

**Espressif IOT ESP**

**Bluetooth Auto Test Report**

**Version 1.0**

Espressif Systems IOT Team

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A2 Report Revision History:

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| Table 1 | | | |
| Revision | Date | Changes | Author |
|  |  |  |  |

Module&Test Information

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| Table 2 | |
| Module Name: | ESP32\_TestBoard |
| PCB Version: | V2 |
| Sample number: | #1 |
| Test Engineer: | hujinping |
| Test Date: | 10/26/18 18:22:53 |
| Test Place: | Second floor laboratory |
| Test Equipment: | WT200 |
| Test Bin | V146 |
| Cable loss/dB: | 12.8 |
| Backoff(4=1dB): | IC(1.5pf\_2.4nH\_1.0pf)/29-j12 |
| Pi match/s11 smith: | 2.0 |
| Note: | |

1. Test Item Summary

1.1. Static Performance

1.1.1. Basic rate TX

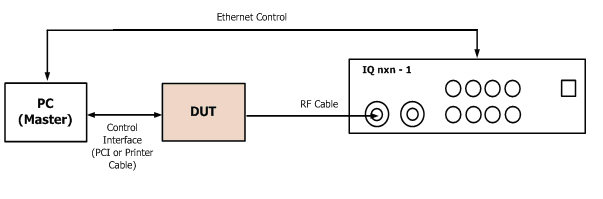
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| Table 3 | | |
| No. | Test Items | Pass/Fail |
| 1 | Basic rate TX | pass |
| 2 | 2M EDR TX | pass |
| 3 | 3M EDR TX | pass |
| 4 | BLE TX | pass |

1. Test Result

2.1. Test setup

a. Maximum Transmit Power Profile vs. Operation Channel

Test Setup:



**Figure 1: WiFi TX Performance Environment Setup**

Note :

1. Config the instrument setup as above.
2. Select Tx Rate/Channel/BW as tables specified below.
3. Run the Test script and record test results.

2.2. Basic rate TX

Requirement

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| Table 5 | |
| Specification | Requirement |
| Frequency range(MHz) | (2400,2483.5) |
| Output Power(dBm) | (-3, +3) @power\_level=4； |
| Init Freq Error(kHz) | (-75kHz,+75kHz) |
| Bandwidth20dB(kHz) | ≤ 1000kHz |
| deltaF2Max(kHz) | (115kHz ,500kHz)(at least 99%) |
| deltaF2Avg(kHz) | (112kHz, 500kHz) |
| deltaF1Avg(kHz) | (140kH, 175kHz) |

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| Table 6 | | | | | | | | | |
| Data rate | 1M\_DH5\_1010 | | | | | | | | |
| Channel | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 78 |
| Frequency | 2402 | 2412 | 2422 | 2432 | 2442 | 2452 | 2462 | 2472 | 2480 |
| Output Power(dBm) | 2.50 | 2.67 | 2.57 | 2.41 | 2.77 | 2.58 | 2.54 | 2.53 | 3.11 |
| Init Freq Error(KHz) | -22.89 | -19.67 | -20.93 | -22.09 | -19.44 | -20.51 | -22.93 | -20.16 | -21.44 |
| deltaF2Max(kHz) | 144.78 | 144.97 | 147.63 | 148.61 | 144.58 | 148.05 | 147.76 | 150.89 | 143.05 |
| deltaF2Avg(kHz) | 138.78 | 138.29 | 141.73 | 142.28 | 138.22 | 141.66 | 141.54 | 144.49 | 137.59 |
| **Pass/Fail** | pass | pass | pass | pass | pass | pass | pass | pass | pass |
| Power by channel | bt_pwr_1M_DH5_1010 | | | | | | | | |
| Init Freq Error by channel | bt_Init_Freq_Err_1M_DH5_1010 | | | | | | | | |
| deltaF2Max by channel | bt_deltaF2Max_1M_DH5_1010 | | | | | | | | |
| deltaF2Avg by channel | bt_deltaF2Avg_1M_DH5_1010_pwr | | | | | | | | |
| **Note：** | **1M\_DH5\_1010 meets the test requirements** | | | | | | | | |

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| Table 7 | | | | | | | | | |
| Data rate | 1M\_DH5\_00001111 | | | | | | | | |
| Channel | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 78 |
| Frequency | 2402 | 2412 | 2422 | 2432 | 2442 | 2452 | 2462 | 2472 | 2480 |
| Output Power(dBm) | 2.46 | 2.62 | 2.64 | 2.57 | 2.73 | 2.64 | 2.60 | 2.79 | 3.04 |
| Init Freq Error(KHz) | -22.28 | -19.69 | -20.54 | -22.77 | -19.48 | -20.28 | -22.70 | -19.98 | -20.66 |
| deltaF1Avg(kHz) | 155.86 | 154.96 | 155.98 | 155.19 | 155.16 | 157.16 | 158.30 | 155.77 | 153.48 |
| **Pass/Fail** | pass | pass | pass | pass | pass | pass | pass | pass | pass |
| Power by channel | bt_pwr_1M_DH5_00001111 | | | | | | | | |
| Init Freq Error by channel | bt_Init_Freq_Err_1M_DH5_00001111 | | | | | | | | |
| deltaF1Avg by channel | bt_deltaF1Avg_1M_DH5_00001111 | | | | | | | | |
| **Note：** | **1M\_DH5\_00001111 meets the test requirements** | | | | | | | | |

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| Table 8 | | | | | | | | | |
| Data rate | 1M\_DH5\_prbs9 | | | | | | | | |
| Channel | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 78 |
| Frequency | 2402 | 2412 | 2422 | 2432 | 2442 | 2452 | 2462 | 2472 | 2480 |
| Output Power(dBm) | 2.48 | 2.63 | 2.68 | 2.56 | 2.73 | 2.69 | 2.67 | 2.80 | 3.00 |
| Init Freq Error(KHz) | -21.87 | -19.91 | -19.82 | -22.46 | -19.70 | -20.20 | -22.40 | -20.10 | -21.21 |
| Bandwidth20dB(kHz) | 860.00 | 900.00 | 900.00 | 866.00 | 900.00 | 900.00 | 900.00 | 900.00 | 902.00 |
| **Pass/Fail** | pass | pass | pass | pass | pass | pass | pass | pass | pass |
| Power by channel | bt_pwr_1M_DH5_prbs9 | | | | | | | | |
| Init Freq Error by channel | bt_Init_Freq_Err_1M_DH5_prbs9 | | | | | | | | |
| Bandwidth20dB by channel | bt_bandwidth20dB_1M_DH5_prbs9 | | | | | | | | |
| **Note：** | **1M\_DH5\_prbs9 meets the test requirements** | | | | | | | | |

2.3 Enhanced data rate 2M TX

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| Table 9 | |
| Specification | Requirement |
| Output Power(dBm) | (-3, +3) @power\_level=4； |
| Init Freq Error(kHz) | (-75,+75) |
| OMEGA\_I(kHz) | (-75kHz, +75kHz)，for all packets |
| OMEGA\_O(kHz) | (-10kHz, 10kHz)，for all block |
| OMEGA\_IO(kHz) | (-75kHz, +75kHz)，for all block |
| DEVM Average(%) | (0, 20) @ 2M |
| DEVM Peak(%) | (0, 35) @ 2M |
| EdrprobEVM99pass(%) | (0, 30) @ 2M |
| EdrPowDiffdB(dB) | (-4dBm, 1dBm) |

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| Table 10 | | | | | | | | | |
| Data rate | 2M\_DH5\_1010 | | | | | | | | |
| Channel | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 78 |
| Frequency | 2402 | 2412 | 2422 | 2432 | 2442 | 2452 | 2462 | 2472 | 2480 |
| Output Power(dBm) | 2.35 | 2.50 | 2.56 | 2.43 | 2.62 | 2.56 | 2.56 | 2.69 | 2.88 |
| Init Freq Error(kHz) | -21.69 | -19.30 | -20.21 | -21.94 | -19.33 | -20.11 | -22.15 | -19.70 | -20.63 |
| OMEGA\_I(kHz) | -20.45 | -20.28 | -20.00 | -20.42 | -20.83 | -20.43 | -20.73 | -21.11 | -20.90 |
| OMEGA\_O(kHz) | -2.66 | -1.93 | -1.48 | -1.71 | -1.88 | -1.57 | -2.25 | -2.13 | -2.66 |
| OMEGA\_IO(kHz) | -23.12 | -22.22 | -21.48 | -22.13 | -22.71 | -22.00 | -22.99 | -23.24 | -23.56 |
| DEVM Average(%) | 4.25 | 4.24 | 4.21 | 4.11 | 4.18 | 4.20 | 4.34 | 4.39 | 4.71 |
| DEVM Peak(%) | 6.37 | 6.73 | 6.58 | 6.62 | 6.78 | 6.45 | 6.69 | 7.00 | 7.42 |
| EdrprobEVM99pass(%) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| EdrPowDiffdB(dB) | -0.17 | -0.17 | -0.19 | -0.18 | -0.16 | -0.17 | -0.18 | -0.17 | -0.18 |
| **Pass/Fail** | pass | pass | pass | pass | pass | pass | pass | pass | pass |
| Power by channel | bt_pwr_2M_DH5_1010 | | | | | | | | |
| Init Freq Error by channel | bt_Init_Freq_Err_2M_DH5_1010 | | | | | | | | |
| DEVM Average(%) by channel | bt_EdrEVMAv_2M_DH5_1010 | | | | | | | | |
| DEVM Peak(%) | bt_EdrEVMpk_2M_DH5_1010 | | | | | | | | |
| EdrPowDiffdB by channel | bt_EdrPowDiffdB_2M_DH5_1010 | | | | | | | | |
| **Note:** | **2M\_DH5\_1010 meets the test requirements** | | | | | | | | |

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| Table 11 | | | | | | | | | |
| Data rate | 2M\_DH5\_00001111 | | | | | | | | |
| Channel | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 78 |
| Frequency | 2402 | 2412 | 2422 | 2432 | 2442 | 2452 | 2462 | 2472 | 2480 |
| Output Power(dBm) | 2.32 | 2.47 | 2.53 | 2.42 | 2.59 | 2.56 | 2.53 | 2.65 | 2.86 |
| Init Freq Error(kHz) | -22.28 | -19.21 | -20.35 | -21.96 | -20.17 | -20.13 | -22.70 | -20.13 | -20.29 |
| OMEGA\_I(kHz) | -20.51 | -20.57 | -19.98 | -20.66 | -19.75 | -20.76 | -20.45 | -20.50 | -20.43 |
| OMEGA\_O(kHz) | -2.22 | -2.21 | -2.42 | -2.84 | -2.63 | -1.90 | -1.31 | -1.71 | -1.99 |
| OMEGA\_IO(kHz) | -22.73 | -22.78 | -22.40 | -23.50 | -22.38 | -22.66 | -21.76 | -22.21 | -22.42 |
| DEVM Average(%) | 4.94 | 4.88 | 5.10 | 4.89 | 5.09 | 5.28 | 5.19 | 5.38 | 5.35 |
| DEVM Peak(%) | 8.19 | 8.55 | 8.71 | 8.59 | 8.55 | 8.69 | 8.81 | 9.12 | 8.79 |
| EdrprobEVM99pass(%) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| EdrPowDiffdB(dB) | -0.20 | -0.20 | -0.22 | -0.22 | -0.23 | -0.21 | -0.22 | -0.20 | -0.22 |
| **Pass/Fail** | pass | pass | pass | pass | pass | pass | pass | pass | pass |
| Power by channel | bt_pwr_2M_DH5_00001111 | | | | | | | | |
| Init Freq Error by channel | bt_Init_Freq_Err_2M_DH5_00001111 | | | | | | | | |
| DEVM Average(%) by channel | bt_EdrEVMAv_2M_DH5_00001111 | | | | | | | | |
| DEVM Peak(%) | bt_EdrEVMpk_2M_DH5_00001111 | | | | | | | | |
| EdrPowDiffdB by channel | bt_EdrPowDiffdB_2M_DH5_00001111 | | | | | | | | |
| **Note:** | **2M\_DH5\_00001111 meets the test requirements** | | | | | | | | |

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| Table 12 | | | | | | | | | |
| Data rate | 2M\_DH5\_prbs9 | | | | | | | | |
| Channel | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 78 |
| Frequency | 2402 | 2412 | 2422 | 2432 | 2442 | 2452 | 2462 | 2472 | 2480 |
| Output Power(dBm) | 2.42 | 2.57 | 2.62 | 2.51 | 2.68 | 2.64 | 2.62 | 2.76 | 2.96 |
| Init Freq Error(kHz) | -22.07 | -19.47 | -20.19 | -22.29 | -19.60 | -19.25 | -22.66 | -19.10 | -20.08 |
| OMEGA\_I(kHz) | -20.61 | -19.72 | -19.69 | -20.47 | -20.57 | -20.33 | -20.45 | -20.71 | -20.65 |
| OMEGA\_O(kHz) | -2.70 | -2.04 | -1.32 | -2.02 | -1.94 | -2.25 | -2.14 | -2.95 | -1.89 |
| OMEGA\_IO(kHz) | -23.31 | -21.75 | -21.01 | -22.49 | -22.52 | -22.58 | -22.59 | -23.66 | -22.54 |
| DEVM Average(%) | 5.26 | 5.22 | 5.07 | 5.19 | 5.41 | 5.11 | 5.28 | 5.44 | 5.35 |
| DEVM Peak(%) | 11.21 | 11.42 | 10.52 | 11.18 | 11.28 | 10.92 | 11.28 | 11.51 | 11.47 |
| EdrprobEVM99pass(%) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| EdrPowDiffdB(dB) | -0.12 | -0.13 | -0.14 | -0.13 | -0.12 | -0.13 | -0.12 | -0.12 | -0.13 |
| **Pass/Fail** | pass | pass | pass | pass | pass | pass | pass | pass | pass |
| Power by channel | bt_pwr_2M_DH5_prbs9 | | | | | | | | |
| Init Freq Error by channel | bt_Init_Freq_Err_2M_DH5_prbs9 | | | | | | | | |
| DEVM Average(%) by channel | bt_EdrEVMAv_2M_DH5_prbs9 | | | | | | | | |
| DEVM Peak(%) | bt_EdrEVMpk_2M_DH5_prbs9 | | | | | | | | |
| EdrPowDiffdB by channel | bt_EdrPowDiffdB_2M_DH5_prbs9 | | | | | | | | |
| **Note:** | **2M\_DH5\_prbs9 meets the test requirements** | | | | | | | | |

2.4Enhanced data rate 3M TX

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| Table 13 | |
| Specification | Requirement |
| Output Power(dBm) | (-3, +3) @power\_level=4； |
| Init Freq Error(kHz) | (-75,+75) |
| OMEGA\_I(kHz) | (-75kHz, +75kHz)，for all packets |
| OMEGA\_O(kHz) | (-10kHz, 10kHz)，for all block |
| OMEGA\_IO(kHz) | (-75kHz, +75kHz)，for all block |
| DEVM Average(%) | (0, 13)@ 3M |
| DEVM Peak(%) | (0, 25)@ 3M |
| EdrprobEVM99pass(%) | (0, 20)@ 3M |
| EdrPowDiffdB(dB) | (-4dBm, 1dBm) |

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| Table 14 | | | | | | | | | |
| Data rate | 3M\_DH5\_1010 | | | | | | | | |
| Channel | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 78 |
| Frequency | 2402 | 2412 | 2422 | 2432 | 2442 | 2452 | 2462 | 2472 | 2480 |
| Output Power(dBm) | 2.42 | 2.57 | 2.61 | 2.50 | 2.67 | 2.63 | 2.61 | 2.75 | 2.94 |
| Init Freq Error(kHz) | -22.15 | -19.13 | -19.84 | -22.04 | -19.61 | -19.68 | -22.10 | -19.35 | -19.88 |
| OMEGA\_I(kHz) | -19.99 | -19.39 | -19.73 | -20.56 | -19.57 | -20.47 | -20.55 | -20.35 | -20.61 |
| OMEGA\_O(kHz) | -2.27 | -2.31 | -2.03 | -2.60 | -2.32 | -1.70 | -2.62 | -1.99 | -1.88 |
| OMEGA\_IO(kHz) | -22.26 | -21.70 | -21.76 | -23.16 | -21.90 | -22.18 | -23.17 | -22.35 | -22.49 |
| DEVM Average(%) | 6.70 | 6.60 | 6.65 | 6.63 | 6.58 | 6.64 | 6.63 | 6.57 | 6.65 |
| DEVM Peak(%) | 10.42 | 10.22 | 10.05 | 10.30 | 10.31 | 10.20 | 10.10 | 10.22 | 10.25 |
| EdrprobEVM99pass(%) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| EdrPowDiffdB(dB) | -0.14 | -0.14 | -0.15 | -0.12 | -0.15 | -0.13 | -0.11 | -0.12 | -0.11 |
| **Pass/Fail** | pass | pass | pass | pass | pass | pass | pass | pass | pass |
| Power by channel | bt_pwr_3M_DH5_1010 | | | | | | | | |
| Init Freq Error by channel | bt_Init_Freq_Err_3M_DH5_1010 | | | | | | | | |
| DEVM Average(%) by channel | bt_EdrEVMAv_3M_DH5_1010 | | | | | | | | |
| DEVM Peak(%) | bt_EdrEVMpk_3M_DH5_1010 | | | | | | | | |
| EdrPowDiffdB by channel | bt_EdrPowDiffdB_3M_DH5_1010 | | | | | | | | |
| **Note:** | **3M\_DH5\_1010 meets the test requirements** | | | | | | | | |

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| Table 15 | | | | | | | | | |
| Data rate | 3M\_DH5\_00001111 | | | | | | | | |
| Channel | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 78 |
| Frequency | 2402 | 2412 | 2422 | 2432 | 2442 | 2452 | 2462 | 2472 | 2480 |
| Output Power(dBm) | 2.39 | 2.55 | 2.62 | 2.47 | 2.67 | 2.66 | 2.63 | 2.77 | 2.97 |
| Init Freq Error(kHz) | -22.57 | -19.59 | -19.53 | -22.38 | -19.68 | -19.81 | -22.52 | -20.00 | -20.42 |
| OMEGA\_I(kHz) | -20.49 | -19.99 | -19.65 | -20.58 | -20.25 | -19.99 | -19.85 | -19.55 | -20.36 |
| OMEGA\_O(kHz) | -2.39 | -1.90 | -2.51 | -2.79 | -2.48 | -1.89 | -2.92 | -2.04 | -2.09 |
| OMEGA\_IO(kHz) | -22.88 | -21.89 | -22.16 | -23.36 | -22.73 | -21.87 | -22.77 | -21.60 | -22.45 |
| DEVM Average(%) | 4.45 | 5.02 | 5.00 | 4.73 | 4.82 | 4.89 | 5.01 | 5.67 | 5.41 |
| DEVM Peak(%) | 7.70 | 8.55 | 7.96 | 8.03 | 8.33 | 7.71 | 8.20 | 9.24 | 8.96 |
| EdrprobEVM99pass(%) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| EdrPowDiffdB(dB) | -0.14 | -0.16 | -0.14 | -0.15 | -0.15 | -0.11 | -0.12 | -0.13 | -0.14 |
| **Pass/Fail** | pass | pass | pass | pass | pass | pass | pass | pass | pass |
| Power by channel | bt_pwr_3M_DH5_00001111 | | | | | | | | |
| Init Freq Error by channel | bt_Init_Freq_Err_3M_DH5_00001111 | | | | | | | | |
| DEVM Average(%) by channel | bt_EdrEVMAv_3M_DH5_00001111 | | | | | | | | |
| DEVM Peak(%) | bt_EdrEVMpk_3M_DH5_00001111 | | | | | | | | |
| EdrPowDiffdB by channel | bt_EdrPowDiffdB_3M_DH5_00001111 | | | | | | | | |
| **Note:** | **3M\_DH5\_00001111 meets the test requirements** | | | | | | | | |

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| Table 16 | | | | | | | | | |
| Data rate | 3M\_DH5\_prbs9 | | | | | | | | |
| Channel | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 78 |
| Frequency | 2402 | 2412 | 2422 | 2432 | 2442 | 2452 | 2462 | 2472 | 2480 |
| Output Power(dBm) | 2.43 | 2.58 | 2.62 | 2.51 | 2.69 | 2.64 | 2.65 | 2.77 | 2.97 |
| Init Freq Error(kHz) | -22.00 | -18.76 | -19.45 | -21.49 | -18.78 | -20.17 | -22.10 | -19.06 | -19.79 |
| OMEGA\_I(kHz) | -19.97 | -19.39 | -20.18 | -19.99 | -20.19 | -19.89 | -19.80 | -19.37 | -20.39 |
| OMEGA\_O(kHz) | -2.62 | -2.01 | -1.78 | -1.90 | -1.52 | -1.98 | -1.74 | -2.48 | -2.72 |
| OMEGA\_IO(kHz) | -22.59 | -21.40 | -21.96 | -21.89 | -21.71 | -21.87 | -21.54 | -21.85 | -23.11 |
| DEVM Average(%) | 5.18 | 5.17 | 5.09 | 5.26 | 5.16 | 5.17 | 5.24 | 5.25 | 5.29 |
| DEVM Peak(%) | 10.56 | 10.38 | 10.12 | 10.82 | 10.80 | 10.10 | 10.12 | 10.34 | 10.83 |
| EdrprobEVM99pass(%) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| EdrPowDiffdB(dB) | -0.13 | -0.13 | -0.12 | -0.13 | -0.12 | -0.12 | -0.14 | -0.13 | -0.12 |
| **Pass/Fail** | pass | pass | pass | pass | pass | pass | pass | pass | pass |
| Power by channel | bt_pwr_3M_DH5_prbs9 | | | | | | | | |
| Init Freq Error by channel | bt_Init_Freq_Err_3M_DH5_prbs9 | | | | | | | | |
| DEVM Average(%) by channel | bt_EdrEVMAv_3M_DH5_prbs9 | | | | | | | | |
| DEVM Peak(%) | bt_EdrEVMpk_3M_DH5_prbs9 | | | | | | | | |
| EdrPowDiffdB by channel | bt_EdrPowDiffdB_3M_DH5_prbs9 | | | | | | | | |
| **Note:** | **3M\_DH5\_prbs9 meets the test requirements** | | | | | | | | |

2.5 BLE TX

Requirement

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| Table 17 | |
| Specification | Requirement |
| Frequency range(MHz) | (2400,2483.5) |
| Output Power(dBm) | (-3, +3) @power\_level=4； |
| Init Freq Error(kHz) | (-150kHz,+150kHz) |
| deltaF2Max(kHz) | (185kHz ,500kHz)(at least 99%) |
| deltaF2Avg(kHz) | (180kHz, 500kHz) |
| deltaF1Avg(kHz) | (225kH, 275kHz) |

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| Table1 18 | | | | | | | | | |
| Data rate | LE\_1010 | | | | | | | | |
| Channel | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 39 |
| Frequency | 2402 | 2412 | 2422 | 2432 | 2442 | 2452 | 2462 | 2472 | 2480 |
| Output Power(dBm) | 2.17 | 2.19 | 2.46 | 2.30 | 2.02 | 2.29 | 2.42 | 2.78 | 2.81 |
| Init Freq Error(kHz) | -18.27 | -20.09 | -20.44 | -18.62 | -20.91 | -20.60 | -18.84 | -21.33 | -19.59 |
| deltaF2Max(kHz) | 226.54 | 229.45 | 222.19 | 224.86 | 229.31 | 226.93 | 230.65 | 223.54 | 227.09 |
| deltaF2Avg(kHz) | 219.49 | 222.99 | 216.07 | 217.89 | 222.63 | 220.95 | 223.97 | 217.28 | 220.95 |
| **Pass/Fail** | pass | pass | pass | pass | pass | pass | pass | pass | pass |
| Power by channel | bt_pwr_LE_1010 | | | | | | | | |
| Init Freq Error by channel | bt_Init_Freq_Err_LE_1010 | | | | | | | | |
| deltaF2Max by channel | bt_deltaF2Max_LE_1010 | | | | | | | | |
| deltaF2Avg by channel | bt_deltaF2Avg_LE_1010_pwr | | | | | | | | |
| **Note：** | **LE\_1010 meets the test requirements** | | | | | | | | |

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| Table1 19 | | | | | | | | | |
| Data rate | LE\_00001111 | | | | | | | | |
| Channel | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 39 |
| Frequency | 2402 | 2412 | 2422 | 2432 | 2442 | 2452 | 2462 | 2472 | 2480 |
| Output Power(dBm) | 2.16 | 2.31 | 2.35 | 2.23 | 2.16 | 2.36 | 2.59 | 2.71 | 2.91 |
| Init Freq Error(kHz) | -18.65 | -20.66 | -20.51 | -18.69 | -20.88 | -20.81 | -19.05 | -20.35 | -20.35 |
| deltaF1Avg(kHz) | 243.87 | 242.30 | 245.79 | 243.72 | 238.71 | 243.31 | 244.08 | 241.86 | 244.98 |
| **Pass/Fail** | pass | pass | pass | pass | pass | pass | pass | pass | pass |
| Power by channel | bt_pwr_LE_00001111 | | | | | | | | |
| Init Freq Error by channel | bt_Init_Freq_Err_LE_00001111 | | | | | | | | |
| deltaF1Avg by channel | bt_deltaF1Avg_LE_00001111 | | | | | | | | |
| **Note：** | **LE\_00001111 meets the test requirements** | | | | | | | | |

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| Table1 20 | | | | | | | | | |
| Data rate | LE\_prbs9 | | | | | | | | |
| Channel | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 39 |
| Frequency | 2402 | 2412 | 2422 | 2432 | 2442 | 2452 | 2462 | 2472 | 2480 |
| Output Power(dBm) | 2.15 | 2.29 | 2.34 | 2.22 | 2.15 | 2.35 | 2.58 | 2.71 | 2.91 |
| Init Freq Error(kHz) | -18.43 | -20.85 | -20.47 | -18.86 | -20.87 | -20.62 | -18.81 | -21.18 | -20.16 |
| **Pass/Fail** | pass | pass | pass | pass | pass | pass | pass | pass | pass |
| Power by channel | bt_pwr_LE_prbs9 | | | | | | | | |
| Init Freq Error by channel | bt_Init_Freq_Err_LE_prbs9 | | | | | | | | |
| **Note:** | **LE\_prbs9 meets the test requirements** | | | | | | | | |