3547860 FERRANTI ELECTRIC INC

95D 04881 Tr 75-11-05

TELECOMMUNICATIONS CIRCUITS

CODEC I.C. SET

ZNPCM1/ZNPCM2

The ZNPCM1 and ZNPCM2 combine with a modicum of capacitors to make an integrated codec system for converting analogue (voice frequency) signals to digital (pulse code modulation) signals and viceversa. The ZNPCM2 converts the analogue input to a delta-sigma modulated pulse stream which is then transformed into a pcm lulse stream by the ZNPCM1. Both devices also provide the reverse function.

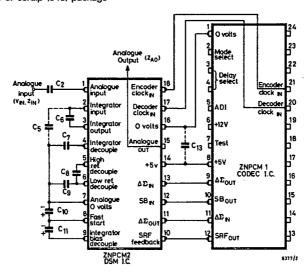
Both devices are manufactured using the Ferranti bipolar process. The ZNPCM1 and ZNPCM2 are supplied in 24 and 18 lead DIL packages respectively and moulded or cerdip versions are available.

FEATURES

- Converts a delta-sigma modulated digital pulse stream inot compressed 'A' law pcm and vice-versa
- Enables realisation of a single-channel codec circuit with minimum component useage
- Pin selectable input-output interface providing either single channel operation at 64K bit/s (2.048KHz external clock) or up to 2,048K bit/s (2,084KHz external clock) for multi-channel burst format
- Encoder and decoder can be clocked asynchronously (useful for pcm multiplex applications)
- Optional alternate digit inversion
- Electrically and pin compatible with AY-3-9900
- Fully TTL compatible
- Requires only a single 5V supply
- Moulded (E24) or cerdip (J24) package

ZNPCM2E/ZMPCM2J

- Converts analogue (300-3,400Hz) signals into a delta-sigma modulated pulse stream and vice-versa
- Complimentary to the ZNPCM1 and AY-3-9900
- Requires only a single 5V supply
- Moulded (E18) or cerdip (J18) package



ZNPCM1/ZNPCM2 Interface