

1. Frequency Stability

1.1 GSM850

1.1.1 Test Result

| Band: GSM850 | | | | | | | |
|--------------|-----------------|------------|---------------|------------------|-----------------------|-------------|---------|
| Network | Frequency (MHz) | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) | | Verdict |
| | | | | | Result | Limit | |
| GPRS | 824.2 | 20 | 3.3 | -13.689 | -0.0166 | -2.5 to 2.5 | Pass |
| | | | 3.6 | -15.433 | -0.0187 | -2.5 to 2.5 | Pass |
| | | | 4.2 | -16.950 | -0.0206 | -2.5 to 2.5 | Pass |
| | | -30 | 3.6 | -17.273 | -0.0210 | -2.5 to 2.5 | Pass |
| | | -20 | 3.6 | -8.201 | -0.0100 | -2.5 to 2.5 | Pass |
| | | -10 | 3.6 | -16.918 | -0.0205 | -2.5 to 2.5 | Pass |
| | | 0 | 3.6 | -14.077 | -0.0171 | -2.5 to 2.5 | Pass |
| | | 10 | 3.6 | -11.106 | -0.0135 | -2.5 to 2.5 | Pass |
| | | 30 | 3.6 | -16.304 | -0.0198 | -2.5 to 2.5 | Pass |
| | | 40 | 3.6 | -10.913 | -0.0132 | -2.5 to 2.5 | Pass |
| | | 50 | 3.6 | -14.303 | -0.0174 | -2.5 to 2.5 | Pass |
| | 836.6 | 20 | 3.3 | -12.785 | -0.0153 | -2.5 to 2.5 | Pass |
| | | | 3.6 | -16.272 | -0.0195 | -2.5 to 2.5 | Pass |
| | | | 4.2 | -11.623 | -0.0139 | -2.5 to 2.5 | Pass |
| | | -30 | 3.6 | -18.177 | -0.0217 | -2.5 to 2.5 | Pass |
| | | -20 | 3.6 | -16.208 | -0.0194 | -2.5 to 2.5 | Pass |
| | | -10 | 3.6 | -19.210 | -0.0230 | -2.5 to 2.5 | Pass |
| | | 0 | 3.6 | -14.496 | -0.0173 | -2.5 to 2.5 | Pass |
| | | 10 | 3.6 | -15.110 | -0.0181 | -2.5 to 2.5 | Pass |
| | | 30 | 3.6 | -15.626 | -0.0187 | -2.5 to 2.5 | Pass |
| | | 40 | 3.6 | -14.916 | -0.0178 | -2.5 to 2.5 | Pass |
| | | 50 | 3.6 | -15.077 | -0.0180 | -2.5 to 2.5 | Pass |
| | 848.8 | 20 | 3.3 | -13.043 | -0.0154 | -2.5 to 2.5 | Pass |
| | | | 3.6 | -11.526 | -0.0136 | -2.5 to 2.5 | Pass |
| | | | 4.2 | -12.333 | -0.0145 | -2.5 to 2.5 | Pass |
| | | -30 | 3.6 | -10.364 | -0.0122 | -2.5 to 2.5 | Pass |
| | | -20 | 3.6 | -16.078 | -0.0189 | -2.5 to 2.5 | Pass |
| | | -10 | 3.6 | -9.912 | -0.0117 | -2.5 to 2.5 | Pass |
| | | 0 | 3.6 | -10.267 | -0.0121 | -2.5 to 2.5 | Pass |
| | | 10 | 3.6 | -15.433 | -0.0182 | -2.5 to 2.5 | Pass |
| | | 30 | 3.6 | -14.367 | -0.0169 | -2.5 to 2.5 | Pass |
| | | 40 | 3.6 | -13.625 | -0.0161 | -2.5 to 2.5 | Pass |
| EGPRS | 824.2 | 20 | 3.3 | -15.465 | -0.0188 | -2.5 to 2.5 | Pass |
| | | | 3.6 | -11.300 | -0.0137 | -2.5 to 2.5 | Pass |
| | | | 4.2 | -2.647 | -0.0032 | -2.5 to 2.5 | Pass |
| | | -30 | 3.6 | -6.167 | -0.0075 | -2.5 to 2.5 | Pass |
| | | -20 | 3.6 | -0.517 | -0.0006 | -2.5 to 2.5 | Pass |
| | | -10 | 3.6 | 1.162 | 0.0014 | -2.5 to 2.5 | Pass |
| | | 0 | 3.6 | -5.876 | -0.0071 | -2.5 to 2.5 | Pass |
| | | 10 | 3.6 | 3.196 | 0.0039 | -2.5 to 2.5 | Pass |
| | | 30 | 3.6 | -7.716 | -0.0094 | -2.5 to 2.5 | Pass |
| | | 40 | 3.6 | -3.099 | -0.0038 | -2.5 to 2.5 | Pass |
| | | 50 | 3.6 | -4.229 | -0.0051 | -2.5 to 2.5 | Pass |
| | 836.6 | 20 | 3.3 | -2.389 | -0.0029 | -2.5 to 2.5 | Pass |
| | | | 3.6 | -12.624 | -0.0151 | -2.5 to 2.5 | Pass |

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|--|-------|-----|-----|---------|---------|-------------|------|
| | | | 4.2 | -3.681 | -0.0044 | -2.5 to 2.5 | Pass |
| | | -30 | 3.6 | -12.043 | -0.0144 | -2.5 to 2.5 | Pass |
| | | -20 | 3.6 | -10.009 | -0.0120 | -2.5 to 2.5 | Pass |
| | | -10 | 3.6 | -3.681 | -0.0044 | -2.5 to 2.5 | Pass |
| | | 0 | 3.6 | -9.815 | -0.0117 | -2.5 to 2.5 | Pass |
| | | 10 | 3.6 | -4.520 | -0.0054 | -2.5 to 2.5 | Pass |
| | | 30 | 3.6 | -12.430 | -0.0149 | -2.5 to 2.5 | Pass |
| | | 40 | 3.6 | -7.200 | -0.0086 | -2.5 to 2.5 | Pass |
| | | 50 | 3.6 | -7.555 | -0.0090 | -2.5 to 2.5 | Pass |
| | 848.8 | 20 | 3.3 | -0.743 | -0.0009 | -2.5 to 2.5 | Pass |
| | | | 3.6 | -10.009 | -0.0118 | -2.5 to 2.5 | Pass |
| | | | 4.2 | -7.426 | -0.0087 | -2.5 to 2.5 | Pass |
| | | -30 | 3.6 | -10.525 | -0.0124 | -2.5 to 2.5 | Pass |
| | | -20 | 3.6 | -11.817 | -0.0139 | -2.5 to 2.5 | Pass |
| | | -10 | 3.6 | -10.461 | -0.0123 | -2.5 to 2.5 | Pass |
| | | 0 | 3.6 | -13.334 | -0.0157 | -2.5 to 2.5 | Pass |
| | | 10 | 3.6 | -10.461 | -0.0123 | -2.5 to 2.5 | Pass |
| | | 30 | 3.6 | -12.139 | -0.0143 | -2.5 to 2.5 | Pass |
| | | 40 | 3.6 | -7.652 | -0.0090 | -2.5 to 2.5 | Pass |
| | | 50 | 3.6 | -10.105 | -0.0119 | -2.5 to 2.5 | Pass |

2. Frequency Stability

2.1 PCS1900

2.1.1 Test Result

| Band: PCS1900 | | | | | | | |
|---------------|-----------------|------------|---------------|------------------|-----------------------|-------------|---------|
| Network | Frequency (MHz) | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) | | Verdict |
| | | | | | Result | Limit | |
| GPRS | 1850.2 | 20 | 3.3 | -5.166 | -0.0028 | -2.5 to 2.5 | Pass |
| | | | 3.6 | -2.099 | -0.0011 | -2.5 to 2.5 | Pass |
| | | | 4.2 | -2.389 | -0.0013 | -2.5 to 2.5 | Pass |
| | | -30 | 3.6 | -5.941 | -0.0032 | -2.5 to 2.5 | Pass |
| | | -20 | 3.6 | -12.269 | -0.0066 | -2.5 to 2.5 | Pass |
| | | -10 | 3.6 | -0.129 | -0.0001 | -2.5 to 2.5 | Pass |
| | | 0 | 3.6 | -2.195 | -0.0012 | -2.5 to 2.5 | Pass |
| | | 10 | 3.6 | -13.431 | -0.0073 | -2.5 to 2.5 | Pass |
| | | 30 | 3.6 | -8.427 | -0.0046 | -2.5 to 2.5 | Pass |
| | | 40 | 3.6 | -12.010 | -0.0065 | -2.5 to 2.5 | Pass |
| | | 50 | 3.6 | -1.582 | -0.0009 | -2.5 to 2.5 | Pass |
| | 1880 | 20 | 3.3 | -6.554 | -0.0035 | -2.5 to 2.5 | Pass |
| | | | 3.6 | -6.425 | -0.0034 | -2.5 to 2.5 | Pass |
| | | | 4.2 | -15.433 | -0.0082 | -2.5 to 2.5 | Pass |
| | | -30 | 3.6 | 3.422 | 0.0018 | -2.5 to 2.5 | Pass |
| | | -20 | 3.6 | -3.455 | -0.0018 | -2.5 to 2.5 | Pass |
| | | -10 | 3.6 | -3.099 | -0.0016 | -2.5 to 2.5 | Pass |
| | | 0 | 3.6 | -1.969 | -0.0010 | -2.5 to 2.5 | Pass |
| | | 10 | 3.6 | -15.917 | -0.0085 | -2.5 to 2.5 | Pass |
| | | 30 | 3.6 | -7.297 | -0.0039 | -2.5 to 2.5 | Pass |
| | | 40 | 3.6 | -10.073 | -0.0054 | -2.5 to 2.5 | Pass |
| | | 50 | 3.6 | -11.881 | -0.0063 | -2.5 to 2.5 | Pass |
| | 1909.8 | 20 | 3.3 | -5.553 | -0.0029 | -2.5 to 2.5 | Pass |
| | | | 3.6 | -10.267 | -0.0054 | -2.5 to 2.5 | Pass |

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|-------|--------|-----|-----|---------|---------|-------------|------|
| | | | 4.2 | -2.454 | -0.0013 | -2.5 to 2.5 | Pass |
| | | -30 | 3.6 | 0.775 | 0.0004 | -2.5 to 2.5 | Pass |
| | | -20 | 3.6 | -9.137 | -0.0048 | -2.5 to 2.5 | Pass |
| | | -10 | 3.6 | 3.487 | 0.0018 | -2.5 to 2.5 | Pass |
| | | 0 | 3.6 | -6.425 | -0.0034 | -2.5 to 2.5 | Pass |
| | | 10 | 3.6 | -7.361 | -0.0039 | -2.5 to 2.5 | Pass |
| | | 30 | 3.6 | -3.616 | -0.0019 | -2.5 to 2.5 | Pass |
| | | 40 | 3.6 | -1.065 | -0.0006 | -2.5 to 2.5 | Pass |
| | | 50 | 3.6 | -1.001 | -0.0005 | -2.5 to 2.5 | Pass |
| EGPRS | 1850.2 | 20 | 3.3 | 2.163 | 0.0012 | -2.5 to 2.5 | Pass |
| | | | 3.6 | -10.687 | -0.0058 | -2.5 to 2.5 | Pass |
| | | | 4.2 | -3.777 | -0.0020 | -2.5 to 2.5 | Pass |
| | | -30 | 3.6 | -5.359 | -0.0029 | -2.5 to 2.5 | Pass |
| | | -20 | 3.6 | 1.421 | 0.0008 | -2.5 to 2.5 | Pass |
| | | -10 | 3.6 | 2.389 | 0.0013 | -2.5 to 2.5 | Pass |
| | | 0 | 3.6 | -2.906 | -0.0016 | -2.5 to 2.5 | Pass |
| | | 10 | 3.6 | -2.551 | -0.0014 | -2.5 to 2.5 | Pass |
| | | 30 | 3.6 | -4.585 | -0.0025 | -2.5 to 2.5 | Pass |
| | | 40 | 3.6 | -8.297 | -0.0045 | -2.5 to 2.5 | Pass |
| | | 50 | 3.6 | 8.071 | 0.0044 | -2.5 to 2.5 | Pass |
| | 1880 | 20 | 3.3 | 0.839 | 0.0004 | -2.5 to 2.5 | Pass |
| | | | 3.6 | 3.939 | 0.0021 | -2.5 to 2.5 | Pass |
| | | | 4.2 | 13.108 | 0.0070 | -2.5 to 2.5 | Pass |
| | | -30 | 3.6 | 7.071 | 0.0038 | -2.5 to 2.5 | Pass |
| | | -20 | 3.6 | 13.334 | 0.0071 | -2.5 to 2.5 | Pass |
| | | -10 | 3.6 | 0.710 | 0.0004 | -2.5 to 2.5 | Pass |
| | | 0 | 3.6 | -6.070 | -0.0032 | -2.5 to 2.5 | Pass |
| | | 10 | 3.6 | 5.489 | 0.0029 | -2.5 to 2.5 | Pass |
| | | 30 | 3.6 | 9.557 | 0.0051 | -2.5 to 2.5 | Pass |
| | | 40 | 3.6 | 12.301 | 0.0065 | -2.5 to 2.5 | Pass |
| | | 50 | 3.6 | 1.098 | 0.0006 | -2.5 to 2.5 | Pass |
| | 1909.8 | 20 | 3.3 | -2.486 | -0.0013 | -2.5 to 2.5 | Pass |
| | | | 3.6 | 1.969 | 0.0010 | -2.5 to 2.5 | Pass |
| | | | 4.2 | 7.716 | 0.0040 | -2.5 to 2.5 | Pass |
| | | -30 | 3.6 | -11.913 | -0.0062 | -2.5 to 2.5 | Pass |
| | | -20 | 3.6 | 4.940 | 0.0026 | -2.5 to 2.5 | Pass |
| | | -10 | 3.6 | 3.261 | 0.0017 | -2.5 to 2.5 | Pass |
| | | 0 | 3.6 | -5.650 | -0.0030 | -2.5 to 2.5 | Pass |
| | | 10 | 3.6 | -6.715 | -0.0035 | -2.5 to 2.5 | Pass |
| | | 30 | 3.6 | 4.068 | 0.0021 | -2.5 to 2.5 | Pass |
| | | 40 | 3.6 | -7.942 | -0.0042 | -2.5 to 2.5 | Pass |
| | | 50 | 3.6 | -9.137 | -0.0048 | -2.5 to 2.5 | Pass |