

Introduction

This manual will go through the steps of flashing the EPCT onto your controller card thus enabling drive status functions from the I2C Bus. For use with 12-6386-01A, 12-6387-01A, 12-6412-01B.

Required materials:

1. Cables:



P/N: 05-1199-01A



P/N: 05-1187-01A

2. Software Kit

Contact your 3ware rep for software kit compatible with CiDesign chassis.

Instructions for flashing your controller card

1. Contact your 3ware rep for software kit.
2. Unzip the kit and remember the location.
3. Run the tw_esconfig.exe file.

Example: `tw_esconfig -c0 -i cid_16_port.bin`

-c# is the controller card port.

-i installs the CCU onto controller card.

cid_#_port.bin is the file you want to flash.

3. After flashing is complete, the system must be restarted.

Installing the cables onto backplanes

1. The activity cable should be installed to J13 or J22 if the HDD does not support pin 11.



Figure 1 - Activity cable plugged into backplane

2. The I2C cable should be installed to JP29 and daisy chained from J28 to J29.

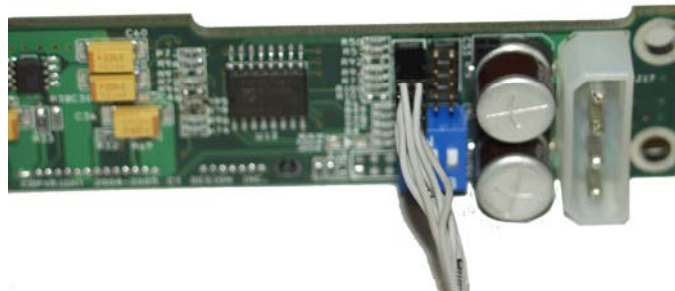


Figure 2 - I2C cable plugged into backplane

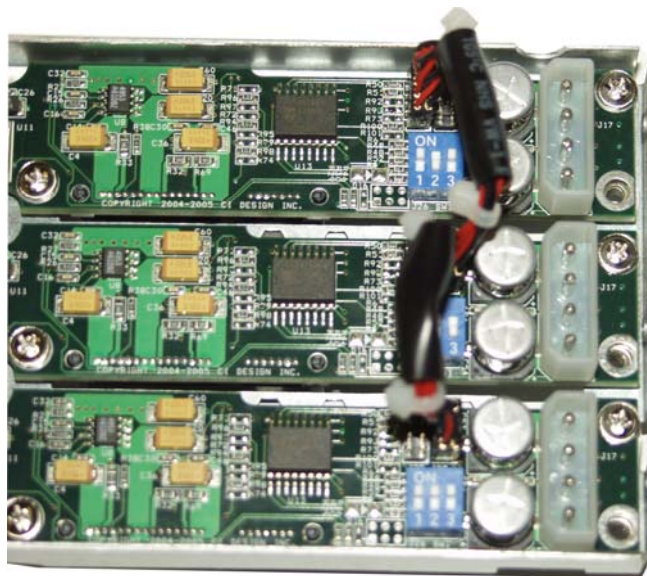


Figure 3 - Daisy chain from J28 to J29

Switch settings on backplane

1. SW2 – Controls the **BLUE** Activity LED.

All dips on SW2 should be in OFF position if using discrete activity cables. Otherwise, all dips on SW2 should be in ON position if HDD supports pin 11. Check the list to see if your HDD supports pin 11.



Figure 4 - SW2 dips in "ON" position

- a. Western Digital – All models
- b. Maxtor – DiamondMax 10 and MaXLine III
- c. Hitachi Deskstar – 7K500 (Kurofune-II), T7K250 (Vancouver-IV), 7K80 (Pathfinder-I)
- d. Seagate Barracuda - 7200.8 ST3300831AS, NL35 Series

2. SW1 – Controls the I2C Addresses

Follow the chart to determine the dip settings:

	BP 1	BP 2	BP 3	BP 4	BP 5	BP 6
All 1U Chassis	000	N/A	N/A	N/A	N/A	N/A
SR208	000	001	N/A	N/A	N/A	N/A
SR212	000	001	010	N/A	N/A	N/A
SR316	000	001	010	011	N/A	N/A
SR524*	000	001	010	011	000	001
SR524**	000	001	010	000	001	010

*Assumes you are using a 16port controller card on BP1-4 and 8port controller card on BP5-6. Requires 2x05-1199-01A

**Assumes you are using a 12port controller card on BP1-3 and 12port controller card on BP4-6. Requires 2x05-1199-01A.



NOTE

$ON = 0, OFF = 1. \quad MSB = 1, LSB = 3.$

3. Install shunt onto pins 9 and 10 of J9 to turn on FAIL LEDs.
 - a. See **Figure 5** for details on how to install shunt.

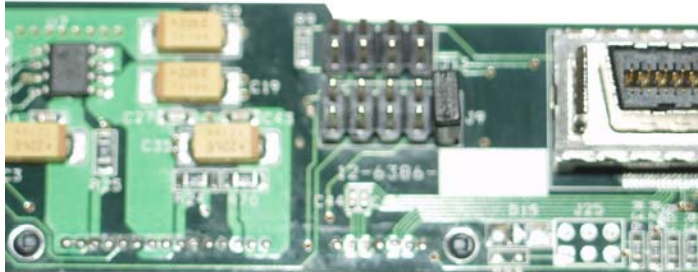


Figure 5 - Installing shunt

Installing the cables onto controller card

The activity cable:

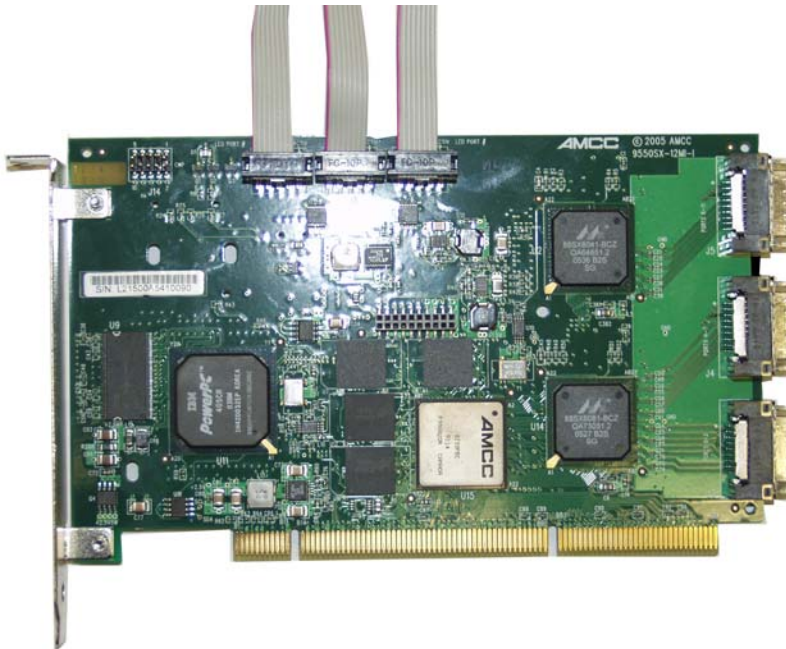


Figure 6 - Activity cable plugged into controller card

The I2C cable:

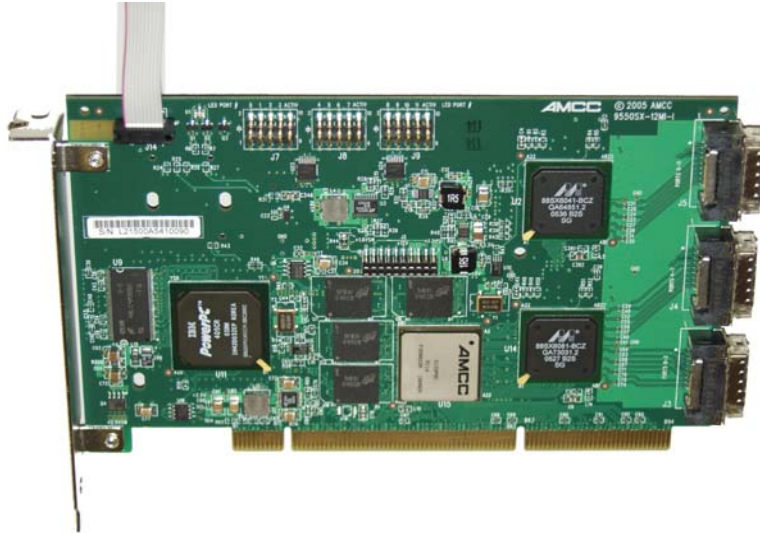


Figure 7 - I2C cable plugged into controller card

Description of LED codes

The following table describes the drive status LED code.

COLOR	STATUS
Solid Green	Drive OK
Blinking Green	Identify
Black	No Drive
Red and Green	Hot Spare
Blinking Red and Green	Rebuilding
Solid Red	Drive timeout or RAID DCB Error
Blinking Red	SMART threshold exceeded error or ECC error
Blinking and Solid Blue	Drive Activity

Drive time-out, DCB error, SMART threshold exceeded, or ECC error will retain across power cycle (non-volatile).

The exceptions are:

- ECC error if mapped out by drive (through RAID creation, initialize, write operation), firmware will report solid green instead of blinking red.
- DCB error result in solid red across power cycles, unless user creates new array using the same drive, which firmware will report solid green.
- SMART error will retain its status through initialization, rebuilding, and array creating by blinking red.
- Drive timeout error may or may not retain solid red, if firmware at any point can communicate with the drive after power cycle, reset, or hard reset.

S1 switch settings on 12-6412-01B (Mini-SAS)

If using 3ware I2C, turn all dips to ON position. Else, all off.

