Z-H8

Standard jumper selections

This document specifies the standard jumper selections and switch settings for the Z-H8 as defined by the factory. If changes to the basic configurations are desired, the schematic should be consulted before making those changes to be sure the jumper functions are understood completely. The Z-H8 is extremely flexible and can be used in many applications.

Z-H8

Interrupt Configuration

Jumpers Installed	No connection on these pins	Description of operation
P28-1 to P28-4 P28-2 to P28-6 P28-3 to P28-5 P28-8 to P28-9	P28-7	These jumpers implement the Heath standard front panel interrupts and also the Z8Ø Non Maskable Interrupt (NMI).

Prossesor Status Port (PSP)

P7-3 to P7-4 P8-1 to P8-2 P8-3 to P9-3 P8-4 to P9-4 P9-1 to P9-2 P9-5 to P9-6	P7-1, P7-2, P7-5, P8-5, P8-6, P8-7, P26-1, P26-2, P26-3, P26-4, P26-5, P26-6, P27-1, P27-2, P27-3, P27-4, P27-5, P27-6	These jumpers inplement the standard Trionyx PSP functions; programmable 2/4 mhz, NMI permanently enabled, and bits 1 and 2 available for user definition.

Configuration of Bus Pins 18, 24, and 25

P2-1 to P3-2		Bus pin 24 is HALT-L signal
P4-1 to P4-2		Bus pin 18 is Side Select
P3Ø-1 to P3Ø-3		Bus pin 25 is BUSAK-L
	P2-2	MWR signal
	P2-3	Input of spare inverter
	P3-1	FØ signal
	P3-3	CN4-2 (connector for side sel)
	P4-3	RFRESH signal
	P3Ø-2	Output of spare inverter

ROM Ø Configuration (U24)

ROM Type	Jumpers installed	No connection on these pins
Trionyx FWZ8Ø (2732)	PB-1 to P23-1 PB-4 to P21-1 PB-6 to P22-1 P19-1 to pl9-2	PB-2, PB-3, PB-5, PB-7, PB-8 P2Ø-1, P2Ø-2, P21-2, P22-2, P23-2
Heath XCON8 (2532)	PB-1 to P2Ø-2 PB-4 to P21-1 PB-6 to P22-1 PB-8 to P23-1	PB-2, PB-3, PB-5, PB-7, P19-1 P19-2, P2Ø-1, P21-2, P22-2 P23-2
Heath PAM8, and PAMGO (27Ø8)	PB-3 to p2Ø-1 PB-6 to P22-1 P19-1 to P19-2 P21-1 to P21-2 P23-1 to P23-2	PB-1, PB-2, PB-4, PB-5, PB-7, PB-8, P2Ø-2

ROM 1 Configuration (U23)

Heath H17 controller ROM (2516) normally used with FWZ8Ø	PA-1 to P1Ø-1 PA-2 to P11-1 PA-4 to P12-1 PA-6 to P13-1 P15-1 to P15-2	PA-3, PA-5, PA-7, PA-8, PA-9 P1Ø-2, P11-2, P12-2, P13-2 P14-1, P14-2

ROM Select Configuration

Jumpers Installed	No connection on these pins	Description of operation
P16-1 to P16-2 P17-1 to P17-2 P18-1 to P18-2	P16-3, P17-3	Both ROMs are disabled with standard Heath ORG Ø circuitry via Bus pin 46.

Miscellaneous Jumpers

Jumper	Status	Description
P1-1 to P1-2	In	Bypasses optional oscillator LC tank circuit (normal)
P1-1 to P1-2	Out	Allows use of tank circuit
	-	
P24-2 to P24-3	In	Early memory write on Bus pin 23 (normal)
P24-1 to P24-3	Out	
P24-2 to P24-3	Out	Standard memory write on Bus pin 23
P24-1 to P24-3	In	
	-	
P5-1 to P5-2	In	Side select positive = low (normal)
P5-2 to P5-3	Out	
P5-1 to P5-2	Out	Side select positive = high
P5-2 to P5-3	In	
	-	
P6-1 to P6-2	In	Power up at 2 mhz (normal)
P6-2 to P6-3	Out	
P6-1 to P6-2	Out	Power up at 4 mhz
P6-2 to P6-3	In	
	-	
P29-1 to P29-2	In	BUSRQ-L enabled from Bus pin 27 (normal)
P29-1 to P29-2	Out	BUSRQ-L not enabled to CPU
	-	
P31-1 to P31-2	Out	2 mhz single step only (normal)
P31-2 to P31-3	In	
P31-1 to P31-2	In	2mhz/4mhz single step enable
P31-2 to P31-3	Out	
	-	

W H-8-37
Double Density
Disk Controller.
Z47 interface.

2449

765
ROSARIO, P.R.
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Z-H8

SWITCH SETTINGS

SW1

Position 2	Position 1	
on	on	No wait states
on	off	1/2 wait state
off	on	1 wait state
off	off	2 wait states

SW2

Position		
1	Ø-1K	ROM1 1K Selection
2	1-2K	
3	2-3K	
4	3-4K	When SW2-X is on, ROM1 will respond to
5	4-5K	bus addresses in the selected range.
6	5-6K	
7	6-7K	Normal setting with FWZ8Ø is position
8	7-8K	5 & 6 on, all others off.

SW3

Position		
1	On	Port 174-177 has H17 Disk (normal)
	Off	Port 174-177 has H47/Z47 Disk
2	On	Undefined (normal)
	Off	Reserved by Heath Co.
3	On	Port 17Ø-173 not in use
	Off	Port 17Ø-173 has H47/Z47 Disk (normal)
4	On	Undefined (normal)
	Off	Reserved by Heath Co.
5	On	Boot from dev. at port 174-177/Primary (normal)
	Off	Boot from dev. at port 17Ø-173/Secondary
6	On	Do memory test on boot - not currently supported
	Off	Do not do memory test (normal)
7	On	Set console to 96ØØ Baud (normal)
	Off	Set console to 192ØØ Baud - not currently supported
8	On	Push button boot from H8 (normal)
	Off	Auto boot on power up and master reset