 °C
CH7	SK715 Power Module	7.4 °C
CH8	TOP Heatsink	9.0 °C



Performance Test

ROC200-DL

- Chamber in -20°C



OVERVIEW					
2024/11/06 02:23:17					
1	21.5	7	13	19	-Over
2	18.0	8	14	20	-Over
3	25.3	9	15	21	-Over
4	20.8	10	16	22	-Over
5	16.8	11	17	23	-Over
6	19.2	12	18	24	-Over

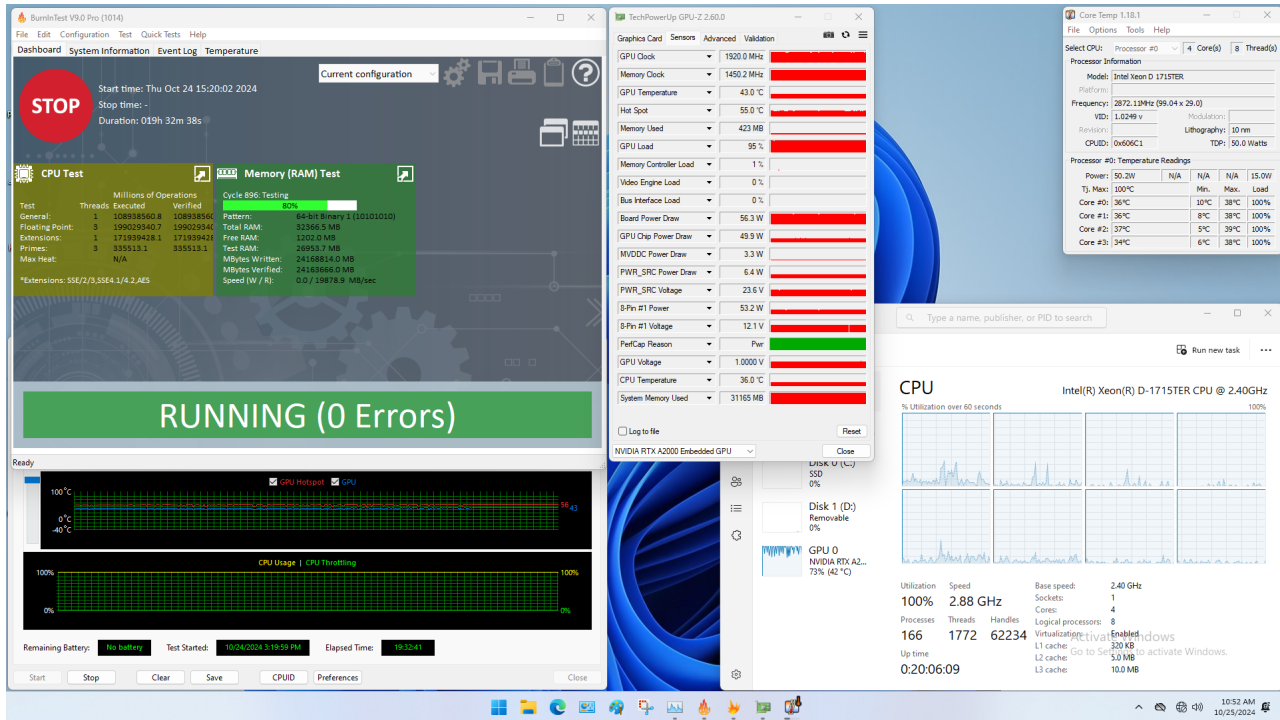
Measuring Point	Ambient Temp.	-20°C
CPU P-Cores Max Temperature		30.0 °C
CPU E-Cores Frequency (Unit: GHz)		2.88 GHz
GPU Temperature		36.2 °C
GPU Hot Spot Temperature		47.4 °C
GPU Frequency (Unit: MHz)		1950 MHz
CH1	CPU	21.5 °C
CH2	DRAM	18.0 °C
CH3	GPU	25.3 °C
CH4	GPU RAM	20.8 °C
CH5	CPU Heatsink	16.8 °C
CH6	GPU Heatsink	19.2 °C
CH7	SK715 Power Module	16.0 °C
CH8	TOP Heatsink	14.3 °C



Performance Test

ROC200-DL

- Chamber in 0°C



OVERVIEW 2024/10/25 10:44:10

1	26.2	7	19.5	13	-0ver	19	-0ver
2	28.8	8	19.6	14	-0ver	20	-0ver
3	29.8	9	-0ver	15	-0ver	21	-0ver
4	24.3	10	-0ver	16	-0ver	22	-0ver
5	21.1	11	-0ver	17	-0ver	23	-0ver
6	22.9	12	-0ver	18	-0ver	24	-0ver

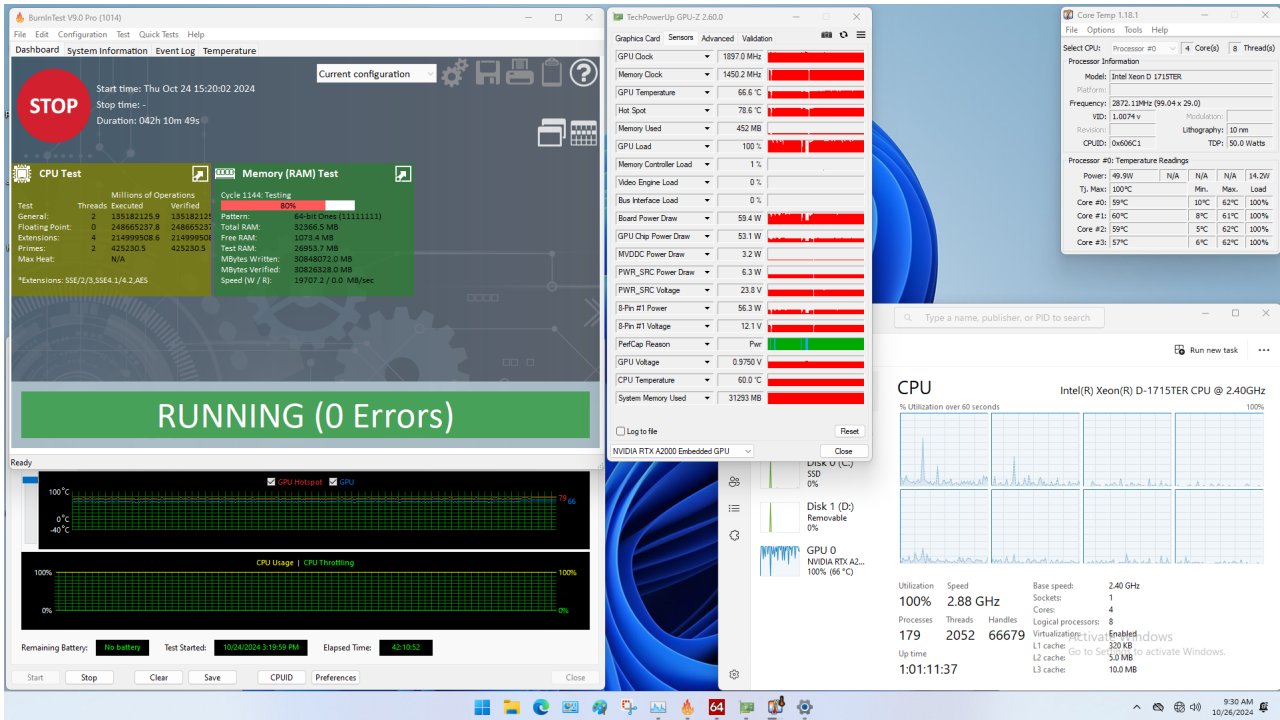
Measuring Point	Ambient Temp.	0°C
CPU P-Cores Max Temperature		36.0 °C
CPU E-Cores Frequency (Unit: GHz)		2.88 GHz
GPU Temperature		43.0 °C
GPU Hot Spot Temperature		55.0 °C
GPU Frequency (Unit: MHz)		1920 MHz
CH1	CPU	26.2 °C
CH2	DRAM	28.8 °C
CH3	GPU	29.0 °C
CH4	GPU RAM	24.3 °C
CH5	CPU Heatsink	21.1 °C
CH6	GPU Heatsink	22.9 °C
CH7	SK715 Power Module	19.5 °C
CH8	TOP Heatsink	19.6 °C



Performance Test

ROC200-DL

- Chamber in 25°C / 85%RH



OVERVIEW					
2024/10/26 09:31:29					
1	49.6	7	43.5	13	19
2	52.3	8	42.7	14	20
3	53.8	9	-0ver	15	21
4	48.6	10	-0ver	16	22
5	44.8	11	-0ver	17	23
6	47.2	12	-0ver	18	24

Measuring Point	Ambient Temp.	25°C
	CPU P-Cores Max Temperature	59.0 °C
	CPU E-Cores Frequency (Unit: GHz)	2.88 GHz
	GPU Temperature	66.6 °C
	GPU Hot Spot Temperature	78.6 °C
	GPU Frequency (Unit: MHz)	1897 MHz
CH1	CPU	49.6 °C
CH2	DRAM	52.3 °C
CH3	GPU	53.8 °C
CH4	GPU RAM	48.6 °C
CH5	CPU Heatsink	44.8 °C
CH6	GPU Heatsink	47.2 °C
CH7	SK715 Power Module	43.5 °C
CH8	TOP Heatsink	42.7 °C



Performance Test

ROC200-DL

- Chamber in 40°C / 85%RH

The screenshot displays a performance test environment. On the left, BurnInTest V9.0 Pro (1014) shows a 'STOP' button and test results for CPU and Memory (RAM) tests. The CPU test shows 30447759.2 million operations completed. The Memory test shows 53% completion. A large green banner at the bottom of the BurnInTest window reads 'RUNNING (0 Errors)'. In the center, TechPowerUp GPU-Z 2.62.0 shows GPU clock at 1815.0 MHz, memory clock at 1450.2 MHz, and GPU temperature at 74.1°C. On the right, Core Temp 1.18.1 shows processor information for Intel Xeon D-1715TER, with core temperatures ranging from 72°C to 75°C. Below these, a Windows task manager window shows CPU utilization at 100% and a task for Intel(R) Xeon(R) D-1715TER CPU @ 2.40GHz.

OVERVIEW
2024/10/29 18:15:29

1	64.2	7	57.7	13	-Over	19	-Over
2	67.2	8	57.9	14	-Over	20	-Over
3	68.7	9	-Over	15	-Over	21	-Over
4	63.4	10	-Over	16	-Over	22	-Over
5	59.7	11	-Over	17	-Over	23	-Over
6	62.8	12	-Over	18	-Over	24	-Over

Measuring Point	Ambient Temp.	40°C
	CPU P-Cores Max Temperature	74.0 °C
	CPU E-Cores Frequency (Unit: GHz)	2.88 GHz
	GPU Temperature	74.1 °C
	GPU Hot Spot Temperature	84.2 °C
	GPU Frequency (Unit: MHz)	1815 MHz
CH1	CPU	64.2 °C
CH2	DRAM	67.2 °C
CH3	GPU	68.7 °C
CH4	GPU RAM	63.4 °C
CH5	CPU Heatsink	59.7 °C
CH6	GPU Heatsink	62.0 °C
CH7	SK715 Power Module	57.7 °C
CH8	TOP Heatsink	57.9 °C



Performance Test

ROC200-DL

- Chamber in 50°C / 85%RH

BurnInTest V9.0 Pro (1014)

Dashboard System Information Event Log Temperature

Start time: Tue Oct 29 08:41:22 2024
Stop time: -
Duration: 027h 51m 23s

CPU Test

Test	Threads	Millions of Operations Executed	Verified
General:	3	224758059.3	224758059.3
Floating Point:	3	1945683074.9	1945683074.9
Extensions:	2	399108.1	399108.1
Primes:	N/A	N/A	N/A
Max Heat:	N/A	N/A	N/A

*Extensions: SSE2/SSE4.1/4.2/AES

Memory (RAM) Test

Cycle 1177: Testing 28%

Pattern: 00-00 Binary 2 (01010101)

Total RAM: 32366.5 MB
Free RAM: 1724.8 MB
Test RAM: 26962.9 MB
MBytes Written: 31754452.0 MB
MBytes Verified: 31728697.0 MB
Speed (W/MB): 63 / 20761.9 MB/Sec

GPU Temperature

GPU Clock: 1762.0 MHz
Memory Clock: 1450.2 MHz
GPU Temperature: 86.7 °C
Hot Spot: 97.5 °C
Memory Used: 420 MB
GPU Load: 100 %
Memory Controller Load: 1 %
Video Engine Load: 0 %
Bus Interface Load: 0 %
Board Power Draw: 53.2 W
GPU Chip Power Draw: 46.6 W
MIVDDC Power Draw: 3.4 W
PWR_SRC Power Draw: 6.5 W
PWR_SRC Voltage: 23.2 V
B-Pin #1 Power: 50.1 W
B-Pin #1 Voltage: 12.1 V
PerfCap Reason: Thm
GPU Voltage: 0.9000 V
GPU Temperature: 83.0 °C
System Memory Used: 30632 MB

Core Temp 1.18.1

Select CPU: Processor #0 4 Core(s) 8 Thread(s)

Model: Intel Xeon D 1715TER

Frequency: 2877.43MHz (99.22 x 29.0)

VDD: 0.9900 v Modulation: 0

Revision: 0x060C1 Lithography: 10 nm

CPUID: 0x060C1 TDP: 50.0 Watts

Processor #0: Temperature Readings

Power:	50.0W	N/A	N/A	12.5W
Tj Max:	100°C	Min.	Max.	Load
Core #0:	81°C	33°C	84°C	100%
Core #1:	80°C	30°C	83°C	100%
Core #2:	80°C	28°C	85°C	100%
Core #3:	81°C	29°C	84°C	100%

GPU Hotspot 99.66 °C

CPU Usage | CPU Throttling

Remaining Battery: No battery Test Started: 10/29/2024 8:41:16 AM Elapsed Time: 07:51:27

System Information

Processor: Intel(R) Xeon(R) D-1715TER CPU @ 2.40GHz

Utilization: 100% Speed: 2.88 GHz Base speed: 2.40 GHz

Processes: 158 Threads: 1657 Handles: 58455

Up time: 0:23:57:00

OVERVIEW 2024/10/30 12:03:57

1	72.1	7	65.6	13	-Over	19	-Over
2	75.2	8	65.8	14	-Over	20	-Over
3	75.1	9	-Over	15	-Over	21	-Over
4	78.5	10	-Over	16	-Over	22	-Over
5	67.6	11	-Over	17	-Over	23	-Over
6	69.1	12	-Over	18	-Over	24	-Over

Measuring Point	Ambient Temp.	50°C
	CPU P-Cores Max Temperature	81.0 °C
	CPU E-Cores Frequency (Unit: GHz)	2.88 GHz
	GPU Temperature	86.7 °C
	GPU Hot Spot Temperature	97.5 °C
	GPU Frequency (Unit: MHz)	1762 MHz
CH1	CPU	72.1 °C
CH2	DRAM	75.2 °C
CH3	GPU	75.1 °C
CH4	GPU RAM	70.5 °C
CH5	CPU Heatsink	67.6 °C
CH6	GPU Heatsink	69.1 °C
CH7	SK715 Power Module	65.6 °C
CH8	TOP Heatsink	65.8 °C



Performance Test

ROC200-DL

- Chamber in 60°C / 85%RH

OVERVIEW				
2024/11/01 11:00:53				
1	77.4	7	72.6	13
2	81.0	8	72.2	14
3	78.9	9	-Over	15
4	75.5	10	-Over	16
5	73.8	11	-Over	17
6	74.3	12	-Over	18
				19
				20
				21
				22
				23
				24

Measuring Point	Ambient Temp.	60°C
	CPU P-Cores Max Temperature	82.0 °C
	CPU E-Cores Frequency (Unit: GHz)	2.40 GHz
	GPU Temperature	86.8 °C
	GPU Hot Spot Temperature	97.8 °C
	GPU Frequency (Unit: MHz)	1440 MHz
CH1	CPU	77.4 °C
CH2	DRAM	81.0 °C
CH3	GPU	78.9 °C
CH4	GPU RAM	75.5 °C
CH5	CPU Heatsink	73.8 °C
CH6	GPU Heatsink	74.3 °C
CH7	SK715 Power Module	72.6 °C
CH8	TOP Heatsink	72.2 °C



Performance Test

ROC200-DL

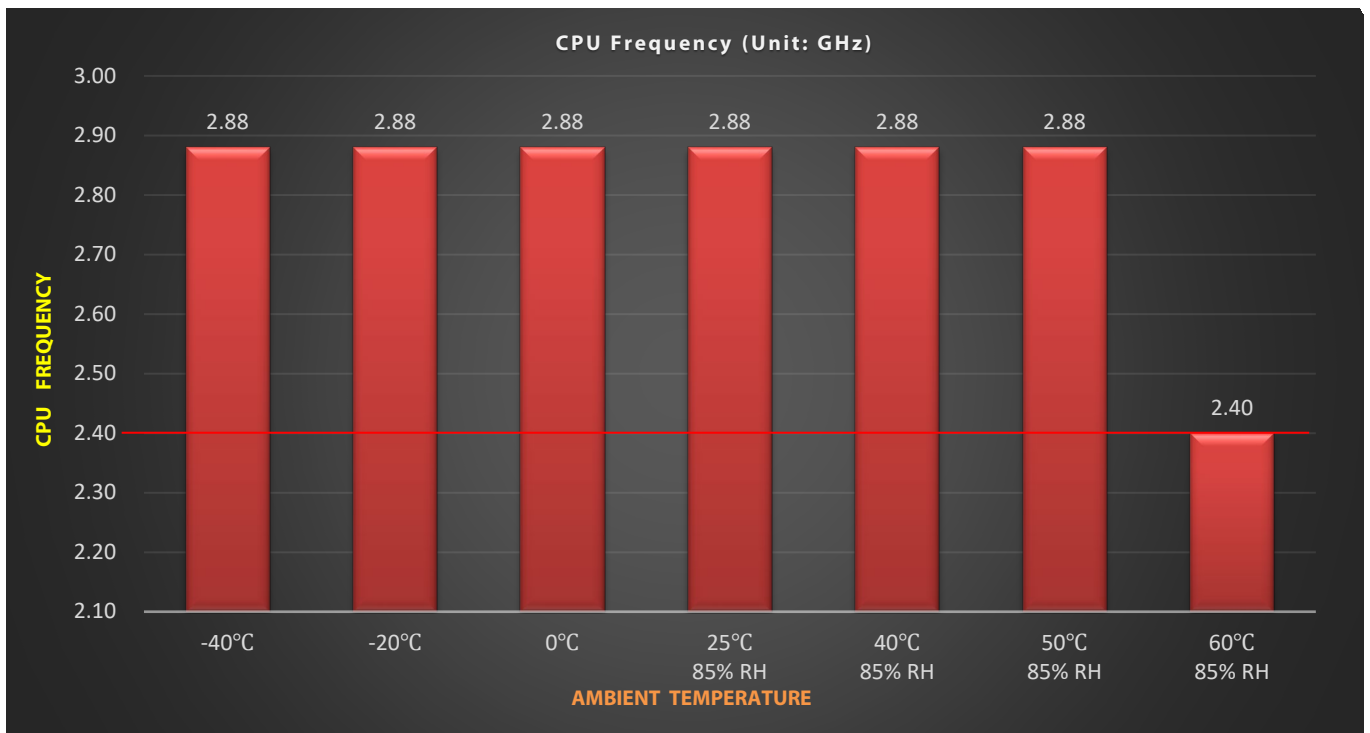
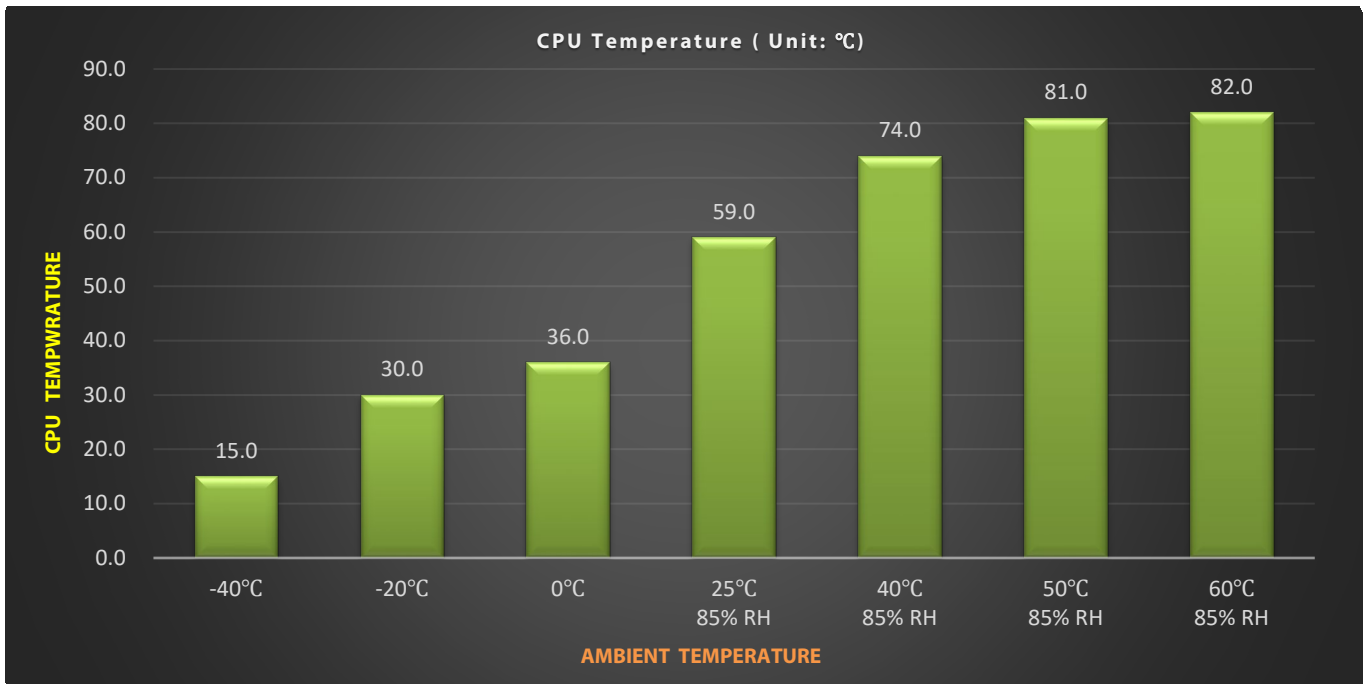
5. THERMAL TEST RESULT(-40°C ~ +60°C)

CPU/GPU - Temperature & Frequency / Thermocouple Measurements

Temperature		Ambient	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C
Frequency						85% RH	85% RH	85% RH	85% RH
CPU Cores Max Temperature (Unit: °C)			15.0	30.0	36.0	59.0	74.0	81.0	82.0
CPU Cores Frequency (Unit: GHz)			2.88	2.88	2.88	2.88	2.88	2.88	2.40
Temperature		Ambient	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C
Temp.						85% RH	85% RH	85% RH	85% RH
GPU Temperature (Unit: °C)			12.6	36.2	43.0	66.6	74.1	86.7	86.8
GPU Hot Spot Temperature (Unit: °C)			24.1	47.4	55.0	78.6	84.2	97.5	97.8
GPU Frequency (Unit: MHz)			1965	1950	1920	1897	1815	1762	1440
Thermocouple		Ambient	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C
Temp.						85% RH	85% RH	85% RH	85% RH
CH1	CPU		1.5	21.5	26.2	49.6	64.2	72.1	77.4
CH2	DRAM		5.4	18.0	28.8	52.3	67.2	75.2	81.0
CH3	GPU		2.0	25.3	29.0	53.8	68.7	75.1	78.9
CH4	GPU RAM		2.3	20.8	24.3	48.6	63.4	70.5	75.5
CH5	CPU Heatsink		6.5	16.8	21.1	44.8	59.7	67.6	73.8
CH6	GPU Heatsink		4.2	19.2	22.9	47.2	62.0	69.1	74.3
CH7	SK715 Power Module		7.4	16.0	19.5	43.5	57.7	65.6	72.6
CH8	TOP Heatsink		9.0	14.3	19.6	42.7	57.9	65.8	72.2

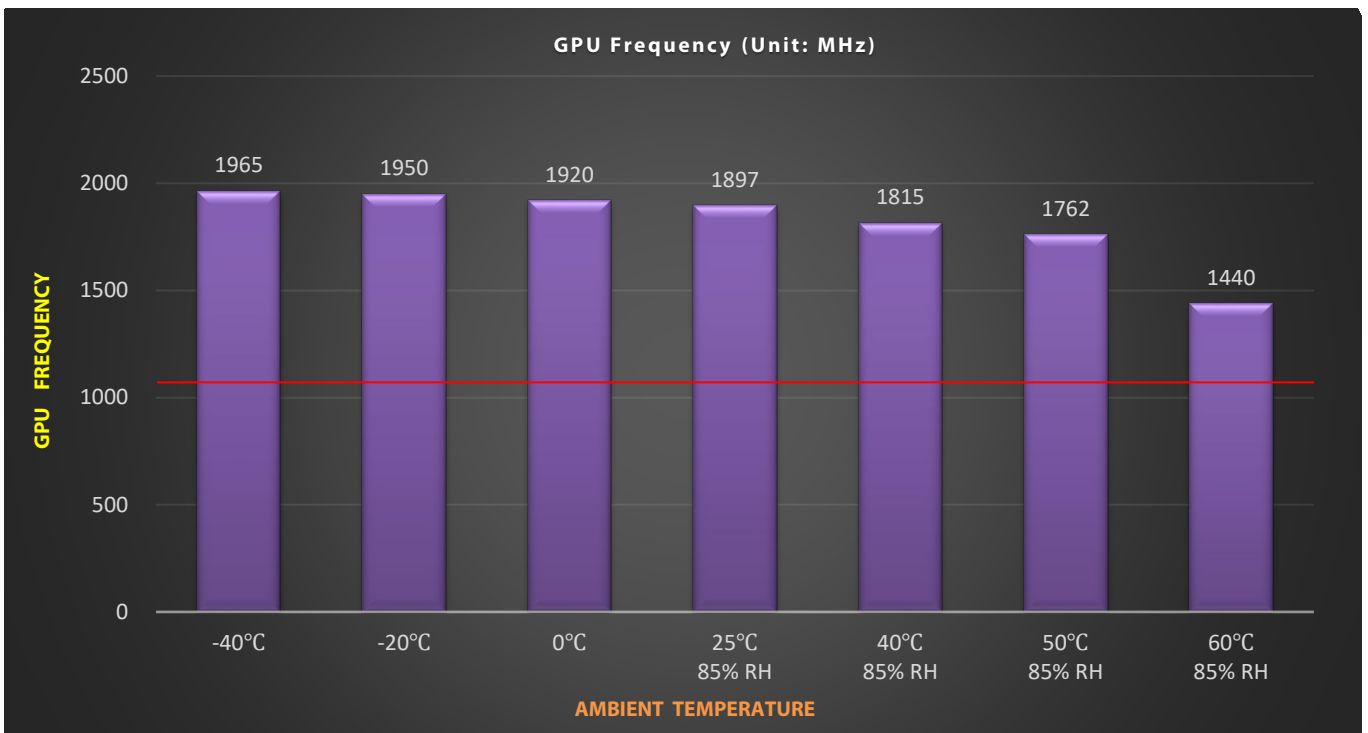
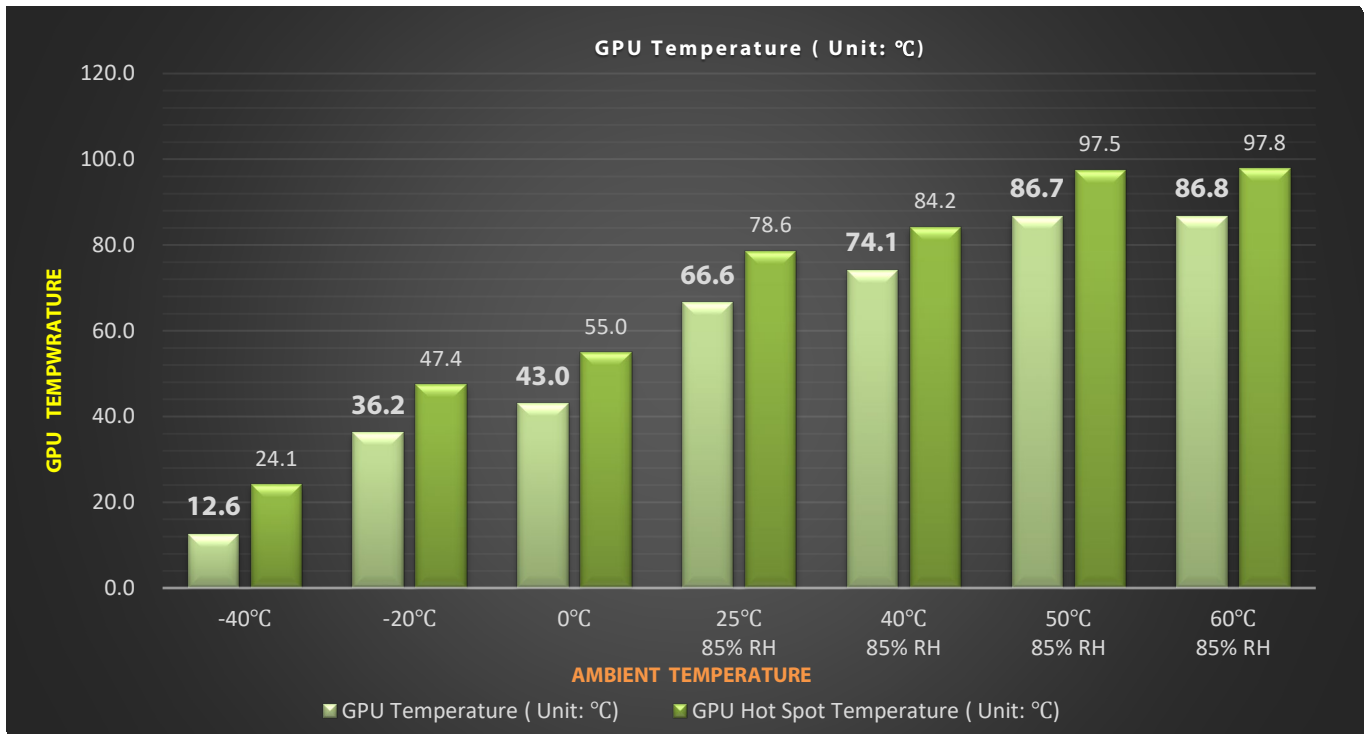
Performance Test

ROC200-DL



Performance Test

ROC200-DL

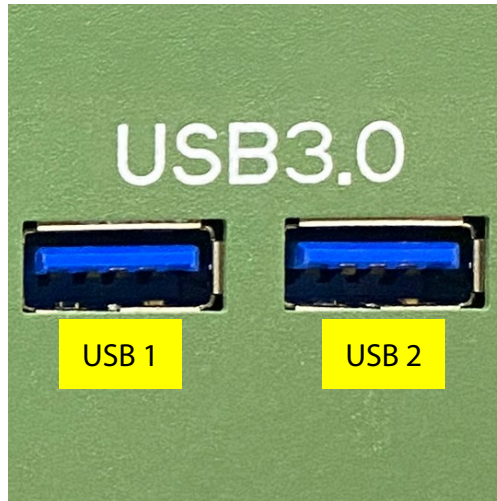


Performance Test

ROC200-DL

6. I/O FUNCTION TEST

6-1. USB3.0



USB 1

PassMark(TM) USB3Test

Select USB Device


Device: PMU33ZQ2CX (SuperSpeed 5Gb/s)

Connection Type: SuperSpeed 5Gb/s

Test mode

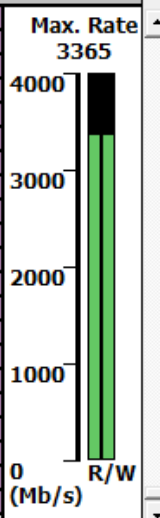
Loopback

Benchmark



Results *Status: BENCHMARK test - Complete*

Duration: 008h 00m 00s Operations: 0 Errors: 0

Write block 40583: 3320.7 Mb/s (415.1 MB/s)		
Read block 40584: 3358.3 Mb/s (419.8 MB/s)		
Write block 40584: 3324.2 Mb/s (415.5 MB/s)		
Read block 40585: 3349.8 Mb/s (418.7 MB/s)		
Write block 40585: 3323.1 Mb/s (415.4 MB/s)		
Read block 40586: 3359.4 Mb/s (419.9 MB/s)		
Write block 40586: 2721.0 Mb/s (340.1 MB/s)		
Read block 40587: 3362.7 Mb/s (420.3 MB/s)		
OVERALL BENCHMARK RESULT:		
Test Start time:		

Max. Rate 3365

Duration 480 Minutes

voltage 5.02V
Speed 5Gb/s

Start Stop

Configure Flash LEDs

Clear Serial Save Log

Reset All Help

About Exit

Performance Test

ROC200-DL

USB 2

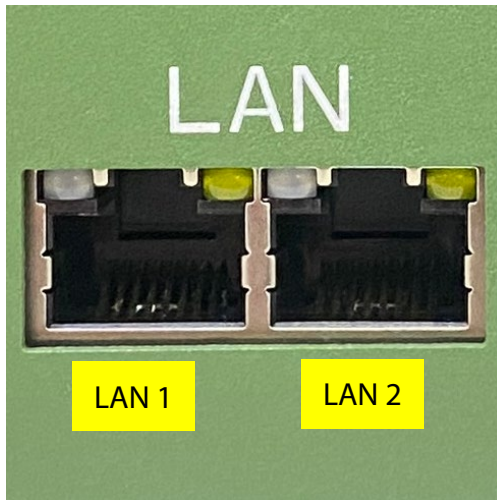
The screenshot displays the PassMark(TM) USB3Test application window. The interface includes a configuration section at the top left with dropdown menus for 'Device' (PMU33ZQ2CX (SuperSpeed 5Gb/s)) and 'Connection Type' (SuperSpeed 5Gb/s). The 'Test mode' section has radio buttons for 'Loopback' and 'Benchmark' (selected). The main area shows a table of results for a 'BENCHMARK test - Complete' that lasted 000h 30m 00s with 0 operations and 0 errors. A bar chart on the right indicates a maximum rate of 3372 Mb/s. A control panel on the right shows a duration of 30 minutes and buttons for Start, Stop, Configure, Flash LEDs, Clear Serial, Save Log, Reset All, Help, About, and Exit. A small black box in the top right corner displays 'Voltage 4.98V' and 'Speed 5Gb/s'.

Results	Status: BENCHMARK test - Complete
Duration: 000h 30m 00s	Operations: 0 Errors: 0
Write block 2382: 3370.7 Mb/s (421.3 MB/s)	
Read block 2383: 3371.7 Mb/s (421.5 MB/s)	
Write block 2383: 3371.0 Mb/s (421.4 MB/s)	
Read block 2384: 3368.2 Mb/s (421.0 MB/s)	
Write block 2384: 3371.4 Mb/s (421.4 MB/s)	
Read block 2385: 3369.4 Mb/s (421.2 MB/s)	
Write block 2385: 3092.7 Mb/s (386.6 MB/s)	
Read block 2386: 3371.0 Mb/s (421.4 MB/s)	
OVERALL BENCHMARK RESULT:	
Test Start time:	
Duration: 000h 30m 00s	
Total number of bytes written: 304087 MB	
Total number of bytes read: 304215 MB	
Maximum Write Data Rate: 3372.1 Mb/s (421.5 MB/s)	
Maximum Read Data Rate: 3372.5 Mb/s (421.6 MB/s)	
Minimum Write Data Rate: 2726.0 Mb/s (340.8 MB/s)	
Minimum Read Data Rate: 2720.0 Mb/s (340.0 MB/s)	
Average Write Data Rate: 3350.0 Mb/s (418.8 MB/s)	
Average Read Data Rate: 3361.8 Mb/s (420.2 MB/s)	
Average Data Rate: 3355.9 Mb/s (419.5 MB/s)	
Minimum Data Rate: 2720.0 Mb/s (340.0 MB/s)	

Performance Test

ROC200-DL

6-2. 1Gbps Ehternet



LAN 1

```
Administrator: Command Prompt
[ 5] 5949.00-5950.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5950.00-5951.00 sec 113 Mbytes 950 Mb/Sec
[ 5] 5951.00-5952.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5952.00-5953.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5953.00-5954.00 sec 113 Mbytes 950 Mb/Sec
[ 5] 5954.00-5955.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5955.00-5956.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5956.00-5957.00 sec 113 Mbytes 950 Mb/Sec
[ 5] 5957.00-5958.00 sec 113 Mbytes 948 Mb/Sec
[ 5] 5958.00-5959.00 sec 113 Mbytes 950 Mb/Sec
[ 5] 5959.00-5960.00 sec 113 Mbytes 950 Mb/Sec
[ 5] 5960.00-5961.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5961.00-5962.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5962.00-5963.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5963.00-5964.00 sec 113 Mbytes 950 Mb/Sec
[ 5] 5964.00-5965.00 sec 113 Mbytes 950 Mb/Sec
[ 5] 5965.00-5966.00 sec 113 Mbytes 950 Mb/Sec
[ 5] 5966.00-5967.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5967.00-5968.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5968.00-5969.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5969.00-5970.00 sec 113 Mbytes 950 Mb/Sec
[ 5] 5970.00-5971.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5971.00-5972.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5972.00-5973.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5973.00-5974.00 sec 113 Mbytes 950 Mb/Sec
[ 5] 5974.00-5975.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5975.00-5976.00 sec 113 Mbytes 950 Mb/Sec
[ 5] 5976.00-5977.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5977.00-5978.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5978.00-5979.00 sec 113 Mbytes 950 Mb/Sec
[ 5] 5979.00-5980.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5980.00-5981.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5981.00-5982.00 sec 113 Mbytes 950 Mb/Sec
[ 5] 5982.00-5983.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5983.00-5984.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5984.00-5985.00 sec 113 Mbytes 950 Mb/Sec
[ 5] 5985.00-5986.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5986.00-5987.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5987.00-5988.00 sec 113 Mbytes 950 Mb/Sec
[ 5] 5988.00-5989.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5989.00-5990.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5990.00-5991.00 sec 113 Mbytes 950 Mb/Sec
[ 5] 5991.00-5992.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5992.00-5993.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5993.00-5994.00 sec 113 Mbytes 950 Mb/Sec
[ 5] 5994.00-5995.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5995.00-5996.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5996.00-5997.00 sec 113 Mbytes 950 Mb/Sec
[ 5] 5997.00-5998.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5998.00-5999.00 sec 113 Mbytes 949 Mb/Sec
[ 5] 5999.00-6000.01 sec 113 Mbytes 949 Mb/Sec
-----
[ ID] Interval Transfer Bitrate sender receiver
[ 5] 0.00-6000.01 sec 663 Gbytes 949 Mb/Sec
[ 5] 0.00-5999.94 sec 663 Gbytes 949 Mb/Sec
iperf Done.
C:\>
```

```
Administrator: Command Prompt
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Reply from 192.168.1.11: bytes=32 time=4ms TTL=64
Ping statistics for 192.168.1.11:
Packets: Sent = 6000, Received = 6000, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>
```

LAN Speed Test Result: Pass
LAN Datapacket Test Result: 0 Lost

Performance Test

ROC200-DL

LAN 2

The image shows two windows from a Windows desktop. The left window is a Command Prompt displaying the output of a performance test. The right window is a Command Prompt displaying the output of a ping test. A third window, 'Ethernet 2 Status', is overlaid on the right side of the Command Prompt window.

Performance Test Results (Left Window):

ID	Interval	Transfer	Bitrate	sender	receiv
5	0.00-0000.00 sec	663 Gbytes	949 Mb/its/sec		
5	0.00-5999.94 sec	663 Gbytes	949 Mb/its/sec		

Ping Test Results (Right Window):

```
Ping statistics for 192.168.1.11:
Packets: Sent = 6000, Received = 6000, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

Ethernet 2 Status (Overlaid Window):

General

- Connection: No network access
- IPv4 Connectivity: No network access
- Media State: Enabled
- Duration: 01:47:07
- Speed: 1.0 Gbps

Activity

Sent: 713,072,152,348 bytes
Received: 2,114,972,138 bytes

LAN Speed Test Result: Pass
LAN Datapacket Test Result: 0 Lost

Performance Test

ROC200-DL

6-4. Serial Port



The screenshot shows the BurnInTest V9.0 Pro (1014) application window. The interface includes a menu bar (File, Edit, Configuration, Test, Quick Tests, Help) and a dashboard with tabs for Dashboard, System Information, Event Log, and Temperature. A large red 'STOP' button is visible on the left. The main area displays test results for two serial ports:

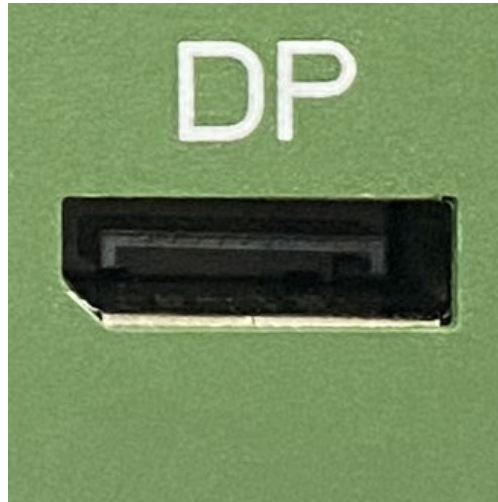
Serial Port	Test speed	Bytes sent	Bytes received	Errors	Throughput
COM1	57600 bits/sec	612941200	612941100	0	9405.1 Bytes/sec
COM2	57600 bits/sec	612938100	612938000	0	8985.8 Bytes/sec

A large green banner at the bottom of the window reads "RUNNING (0 Errors)". The status bar at the bottom left shows "Ready".

Performance Test

ROC200-DL

6-5. Display Port



System > Display > Advanced display

Select a display to view or change its settings

Display 1: BenQ EX2710S ▾

Display information



BenQ EX2710S

Display 1: Connected to NVIDIA RTX A2000 Embedded GPU

Desktop mode	1920 × 1080, 165 Hz
Active signal mode	1920 × 1080, 165 Hz
Bit depth	8-bit
Color format	RGB
Color space	Standard dynamic range (SDR)
HDR certification	Not found More about HDR certification

[Display adapter properties for Display 1](#)

Choose a refresh rate

A higher rate gives smoother motion, but also uses more power [More about refresh rate](#)

165 Hz ▾