

# **TIWI FAMILY INI FILE RADIO PARAMETER USER GUIDE**



**LS RESEARCH, LLC**  
WIRELESS PRODUCT DEVELOPMENT

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## 1 Introduction

### 1.1 Purpose & Scope

The purpose of this document is to provide details regarding configuring an ini file for use with any module in the TiWi family (TiWi-R2, TiWi-BLE, TiWi5, etc). The document will detail the responsibilities of module integrator (OEM).

### 1.2 Audience

This document is intended to be read by engineers and technical management. A general knowledge of common engineering practices is assumed.

### 1.3 Applicable Documents

### 1.4 Revision History

Date	Change Description	Revision
9-23-2011	Initial Release	1.0

**Table 1 Revision History**

## 2 2.4GHz TiWi Modules (TiWi-R2 and TiWi-BLE)

### 2.1 Overview

The settings below should replace the default INI file settings in order to allow the TiWi-R2 and TiWi-BLE to operate correctly.

### 2.2 Radio Parameters

```
TXBiPFEMManufacturer = 1
STRFRefClock = 2
Single_Dual_Band_Solution = 0
```

```
RxTraceInsertionLoss_2_4G = 0C
TXTraceLoss_2_4G = 0C
```

```
TXBiPReferencePDvoltage_2_4G = 375 # decimal value
TxBiPReferencePower_2_4G = 128 # decimal value
TxBiPOffsetdB_2_4G = 12 # decimal value
TxPerRatePowerLimits_2_4G_Normal = 15,1B,1F,21,25,26
TxPerRatePowerLimits_2_4G_Degraded = 12,1B,1F,20,24,25
TxPerRatePowerLimits_2_4G_Extreme = 12,18,1B,1C,20,21
DegradedLowToNormalThr_2_4G = 20
NormalToDegradedHighThr_2_4G = 2D
TxPerChannelPowerLimits_2_4G_11b = 26,26,26,26,26,26,26,26,26,26,26,15,27
TxPerChannelPowerLimits_2_4G_OFDM = 27,27,27,27,27,27,27,27,27,27,27,15,2A
TxPDVsRateOffsets_2_4G = 01,02,02,02,00
TxIbiasTable_2_4G = 11,11,15,11,15,0f
RxFemInsertionLoss_2_4G = 14
```





## **4 Contacting LS Research**

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