CURTIS ELECTROMUSIC SPECIALTIES
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C E M 5 5 1 2

OCTAL DOUBLE BUFFERED SAMPLE & HOLD

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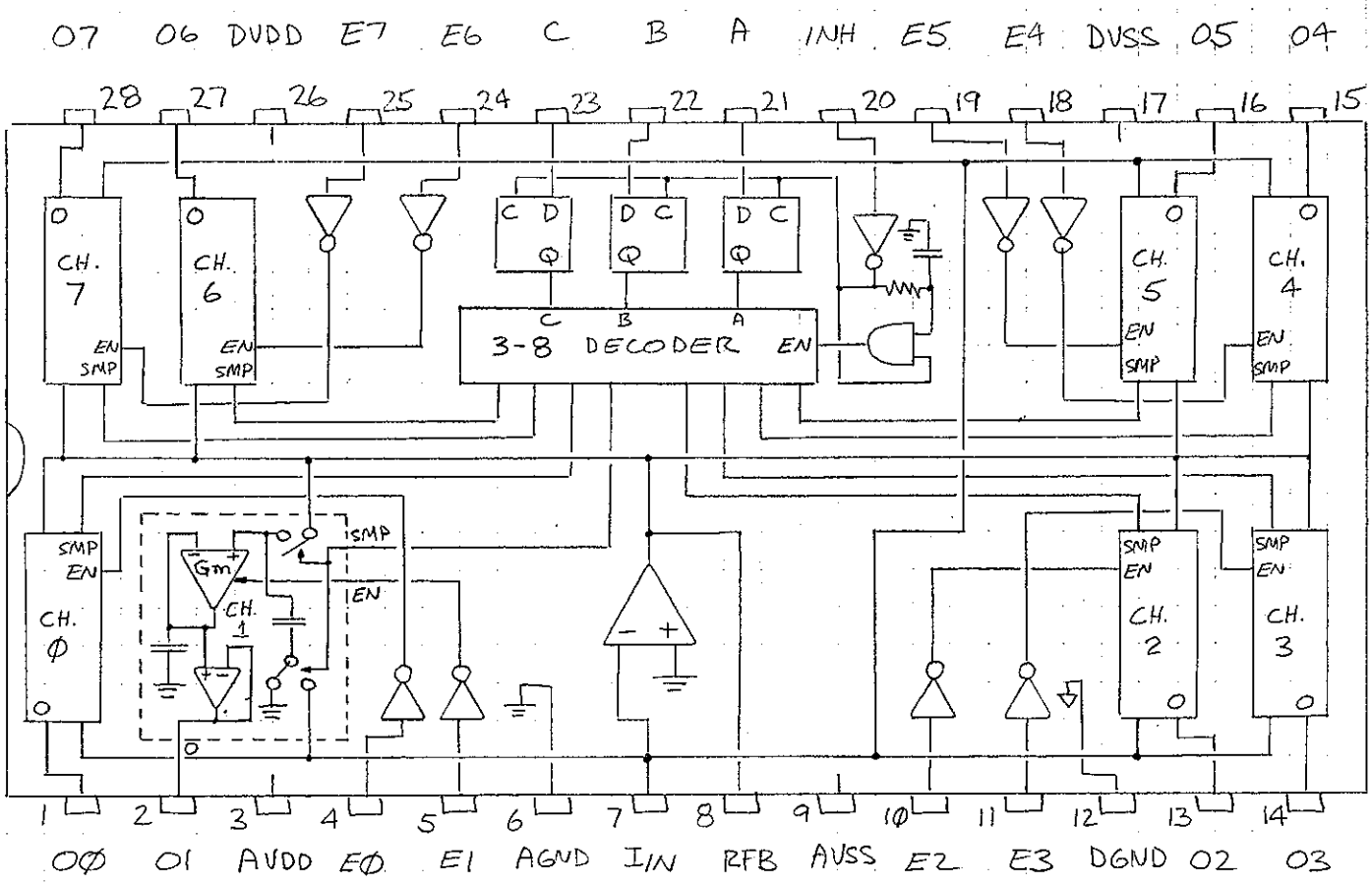
The CEM 5512 is a high speed, eight channel multiplexed Sample & Hold with double sampling capability intended for digital audio applications. With all capacitors on chip, each channel consists of an input S&H with fast response for acquiring an input signal to 12 bits within 400nS, and followed by an output S&H with independent track/hold enable signal; the addition of the second S&H allows precise timing control over the output sample regardless of when the multiplexed DAC data is available from the system. This structure, in combination with separate analog and digital supply pins and a novel design for the output S&H which effectively eliminates track-to-hold steps and signal feedthrough, provides exceptionally clean outputs for low noise and distortion.

Also included on-chip are a fast input op amp for directly accepting a current input from any industry standard high speed bipolar DAC, an input address latch and INHIBIT delay generator for allowing easy interface to the external logic, and buffers on every output to drive moderate capacitive loading without affecting performance. Ease of interface is further enhanced with logic inputs which are TTL compatible regardless of supply.

Self-contained and requiring few external components, the CEM 5512 allows high speed multi-channel digital audio to be generated with CD compatible performance.

Features

- 16 Sample & Holds on a Single Chip
- High Speed Acquisition: 12 bits in <400nS
- Extremely Low Track-to-Hold Steps, Signal Feedthrough, and Other Noise at Outputs
- Low Distortion: <.05%
- Hold Capacitor On-Chip
- TTL Compatible Static Protected Inputs
- Large Output Swing: 5V.P.P. with +/-6V Supplies



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