



中国认可
国际互认
检测
TESTING
CNAS L5313



DEKRA

RF Exposure Evaluation Declaration

Product Name : EZ-BT WICED Module

Model No. : CYBT-353027-02

IC : 7922A-3027

Applicant : Cypress Semiconductor

Address : 198 Champion Ct, San Jose, California 95134
United States

Date of Receipt : Jan. 31, 2018

Test Date : Feb. 01, 2018~ Apr. 19, 2018

Issued Date : Apr. 20, 2018

Report No. : 1812155R-RF-CA-P20V01

Report Version : V1.0

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by TAF any agency of the government.

The test report shall not be reproduced without the written approval of DEKRA Testing and Certification (Suzhou) Co., Ltd.

Test Report Certification

Issued Date : Apr. 20, 2018

Report No. : 1812155R-RF-CA-P20V01



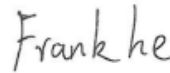
Product Name : EZ-BT WICED Module
Applicant : Cypress Semiconductor
Address : 198 Champion Ct, San Jose, California 95134
United States
Manufacturer : Cypress Semiconductor
Address : 198 Champion Ct, San Jose, California 95134
United States
Model No. : CYBT-353027-02
IC : 7922A-3027
EUT Voltage : DC 2.3-3.6V
Applicable Standard : RSS-102: Issue 5, 2015
Test Result : Complied
Performed Location : DEKRA Testing and Certification (Suzhou) Co., Ltd.
No.99 Hongye Rd., Suzhou Industrial Park, Suzhou,
215006, Jiangsu, China
TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098
IC Lab Code: 4075B

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Approved By :



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1. RF Exposure Evaluation

1.1. Limits

From RSS-102 Issue 5, Section 2.5.1 Exemption

No SAR Evaluation Required if power is below the following threshold:

Table 1: SAR evaluation – Exemption limits for routine evaluation based on frequency and separation distance^{4,5}

| Frequency (MHz) | Exemption Limits (mW) | | | | |
|-----------------|---------------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| | At separation distance of ≤ 5 mm | At separation distance of 10 mm | At separation distance of 15 mm | At separation distance of 20 mm | At separation distance of 25 mm |
| ≤ 300 | 71 mW | 101 mW | 132 mW | 162 mW | 193 mW |
| 450 | 52 mW | 70 mW | 88 mW | 106 mW | 123 mW |
| 835 | 17 mW | 30 mW | 42 mW | 55 mW | 67 mW |
| 1900 | 7 mW | 10 mW | 18 mW | 34 mW | 60 mW |
| 2450 | 4 mW | 7 mW | 15 mW | 30 mW | 52 mW |
| 3500 | 2 mW | 6 mW | 16 mW | 32 mW | 55 mW |
| 5800 | 1 mW | 6 mW | 15 mW | 27 mW | 41 mW |

| Frequency (MHz) | Exemption Limits (mW) | | | | |
|-----------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--|
| | At separation distance of 30 mm | At separation distance of 35 mm | At separation distance of 40 mm | At separation distance of 45 mm | At separation distance of ≥ 50 mm |
| ≤ 300 | 223 mW | 254 mW | 284 mW | 315 mW | 345 mW |
| 450 | 141 mW | 159 mW | 177 mW | 195 mW | 213 mW |
| 835 | 80 mW | 92 mW | 105 mW | 117 mW | 130 mW |
| 1900 | 99 mW | 153 mW | 225 mW | 316 mW | 431 mW |
| 2450 | 83 mW | 123 mW | 173 mW | 235 mW | 309 mW |
| 3500 | 86 mW | 124 mW | 170 mW | 225 mW | 290 mW |
| 5800 | 56 mW | 71 mW | 85 mW | 97 mW | 106 mW |

1.2. Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

The temperature and related humidity: 18 and 78% RH.

1.3. Test Result of RF Exposure Evaluation

| | | |
|-----------|---|------------------------|
| Product | : | EZ-BT WICED Module |
| Test Item | : | RF Exposure Evaluation |
| Test Site | : | AC-6 |

● Antenna Gain:

| | | | | | | |
|-------------------------------------|-------------------------------------|----------------|-------------------------------------|----------------------|--------------------------|-----------|
| Model No. | N/A | | | | | |
| Antenna manufacturer | N/A | | | | | |
| Antenna Delivery | <input checked="" type="checkbox"/> | 1*TX+1*RX | <input type="checkbox"/> | 2*TX+2*RX | <input type="checkbox"/> | 3*TX+3*RX |
| Antenna technology | <input checked="" type="checkbox"/> | SISO | | | | |
| | <input type="checkbox"/> | MIMO | <input type="checkbox"/> | Basic | | |
| | | | <input type="checkbox"/> | CDD | | |
| | | | <input type="checkbox"/> | Sectorized | | |
| | | | <input type="checkbox"/> | Beam-forming | | |
| Antenna Type | <input type="checkbox"/> | External | <input type="checkbox"/> | Dipole | | |
| | | | <input type="checkbox"/> | Sectorized | | |
| | <input checked="" type="checkbox"/> | Internal | <input type="checkbox"/> | PIFA | | |
| | | | <input type="checkbox"/> | PCB | | |
| | | | <input checked="" type="checkbox"/> | Ceramic Chip Antenna | | |
| | | | <input type="checkbox"/> | Monopole Antenna | | |
| | Antenna Technology | Ant Gain (dBi) | | | | |
| <input checked="" type="checkbox"/> | SISO | -1 | | | | |

Maximum measured transmitter power:

Maximum conducted tune-up power is 9.9dBm for BT3.0, 7.0dBm for BLE:

| Frequency (MHz) | Pout Conducted (dBm) | Pout Conducted (mW) | Maximum Antenna Gain (dBi) | Pout EIRP (mW) |
|-----------------|----------------------|---------------------|----------------------------|----------------|
| BT3.0 | 9.9 | 9.772 | -1 | 7.762 |
| BLE | 7.0 | 5.012 | -1 | 3.981 |

$EIRP = P_{Conducted} + \text{Antenna Gain}$

Threshold for no SAR evaluation in 15mm is 15.00 mW

Maximum TX Power is 9.772mW Conducted and 7.762mW EIRP

Maximum TX Power is 9.772mW

Conclusion: SAR is not required for EZ-BT WICED Module as long as the distance is higher than 15mm away from the user since the maximum output power(both conducted and EIRP) is below IC threshold.

_____ The End _____