

Item # ADC-HS12BMC, Legacy Analog-to-Digital Converters

List Price

Legacy Analog-to-Digital Converters



The ADC-HS12B is a high performance 12 Bit hybrid A/D converter with a self-contained sample-hold. It is specifically designed for systems applications where the sample-hold is an integral part of the conversion process. The internal sample hold has a 6 microsecond acquisition time for a full 10V dc input change; the A/D converter has a fast 9 microsecond conversion time. Five input voltage ranges are programmable by external pin connections; 0 to +5V, 0 to +10V, $\pm 2.5V$, $\pm 5V$, and $\pm 10V$. Input impedance to the sample hole is 100 megohms. Output coding is complementary binary for unipolar operation and complimentary offset binary for bipolar operation.

Image is for illustration purposes only

SPECIFICATIONS

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| Description | 12 Bit, 6 μ Sec & 9 μ Sec Analog to Digital (A/D) Converter with Programmable Input and Internal Sample-Hold. $\pm 2.5V$, $\pm 5V$, 0 to +5V, 0 to +10V Input ranges, 0°C to +70°C temperature range. |
| Resolution | 12 bits |
| Number of Channels | 1 |
| Sampling Rate | 0.1 MHz |
| Power Consumption | 1.1 W |
| Differential Non-Linearity Error/Other | 0.75 LSB |
| Integral Non-Linearity Error/Other | 0.5 LSB |
| Package Type | TDIP |
| Input Range 1st (min) | 0 V |
| Input Range 1st (max) | 5 V |
| Input Range 2nd (min) | 0 V |
| Input Range 2nd (max) | 10 V |
| Input Range 3rd (min) | -2.5 V |
| Input Range 3rd (max) | 2.5 V |
| Input Range 4th (min) | -5 V |

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| Input Range 4th (max) | 5 V |
| Input Range 5th (min) | -10 V |
| Input Range 5th (max) | 10 V |
| Required Supply Voltage 1st | 5 V |
| Required Supply Voltage 3rd | 15 V |
| Required Supply Voltage 4th | -15 V |
| Operating Temp. Range (min) | 0 °C |
| Operating Temp. Range (max) | 70 °C |
| RoHS | No |
| Status | Recommended for new design |