# TELECOMMUNICATIONS CIRCUITS

## ADVANCE INFORMATION
## 2MBIT PCM SIGNALLING CIRCUIT:
## PCM SYNCHRONISING WORD GENERATOR ZN1444E

The 2MBit PCM signalling circuits comprise a group of circuits which will perform the common signalling and error detection functions for a 2.048MBit 30 channel PCM transmission link operating to the appropriate CCITT recommendations. The circuits are fabricated using the Ferranti FAB-2 CDI process and operate from a single 5 volt supply. Relevant inputs and outputs are TTL compatible.

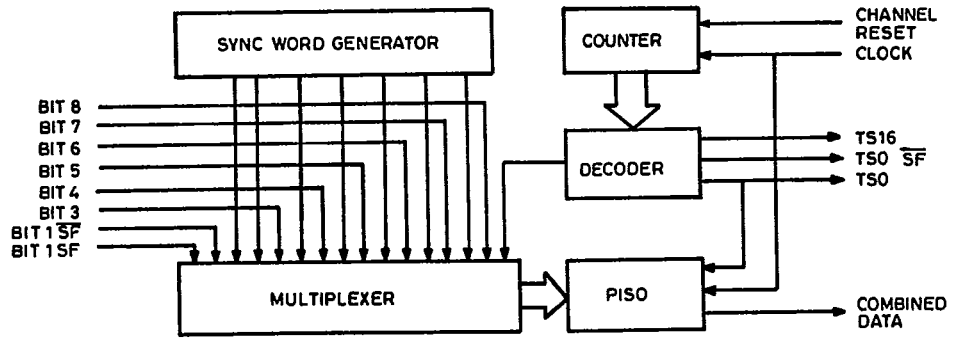
The ZN1444E generates the synchronising word in accordance with CCITT recommendation G732 The synchronising word is injected onto the PCM data highway during time slot 0 in alternate frames. The spare time slot 0 data bits, bit 1 in every frame, and bits 3 to 8 inclusive in alternate frames (i.e. those not containing the synchronising word) are available as parallel inputs and are output onto the PCM data highway.

The data output of the ZN1444E is "open collector" and can be "wire-AND-ed" directly onto the data highway.

The device also provides a time slot 0 channel pulse TS0, a time slot 0 non-sync frame TS0 $\overline{SF}$, and a time slot 16, TS16, output.

### FEATURES

- Conforms to CCITT recommendation G732
- All relevant inputs and outputs are TTL compatible
- 5 volt operation
- Direct output onto PCM data highway
- Channel pulses provided for both time slot 0 and time slot 16
- Combined data output is "open collector" permitting "wired" type operation
- Provides time slot 0 non-sync frame
- Low cost 16-lead plastic DIL package




System Diagram