
PIC10F220/222 Rev. B Silicon/Data Sheet Errata

The PIC10F220/222 silicon Rev. B. parts you have received conform functionally to the Device Data Sheet (DS41270E), except for the anomalies described below.

1. Module: Analog-to-Digital (A/D) Converter

The A/D Converter does not meet the design target. The specifications listed below in Table 10-5 of DS41270E apply to silicon Rev. B.

TABLE 10-5: A/D CONVERTER CHARACTERISTICS

| Standard Operating Conditions (unless otherwise stated) Operating temperature $-40^{\circ}\text{C} \leq T_A \leq +125^{\circ}\text{C}$ | | | | | | | |
|---|-----------------|--|----------|---------------------------|--------------------------------|---------------|-----------------------------------|
| Param No. | Sym. | Characteristic | Min. | Typ† | Max. | Units | Conditions |
| A01 | NR | Resolution | — | — | 8 bits | bit | |
| A03 | EIL | Integral Error | — | — | ± 1.5 | LSb | |
| A04 | EDL | Differential Error | — | — | $-1 \leq \text{EDL} \leq +1.5$ | LSb | |
| A05 | EFS | Full-scale Range | 2.0* | — | 5.5* | V | |
| A06 | EOFF | Offset Error | — | — | ± 1.5 | LSb | |
| A07 | EGN | Gain Error | — | — | ± 1.8 | LSb | |
| A10 | — | Monotonicity | — | guaranteed ⁽¹⁾ | — | — | $V_{SS} \leq V_{AIN} \leq V_{DD}$ |
| A25 | VAIN | Analog Input Voltage | V_{SS} | — | V_{DD} | V | |
| A30 | ZAIN | Recommended Impedence of Analog Voltage Source | — | — | 10 | k Ω | |
| A31* | ΔI_{AD} | A/D Conversion Current ⁽²⁾ | — | 120 | 150 | μA | 2.0V |
| | | | — | 200 | 250 | μA | 5.0V |

* These parameters are characterized but not tested.

† Data in the "Typ" column is at 5.0V, 25°C unless otherwise stated. These parameters are for design guidance only and are not tested.

Note 1: The A/D conversion result never decreases with an increase in the input voltage.

2: This is the additional current consumed by the A/D module when it is enabled; this current adds to base I_{DD} .

Clarifications/Corrections to the Data Sheet:

In the Device Data Sheet (DS41270E), the following clarifications and corrections should be noted.

None.

APPENDIX A: REVISION HISTORY

Rev A Document (10/2008)

First revision of this document.

Note the following details of the code protection feature on Microchip devices:

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