

TEST REPORT

SCOPE OF WORK

COMMISSION REGULATION (EC) No 1275/2008 (ErP Lot 6)

PRODUCT/MODEL

Notebook / GM6PG7X

DESCRIPTION OF REGULATION

COMMISSION REGULATION (EU) No 801/2013 of 22 August 2013
amending Regulation (EC) No 1275/2008;

DESCRIPTION OF TEST METHODS AND STANDARDS

EN 50564:2011 Electrical and electronic household and office equipment
— Measurement of low power consumption

| SAMPLE # | SAMPLE RECEIVED | SERIEL # | DATE | CONDITION |
|----------|-----------------|----------|----------|-----------|
| | | N/A | 2023/3/6 | -- |

Page1-3: ErP Report from safety

1. General Information:

1. Applicant/address:

TONGFANG HONGKONG (SUZHOU) LIMITED
NO. 10 Plant, Jianwu Phase III, Western Zone, Comprehensive
Bonded Zone, NO.200, Suhong Middle Road, Suzhou
Industrial Park

2. Model name:

GM6PG7X

3. Year of Manufacture: 2023

2. General Technical Information:

| | |
|-----------------------------|---|
| 1. Manufacturer/address: | Same as applicant |
| 2. Product type | <input type="checkbox"/> Desktop <input type="checkbox"/> All In One Tablet <input checked="" type="checkbox"/> Notebook <input type="checkbox"/> Workstation |
| 3. Operating system: | Windows 11 |
| 3. Central processing unit: | Intel Core I7-13700H, 2.4GHz, 14cores |
| 4. Diagonal screen size | 17.3 (inch) |
| 5. Installed system memory: | 16G*2 |
| 6. Internal storage: | 1T *2 |
| 7. Discrete graphics card: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 8. Category: | Category C |
| 9. External power supply: | CCY/ A17-230P1A |

3. General Technical Information:

| | |
|--------------------------------------|---|
| 1. Test laboratory and Address | TONGFANG HONGKONG (SUZHOU) LIMITED NO. 10 Plant, Jianwu Phase III, Western Zone, Comprehensive Bonded Zone, NO.200, Suhong Middle Road, Suzhou Industrial Park |
| 2. Voltage/Freq. of power supply | 230 Vac/50 Hz |
| 3. Ambient temp. (°C) | 24 |
| 4. Humidity (%) | 55 |
| 5. Air Speed Close to the UUT: (m/s) | 0.1 |

4. Equipment list:

| Reg. No. | Equipment Name | Brand Name | Type / Model | Cal. Date | Next Cal. |
|----------|---------------------|------------|--------------|------------|------------|
| CCC061 | Thermo-Hygrograph | ISUZU | TH-27R | 06/03/2022 | 06/02/2023 |
| CCC078 | Digital Power Meter | Yokogawa | WT310E | 03/11/2022 | 03/10/2023 |
| CCC039 | Timer | E-MORE | CM-173 | 04/22/2022 | 04/21/2023 |
| CCCN0029 | AC Power Source | APE | AFW-150AY | 03/09/2022 | 03/08/2023 |

5. Test result (Intel Core I7-13700H, 2.4GHz, 14cores):

Off Mode Test Result:

| | |
|--------------------------|-----------------|
| 1. Tested at: | 230 Vac / 50 Hz |
| 2. The Average power (W) | 0.42 |

Summary:

| Intel Core I7-13700H 2.4GHz 14cores | Result | Limit | Verdict |
|---|--------|-------|---------|
| Off Mode (W) | 0.42 | 0.5 | PASS |
| The measurements of P _{off} are refer to EN 62623:2013 | | | |

The results only relate to the item tested

Page4-7: Power Consumption from Power/PM/EE

I. Power Consumption

1. Sleep mode with WOL enabled power demand (Watts)

| Model | GM6PG7X |
|-------|---------|
| Watts | 2.44 |

2. Off mode with WOL enabled power demand (Watts)

| Model | GM6PG7X |
|-------|---------|
| Watts | 0.4 |

3. Internal power supply efficiency at 10 %, 20 %, 50 % and 100 % of rated output power

80%

4. External Power Supply Efficiency

Efficiency

1. Specification:

1-1

DOE(Level VI):

(1)115Vac / 0A load $\leq 0.21W$

(2)115Vac / 25%,50%,75%,100% load $\geq 88\%$

(Average Active Mode Efficiency ,Warm up 30 minutes later , DC Cable ≤ 1200 mm,14AWG)

Erp(Tier 2):

(1)230Vac / 0A load $\leq 0.21W$

(2)230Vac / 25%,50%,75%,100% load $\geq 88\%$

(Average Active Mode Efficiency ,Warm up 30 minutes later , DC Cable ≤ 1200 mm,14AWG)

1-2

Efficiency: (Warm up 10minutes later)

100Vac @ 11.8A load, Efficiency $\geq 89\%$

240Vac @ 11.8A load, Efficiency $\geq 91\%$

2. Test condition:

Input: 100Vac/60Hz; 115Vac/60Hz; 230Vac/50Hz; 240Vac/50Hz

Ambient Temperature: 25°C

| Load | +19.5V |
|---------|--------|
| No load | 0A |
| 10% | 1.18A |
| 25% | 2.95A |
| 50% | 5.9A |
| 75% | 8.85A |
| Max | 11.8A |

3. Test record:

| Load | Vin (Vac) | Iinrms (A) | Pin (W) | Pout (W) | PF | Eff (%) | Spec (%) | Result |
|------|--------------|---------------|------------|-------------|-------|------------|-------------|--------|
| Max | 100.050 | 2.465 | 244.160 | 225.174 | 0.990 | 92.224 | >89 | PASS |
| | 239.790 | 1.054 | 241.336 | 225.186 | 0.955 | 93.308 | >91 | PASS |

| | 115V/60Hz | | | | | |
|--------------------|-----------|---------------------|--------|--------|--------|--------|
| | No load | Active power values | | | | |
| Load | 0% | 10% | 25% | 50% | 75% | 100% |
| Iout (A) | -- | 1.18 | 2.95 | 5.91 | 8.86 | 11.81 |
| Vout (V) | | 19.51 | 19.46 | 19.37 | 19.27 | 19.17 |
| Pout (W) | | 23.10 | 57.50 | 114.41 | 170.72 | 226.44 |
| Fin (Hz) | 60 | 60 | 60 | 60 | 60 | 60 |
| Iin (A) | 0.02 | 0.26 | 0.57 | 1.12 | 1.65 | 2.18 |
| Vin (V) | 115.46 | 115.39 | 115.29 | 115.11 | 115.03 | 114.85 |
| Pin (W) | 0.07 | 27.03 | 62.86 | 123.56 | 184.98 | 247.73 |
| THDv (%) | 0.08 | 0.06 | 0.06 | 0.22 | 0.19 | 0.11 |
| PF (W/VA) | 0.03 | 0.92 | 0.96 | 0.95 | 0.98 | 0.99 |
| Power Consumed (W) | 0.07 | 3.93 | 5.36 | 9.15 | 14.26 | 21.29 |
| Efficiency | -- | 85.5% | 91.5% | 92.6% | 92.3% | 91.4% |
| Average Efficiency | -- | -- | 91.94% | | | |

| | 230V/50Hz | | | | | |
|--------------------|-----------|---------------------|--------|--------|--------|--------|
| | No load | Active power values | | | | |
| Load | 0% | 10% | 25% | 50% | 75% | 100% |
| Iout (A) | -- | 1.18 | 2.95 | 5.91 | 8.86 | 11.81 |
| Vout (V) | | 19.52 | 19.46 | 19.37 | 19.28 | 19.18 |
| Pout (W) | | 23.10 | 57.50 | 114.45 | 170.81 | 226.57 |
| Fin (Hz) | 50 | 50 | 50 | 50 | 50 | 50 |
| Iin (A) | 0.03 | 0.16 | 0.31 | 0.58 | 0.85 | 1.11 |
| Vin (V) | 230.40 | 230.37 | 230.32 | 230.24 | 230.15 | 230.06 |
| Pin (W) | 0.08 | 28.31 | 63.84 | 123.62 | 183.51 | 244.07 |
| THDv (%) | 0.14 | 0.11 | 0.17 | 0.13 | 0.06 | 0.18 |
| PF (W/VA) | 0.01 | 0.76 | 0.89 | 0.93 | 0.94 | 0.96 |
| Power Consumed (W) | 0.08 | 5.21 | 6.33 | 9.17 | 12.70 | 17.49 |
| Efficiency | -- | 81.6% | 90.1% | 92.6% | 93.1% | 92.8% |
| Average Efficiency | -- | -- | 92.14% | | | |

5. Minimum number of loading cycles that the batteries can withstand (applies only to notebook computers):

500 Cycles

6. User information on the energy-saving potential of power management functionality

https://www.energystar.gov/products/low_carbon_it_campaign/power_management_computer

Page6-8: Noise Level Report from PT

Noise Levels (the declared A-weighted **sound pressure** level) of the computer

***The data of this section (Noise level) can be applied to GM6PG7X

GM6PG7X I7-13700H

1. Samples Configuration:

| Configuration: | Brand/Frequency/Capacity/Description |
|---------------------------|---|
| P/N | NA |
| Main Board Version | VB |
| Windows version | Windows11 |
| BIOS/EC Version | B.0.07/ 0.21.00 |
| CPU | INTEL Core i7 -13700H |
| Memory | D4,3200,16G,1G*8,M471A2K43DB1-CWE,SS |
| VGA | GeForce RTX 4070 |
| Storage/ HDD | N/A |
| SSD | SSD, PCIe*4,1TB,IM2P33F8-001TD,Adata |
| Wi-Fi | WLAN+BT,2*2,2P ,2230E,AX201.NGWGNVW,INTEL |
| ADAPTER | 230 Watts ADP |

2. Test Equipment:

2-1 Semi-Anechoic Chamber: Acoustic testing for system sound pressure/ quality shall be testing in a qualified Semi-anechoic chamber meeting the requirements of ISO-3744.

2-2 Microphone: Follow ISO-3744

3. Test Condition

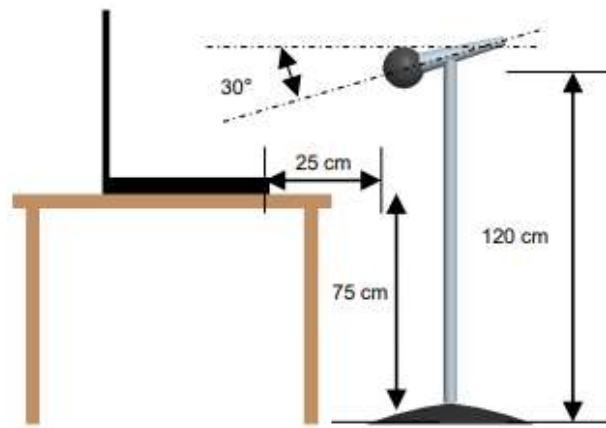
3-1 Environment Temperature: 23+-2degC

4. Test Standard Reference

4-1 Sound pressure standard: follow ISO7779-chapter 8.6.3-C

4-2 It is 25cm away from test machine for four edges.

4-3 Show as below picture.



4-4. For B phase test, we determine the fan RPM to meet THTF acoustic SPEC in front side sound pressure.

4-5. Sound pressure SPEC

| NB | Front(dBA)SPEC |
|-------------|----------------|
| Turbo mode | 46 |
| Gaming mode | 42 |
| Office mode | 35 |

5. Acoustic test report

Sound pressure

| Semi-Anechoic Chamber | MiTAC | |
|-----------------------|------------|------|
| | Front(dBA) | SPEC |
| Turbo mode | 45.9 | 46 |
| Gaming mode | 42 | 42 |
| Office mode | 35 | 35 |

6. Conclusion:

- Sound pressure:
Turbo mode test is under spec.
Gaming mode test is under spec.
Office mode test is under spec.

Page10-11: MS OS Setting Description from FAE Huaizhi

| | |
|---|--|
| 1. Description of how enter Sleep /OFF mode have to be select or programmed;↵ | The sleep or Off mode was selected or be programmed by operating system power management function. ↵ |
| 2. Step about how to acquiring a stable system experience↵ | Plug in power supplier (adapter) and press power button to turn on system↵ |
| 3. Events of users require the equipment automatically goes into to SLEEP /OFF mode;↵ | The power management function allow the system automatically switching from idle mode to sleep mode , etc: after a period of user's action(idle-> screen off ->sleep).↵ |
| 4. During an idle period before the computer automatically reaches sleep mode, or another condition which does not exceed the applicable power demand requirements for sleep mode;↵ | The system for a period that no user or network activity (base on user power management settings).↵ Path:↵ Control Panel\Hardware and Sound\Power Options\Edit Plan Settings"↵ |
| 5. For a period of time that Admin/users are not activity ,the computer automatically enter power saving mode that has a lower power demand requirement than sleep mode;↵ | The system for a period no user or network activity (base on user power management settings) + user power management settings:" Control Panel\Hardware and Sound\Power Options\Edit Plan Settings"↵ |
| 6. The length of time before the display sleep mode is set to activate after user inactivity;↵ | If there is no user or network activity, the time stay in OS can be set , such as "1 minutes" ,"2 minutes" ... "never"↵ Path:↵ Control Panel\Hardware and Sound\Power Options\Edit Plan Settings,↵ |
| 7. How to <u>implete</u> the MS function;↵ | User power management settings:" Control Panel\Hardware and Sound\Power Options\Choose what the power button do" + or default Press the shortcut key (Fn+F1) to enter sleep mode↵ |

*If a notebook computer is operated by battery/ies that cannot be accessed and replaced by a non-professional user, in addition to the information specified in point 7.1 of Regulation 617/2013/EU, manufacturers shall provide in the technical documentation, and make available on free-access websites and on the external packaging of the notebook computer, the following information.

**"The battery[ies] in this product cannot be easily replaced by users themselves.

Signed by



TONGFANG HONGKONG LIMITED