HCS412

HCS412 Silicon Revision B0 Errata Sheet

1.0 ERRATA

The HCS412 (silicon revision B0) conforms to the device datasheet (DS41099A) with the exceptions described below.

1.1 <u>Transponder Mode</u>

- This errata sheet applies only when the HCS412 is used in TRANSPONDER mode, i.e. when configuration option S2LC is configured such that pin LC1 will be used as a transponder interface pin.
- On revision B0 silicon the bias voltage on LC1 may be sufficiently large to cause unintended turning on of the device and consequential drain of the battery.
- 3. Therefore to ensure reliable device operation when used as a transponder, a 4.7 M Ω 10% resistor must be connected between pin 3 (LC1) and pin 5 (Ground). The resistor ensures sufficient loading of the internal biasing circuitry to cause a sufficient reduction in the LC1 bias voltage.
- 4. Designers intending transponder operation should carefully measure LC input voltages to the LC0/LC1 pins since use of revision B0 devices without the resistor may lead to extremely high sensitivity which may cause unrealistic expectations regarding transponder operating range due to sensitivity as described above.

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- The PICmicro family meets the specifications contained in the Microchip Data Sheet.
- Microchip believes that its family of PICmicro microcontrollers is one of the most secure products of its kind on the market today, when used in the intended manner and under normal conditions.
- There are dishonest and possibly illegal methods used to breach the code protection feature. All of these methods, to our knowledge, require using the PICmicro microcontroller in a manner outside the operating specifications contained in the data sheet. The person doing so may be engaged in theft of intellectual property.
- · Microchip is willing to work with the customer who is concerned about the integrity of their code.
- Neither Microchip nor any other semiconductor manufacturer can guarantee the security of their code. Code protection does not mean that we are guaranteeing the product as "unbreakable".
- Code protection is constantly evolving. We at Microchip are committed to continuously improving the code protection features of our product.

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