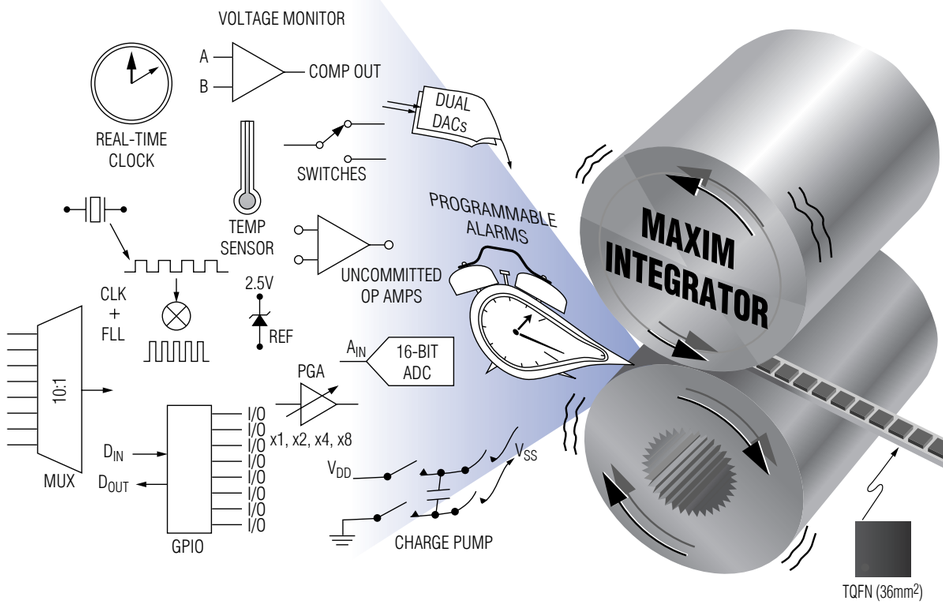
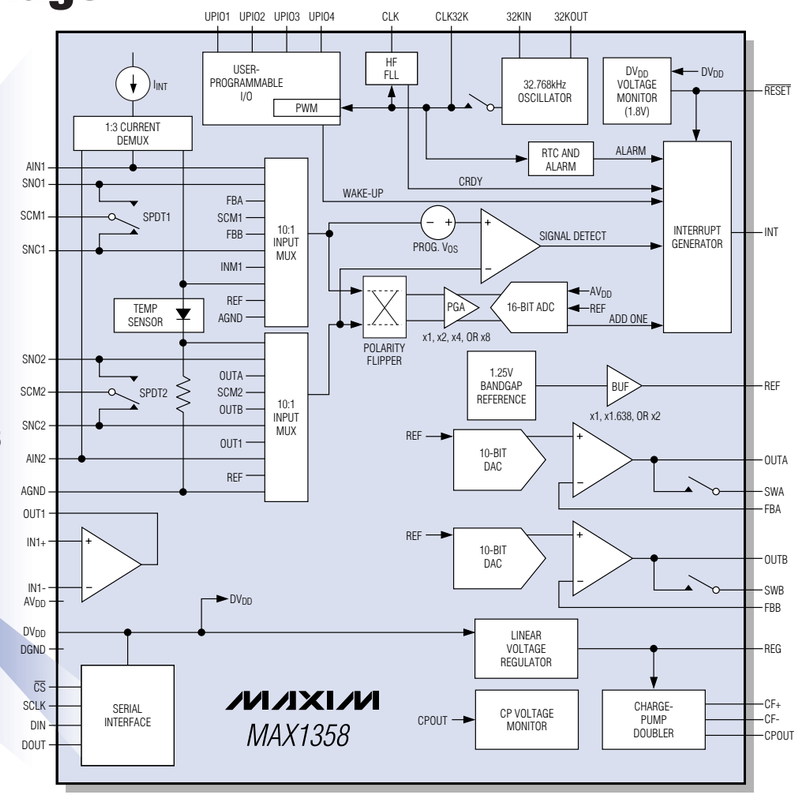
16-BIT, DATA-ACQUISITION SYSTEMS WITH 12-BIT DACs SUPPORT YOUR µC

Tiny 6mm x 6mm TQFN Package



JOINS WITH LOW-COST MICROCONTROLLERS



- Low-Power 1.8V to 3.6 Operation
- Charge Pump Provides 3V at 10mA
- 1.4mA Operating Current
- 6µA Sleep Current, 1.5µA Shutdown

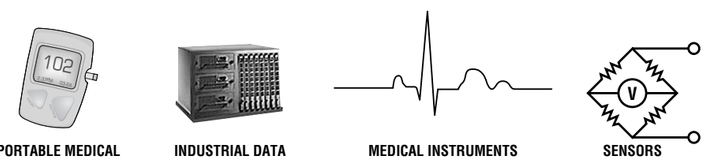
Integration Simplifies Your Design!

PRECISION ANALOG

- 16-Bit, Sigma-Delta ADC
  - 10sps to 512sps, No Missing Codes
- PGA with Gains of 1, 2, 4, and 8
- Low-Leakage SPDT and SPST Switches
- Low-Noise Uncommitted Op Amps
- Force-Sense DACs (MAX1358/59 Only)
- Internal 1.25V, 2.048V, or 2.5V Reference
- ±0.5°C Internal/External Temperature Sensor

MICROCONTROLLER SUPPORT

- 32kHz Internal Oscillator with FLL Multiplier and Clock Output for External Devices
- General-Purpose I/O
- Programmable Interrupts/Alarms
- V_{DD} Monitor
- Dual Voltage Monitors
- Watchdog Timer
- RTC with 1/256sec Resolution



PORTABLE MEDICAL DEVICES | INDUSTRIAL DATA AQUISITION | MEDICAL INSTRUMENTS | SENSORS

Part	Resolution	No. of Input Channels	Speed (ksps)	DACs	No. of Op Amps	GPIO	Switches SPDT/SPST	Price† ($)
MAX1358	16-bit, sigma delta	2	0.01 to 0.512	2 x 10-bit F/S**	1	4	2/2	8.07
MAX1359	16-bit, sigma delta	2	0.01 to 0.512	1 x 10-bit F/S**	2	4	2/1	7.45
MAX1360*	16-bit, sigma delta	2	0.01 to 0.512	0	3	4	2/0	*

*Future product—contact factory for availability.
** F/S = Force–sense.
†1000 piece price provided is for design guidance and is FOB USA. International prices will differ due to local duties, taxes, and exchange rates Not all packages are offered in 1k increments, and some may require minimum order quantities.

MAXIM

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