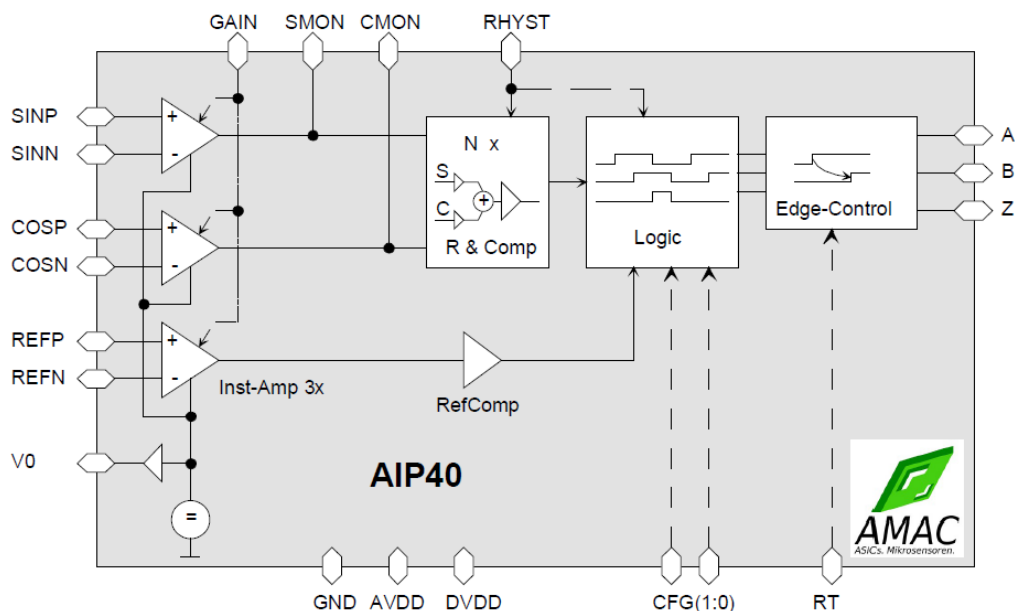
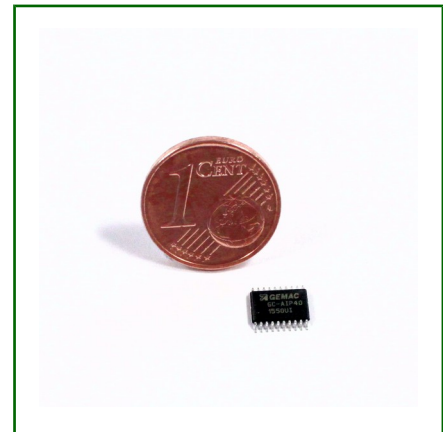


Interpolation Circuit GC-AIP40

Features:

The Interpolation IC GC-AIP40 is suitable for increasing the resolution of incremental position and angular measuring systems with sine shaped output signals. The IC can be used with the standard voltage signals as well as current signals. Furthermore photo diode arrays and sensor bridges can be connected directly. An adjustable minimum edge distance at the output and a programmable analogue and digital hysteresis enables the use also in case of noisy input signals.



Technical Specifications*:

Analogue input	Sine- / cosine- / reference Signal Differential / single-ended Adjustable Gain for 1V _{pp} / 660mV _{pp} / 530mV _{pp} / 80mV _{pp} Maximum 1.2MHz for interpolation rates ≤ 20 Maximum 750kHz for interpolation rate = 32 Maximum 600kHz for interpolation rate = 40
Interpolation rate	40 / 32 / 20 / 16 / 8 / 4 edges per sine period
Reference signal processing	Filter for suppressing the edge distance noise at low input frequencies
Possibilities of configuration	Configuration pins
Noise suppression	Adjustable hysteresis analogue Adjustable hysteresis digital Adjustable minimum edge distance at the output
Output signals	90°-square wave (A/B/Z); TTL- and CMOS-compatible
Package	TSSOP20

* A complete and more detailed description of the technical specifications is available at the data sheet at www.amac-chemnitz.de.

Ordering Information:

Product Type	Description	Item No.
GC-AIP40	Interpolation IC GC-AIP40, RoHS	PR-43800-50
GC-AIP40-DIE	Interpolation IC GC-AIP40, RoHS, DIE	PR-43800-06
GP40	Demoboard for GC-AIP40, RoHS	PR-43810-00