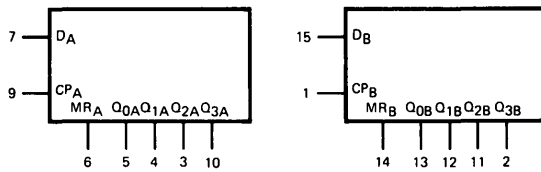


# FAIRCHILD LOGIC/CONNECTION DIAGRAMS

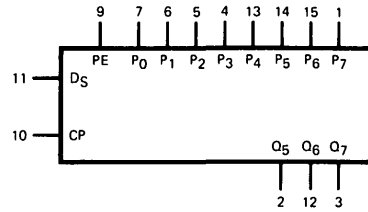
## DIGITAL-CMOS

**C42  
4015B**



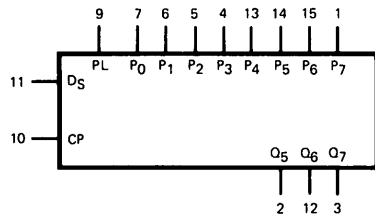
$V_{DD}$  = Pin 16  
 $V_{SS}$  = Pin 8

**C43  
4014B**



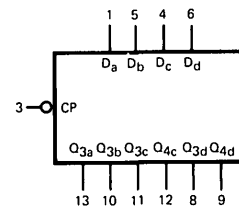
$V_{DD}$  = Pin 16  
 $V_{SS}$  = Pin 8

**C44  
4021B**



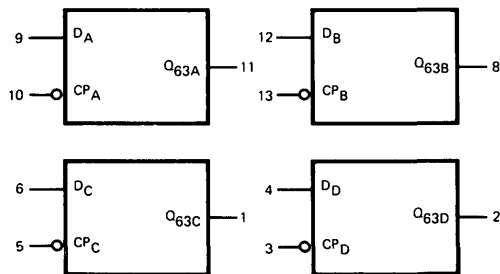
$V_{DD}$  = Pin 16  
 $V_{SS}$  = Pin 8

**C45  
4006B**



$V_{DD}$  = Pin 14  
 $V_{SS}$  = Pin 7  
NC = Pin 2

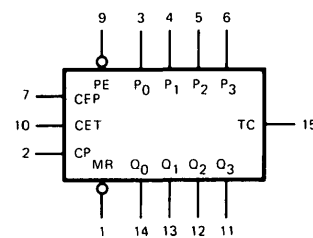
**C46  
4731B \***



$V_{DD}$  = Pin 14  
 $V_{SS}$  = Pin 7

\*Pinout shown is for dual in-line package only  
See CMOS databook for flatpak pinout

**C47  
40160B, 40161B**



$V_{DD}$  = Pin 16  
 $V_{SS}$  = Pin 8

NOTE The Flatpak versions have the same pinouts (Connection Diagram) as the Dual In-Line Packages

FAIRCHILD DIGITAL

CMOS

REGISTERS

Item	Function	DEVICE NO.	No. of Bits	Serial Entry	Parallel Entry No. of Bits	Clock Edge	Max Clock Frequency MHz (Typ) VDD = 10V	Clock To Output Delay -ns (Typ) VDD = 10V	Logic/Connection Diagram	Package(s)
1	Parallel-In/Parallel-Out	4035B	4	JK	4	L→H	17	90	C39	4L,6B,9B
2	Parallel-In/Parallel-Out Bidirectional	40194B	4	D	4	L→H	14	45	C40	4L,6B,9B
3	Parallel-In/Parallel-Out	40195B	4	JK	4	L→H	14	45	C41	4L,6B,9B
4	Serial-In/Parallel-Out	4015B	8	D	—	L→H	14	85	C42	4L,6B,9B
5	Parallel-In/Serial-Out	4014B	8	D	8	L→H	14	68	C43	4L,6B,9B
6	Parallel-In/Serial-Out	4021B	8	D	8	L→H	18	74	C44	4L,6B,9B
7	Serial-In/Serial-Out	4006B	18	D	—	H→L	30	37	C45	3I,6A,9A
8	Serial-In/Serial-Out	4731B	256	D	—	H→L	8	95	C46	3I,6A,9A
9	Serial-In/Serial-Out	4031B	64	D	—	L→H	8	60	C78	4L,6B,9B
10	Serial-In/Serial-Out Variable	4557B	1 to 64	D	—	2- H→L or L→H	10	150	C80	4L,6B,9B
11	Parallel/Serial-Input/Output	4034B	8	D	8	L→H	8	155	C79	4M,6N,9N

DECODERS/DEMULTIPLEXERS

Item	Function	DEVICE NO.	Address Inputs	Active LOW Enable	Output Configuration	Select Delay ns (Typ) VDD = 10V	Enable Delay ns (Typ) VDD = 10V	Logic/Connection Diagram	Package(s)
12	Dual 1-of-4 Decoder	4555B	2x2	2	H	60	60	C34	4L,6B,9B
13	Dual 1-of-4 Decoder	4556B	2x2	2	L	68	58	C35	4L,6B,9B
14	1-of-10 Decoder	4028B	4	—	H	66	—	C36	4L,6B,9B
15	1-of-16 Decoder	4514B	4	1	H	95	95	C37	4M,6N,9N,9U
16	1-of-16 Decoder	4515B	4	1	L	95	95	C38	4M,6N,9N,9U
17	Dual 4-Channel Demultiplexer	4052B	2	1	H	125	105	C64	4L,6B,9B