Z8069 OCI
Orgasmotron Controller Interface Unit

Zilog

Product Brief

Preliminary

August 1979

Features

- Complete controller for Orgasmotron, removes need for manual assistance by integrating previously discrete function.
- Low droop surge capability reduces decoupling requirements.
- Single ended output drives re-entrant horn.
- Built-in reliability ensures maximum up-time.
- Fast rise-time and rapid turn-on provided by active pull-down feature.
- Strapping option selects Master/Slave function.

Description

The Z-OCI Orgasmotron Controller Interface Unit is the end product of exhaustive research by an experienced team soliciting inputs from the public. The result is a versatile component designed to give satisfaction in all applications. Existing NMOS* technology has been married with Injection Logic to aid compatibility. A revolutionary silicone implant technique increases capacity, replacing the passive pull-ups used in previous designs. The device is designed to acheive unequalled performance in low-level interfaces through highly efficient coupling (Consequently, poor results may be expected if a Zero Insertion Force socket is used).

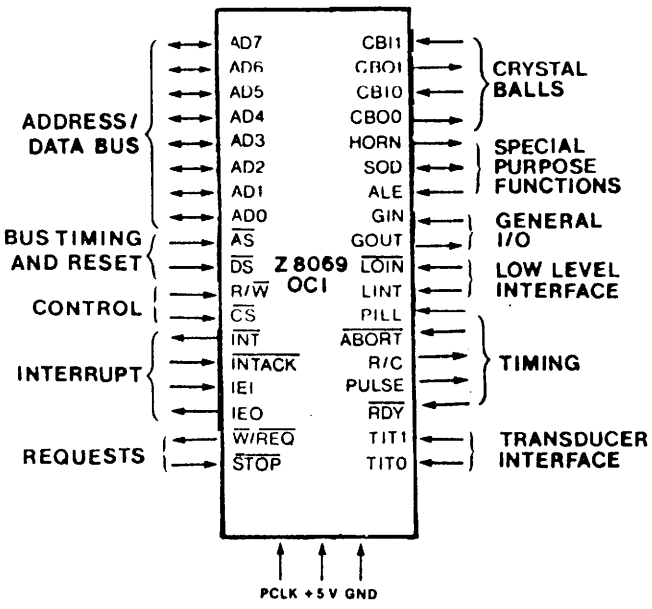

Figure 1. Pin Functions

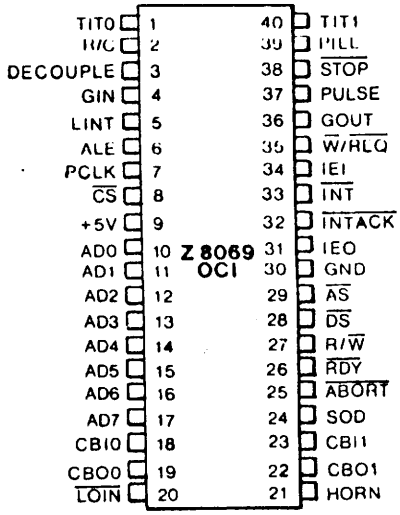

Figure 2. Pin Assignments

* Never Made On Sunday

Description (Continued)

At the heart of the Z-OCI is a variable pulse-rate timing source with two distinct operating modes. Of these, the Phase Integral Locked Loop provides superior input protection and sensitivity while minimising the requirement for abort operations. As an alternative to the PILL, an external RC network can be used in conjunction with the on-board rhythm generator. Increased decoupling or mass termination may be required in this configuration because the abort option may not be selected.

Flexible design aids expansion of the Z-OCI, since physical constraints on the DIL do place an upper limit on device size. Future family planning embraces Extended Procreation Units (EPU's) capable of DMA (Direct Mammary Access) in physical addresss space using Peek and Poke operations.

No WAIT states are required by the dedicated architecture of the Z-OCI; an unprecedented performance is acheived through predictive logic based on dual crystal balls. The potent Monte Carlo remainder theorem quickly arrives at Critical Day, as shown in figure 3. Lock-up and deadly embrace are avoided by reducing interrupt overhead. Loose timing requirements remove the need for inhibition.

A variety of configurations may be selected for different applications (although violations result if outputs are tied down). AC/DC operation is supported by the Serial Output Data signal. Local loop-back permits functional testing in the absence of external connections. This self-diagnostic capability is used frequently, ensuring a clean bill of health for the Universal Interface.

Electronic testing in a wide variety of production line positions results in exceptionally low infant mortality and a complete absence of functional drop-outs for the Z-OCI.

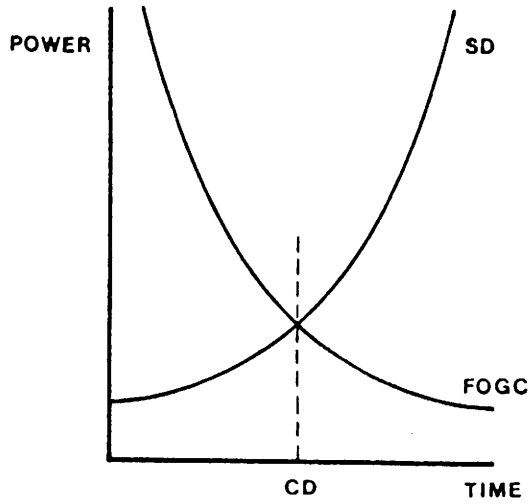

Figure 3. Physical Assignment Timing

Key: SD Sex Drive
FOGC Fear Of Getting Caught
CD Critical Day

Typical Applications

The Z-OCI is particularly suitable for automotive applications: the package is designed to screw on rear seats. The domestic market will take off quickly, but privacy issues mean that office exploitation will be slow in coming.

In use, satisfactory results are usually obtained by stimulation of the Transducer Input Terminals. If turn-on delay is excessive, the General Input (GIN) should be primed to reduce resistance. Care should be taken, as excessive use of this feature activates GOUT. Similarly, a high level on Address Latch Enable (ALE) causes output droop.