

FCC SAR Exclusion Report

FCC ID: GDDMXU-270

Report No. : BTL-FCCP-4-2207T123
Equipment : CHERRY KW X ULP Keyboard
Model Name : MXU-270
Brand Name : CHERRY
Applicant : Cherry Europe GmbH
Address : Cherrystr. Auerbach_OPf. Germany 91275

FCC Rule Part(s) : 47 CFR § 2.1093
KDB 447498 D01 General RF Exposure Guidance v06
FCC Guidelines for Human Exposure IEEE C95.1

Date of Receipt : 2022/8/2
Date of Test : 2022/8/2 ~ 2022/8/26
Issued Date : 2023/3/24

The above equipment has been tested and found in compliance with the requirement of the above standards by BTL Inc.

Prepared by : Eric Lee
Eric Lee, Engineer

Approved by : Jerry Chuang
Jerry Chuang, Supervisor

BTL Inc.

No.18, Ln. 171, Sec. 2, Jiuzong Rd., Neihu Dist., Taipei City 114, Taiwan

Tel: +886-2-2657-3299 Fax: +886-2-2657-3331 Web: www.newbtl.com

REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-4-2207T123	R00	Original Report.	2022/9/27	Invalid
BTL-FCCP-4-2207T123	R01	Revised report to address TAF Audit's comments.	2023/3/24	Valid

Evaluation Facility:

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan
(FCC DN: TW0659)

SAR01

According to KDB 447498 section 4.3.1 a), the 1-g SAR test exclusion thresholds at test separation distance \leq 50 mm are determined by:

$$\{ [(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] \leq 3.0 \}$$

BLE:

The maximum tune up power is -0.5 dBm +/- 0.5 dB,

SRD:

The maximum tune up power is 0 dBm +/- 0.5 dB,

therefore the highest tune-up powers is

0.5 dBm (1.12 mW) @ 2403 MHz

When the minimum test separation distance is $<$ 50 mm, a distance of 5 mm according to e) in section 4.1 is applied to determine SAR test exclusion.

So,

$$[(1.12 \text{mW} / 5 \text{mm}) * (2.403 \text{GHz}^{0.5})] = 0.3$$

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] = 0.3 < 3.0$$

Therefore, standalone SAR measurements are not required for both head and body.

End of Test Report