RF Exposure Evaluation

Test report

On Behalf of
VTIN TECHNOLOGY Co.,Limited

For
3-mode single keyboard
Model No.: PC303A

FCC ID: 2AIL4-PC303A

Prepared for :	**VTIN TECHNOLOGY Co.,Limited** **UNIT D 16/F ONE CAPITAL PLACE 21 LUARD ROAD WAN CHAI, Hong Kong, China**
Prepared By :	**Shenzhen HUAK Testing Technology Co., Ltd.** **1F, B2 Building, JunfengZhongchengZhizao Innovation Park, Fuhai Street, Bao'an District, Shenzhen City, China**
Date of Test:	**Sep. 04, 2020 ~ Oct. 10, 2020**
Date of Report:	**Oct. 10, 2020**

1 General Description of EUT

Product Name	3-mode single keyboard
Model/Type reference	PC303A
Trade Mark	VICTSING
FCC ID	2AIL4-PC303A
Hardware Version	VER 2.0
Software Version	V1.8
2.4GHz	
Operation frequency	2403MHz—2480MHz
Channel number	16
Modulation Technology	GFSK
BLE	
Operation frequency:	2402MHz ~ 2480MHz
Channel separation:	2MHz
Channel number:	40
Modulation Technology:	GFSK
EDR	
Version:	Supported EDR
Modulation:	GFSK, π/4DQPSK, 8DPSK
Operation frequency:	2402MHz~2480MHz
Channel number:	79CH
Channel separation:	1MHz
Antenna type:	PCB Antenna
Antenna gain:	1.8dBi
Power supply:	DC 3.7V from battery

2 RF Exposure ComplianceRequirement

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]· [√f(GHz)] ≤ **3.0** for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,

Wheref(GHz) is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearsetmW and mm before calcution

The results is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mmand for transmission frequencies between 100 MHz and 6 GHz. When the minimum testseparationdistance is < 5 mm, a distance of 5 mm is applied to determine SAR testexclusion

3 EUT RFExposure

Antenna Gain: 1.8dBi

Define the minimum distance: 5mm

GFSK(2.4GHz)						
Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2403MHz)	-3.952	-3±1	-2	0.631	0.196	3.0
Middle (2441MHz)	-3.912	-3±1	-2	0.631	0.197	
Highest (2480MHz)	-3.270	-3±1	-2	0.631	0.199	
Conclusion: the calculated value ≤3.0, SAR is exempted.						

Note: For maximum peak conducted output power, please refer to test report HK2009102513-1E

GFSK(BLE)						
Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2402MHz)	-3.993	-4±1	-3	0.501	0.155	3.0
Middle (2440MHz)	-4.254	-4±1	-3	0.501	0.157	
Highest (2480MHz)	-4.224	-4±1	-3	0.501	0.158	
Conclusion: the calculated value ≤3.0, SAR is exempted.						

Note: For maximum peak conducted output power, please refer to test report HK2009102513-2E

EDR

DH5						
Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2402MHz)	3.914	3±1	4	2.512	0.779	3.0
Middle (2441MHz)	3.469	3±1	4	2.512	0.785	
Highest (2480MHz)	3.276	3±1	4	2.512	0.791	
2DH5						
Lowest (2402MHz)	3.674	3±1	4	2.512	0.779	3.0
Middle (2441MHz)	3.235	3±1	4	2.512	0.785	
Highest (2480MHz)	3.082	3±1	4	2.512	0.791	

3DH5						
Lowest (2402MHz)	3.988	3±1	4	2.512	0.779	3.0
Middle (2441MHz)	3.631	3±1	4	2.512	0.785	
Highest (2480MHz)	3.412	3±1	4	2.512	0.791	
Conclusion: the calculated value ≤3.0, SAR is exempted.						

Note: For maximum peak conducted output power, please refer to test report HK2009102513-3E