

## **How to Program the I2C Actions in a Combo384 Maintenance Tool**

Combo384 can operate as an I2C master, sending a preprogrammed sequence of I2C commands upon the occurrence of an event, using the TWD.C pins (SDA PIN12, SCL PIN2).

Maintenance tool 1.18

Audio Device:

**Firmware Programming** | **I2C Actions Setup** | **Advanced** | **Configuration bits**

**Events**

- OnReset
- On384Set
- On352Set
- On192Set
- On176Set
- On96Set
- On88Set
- On48Set
- On44Set
- OnDSD64
- OnDSD128
- OnDSD256
- OnDSD512
- OnMute
- OnUnMute
- OnVolume

**I2C Address**  **Register**  **Value**

**Description**

**I2C Command List**

| Address | Register | Value | Description |
|---------|----------|-------|-------------|
|---------|----------|-------|-------------|

Fig. 1

By selecting an event from the list on the left, see Fig.1, it is possible to enter the sequence of I2C commands to be executed when the event occurs in the table on the right.



Maintenance tool 1.18

Audio Device

vid\_16d0&pid\_071a

combo384

Show Log

Firmware ProgrammingI2C Actions SetupAdvancedConfiguration bits

Events

OnReset

On384Set

On352Set

On192Set

On176Set

On96Set

On88Set

On48Set

On44Set

OnDSD64

OnDSD128

OnDSD256

OnDSD512

OnMute

OnUnMute

OnVolume

I2C Address

Register

Value

0x48

0x10

0x20

Description

ADD I2C Cmd

I2C Command List

| Address | Register | Value | Description |
|---------|----------|-------|-------------|
| 0x48    | 0x10     | 0x20  |             |

Test

Write Flash

In Fig.2, an example of an I2C command is shown, which is executed when the 48kHz sample rate is selected. 0x48 is the I2C device address, 0x10 is the register, and 0x20 is the value to be written.

Maintenance tool 1.18

Audio Device: vid\_16d0&pid\_071a    combo384    Show Log

Firmware Programming    **I2C Actions Setup**    Advanced    Configuration bits

**Events**

- OnReset
- On384Set
- On352Set
- On192Set
- On176Set
- On96Set
- On88Set
- On48Set
- On44Set
- OnDSD64
- OnDSD128
- OnDSD256
- OnDSD512
- OnMute
- OnUnMute
- OnVolume**

**I2C Address**    **Register**    **Value**

0x48    0x0    7

**Description**

ADD I2C Cmd

**I2C Command List**

| Address | Register | Value | Description |
|---------|----------|-------|-------------|
| 0x48    | 0x0      | 0x7   |             |

Test

Write Flash

Fig.3

The OnVolume event behaves slightly differently. The I2C command includes the device address, the base register, and the value field, which is used as the number of registers to be updated starting from the base register. This is because the volume value is sent by the host.

After programming the event table, press the "Write Flash" button to transfer the table to the CPU. The "Test" button allows you to immediately execute the selected table.

