

Data Acquisition System Single ADC Octal DAC 12bit 36-Pin TOFN EP

Manufacturer: <u>Maxim Integrated</u>

Package/Case: TQFN

Product Type: Data Conversion ICs

Lifecycle: Obsolete



Images are for reference only

Inquiry

General Description

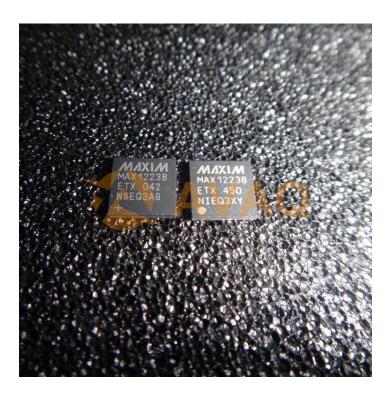
The MAX1221/MAX1223/MAX1343 integrate a multichannel, 12-bit, analog-to-digital converter (ADC) and a 12-bit, digital-to-analog converter (DAC) in a single IC. The devices also include a temperature sensor and configurable general-purpose I/O ports (GPIOs) with a 25MHz SPI?-/QSPI?-/MICROWIRE?-compatible serial interface. The ADC is available in a 12 or an eight input-channel version. The DAC outputs settle within 2.0μs, and the ADC has a 225ksps conversion rate. All devices include an internal reference (2.5V) providing a well-regulated, low-noise reference for both the ADC and DAC. Programmable reference modes for the ADC and DAC allow the use of an internal reference, an external reference, or a combination of both. Features such as an internal ±1°C accurate temperature sensor, FIFO, scan modes, programmable internal or external clock modes, data averaging, and AutoShutdown? allow users to minimize both power consumption and processor requirements. The low glitch energy (4nV?s) and low digital feedthrough (0.5nV?s) of the integrated DACs make these devices ideal for digital control of fast-response closed-loop systems. The devices are guaranteed to operate with a supply voltage from +2.7V to +5.25V. The devices consume 2.5mA at 225ksps throughput, only 22μA at 1ksps throughput, and under 0.2μA in the shutdown mode. The MAX1221/MAX1343 offer four GPIOs that can be configured as inputs or outputs. The MAX1221/MAX1223/MAX1343 are available in 36-pin thin QFN packages. All devices are specified over the -40°C to +85°C temperature range.

Application

Closed-Loop Controls for Optical Components and Base Stations

Data Acquisition Systems

System Supervision and Control



Recommended For You

Maxim Integrated

TQFN68

MAX1057BETM-T

Maxim Integrated

BGA

MAX1408EAI+T

Maxim Integrated

SSOP-28

MAX1042BETX+T

Maxim Integrated

QFN-36

MAX1220BETX

Maxim Integrated

QFN

MAX5541ESA+

Maxim Integrated

SOIC8

MAX1040BETX+T

Maxim Integrated

BGA

MAX1343BETX

Maxim Integrated

QFN-36

MAX30002CWV+T

Maxim Integrated

SMDSMT

MAX30001CWV+

Maxim Integrated

WLP30

MAX12900AATJ+T

Maxim Integrated

Correctoriginal

MAX1414CAI-T

Maxim Integrated

BGA

MAX1342BETX+

Maxim Integrated

Correctoriginal

MAX1414EAI+T

Maxim Integrated

SSOP-28

MAX1340BETX+T

Maxim Integrated

BGA