CMOS

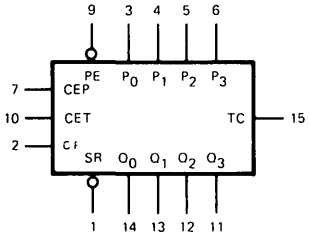
COUNTERS (Cont'd)

Item	Function	DEVICE NO.	Modulo	Parallel Load[1]	Clock Transition	Max Clock Rate MHz (Typ) V_{DD} = 10V	Clock to Q Output Delay ns (Typ) V_{DD} = 10V	Logic/Connection Diagram	Package(s)
1	4-Bit Sync Count Up/Down	**40193B**	Binary	A	L→H	8 0	105	C51	4L,6B,9B
2	4-Bit Sync Count Up/Down	**4029B**	Decade or Binary	A	L→H	12	62	C52	4L,6B,9B
3	Dual 4-Bit Sync Count Up	**4518B**	Decade	—	L→H or H→L	10	95	C53	4L,6B,9B
4	Dual 4-Bit Synchronous Count Up	**4520B**	Binary	—	L→H or H→L	10	95	C53	4L,6B,9B
5	7-Bit Ripple Count Up	**4024B**	Binary	—	H→L	30	45	C54	3I,6A,9A
6	12-Bit Ripple Count Up	**4040B**	Binary	—	H→L	25	55	C55	4L,6B,9B
7	14-Bit Ripple Count Up	**4020B**	Binary	—	H→L	25	55	C56	4L,6B,9B
8	4-Bit Johnson Counter	**4022B**[2]	1-of-8	—	L→H or H→L	16	95	C57	4L,6B,9B
9	5-Bit Johnson Counter	**4017B**	1-of-10	—	L→H or H→L	13 8	114	C58	4L,6B,9B
10	5-Bit Johnson Counter	**4018B**[2]	—	—	L→H	10	115	C59	4L,6B,9B
11	Bit Rate Generator	**4702B**	14-Bit Rates	—	L→H	6 5	40	C60	4L,6B,9B
12	21-Stage Binary Counter	**4045B**	Binary	—	L→H	25	900	C89	3I,6A,9A
13	24-Stage Binary Counter	**4521B**	Binary	—	H→L	12	3200	C90	4L,6B,9B
14	Real Time 5-Decade Counter	**4534B**	Decade (x5)	—	L→H	4 5	1000	C91	4M,6N,9N
15	3-Digit BCD Counter	**4553B**	Decade (x3)	—	L→H or H→L	6 0	300	C92	4L,6B,9B
16	7-Stage Counter	**4727B**	Binary	—	L→H	8 0	90	C93	3I,6A,9A
17	7-Stage Counter	**4737B**	Binary	—	L→H	8 0	90	C95	3I,6A,9A
18	Programmable Timer/Counter	**4722B**	Binary	—	H→L	6 0	1000	C94	4L,6B,9B
19	Industrial Time Base Generator	**4566B**	Decade	—	H→L	3 2	400	C99	4L,6B,9B

1 A = Asynchronous S = Synchronous
2 To be announced

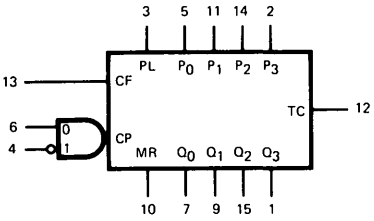
DIGITAL-CMOS

C48
40162B, 40163B



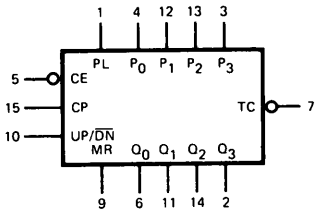
V_{DD} = Pin 16
V_{SS} = Pin 8

C49
4522B, 4526B



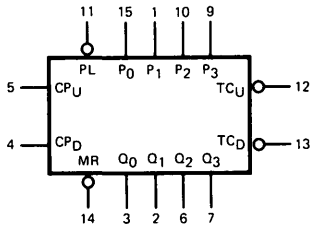
V_{DD} = Pin 16
V_{SS} = Pin 8

C50
4510B, 4516B



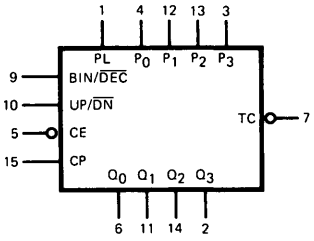
V_{DD} = Pin 16
V_{SS} = Pin 8

C51
40192B, 40193B



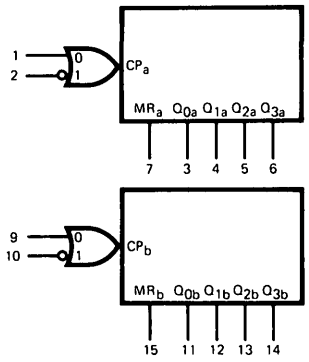
V_{DD} = Pin 16
V_{SS} = Pin 8

C52
4029B



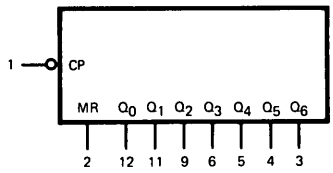
V_{DD} = Pin 16
V_{SS} = Pin 8

C53
4518B, 4520B



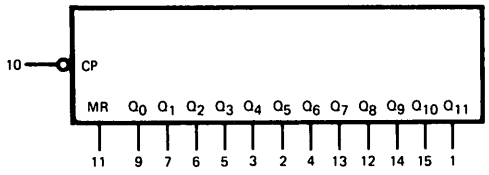
V_{DD} = Pin 16
V_{SS} = Pin 8

C54
4024B



V_{DD} = Pin 14
V_{SS} = Pin 7
NC = Pins 8, 10 and 13

C55
4040B



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

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