



VSC7155 Release Note

Model: XJ-SA12-005
Provide By: DQA
Release Date: Aug 1st, 2008
Firmware Version: 3.04C01

Worldwide Technical Support and Product Information

WWW.AICIPC.COM

Worldwide Offices

New Jersey Office : 973-884-8886 / Email : syao@aicipc.com

Japan Office : 81-43-202-8380 / Email : japansales@twinipc.com

Europe Office : 31-30-638-6789 /Email : hc@aicipc.com

AIC Headquarter

17970 E. Ajax Circle City of Industry, CA 91748

Tel : 626-581-4300

T-WIN Taiwan Headquarter

No.9, Alley 19, Lane 20, Ta Hsing Rd. Luchu Shiang, Taoyuan Hsien,
Taiwan, R.O.C.

Tel:+886-3-3138386



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May28th-2007

Version 3.04a(Alfa) FW for AIC 5/10D Tower Expander

Major improvements:

1. LM80 temperature sensor support:

- a. When the temperature is up to 45°C the enclosure buzzer beeps and temp fail LED is light.
- b. When the temperature is up to 55°C the enclosure buzzer beeps and temp fail LED is light.
- c. SES support of temperature sensor element

2. Fan support

a. Fan error support

When fan error detected, the enclosure buzzer beeps and fan fail LED is light.

b. Fan speed control by temperature

SES Status	LOWEST	SECLOWEST	SPEED3	SPEED4	SPEED5	INTERMEDIATE	HIGHEST
Temp(°C).	T < 25	25 <= T < 35	NA	NA	NA	35 <= T < 40	T >= 40
Fan Speed Stage	Stage 3	Stage 2	NA	NA	NA	Stage 1	Stage 0

P.S. Fan Speed Stage 0: the highest speed; Fan Speed Stage 3: the lowest speed

- c. 5 D/10D FAN number auto detecting.
- d. SES support of cooling element.

3. Alarm support

- a. Beeping when the system boots up.
- b. SES support of alarm element

4. Full SES support of disk (insertion/removal, flashing of presence/fault LED).

- a. SES support of array device element
- b. An example of indicators behavior for Adaptec 4805
 - (i). One HD fail: fail LED flash (fast)
 - (ii). One HD Device fails in a array: the fail LEDs of All members are flash (slow); That fail LED of the fail HD device is flash (fast)
 - (iii). Rebuild: The fail LEDs of all members are flash (slow)
 - (iv). Blink: when the HD device is assigned, the fail led is blink.

5. Dual Bank FW

Select by boot loader. When expander is booting up, can press 'T' or 't' to swap the different firmware.



Note:

FW filename:

EM7155-AIC-5_10D-Tower-3.04a.fuf: for update.

EM7155-AIC-5_10D-Tower-3.04a-Mfg.bin (include boot loader 3.00) for production

June 22th-2007

Version 3.04a(Alfa) FW for AIC 5/10D Tower Expander

Define Model Name: EJ55-AIC-T5_10D-A0-3.04a

Major improvements:

1. Define model name “EJ55-AIC-T5_10D-A0-3.04a”

2. Confirm console command as below

tbuzzer	Make sure the Buzzer Beeping
tIm80	Make sure the Im80 works well.
ttemp	Temperature Simulation.
tverified	Verify the operablility of all leds in the system.
tbistloopback	Verify the quality for each Phy.
	tBISTLoopback [Rate] [Pattern] [PHY_range1]

3. Add boot loader function manual.

Please survey the VITESSE Recovery boot loader operation manual (ZH).

Note:

1. After 3.04, the S3R format is canceled.

2. FW filename:

EJ55-AIC-5_10D-A0-3.04a.fuf: for update. (console command : fwburn uart0)

EJ55-AIC-5_10D-A0-3.04a-Mfg.bin (include boot loader 3.00) for production

July 3th-2007

Version 3.04A FW for AIC 5/10D Tower Expander

Define Model Name: EJ55-AIC-T5_10D-A0-3.04A

1. This modification was based on “[XJ-F-0009-01 for XJ-SA12-005 with 3.04a Test Report.pdf](#)”.
2. Version change, ‘a’ =>’A’.
3. Sync the firmware level and firmware version and don’t display the dot.
(03.04A => 304A)
4. “Critical fail” can be differentiated from “Warning fail” in SES support for



temperature sensor.

5. The “Fan Speed” and “Fan Stage” were displayed by console command”showfanspeed”.

Note:

FW filename:

EJ55-AIC-5_10D-A0-3.04A.fuf: for update. (console command : fwburn uart0)

EJ55-AIC-5_10D-A0-3.04A-Mfg.bin (include boot loader 3.00) for production

July 9th-2007

Version 3.04b FW for AIC 5/10D Tower Expander

Define Model Name: EJ55-AIC-T5_10D-A0-3.04b

1. This modification was based on “[XJ-F-0009-01 for XJ-SA12-005 with 3.04A Test Report.pdf](#)”.
2. Version change, ‘A’ =>’b’.
3. “Warning fail” cannot return back optimal is fixed.

Note:

FW filename:

EJ55-AIC-5_10D-A0-3.04b.fuf: for update. (console command : fwburn uart0)

EJ55-AIC-5_10D-A0-3.04b-Mfg.bin (include boot loader 3.00) for production

October 4th-2007

Version 3.04B FW for AIC 5/10D Tower Expander.

Define Model Name: EJ55-AIC-T5_10D-A0-3.04B

1. This modification was based on “[XJ-F-0009-03 for XJ-SA12-005 with 3.04b Test Report.pdf](#)”.
2. Version change, ‘b’ =>’B’.
3. Adaptec cascade issue was fixed.
4. When event occur or change .the buzzer will beep.
5. This FW was shared by 5bay and 10bay. 5 bay’s FAN2 was not installed, so SES status will show FAN2: Not Install.
6. Behavior of Array-fail was improved for LSI 8480E HBA (1.03.60-0255)/ LSI 8344ELP HBA (1.03.60-0255).
7. Adaptec’s temperature status was fixed.



8. Adaptec's "Blink Enclosure" was implemented.
9. Blink interference was fixed.
10. Console command "ttemp" was used to simulation temperature.

Note:

FW filename:

EJ55-AIC-5_10D-A0-3.04B.fuf: for update. (Console command: fwburn uart0)

EJ55-AIC-5_10D-A0-3.04B-Mfg.bin (Include Boot Loader 3.00 and Dual Bank FW3.04B) for production.

February 14th-2008

Version 3.04c FW for AIC 5/10D Tower Expander.

Define Model Name: EJ55-AIC-T5_10D-A0-3.04c

Major improvements:

1. This modification was based on ATTO Daisy-Chain issue.
2. Version change, 'B' =>'c'.
3. Support ATTO's SES RPM reporting function
4. Add Fan Speed Stage Control (tfanspeedverify) in Console Command.
5. Fan Speed Display revised

FW filename:

EJ55-AIC-5_10D-A0-3.04c.fuf: for update. (Console command: fwburn uart0)

February 22th-2008

Version 3.04c01 FW for AIC 5/10D Tower Expander.

Define Model Name: EJ55-AIC-T5_10D-A0-3.04c01

Major improvements:

1. This modification was based on AVID FAN Report issue.
2. Version change, 'c' =>'c01'.
3. Support SATA I non-NCQ HDDs.



4. PHY Signal Adjustment - Just Fine Tune, Non-Issue.

FW filename:

EJ55-AIC-5_10D-A0-3.04c01.fuf: for update. (Console command: fwburn uart0)

March 11th-2008

Version 3.04C FW for AIC 5/10D Tower Expander.

Define Model Name: EJ55-AIC-T5_10D-A0-3.04C

Major improvements:

1. Version change, 'c01' =>'C', just for Formal Release.

FW filename:

EJ55-AIC-5_10D-A0-3.04C.fuf: for update. (Console command: fwburn uart0)

EJ55-AIC-5_10D-A0-3.04C-Mfg.bin: (Include Boot Loader 3.00 and Dual Bank FW3.04C for production.

August 1st-2008

Version 3.04C01 FW for AIC 5/10D Tower Expander.

Define Model Name: EJ55-AIC-T5_10D-A0-3.04C01

Major improvements:

- (1) This version had "FUZZY Control" on FAN as below table.
- (2) This solution could solve the repeating FAN speed change annoying issue and meet the thermal spec.



Rise Condition		Threshold T1		Threshold T2		Threshold T3	
Temperature(Rise)	<25	25	25~34	35	35~39	40	>40
FAN Stage	3	2	2	1	1	0	0
Fall Condition		Threshold T1		Threshold T2		Threshold T3	
Temperature(Fall)	<25	25	25~30	31	31~35	36	>36
FAN Stage	3	2	2	1	1	Keep	Keep

Temperature

Unit:°C

(3)Cancel the temperature trend debug message on console

FW filename:

EJ55-AIC-5_10D-A0-3.04C01.fuf: for update. (Console command: fwburn uart0)

EJ55-AIC-5_10D-A0-3.04C01-Mfg.bin: (Include Boot Loader 3.00 and Dual Bank FW3.04C01 for production.)