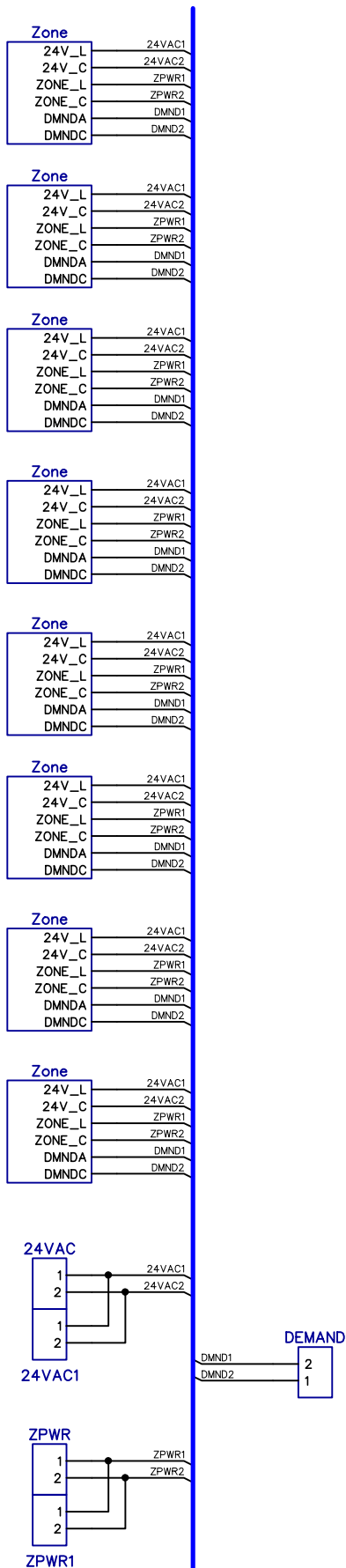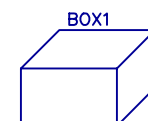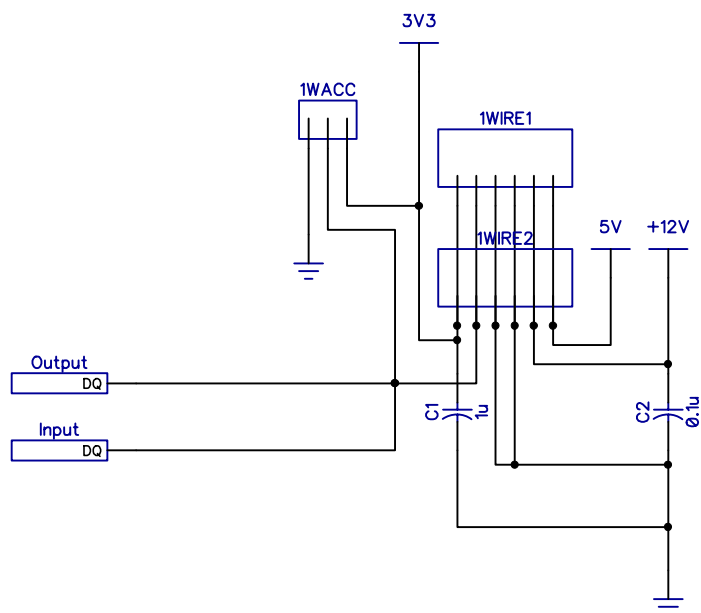## 8-Zone I/O Module

Zone control center provides ports for up to 8 zones. Each zone includes a wiring port for a 24VAC thermostat, a 24VAC zone valve or 120VAC circulator, and an optional end switch.

Two 1-wire modules are included: a dual-port relay-driven output, and a dual-port relay-isolated input. These may be used to allow HotPi to directly sense/drive external devices, or cross-wired directly on the board to control the demand signal to the backup boiler, etc.

Power inputs for thermostats and zone controls are provided separately, allowing the use of circulators or zone valves. On-board traces are sized to allow direct wiring to circulators.

Zone
24V_L	24VAC1
24V_C	24VAC2
ZONE_L	ZPWR1
ZONE_C	ZPWR2
DMNDA	DMND1
DMNDC	DMND2

Zone
24V_L	24VAC1
24V_C	24VAC2
ZONE_L	ZPWR1
ZONE_C	ZPWR2
DMNDA	DMND1
DMNDC	DMND2

Zone
24V_L	24VAC1
24V_C	24VAC2
ZONE_L	ZPWR1
ZONE_C	ZPWR2
DMNDA	DMND1
DMNDC	DMND2

Zone
24V_L	24VAC1
24V_C	24VAC2
ZONE_L	ZPWR1
ZONE_C	ZPWR2
DMNDA	DMND1
DMNDC	DMND2

Zone
24V_L	24VAC1
24V_C	24VAC2
ZONE_L	ZPWR1
ZONE_C	ZPWR2
DMNDA	DMND1
DMNDC	DMND2

Zone
24V_L	24VAC1
24V_C	24VAC2
ZONE_L	ZPWR1
ZONE_C	ZPWR2
DMNDA	DMND1
DMNDC	DMND2

Zone
24V_L	24VAC1
24V_C	24VAC2
ZONE_L	ZPWR1
ZONE_C	ZPWR2
DMNDA	DMND1
DMNDC	DMND2

Zone
24V_L	24VAC1
24V_C	24VAC2
ZONE_L	ZPWR1
ZONE_C	ZPWR2
DMNDA	DMND1
DMNDC	DMND2

24VAC
1	24VAC1
2	24VAC2
1	
2	

24VAC1

DEMAND
| DMND1 | 2 |
| DMND2 | 1 |

ZPWR
1	ZPWR1
2	ZPWR2
1	
2	

ZPWR1

3V3

1WACC

1WIRE1

1WIRE2

5V   +12V

Output
DQ

Input
DQ

C1 1u

C2 0.1u

BOX1

Zone I/O Module

Zone thermostat connectors provide a "C" line for communicating thermostats that require 24VAC power, plus three unused tie points to make wiring 4-6 wire systems easier and cleaner.

24VAC is provided to each thermostat. Zone power is provided independently. This may be jumpered to 24VAC, or a separate 120VAC line to run circulators.

End switches for zone relays can provide a demand signal to the boiler(s). For circulators, the "Aux" pole on the zone relay can provide the same function.

The "Aux" pole may also be used to provide a "priority" signal. To use with an end switch, jumper the end switch in series with the "Aux" pole.

TT	24V_L
R	
W	RLY6.1
C	24V_C
TB	
1	
2	
3	RLY6.2 ZONE_L
ZONE	
1	
2	ZONE_C
1	DMNDA
2	DMNDC
ESW	
AUX	
1	
2	RLY6.3
3	