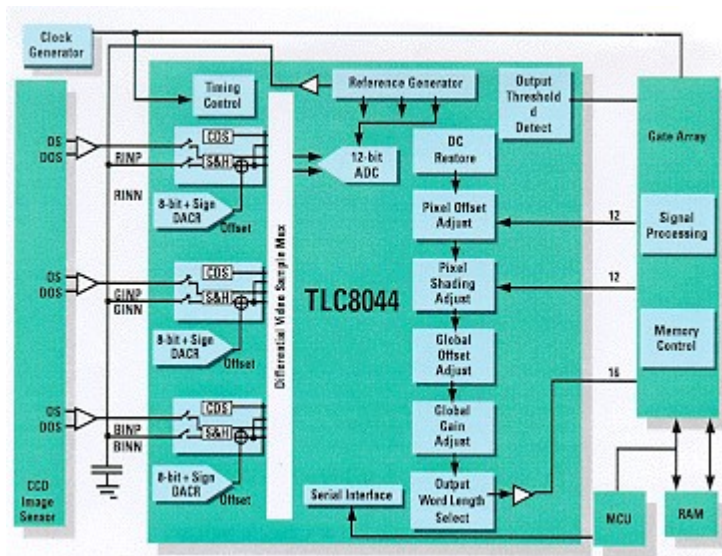


## A/D CCD interfaces



The TLC8044 and TLC8144 A/D CCD interface devices digitize and compensate the output of CCD image sensors, handling both color and gray-scale economically. Operating in correlated double sample (CDS) or sample and hold modes, the interfaces are compatible with CCD imagers, contact image sensors (CISs) and hand-held and flatbed scanners.

The TLC8044 features a fully differential analog signal path and allows up to 36 bits of color, while the TLC8144 features a single-ended analog signal path with three independent PGAs and allows up to 30 bits of color. The '8144 provides for pixel-by-pixel compensation or pixel response non-uniformity (PRNU) using externally stored calibration data, or the output can be passed directly to a host CPU. The '8044 offers pixel-by-pixel compensation, PRNU or the use of internal registers for offset correction and pixel shading. The '8044 also provides global offset and gain adjustments for each color. The '8144 provides 10-bit output data, while the '8044 features programmable output word length of 8, 10, 12 or 16 bits.

TLC8044          64-pin mini-PQFP

TLC8144          48-pin TQFP

Suggested retail pricing in U.S. dollars in 1K quantity.

### TLC8044/8144 features

- 12- or 10-bit operation
- Three independent PGAs ('8144)
- Economical color and gray-scale operation
- Pixel-by-pixel digital compression
- 400-mW power dissipation