The DSP56F80x has a COP watchdog. This is not enabled by IsoMax, or used by IsoMax in any way, so it's available for your use.

Unless you are using the WAIT and STOP modes yourself, you can ignore these options. IsoMax does not ever put the CPU into WAIT or STOP.

You *will* need to install a reset vector for the COP interrupt. The normal reset vector is at address $0000, but the COP vector is at address $0002 and is relocated to address $7D82. You'll probably want this to jump to the normal reset address, which you can read from location $0000 and write to Program Flash as follows (remember that each interrupt vector is two cells):

```
HEX 0 P@  7D82 PF!
    1  P@  7D83 PF!
```

So all you should need to do to enable the COP is the following:

1. Store the COP reset vector in Flash ROM, as described above.

2. Store a suitable 12-bit value in the COP Time-Out Register (COPTO). The timeout will be this value * 204.8 usec (given the 80 MHz CPU clock). The maximum value, $0FFF, gives a timeout of about 839 msec.

3. Make sure your application regularly services the COPSRV register by writing $5555 followed by $AAAA. One way to do this is to make it part of the IsoMax service, e.g. by creating a state machine to do this.

4. Set the COP Enable Bit (bit 1) in the COPCTL register.

Steps 2, 3, and 4 will of course need to be done in your initialization code, since after a reset IsoMax will disable the COP (by writing zero to COPCTL). To detect that a COP has occurred, check the COPR bit in the SYS_STS register.