New Low-Cost IC Designed for Electronic Weigh-Scale Applications
Delivers Precise Measurements at Mass-Market Prices

CS5550 Features
- Output word rate: 2.44 – 4 kSps
- 24-bit A/D registers on both channels
  - Channel 1: 13 ENOBs
  - Channel 2: 10 ENOBs
- Power consumption: <12 mW
- Adjustable input range on channel 1
- Ground-referenced signals with single supply
- On-chip 2.5 V reference: (typ 25 ppm / °C)
- Simple 3-wire digital serial interface

- Power supply configurations:
  - VA+ = +5 V
  - AGND = 0 V
  - VD+ = +3.3 V to +5 V
- Offset and gain calibrations on both channels
- Package: 24-pin SSOP
- CS5550 Price: $1.27 (100K)

CS5550 Benefits
- Easy to design
- Value priced
- Highly integrated analog front end
- Small footprint

The CS5550 enables weigh-scale manufacturers to provide accurate, cost-effective solutions for their customers. This new IC from Cirrus Logic is an integrated device that combines two ΔΣ A/D converters, two amplifiers and a serial interface on a single chip.

For communication with a micro-controller, the IC features a bi-directional serial interface, which is initialized and fully functional upon reset. The device also offers excellent temperature stability for long-life operation. The CS5550 delivers precise measurements and is ideal for electronic weigh-scale applications.