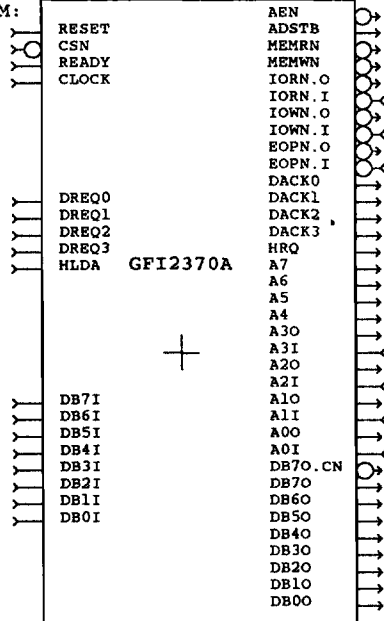


**GENERAL DESCRIPTION:**

THE GFI2370A IS COMPATIBLE IN FUNCTIONALITY WITH THE INTEL 8237A 4-CHANNEL PROGRAMMABLE DMA CONTROLLER. THE PERFORMANCE IS MUCH IMPROVED OVER THE STANDARD PART. FOR A DETAILED FUNCTIONAL DESCRIPTION, SEE THE INTEL DATA BOOK.

**PIN DIAGRAM:**



- ARRAY GATES USED - 2961
- ARRAY AREA USED - 3330 GATE LOCATIONS
- LL7000 SERIES COMPATIBLE
- LSA2000 SERIES COMPATIBLE

**INPUT LOADING: (LOADING IN TRANSISTOR PAIRS)**

RESET - 1.5	READY - 3.5	DREQ0:3 - 5.9	DB7I:0I - 4.9	IOWN.I - 1
CSN - 2	CLOCK - 4.5	HLDA - 1	IORN.I - 1	EOPN.I - 1
				A3I:0I - 1.5

**OUTPUT DRIVE: (DRIVE IN (#P, #N))**

AEN - (1,1)	MEMWN - (1,1)	EOPN.O - (1,0.5)	A7:4 - (1,1)
ADSTB - (1,1)	IORN.O - (1,1)	DACK0:3 - (1,1)	A3O:0O - (1,1)
MEMRN - (1,1)	IOWN.O - (1,1)	HRQ - (1,1)	DB7O.CN - (1,1)
			DB7O:0O - (1,1)

**NDL SYNTAX:**

Z (AEN, ADSTB, MEMRN, MEMWN, IORN.O, IOWN.O, EOPN.O, DACK0, DACK1, DACK2, DACK3, HRQ, A7, A6, A5, A4, A3O, A2O, A1O, A0O, DB7O.CN, DB7O, DB6O, DB5O, DB4O, DB3O, DB2O, DB1O, DB0O)

-GFI2370A (RESET, CSN, READY, CLOCK, DREQ0, DREQ1, DREQ2, DREQ3, HLDA, DB7I, DB6I, DB5I, DB4I, DB3I, DB2I, DB1I, DB0I, IORN.I, IOWN.I, EOPN.I, A3I, A2I, A1I, A0I)§

APPLICATION NOTE:

This megafunction can be used to duplicate the functions of the Intel 8237A 4-channel programmable DMA controller. The I/O can be made compatible with the standard part as shown in the diagram below. Note that the DB70.CN output is used to gate the output of the data lines. All other signals are compatible with the standard part.

