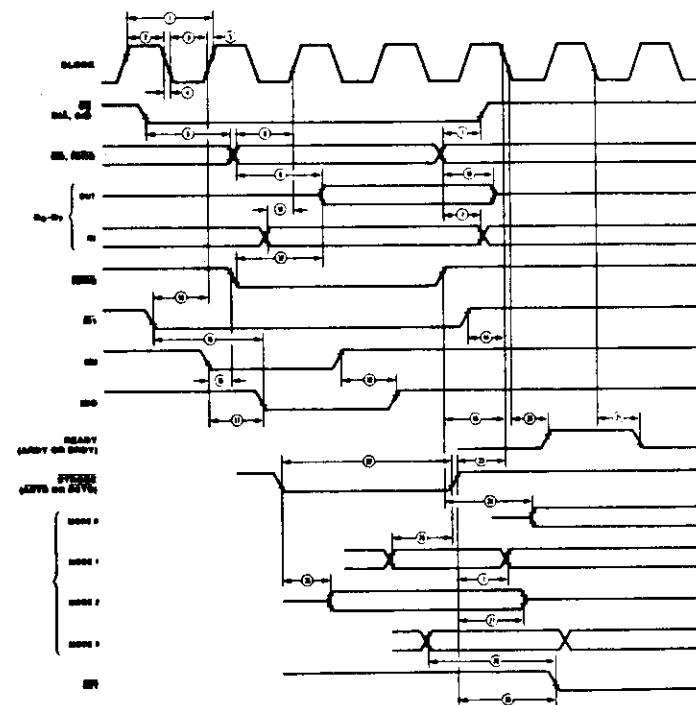


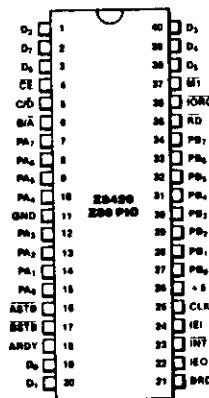
## AC TIMING DIAGRAM



**Z08420 Customer  
Procurement Spec (CPS)**

## GENERAL DESCRIPTION

The Z80 PIO Parallel I/O Circuit is a programmable, dual port device that provides a TTL-compatible interface between peripheral devices and the Z80 CPU (Figures 1 and 2). The CPU configures the Z80 PIO to interface with a wide range of peripheral devices with no other external logic. Typical peripheral devices that are compatible with the Z80 PIO include most keyboards, paper tape readers and punches, printers, and PROM programmers.



**40-pin Dual-In-Line Package (DIP),  
Pin Assignments**

Z80 is a registered trademark of Zilog Inc

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(parameters) on products delivered  
in the future are subject to change  
without notice. All parameters  
are tested except those which are  
characterized or guaranteed by  
design.

Zilog, Inc. 1315 Dell Ave., Campbell, California 95008  
Telephone (408)370-8000 TWX 910-338-7621

#### DC CHARACTERISTICS

Number	Parameter	Value	Unit	Min	Max	Step	Label
1	TDC	Cloud Optics Time	ms	0.00	1.00	0.05	[1]
2	TDC	Cloud Min Path	m	100	2000	100	[1]
3	TDC	Cloud Max Path	m	100	2000	100	[1]
4	TDC	Cloud Full Time	s	0.00	30	0.05	[1]
5	TDC	Cloud Reset Time	s	0.00	30	0.05	[1]
6	TRIGGER	CEP CDR ID to OLT Status Timer	s	0.00	60	0.05	[1]
7	TRIGGER	Any word trigger for Specialized Status Timer	s	0.00	60	0.05	[1]
8	TRIGGER	CEP OLT ID to Cloud Status Timer	s	0.00	60	0.05	[1]
9	TRIGGER	CEP OLT ID to OLT Status Timer	s	0.00	60	0.05	[1]
10	TRIGGER	CEP OLT ID to OLT Status Timer	s	0.00	60	0.05	[1]
11	TRIGGER	CEP OLT ID to OLT Status Timer	s	0.00	60	0.05	[1]
12	TRIGGER	CEP OLT ID to OLT Status Timer	s	0.00	60	0.05	[1]

MC GRAW HILL

Task ID	Description	Predecessor	Start Date	End Date	Duration	Resource	Notes
1	Project Kick-off Meeting		2023-01-01	2023-01-02	1 day	Project Manager, Stakeholders	Initial planning phase.
2	Requirements Gathering Session	1	2023-01-05	2023-01-06	1 day	Product Owner, UX Designer	Identify user needs and features.
3	Design Phase Initiation	2	2023-01-09	2023-01-10	1 day	UI/UX Designer, Frontend Dev	Start of visual design work.
4	Frontend Development	3	2023-01-15	2023-02-15	31 days	Frontend Dev Team	Implementation of user interface.
5	Backend API Integration	4	2023-02-01	2023-02-15	15 days	Backend Dev Team	Integration of external APIs.
6	Database Setup	5	2023-02-15	2023-02-28	14 days	DB Admin, QA Lead	Setup and configuration of databases.
7	Testing Phase Initiation	6	2023-03-01	2023-03-15	15 days	QA Lead, Testers	Start of quality assurance process.
8	User Acceptance Testing	7	2023-03-15	2023-03-31	17 days	Product Owner, Stakeholders	Final review and sign-off.
9	Deployment Preparation	8	2023-04-01	2023-04-15	15 days	Deployment Lead, Devops	Final checks before go-live.
10	Go-Live and Post-Launch Review	9	2023-04-15	2023-04-16	1 day	Project Manager, Stakeholders	Official launch and initial feedback.
11	Post-Launch Support	10	2023-04-16	Ongoing	1 day	Support Team	Ongoing support and maintenance.
12	Phase One Delivery	11	2023-04-16	2023-04-16	0 days	Project Manager	Completion of Phase One.
13	Phase Two Planning	12	2023-04-17	2023-04-17	0 days	Project Manager	Start of Phase Two planning.
14	Phase Two Initiation	13	2023-04-18	2023-05-15	30 days	Product Owner, UX Designer	Start of Phase Two development.
15	Phase Three Planning	14	2023-05-16	2023-05-16	0 days	Project Manager	Start of Phase Three planning.
16	Phase Three Initiation	15	2023-05-17	2023-06-15	30 days	Product Owner, UX Designer	Start of Phase Three development.
17	Phase Four Planning	16	2023-06-16	2023-06-16	0 days	Project Manager	Start of Phase Four planning.
18	Phase Four Initiation	17	2023-06-17	2023-07-15	30 days	Product Owner, UX Designer	Start of Phase Four development.
19	Phase Five Planning	18	2023-07-16	2023-07-16	0 days	Project Manager	Start of Phase Five planning.
20	Phase Five Initiation	19	2023-07-17	2023-08-15	30 days	Product Owner, UX Designer	Start of Phase Five development.
21	Phase Six Planning	20	2023-08-16	2023-08-16	0 days	Project Manager	Start of Phase Six planning.
22	Phase Six Initiation	21	2023-08-17	2023-09-15	30 days	Product Owner, UX Designer	Start of Phase Six development.
23	Phase Seven Planning	22	2023-09-16	2023-09-16	0 days	Project Manager	Start of Phase Seven planning.
24	Phase Seven Initiation	23	2023-09-17	2023-10-15	30 days	Product Owner, UX Designer	Start of Phase Seven development.
25	Phase Eight Planning	24	2023-10-16	2023-10-16	0 days	Project Manager	Start of Phase Eight planning.
26	Phase Eight Initiation	25	2023-10-17	2023-11-15	30 days	Product Owner, UX Designer	Start of Phase Eight development.
27	Phase Nine Planning	26	2023-11-16	2023-11-16	0 days	Project Manager	Start of Phase Nine planning.
28	Phase Nine Initiation	27	2023-11-17	2023-12-15	30 days	Product Owner, UX Designer	Start of Phase Nine development.
29	Phase Ten Planning	28	2023-12-16	2023-12-16	0 days	Project Manager	Start of Phase Ten planning.
30	Phase Ten Initiation	29	2023-12-17	2024-01-15	30 days	Product Owner, UX Designer	Start of Phase Ten development.
31	Phase Eleven Planning	30	2024-01-16	2024-01-16	0 days	Project Manager	Start of Phase Eleven planning.
32	Phase Eleven Initiation	31	2024-01-17	2024-02-15	30 days	Product Owner, UX Designer	Start of Phase Eleven development.
33	Phase Twelve Planning	32	2024-02-16	2024-02-16	0 days	Project Manager	Start of Phase Twelve planning.
34	Phase Twelve Initiation	33	2024-02-17	2024-03-15	30 days	Product Owner, UX Designer	Start of Phase Twelve development.
35	Phase Thirteen Planning	34	2024-03-16	2024-03-16	0 days	Project Manager	Start of Phase Thirteen planning.
36	Phase Thirteen Initiation	35	2024-03-17	2024-04-15	30 days	Product Owner, UX Designer	Start of Phase Thirteen development.
37	Phase Fourteen Planning	36	2024-04-16	2024-04-16	0 days	Project Manager	Start of Phase Fourteen planning.
38	Phase Fourteen Initiation	37	2024-04-17	2024-05-15	30 days	Product Owner, UX Designer	Start of Phase Fourteen development.
39	Phase Fifteen Planning	38	2024-05-16	2024-05-16	0 days	Project Manager	Start of Phase Fifteen planning.
40	Phase Fifteen Initiation	39	2024-05-17	2024-06-15	30 days	Product Owner, UX Designer	Start of Phase Fifteen development.
41	Phase Sixteen Planning	40	2024-06-16	2024-06-16	0 days	Project Manager	Start of Phase Sixteen planning.
42	Phase Sixteen Initiation	41	2024-06-17	2024-07-15	30 days	Product Owner, UX Designer	Start of Phase Sixteen development.
43	Phase Seventeen Planning	42	2024-07-16	2024-07-16	0 days	Project Manager	Start of Phase Seventeen planning.
44	Phase Seventeen Initiation	43	2024-07-17	2024-08-15	30 days	Product Owner, UX Designer	Start of Phase Seventeen development.
45	Phase Eighteen Planning	44	2024-08-16	2024-08-16	0 days	Project Manager	Start of Phase Eighteen planning.
46	Phase Eighteen Initiation	45	2024-08-17	2024-09-15	30 days	Product Owner, UX Designer	Start of Phase Eighteen development.
47	Phase Nineteen Planning	46	2024-09-16	2024-09-16	0 days	Project Manager	Start of Phase Nineteen planning.
48	Phase Nineteen Initiation	47	2024-09-17	2024-10-15	30 days	Product Owner, UX Designer	Start of Phase Nineteen development.
49	Phase Twenty Planning	48	2024-10-16	2024-10-16	0 days	Project Manager	Start of Phase Twenty planning.
50	Phase Twenty Initiation	49	2024-10-17	2024-11-15	30 days	Product Owner, UX Designer	Start of Phase Twenty development.
51	Phase Twenty-one Planning	50	2024-11-16	2024-11-16	0 days	Project Manager	Start of Phase Twenty-one planning.
52	Phase Twenty-one Initiation	51	2024-11-17	2024-12-15	30 days	Product Owner, UX Designer	Start of Phase Twenty-one development.
53	Phase Twenty-two Planning	52	2024-12-16	2024-12-16	0 days	Project Manager	Start of Phase Twenty-two planning.
54	Phase Twenty-two Initiation	53	2024-12-17	2025-01-15	30 days	Product Owner, UX Designer	Start of Phase Twenty-two development.
55	Phase Twenty-three Planning	54	2025-01-16	2025-01-16	0 days	Project Manager	Start of Phase Twenty-three planning.
56	Phase Twenty-three Initiation	55	2025-01-17	2025-02-15	30 days	Product Owner, UX Designer	Start of Phase Twenty-three development.
57	Phase Twenty-four Planning	56	2025-02-16	2025-02-16	0 days	Project Manager	Start of Phase Twenty-four planning.
58	Phase Twenty-four Initiation	57	2025-02-17	2025-03-15	30 days	Product Owner, UX Designer	Start of Phase Twenty-four development.
59	Phase Twenty-five Planning	58	2025-03-16	2025-03-16	0 days	Project Manager	Start of Phase Twenty-five planning.
60	Phase Twenty-five Initiation	59	2025-03-17	2025-04-15	30 days	Product Owner, UX Designer	Start of Phase Twenty-five development.
61	Phase Twenty-six Planning	60	2025-04-16	2025-04-16	0 days	Project Manager	Start of Phase Twenty-six planning.
62	Phase Twenty-six Initiation	61	2025-04-17	2025-05-15	30 days	Product Owner, UX Designer	Start of Phase Twenty-six development.
63	Phase Twenty-seven Planning	62	2025-05-16	2025-05-16	0 days	Project Manager	Start of Phase Twenty-seven planning.
64	Phase Twenty-seven Initiation	63	2025-05-17	2025-06-15	30 days	Product Owner, UX Designer	Start of Phase Twenty-seven development.
65	Phase Twenty-eight Planning	64	2025-06-16	2025-06-16	0 days	Project Manager	Start of Phase Twenty-eight planning.
66	Phase Twenty-eight Initiation	65	2025-06-17	2025-07-15	30 days	Product Owner, UX Designer	Start of Phase Twenty-eight development.
67	Phase Twenty-nine Planning	66	2025-07-16	2025-07-16	0 days	Project Manager	Start of Phase Twenty-nine planning.
68	Phase Twenty-nine Initiation	67	2025-07-17	2025-08-15	30 days	Product Owner, UX Designer	Start of Phase Twenty-nine development.
69	Phase Thirty Planning	68	2025-08-16	2025-08-16	0 days	Project Manager	Start of Phase Thirty planning.
70	Phase Thirty Initiation	69	2025-08-17	2025-09-15	30 days	Product Owner, UX Designer	Start of Phase Thirty development.
71	Phase Thirty-one Planning	70	2025-09-16	2025-09-16	0 days	Project Manager	Start of Phase Thirty-one planning.
72	Phase Thirty-one Initiation	71	2025-09-17	2025-10-15	30 days	Product Owner, UX Designer	Start of Phase Thirty-one development.
73	Phase Thirty-two Planning	72	2025-10-16	2025-10-16	0 days	Project Manager	Start of Phase Thirty-two planning.
74	Phase Thirty-two Initiation	73	2025-10-17	2025-11-15	30 days	Product Owner, UX Designer	Start of Phase Thirty-two development.
75	Phase Thirty-three Planning	74	2025-11-16	2025-11-16	0 days	Project Manager	Start of Phase Thirty-three planning.
76	Phase Thirty-three Initiation	75	2025-11-17	2025-12-15	30 days	Product Owner, UX Designer	Start of Phase Thirty-three development.
77	Phase Thirty-four Planning	76	2025-12-16	2025-12-16	0 days	Project Manager	Start of Phase Thirty-four planning.
78	Phase Thirty-four Initiation	77	2025-12-17	2025-01-15	30 days	Product Owner, UX Designer	Start of Phase Thirty-four development.
79	Phase Thirty-five Planning	78	2025-01-16	2025-01-16	0 days	Project Manager	Start of Phase Thirty-five planning.
80	Phase Thirty-five Initiation	79	2025-01-17	2025-02-15	30 days	Product Owner, UX Designer	Start of Phase Thirty-five development.
81	Phase Thirty-six Planning	80	2025-02-16	2025-02-16	0 days	Project Manager	Start of Phase Thirty-six planning.
82	Phase Thirty-six Initiation	81	2025-02-17	2025-03-15	30 days	Product Owner, UX Designer	Start of Phase Thirty-six development.
83	Phase Thirty-seven Planning	82	2025-03-16	2025-03-16	0 days	Project Manager	Start of Phase Thirty-seven planning.
84	Phase Thirty-seven Initiation	83	2025-03-17	2025-04-15	30 days	Product Owner, UX Designer	Start of Phase Thirty-seven development.
85	Phase Thirty-eight Planning	84	2025-04-16	2025-04-16	0 days	Project Manager	Start of Phase Thirty-eight planning.
86	Phase Thirty-eight Initiation	85	2025-04-17	2025-05-15	30 days	Product Owner, UX Designer	Start of Phase Thirty-eight development.
87	Phase Thirty-nine Planning	86	2025-05-16	2025-05-16	0 days	Project Manager	Start of Phase Thirty-nine planning.
88	Phase Thirty-nine Initiation	87	2025-05-17	2025-06-15	30 days	Product Owner, UX Designer	Start of Phase Thirty-nine development.
89	Phase Forty Planning	88	2025-06-16	2025-06-16	0 days	Project Manager	Start of Phase Forty planning.
90	Phase Forty Initiation	89	2025-06-17	2025-07-15	30 days	Product Owner, UX Designer	Start of Phase Forty development.
91	Phase Forty-one Planning	90	2025-07-16	2025-07-16	0 days	Project Manager	Start of Phase Forty-one planning.
92	Phase Forty-one Initiation	91	2025-07-17	2025-08-15	30 days	Product Owner, UX Designer	Start of Phase Forty-one development.
93	Phase Forty-two Planning	92	2025-08-16	2025-08-16	0 days	Project Manager	Start of Phase Forty-two planning.
94	Phase Forty-two Initiation	93	2025-08-17	2025-09-15	30 days	Product Owner, UX Designer	Start of Phase Forty-two development.
95	Phase Forty-three Planning	94	2025-09-16	2025-09-16	0 days	Project Manager	Start of Phase Forty-three planning.
96	Phase Forty-three Initiation	95	2025-09-17	2025-10-15	30 days	Product Owner, UX Designer	Start of Phase Forty-three development.
97	Phase Forty-four Planning	96	2025-10-16	2025-10-16	0 days	Project Manager	Start of Phase Forty-four planning.
98	Phase Forty-four Initiation	97	2025-10-17	2025-11-15	30 days	Product Owner, UX Designer	Start of Phase Forty-four development.
99	Phase Forty-five Planning	98	2025-11-16	2025-11-16	0 days	Project Manager	Start of Phase Forty-five planning.
100	Phase Forty-five Initiation	99	2025-11-17	2025-12-15	30 days	Product Owner, UX Designer	Start of Phase Forty-five development.
101	Phase Forty-six Planning	100	2025-12-16	2025-12-16	0 days	Project Manager	Start of Phase Forty-six planning.
102	Phase Forty-six Initiation	101	2025-12-17	2025-01-15	30 days	Product Owner, UX Designer	Start of Phase Forty-six development.
103	Phase Forty-seven Planning	102	2025-01-16	2025-01-16	0 days	Project Manager	Start of Phase Forty-seven planning.
104	Phase Forty-seven Initiation	103	2025-01-17	2025-02-15	30 days	Product Owner, UX Designer	Start of Phase Forty-seven development.
105	Phase Forty-eight Planning	104	2025-02-16	2025-02-16	0 days	Project Manager	Start of Phase Forty-eight planning.
106	Phase Forty-eight Initiation	105	2025-02-17	2025-03-15	30 days	Product Owner, UX Designer	Start of Phase Forty-eight development.
107	Phase Forty-nine Planning	106	2025-03-16	2025-03-16	0 days	Project Manager	Start of Phase Forty-nine planning.
108	Phase Forty-nine Initiation	107	2025-03-17	2025-04-15	30 days	Product Owner, UX Designer	Start of Phase Forty-nine development.
109	Phase Fifty Planning	108	2025-04-16	2025-04-16	0 days	Project Manager	Start of Phase Fifty planning.
110	Phase Fifty Initiation	109	2025-04-17	2025-05-15	30 days	Product Owner, UX Designer	Start of Phase Fifty development.
111	Phase Fifty-one Planning	110	2025-05-16	2025-05-16	0 days	Project Manager	Start of Phase Fifty-one planning.
112	Phase Fifty-one Initiation	111	2025-05-17	2025-06-15	30 days	Product Owner, UX Designer	Start of Phase Fifty-one development.
113	Phase Fifty-two Planning	112	2025-06-16	2025-06-16	0 days	Project Manager	Start of Phase Fifty-two planning.
114	Phase Fifty-two Initiation	113	2025-06-17	2025-07-15	30 days	Product Owner, UX Designer	Start of Phase Fifty-two development.
115	Phase Fifty-three Planning	114	2025-07-16	2025-07-16	0 days	Project Manager	Start of Phase Fifty-three planning.
116	Phase Fifty-three Initiation	115	2025-07-17	2025-08-15	30 days	Product Owner, UX Designer	Start of Phase Fifty-three development.
117	Phase Fifty-four Planning	116	2025-08-16	2025-08-16	0 days	Project Manager	Start of Phase Fifty-four planning.
118	Phase Fifty-four Initiation	117	2025-08-17	2025-09-15	30 days	Product Owner, UX Designer	Start of Phase Fifty-four development.
119	Phase Fifty-five Planning	118	2025-09-16	2025-09-16	0 days	Project Manager	Start of Phase Fifty-five planning.
120	Phase Fifty-five Initiation	119	2025-09-17	2025-10-15	30 days	Product Owner, UX Designer	Start of Phase Fifty-five development.
121	Phase Fifty-six Planning	120	2025-10-16	2025-10-16	0 days	Project Manager	Start of Phase Fifty-six planning.
122	Phase Fifty-six Initiation	121	2025-10-17	2025-11-15	30 days	Product Owner, UX Designer	Start of Phase Fifty-six development.
123	Phase Fifty-seven Planning	122	2025-11-16	2025-11-16	0 days	Project Manager	Start of Phase Fifty-seven planning.
124	Phase Fifty-seven Initiation	123	2025-11-17	2025-12-15	30 days	Product Owner, UX Designer	Start of Phase Fifty-seven development.
125	Phase Fifty-eight Planning	124	2025-12-16	2025-12-16	0 days	Project Manager	Start of Phase Fifty-eight planning.
126	Phase Fifty-eight Initiation	125	2025-12-17	2025-01-15	30 days	Product Owner, UX Designer	Start of Phase Fifty-eight development.
127	Phase Fifty-nine Planning	126	2025-01-16	2025-01-16	0 days	Project Manager	Start of Phase Fifty-nine planning.
128	Phase Fifty-nine Initiation	127	2025-01-17	2025-02-15	30 days	Product Owner, UX Designer	Start of Phase Fifty-nine development.
129	Phase Sixty Planning	128	2025-02-16	2025-02-16	0 days	Project Manager	Start of Phase Sixty planning.
130	Phase Sixty Initiation	129	2025-02-17	2025-03-15	30 days	Product Owner, UX Designer	Start of Phase Sixty development.
131	Phase Sixty-one Planning	130	2025-03-16	2025-03-16	0 days	Project Manager	Start of Phase Sixty-one planning.
132	Phase Sixty-one Initiation	131	2025-03-17	2025-04-15	30 days	Product Owner, UX Designer	Start of Phase Sixty-one development.
133	Phase Sixty-two Planning	132	2025-04-16	2025-04-16	0 days	Project Manager	Start of Phase Sixty-two planning.
134	Phase Sixty-two Initiation	133	2025-04-17	2025-05-15	30 days	Product Owner, UX Designer	Start of Phase Sixty-two development.
135	Phase Sixty-three Planning	134	2025-05-16	2025-05-16	0 days	Project Manager	Start of Phase Sixty-three planning.
136	Phase Sixty-three Initiation	135	2025-05-17	2025-06-15	30 days	Product Owner, UX Designer	Start of Phase Sixty-three development.
137	Phase Sixty-four Planning	136	2025-06-16	2025-06-16	0 days	Project Manager	Start of Phase Sixty-four planning.
138	Phase Sixty-four Initiation	137	2025-06-17	2025-07-15	30 days	Product Owner, UX Designer	Start of Phase Sixty-four development.
139	Phase Sixty-five Planning	138	2025-07-16	2025-07-16	0 days	Project Manager	Start of Phase Sixty-five planning.
140	Phase Sixty-five Initiation	139	2025-07-17	2025-08-15	30 days	Product Owner, UX Designer	Start of Phase Sixty-five development.
141	Phase Sixty-six Planning	140	2025-08-16	2025-08-16	0 days	Project Manager	Start of Phase Sixty-six planning.
142	Phase Sixty-six Initiation	141	2025-08-17	2025-09-15	30 days	Product Owner, UX Designer	Start of Phase Sixty-six development.
143	Phase Sixty-seven Planning	142	2025-09-16	2			