



Product Information Notice for ADBMS68XX Data Sheet Improvement

PIN 24_0274

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Data Sheet Comparison

Table 3. S-ADC Specifications

| Parameter | Symbol | Min | Typ | Max | Unit | Test Conditions/Comments |
|--|--------------------|------|-------|------|---------------|------------------------------|
| MEASUREMENT RESOLUTION ¹ | | | 0.15 | | mV/bit | |
| INPUT RANGE | V_{SDIF} | -0.3 | | 5.5 | V | (Sx to V-) > -0.1V |
| ADC OFFSET VOLTAGE ² | | | ±0.2 | | mV | |
| ADC GAIN ERROR ² | | | ±0.03 | | % | |
| ADC UPDATE RATE | | 0.45 | 0.5 | 0.55 | kHz | |
| ADC TRANSITION NOISE | | | 40 | | μV_{RMS} | |
| S-ADC TOTAL MEASUREMENT ERROR ³ | STME | | | ±6.5 | mV | $0V \leq V_{SDIF} \leq 4.5V$ |
| | | | | ±8 | mV | $V_{SDIF} \leq 5.5V$ |
| INPUT LEAKAGE CURRENT | | | 10 | ±250 | nA | ADC off, $V_{SDIF} = 5.5V$ |
| DIFFERENTIAL INPUT RESISTANCE | R_{IN_SADC} | 1 | 1.8 | 2.6 | M Ω | ADC on |
| DIFFERENTIAL INPUT RESISTANCE DURING OPEN WIRE DETECTION | $R_{IN_SADC_OW}$ | | 20 | | k Ω | |
| GAIN DURING OPEN WIRE DETECTION | | 85 | 90 | 95 | % | No open wire fault |
| ADC SAMPLING FREQUENCY | f_s | 3.7 | 4.1 | 4.5 | MHz | |

AHEAD OF WHAT'S POSSIBLE

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