ICOP-4087

PC/104 Solid State Disk Module

User's Manual

(Version1.1)

Copyright Notice

Trademarks Acknowledgments

Table of Contents

Chapter 0

Packing List

Function	Function	Package
ICOP-4087	PC/104 Solid State Disk Module	● ICOP-4087 PC/104 Solid State Disk Module x 1 ● Screw Kit x 1

Chapter 1
Specifications

Features	ICOP-4086
Emulate Drive	A or B
Bootable Drive	A
Bus Interface	PC/104 8 bit standard compliant
Memory Sockets	4 (32 Pin DIP socket)
Power Requirement	+5V @120mA
Board Weight	80g
Board Size	96mm X 90 mm (3.54 x 3.77 inches)
Storage Temperature	0 ~ +60°C

Description

Emulates drive A, B,

Bootable from Drive A or Drive B simulation

Flash Disk:

Support SRAM / NVSRAM memory up to 4 sockets

Maximum capacity: 512KB x 4=2M byte by SRAM / NVSRAM Memory.

Type supported:

SRAM: Sony CX581000AP-70LL (128K)

HITACHI HM628512LFP-7 (512K)

NVSRAM: Dallas-DS1245Y-100 (128K)

Dallas-DS1245Y-120 (128K)

Dallas-DS1250Y-100 (512K)

Note: (1) Stack on 4 pcs ICOP-4087 in maximum, to extend 4 times capacity. Compatible with BIOS level, without program modification or driver requirement.

(2)Memory Address: **D0000~DFFFF**

Bus Interface: PC/104 8 bit standard compliant

Socket: 4 sockets for SRAM / NVSRAM memory

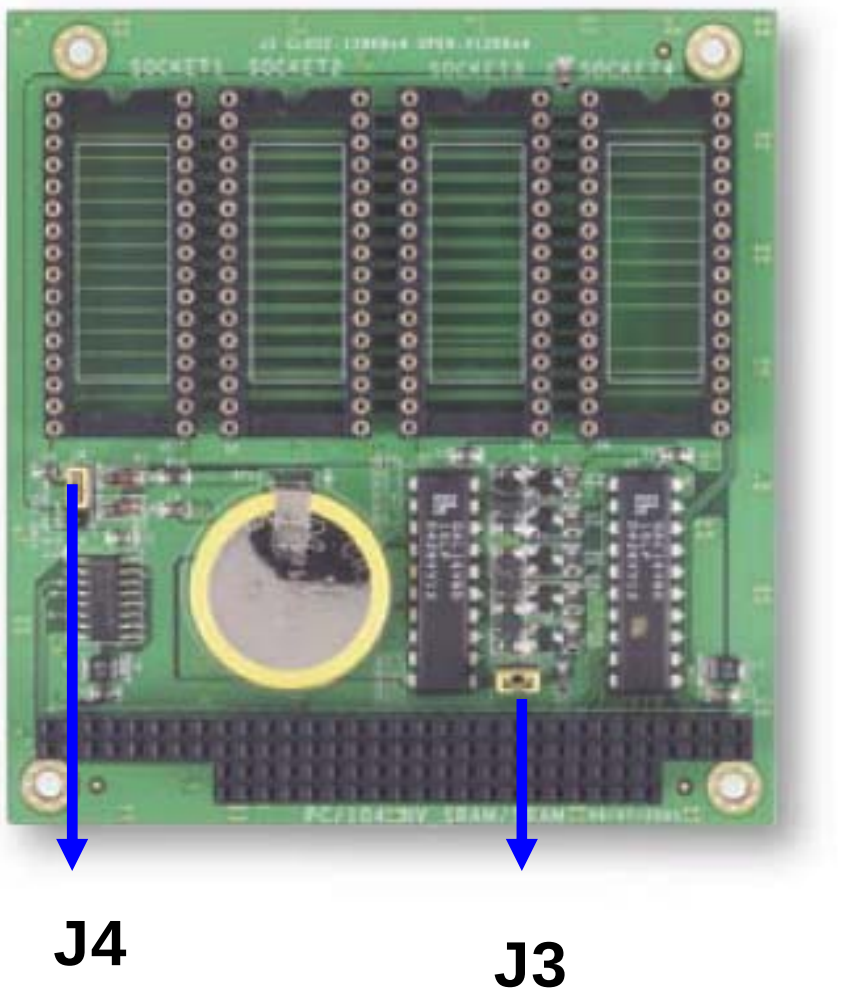
Power Requirements: single +5V @ 120 mA

Dimensions: 90 (L) x 96 (W) mm.

Weight: 80 g

Operating Temperature: 0 ~ +60 °C

Component Location



Chapter 2

Jumper Setting

J3: Size Select

Pin#	Signal Name
Close	128K x 4
Open	512K x 4

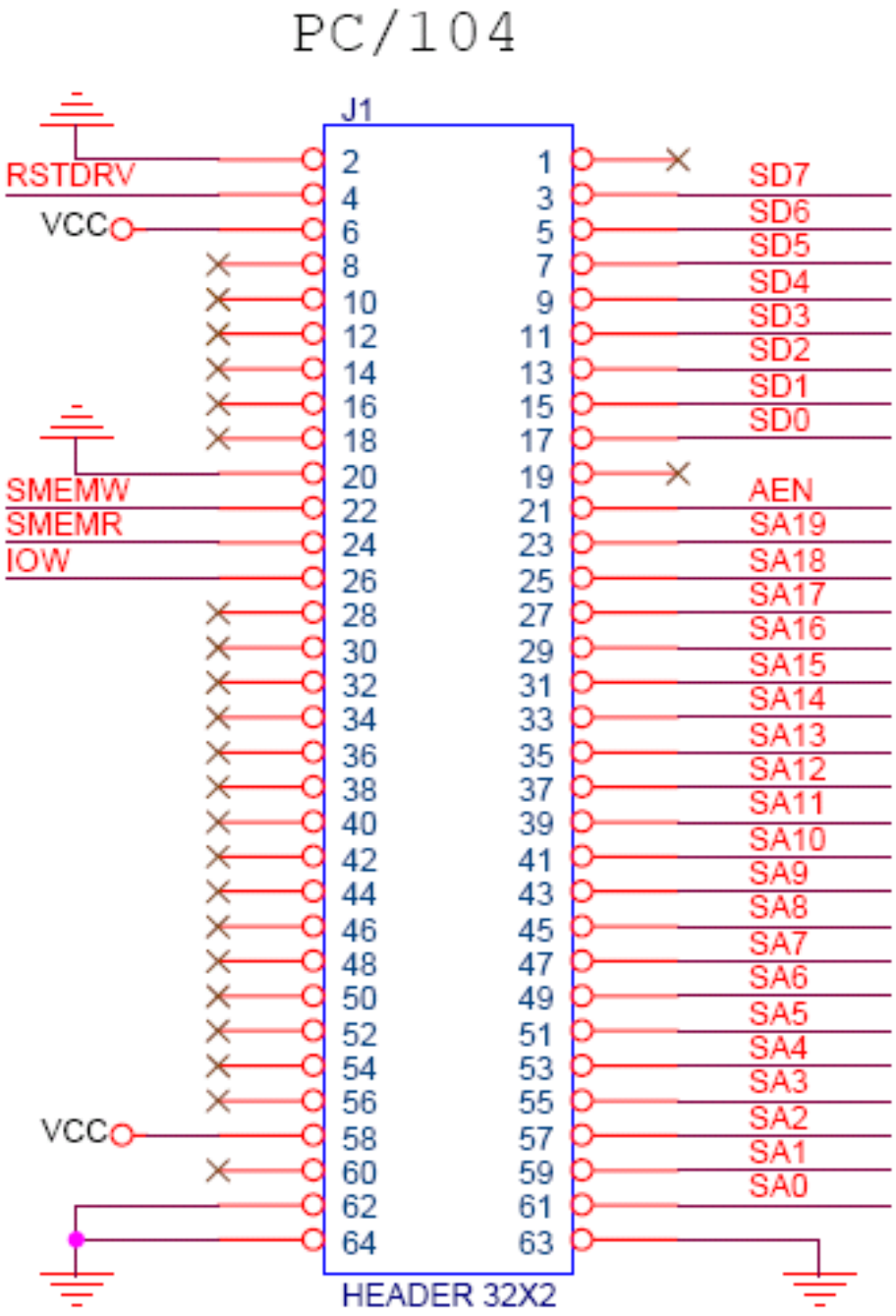
J3: Type Select

Memory Type	1-2	2-3
NV_SRAM	●	
SRAM		●

C h a p t e r 3

Connectors

J1: PC/104 connector



Technical Data Sheet

Product Name	ICOP-4087 DM27	Doc.No.	QMT950037R00
Product Description	PC/104 NV_SRAM / SRAM 128KB / 512KB * 4	Doc. Category	Confidential
		Issued Date	03-31-2006

Production Test Procedure (測試指導書)

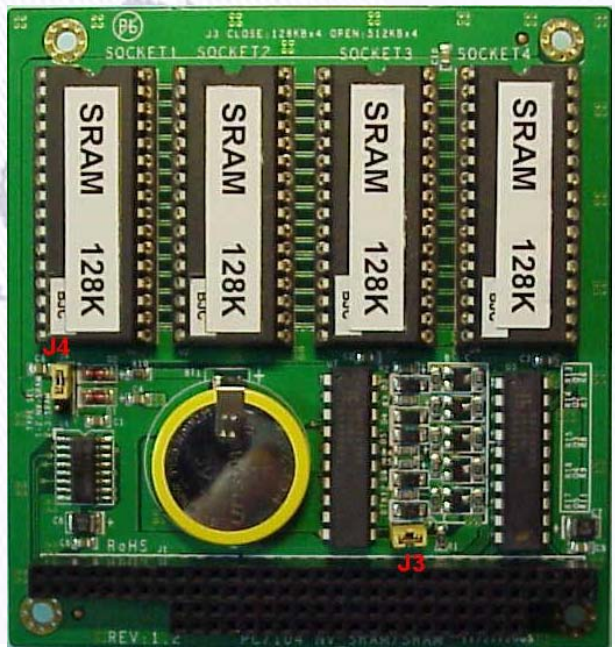
Jumper setting & Test procedure

A. SRAM 128K

A-1. Jumper setting

	FLASH DISK Type		J3	J4
V	SRAM	128K	Short	2-3
	SRAM	512K	Open	2-3
	NVSRAM	128K	Short	1-2
	NVSRAM	512K	Open	1-2

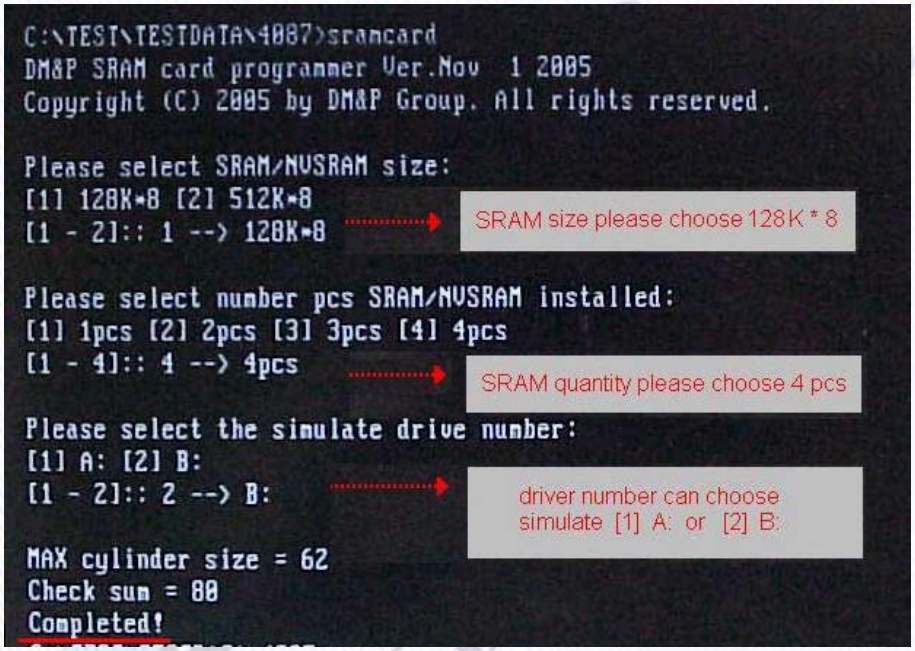
SRAM 128K in U1.U2.U3.U4 and Item is Sony CX581000AP-70LL



A-2. Test procedure

i. Operate SRAMCARD.EXE，Emulates drive B，Please see as below。

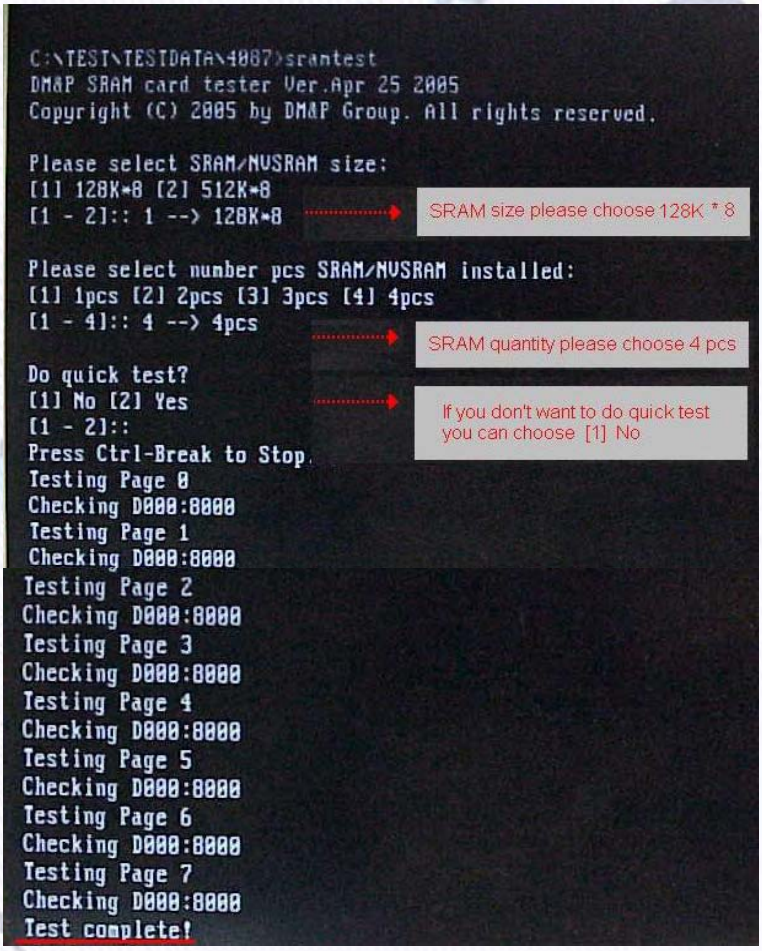
(If you want to Emulates drive A，drive number can choose [1] A：)



ii. Reboot and Operate Format B： /S/U ，Please see as below。

iii. Operate SRAMTEST.EXE and do the SRAM Read / Write test。

After you execute SRAMTEST.EXE file，the original data of SRAM will be cleaned，Hardware define 64K as 1 page，So 512K bytes SRAM will divide into 8 Pages。Finally，you will see the test complete on the screen。



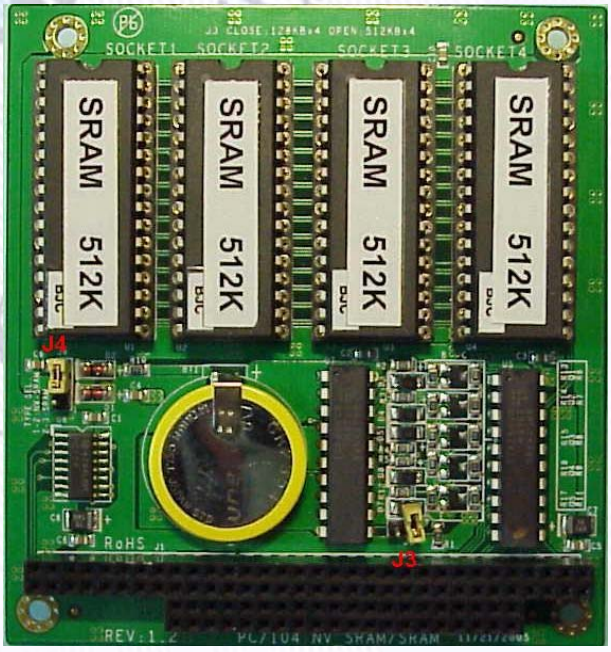
Jumper setting & Test procedure

B. SRAM 512K

B-1. Jumper setting

	FLASH DISK Type	J3	J4
	SRAM 128K	Short	2-3
V	**SRAM 512K**	**Open**	**2-3**
	NVSRAM 128K	Short	1-2
	NVSRAM 512K	Open	1-2

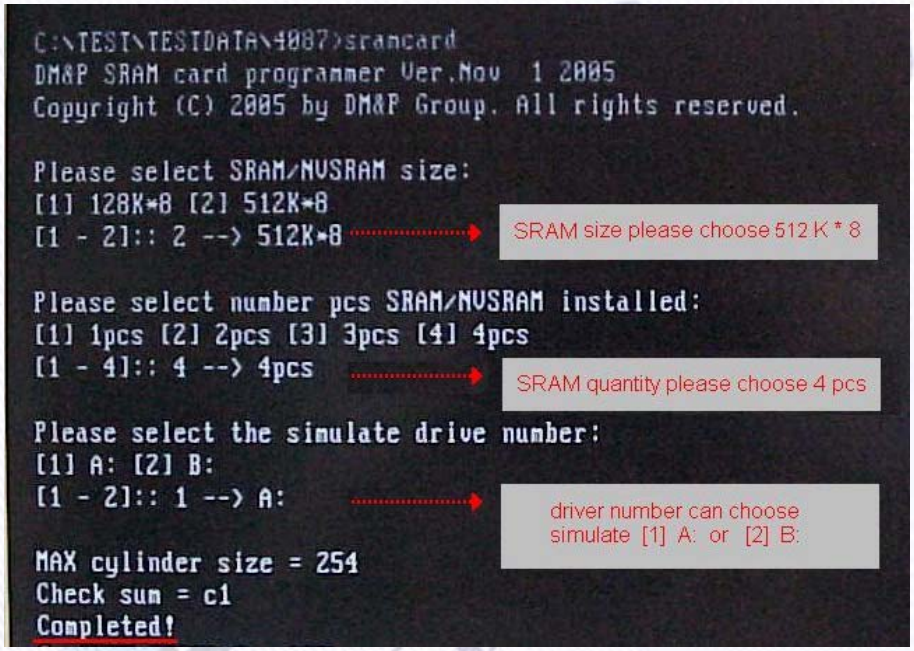
SRAM 512K in U1.U2.U3.U4 and Item is HITACHI HM628512LFP-7



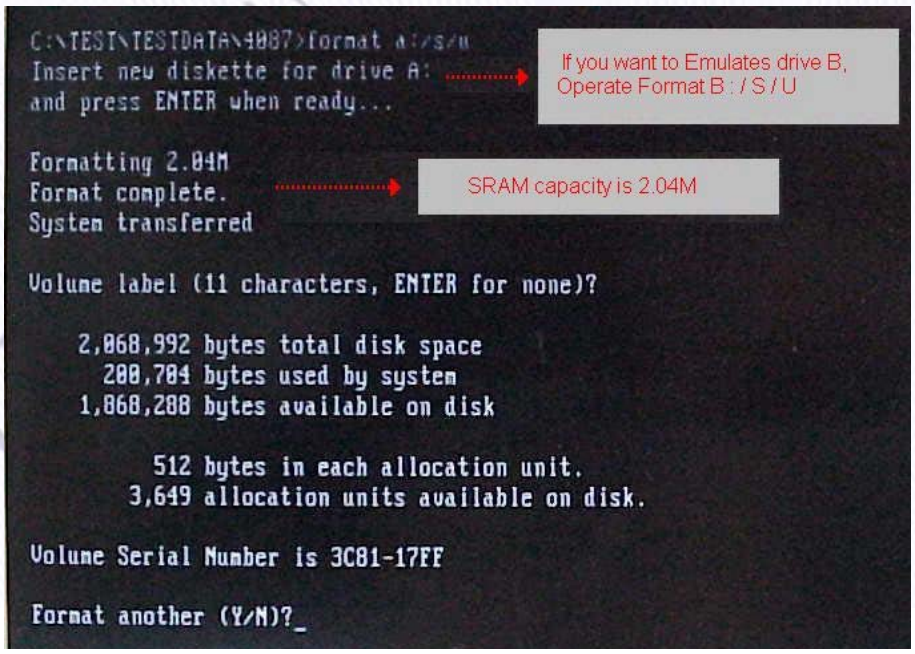
B-2. Test procedure

i. Operate SRAMCARD.EXE，Emulates drive A，Please see as below。

(If you want to Emulates drive B，drive number can choose [2] B：)

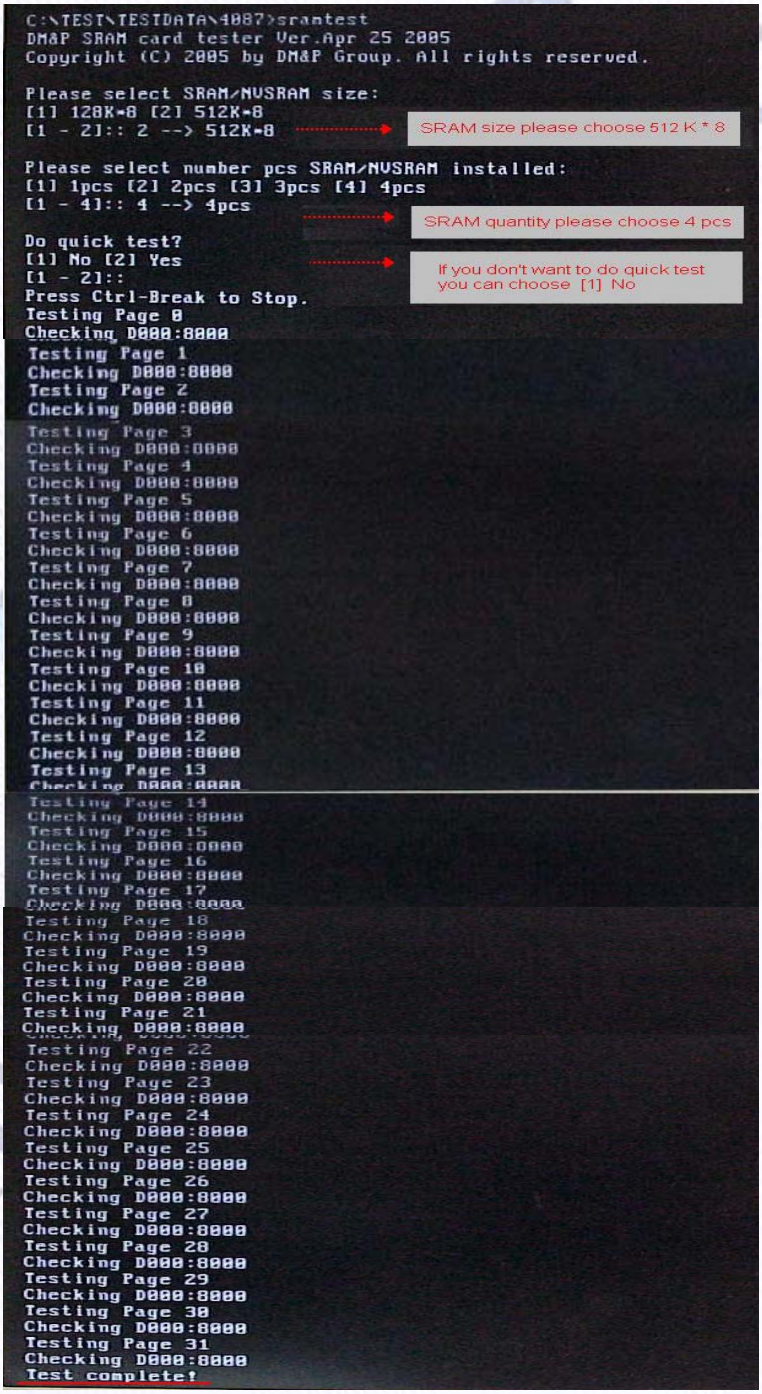


ii. Reboot and Operate Format A： / S / U ，Please see as below。



iii. Operate SRAMTEST.EXE and do the SRAM Read / Write test。

After you execute SRAMTEST.EXE file，the original data of SRAM will be cleaned，Hardware define 64K as 1 page，So 2M bytes SRAM will divide into 32 Pages。Finally，you will see the test complete on the screen。



Jumper setting & Test procedure

C. NVSRAM 128K

C-1. Jumper setting

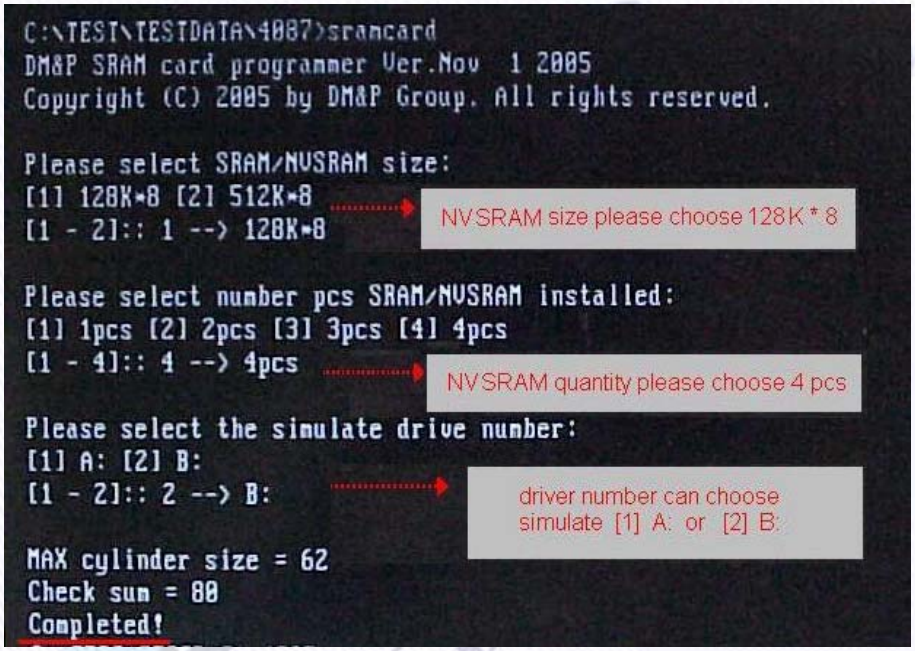
	FLASH DISK Type		J3	J4
	SRAM	128K	Short	2-3
	SRAM	512K	Open	2-3
V	**NVSRAM**	**128K**	**Short**	**1-2**
	NVSRAM	512K	Open	1-2

NVSRAM 128K in U1.U2.U3.U4 and Item is Dallas-DS1245Y-100

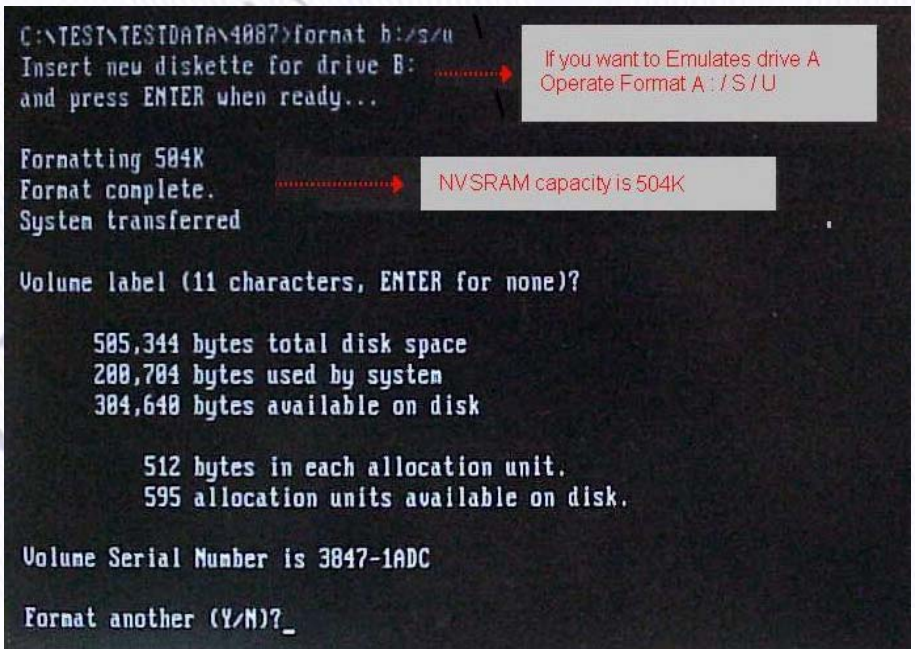
C-2. Test procedure

i. Operate SRAMCARD.EXE，Emulates drive B，Please see as below。

(If you want to Emulates drive A，drive number can choose [1] A：)

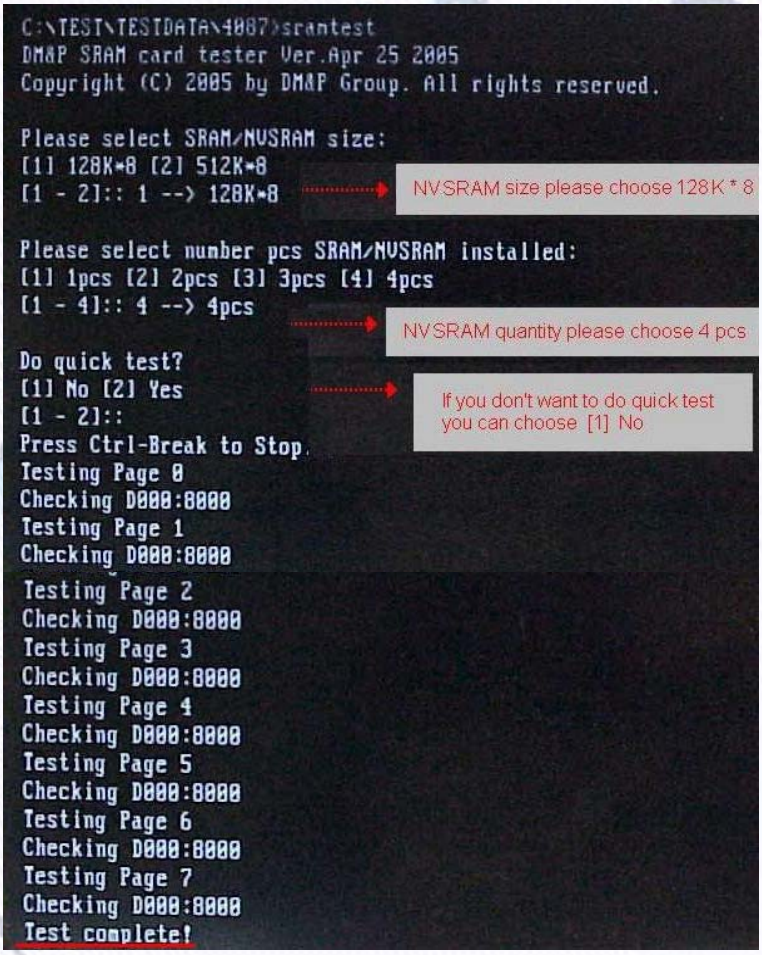


ii. Reboot and Operate Format B： /S / U ，Please see as below。



iii. Operate SRAMTEST.EXE and do the NVSRAM Read / Write test。

After you execute SRAMTEST.EXE file，the original data of NVSRAM will be cleaned，Hardware define 64K as 1 page，So 512K bytes NVSRAM will divide into 8 Pages。Finally，you will see the test complete on the screen。



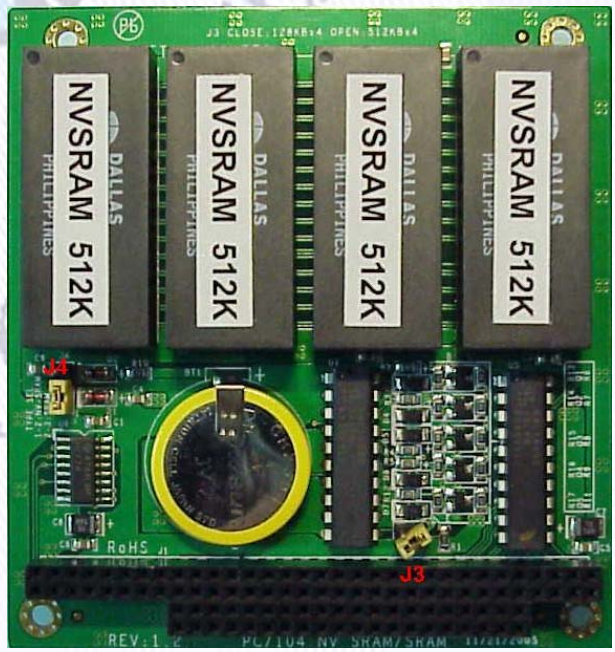
Jumper setting & Test procedure

D. NVSRAM 512K

D-1. Jumper setting

	FLASH DISK Type	J3	J4
	SRAM 128K	Short	2-3
	SRAM 512K	Open	2-3
	NVSRAM 128K	Short	1-2
V	**NVSRAM 512K**	**Open**	**1-2**

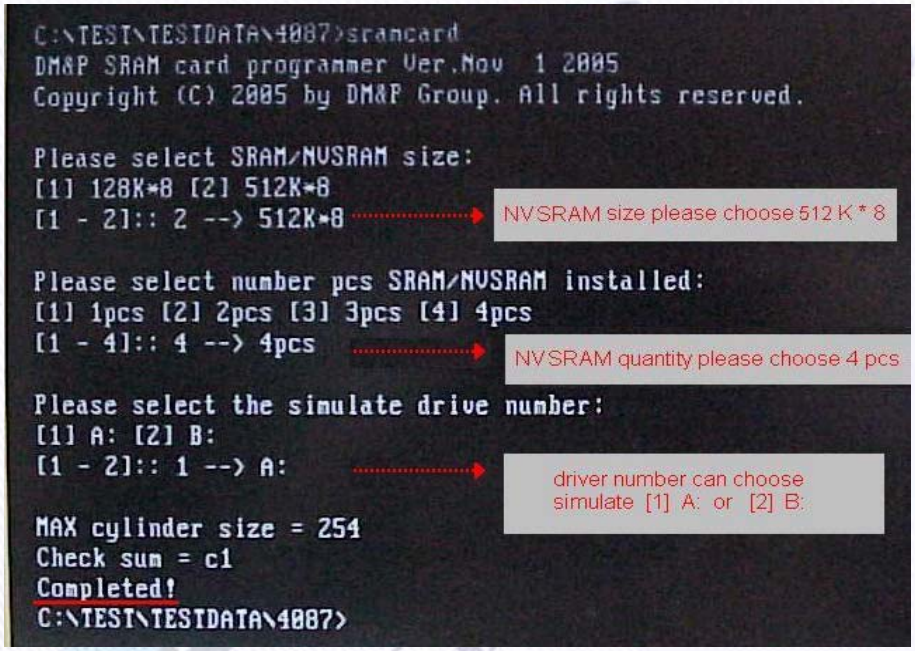
NVSRAM 512K in U1.U2.U3.U4 and Item is Dallas-DS1250Y-100



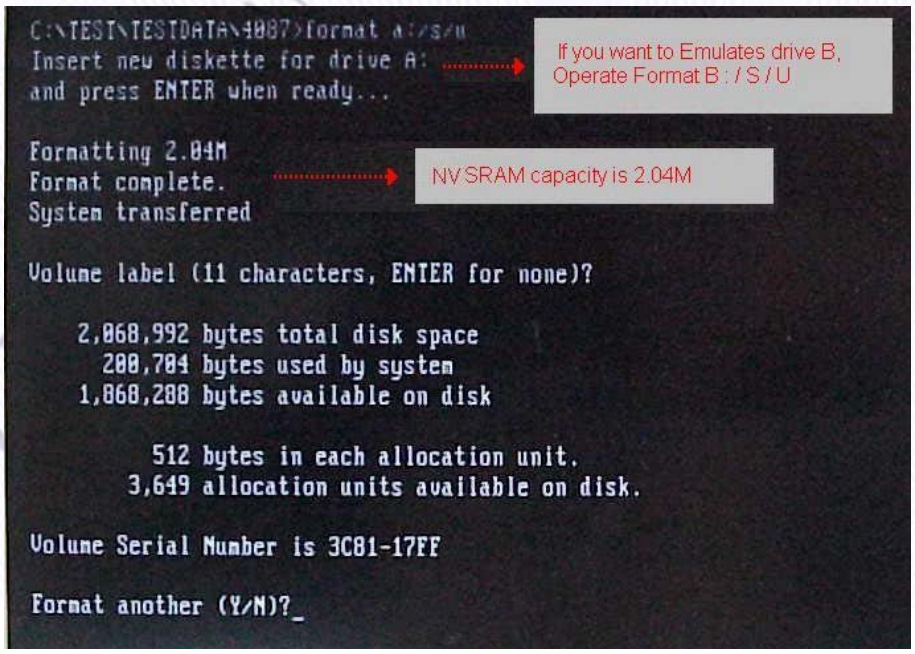
D-2. Test procedure

i. Operate SRAMCARD.EXE，Emulates drive A，Please see as below。

(If you want to Emulates drive B，drive number can choose [2] B：)

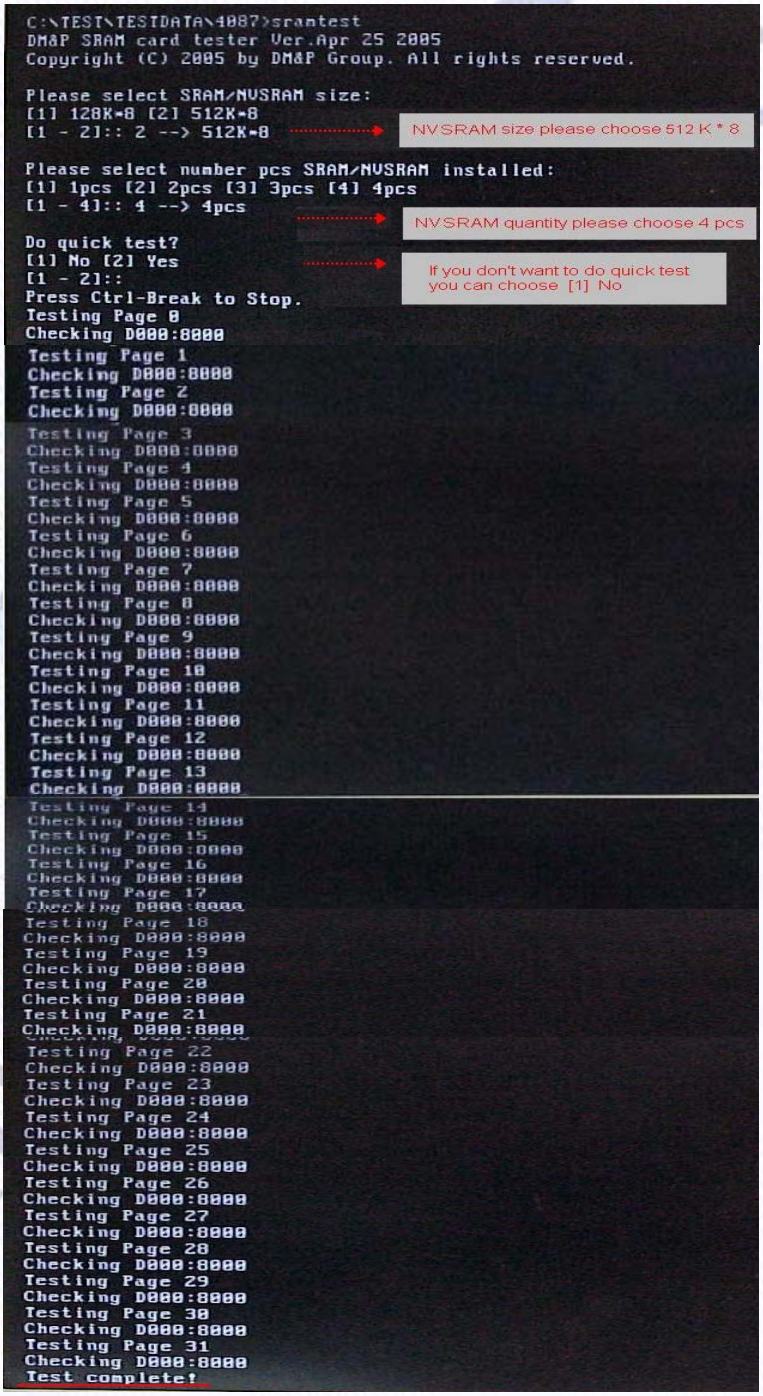


ii. Reboot and Operate Format A： / S / U ，Please see as below。



iii. Operate SRAMTEST.EXE and do the NVSRAM Read / Write test。

After you execute SRAMTEST.EXE file，the original data of SRAM will be cleaned，Hardware define 64K as 1 page，So 2M bytes NVSRAM will divide into 32 Pages。Finally，you will see the test complete on the screen。



Technical Data Sheet

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		Issued Date	03-31-2006

Production Test Procedure (測試指導書)

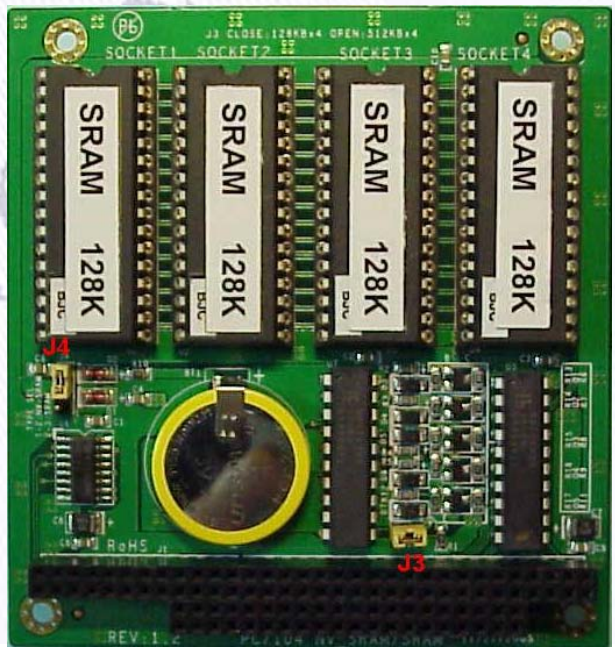
Jumper setting & Test procedure

A. SRAM 128K

A-1. Jumper setting

	FLASH DISK Type		J3	J4
V	SRAM	128K	Short	2-3
	SRAM	512K	Open	2-3
	NVSRAM	128K	Short	1-2
	NVSRAM	512K	Open	1-2

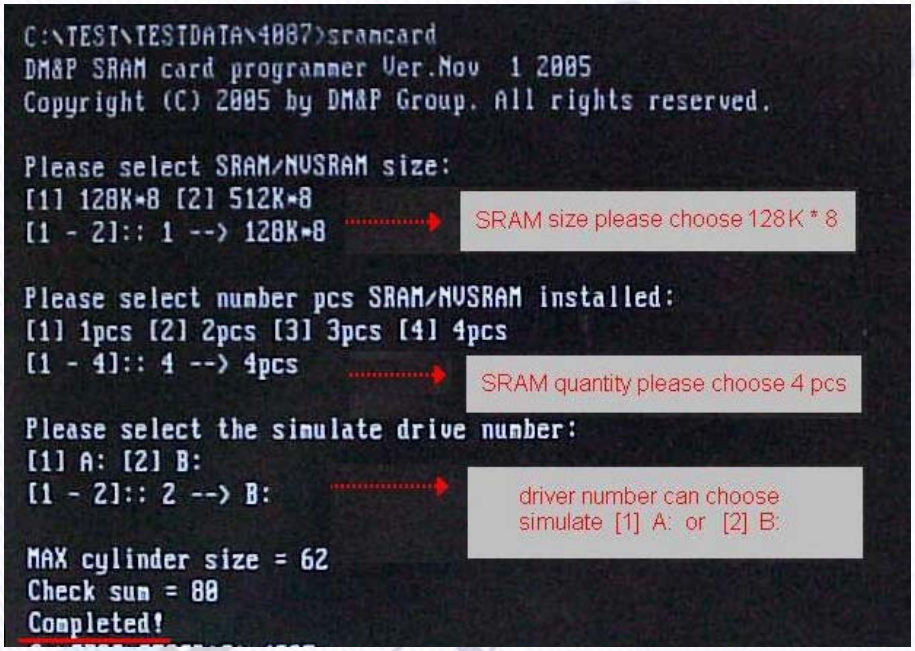
SRAM 128K in U1.U2.U3.U4 and Item is Sony CX581000AP-70LL



A-2. Test procedure

i. Operate SRAMCARD.EXE，Emulates drive B，Please see as below。

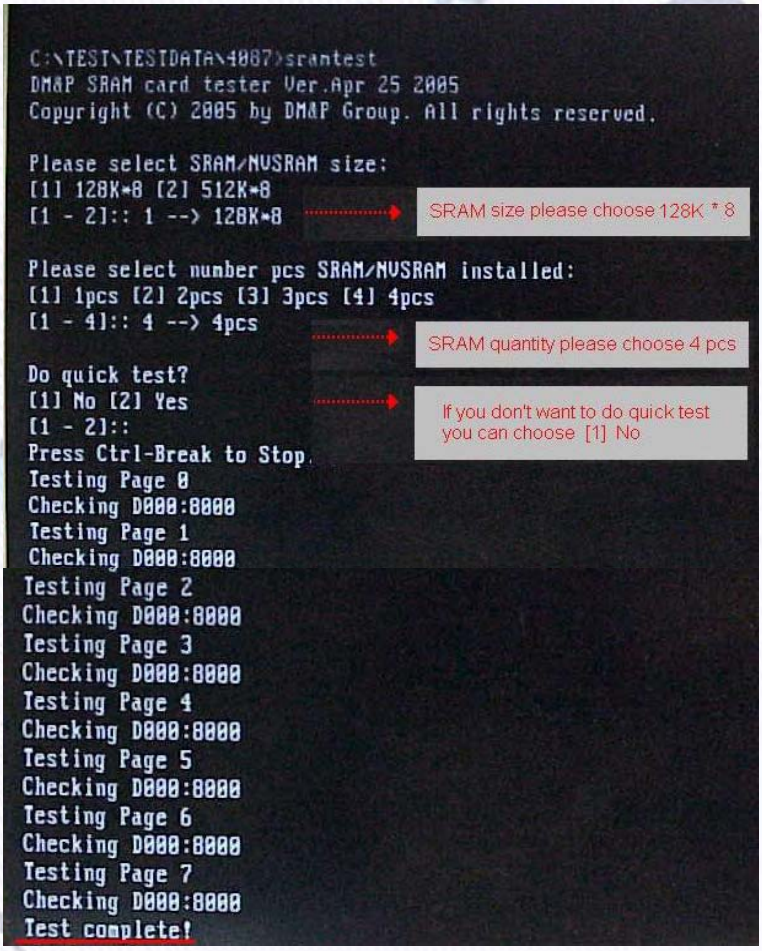
(If you want to Emulates drive A，drive number can choose [1] A：)



ii. Reboot and Operate Format B： /S/U ，Please see as below。

iii. Operate SRAMTEST.EXE and do the SRAM Read / Write test。

After you execute SRAMTEST.EXE file，the original data of SRAM will be cleaned，Hardware define 64K as 1 page，So 512K bytes SRAM will divide into 8 Pages。Finally，you will see the test complete on the screen。



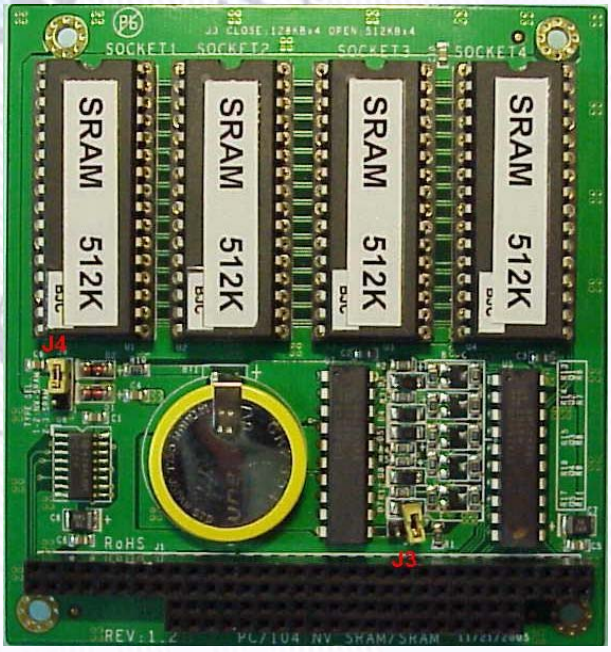
Jumper setting & Test procedure

B. SRAM 512K

B-1. Jumper setting

	FLASH DISK Type	J3	J4
	SRAM 128K	Short	2-3
V	**SRAM 512K**	**Open**	**2-3**
	NVSRAM 128K	Short	1-2
	NVSRAM 512K	Open	1-2

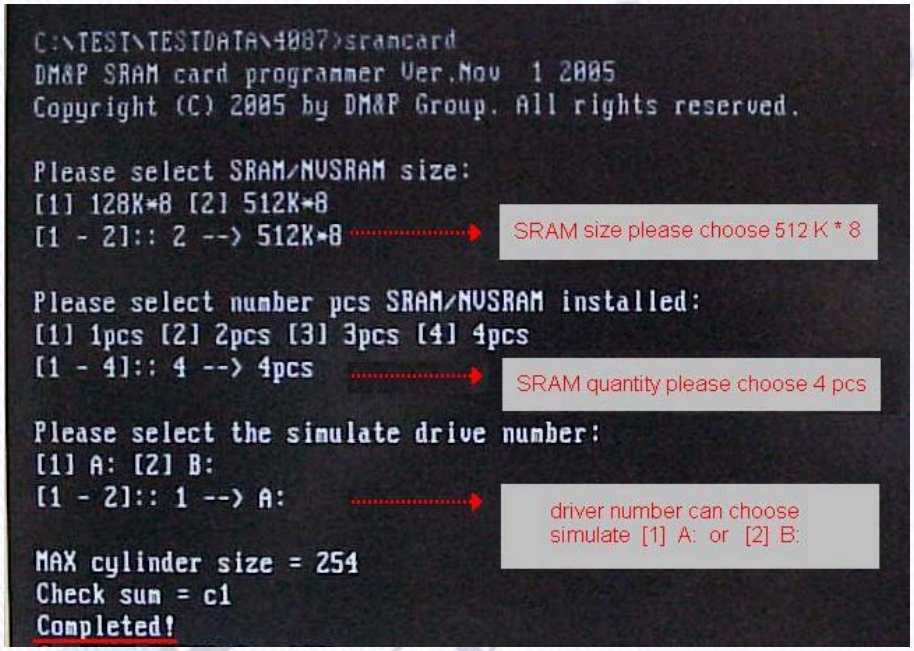
SRAM 512K in U1.U2.U3.U4 and Item is HITACHI HM628512LFP-7



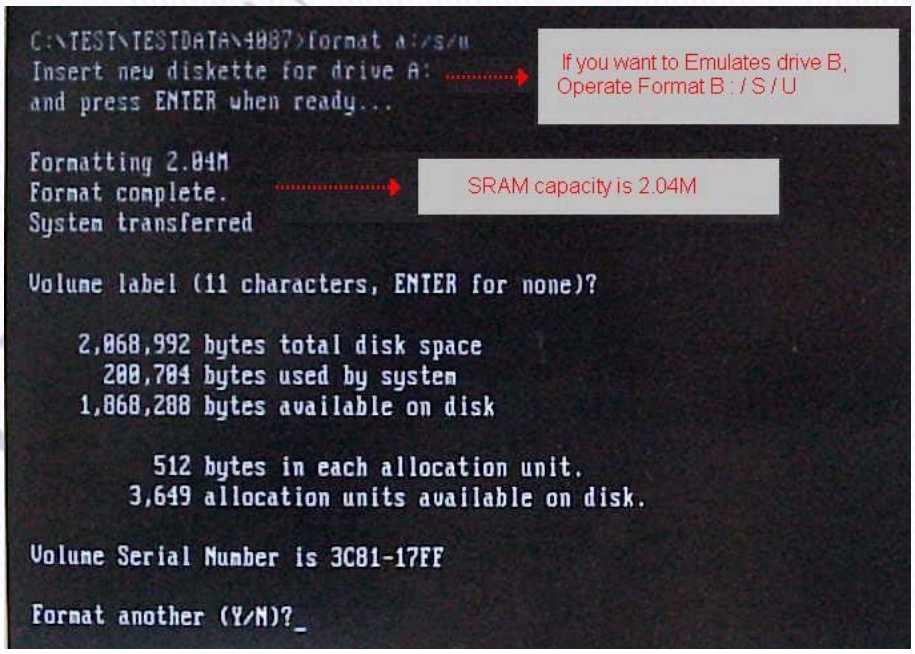
B-2. Test procedure

i. Operate SRAMCARD.EXE，Emulates drive A，Please see as below。

(If you want to Emulates drive B，drive number can choose [2] B：)

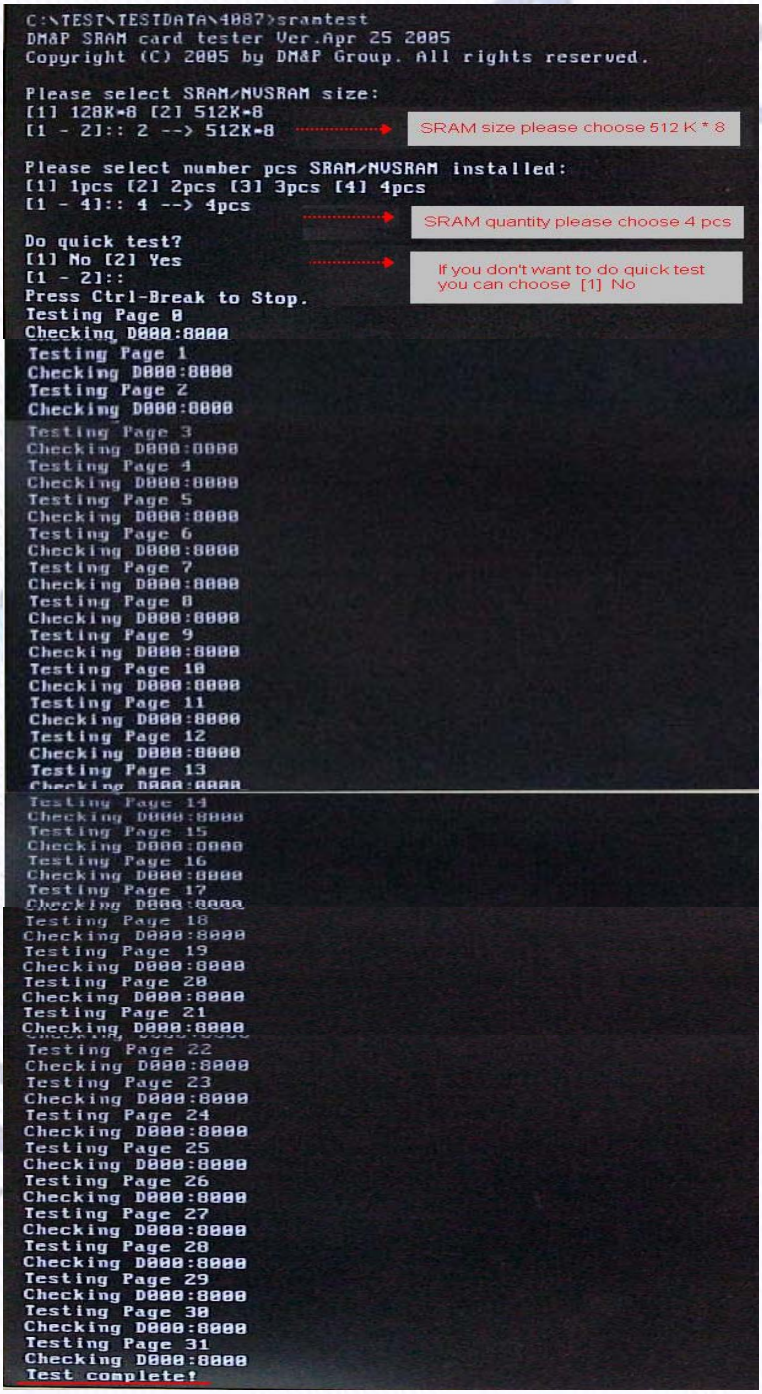


ii. Reboot and Operate Format A： / S / U ，Please see as below。



iii. Operate SRAMTEST.EXE and do the SRAM Read / Write test。

After you execute SRAMTEST.EXE file，the original data of SRAM will be cleaned，Hardware define 64K as 1 page，So 2M bytes SRAM will divide into 32 Pages。Finally，you will see the test complete on the screen。



Jumper setting & Test procedure

C. NVSRAM 128K

C-1. Jumper setting

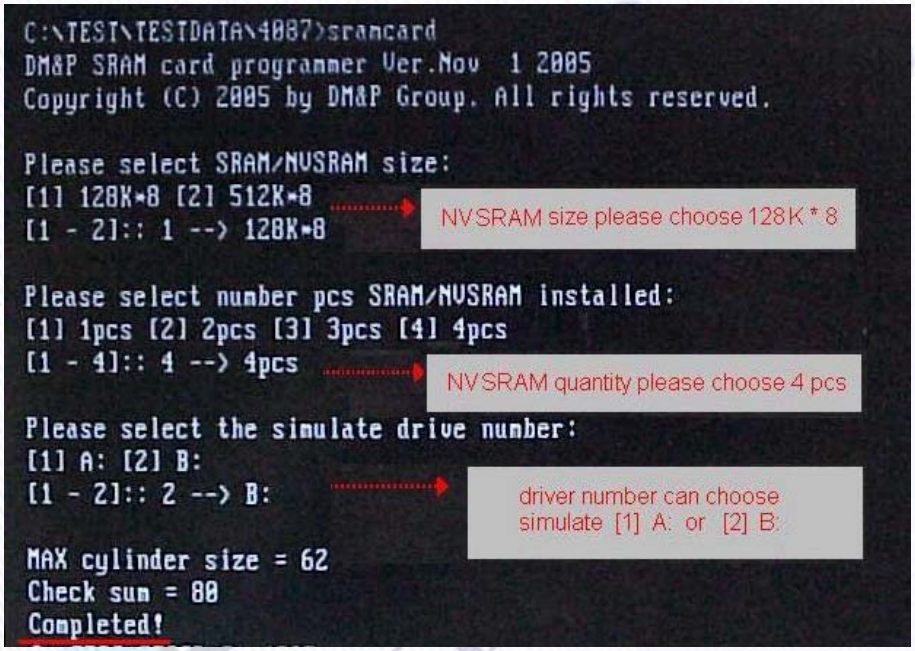
	FLASH DISK Type		J3	J4
	SRAM	128K	Short	2-3
	SRAM	512K	Open	2-3
V	**NVSRAM**	**128K**	**Short**	**1-2**
	NVSRAM	512K	Open	1-2

NVSRAM 128K in U1.U2.U3.U4 and Item is Dallas-DS1245Y-100

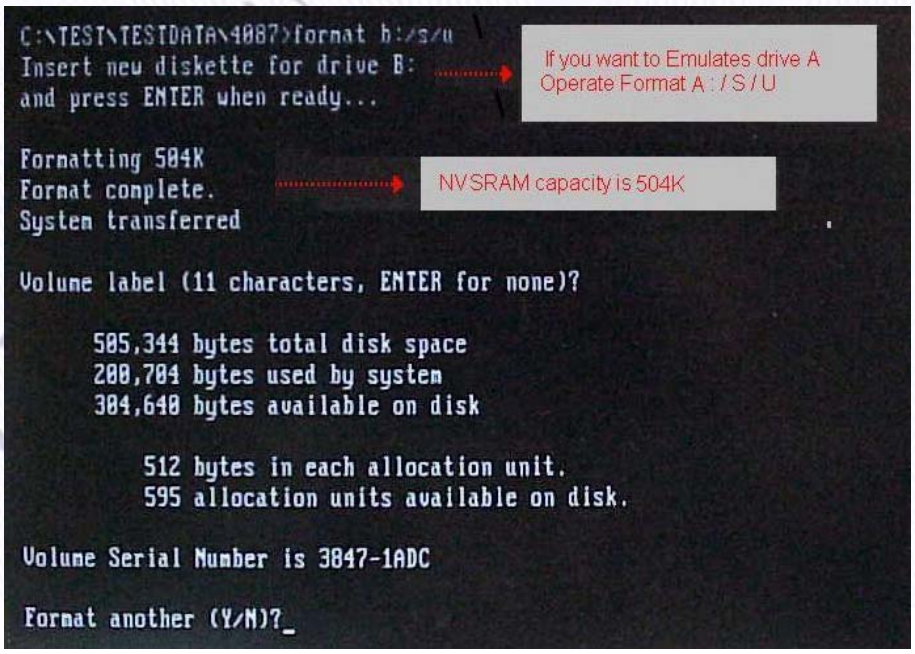
C-2. Test procedure

i. Operate SRAMCARD.EXE，Emulates drive B，Please see as below。

(If you want to Emulates drive A，drive number can choose [1] A：)

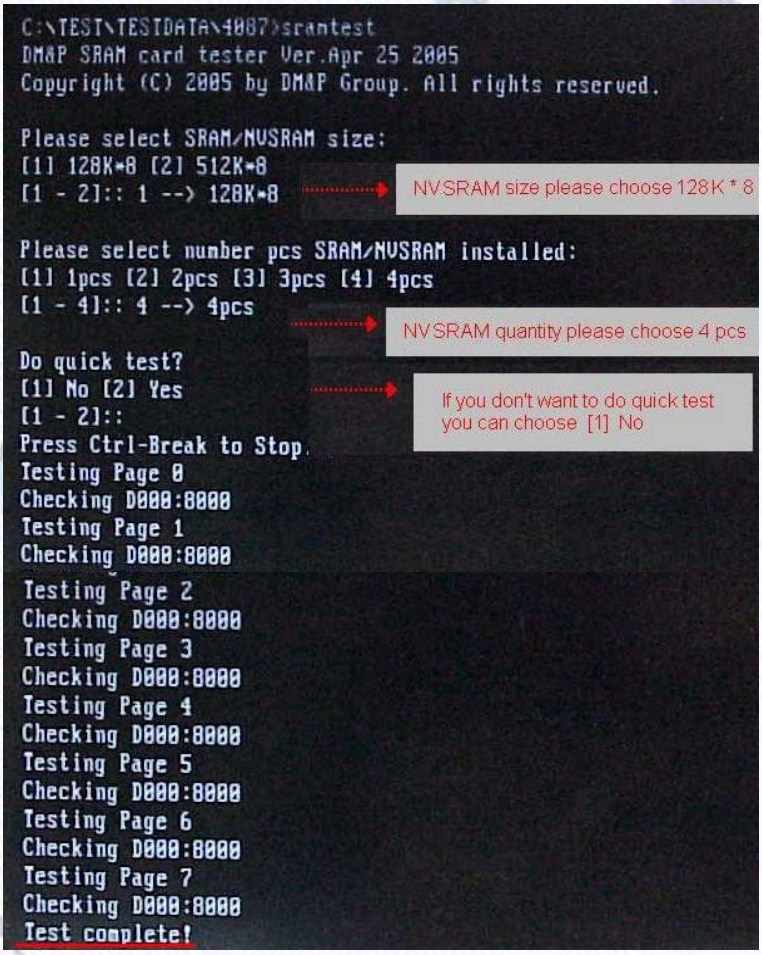


ii. Reboot and Operate Format B： /S / U ，Please see as below。



iii. Operate SRAMTEST.EXE and do the NVSRAM Read / Write test。

After you execute SRAMTEST.EXE file，the original data of NVSRAM will be cleaned，Hardware define 64K as 1 page，So 512K bytes NVSRAM will divide into 8 Pages。Finally，you will see the test complete on the screen。



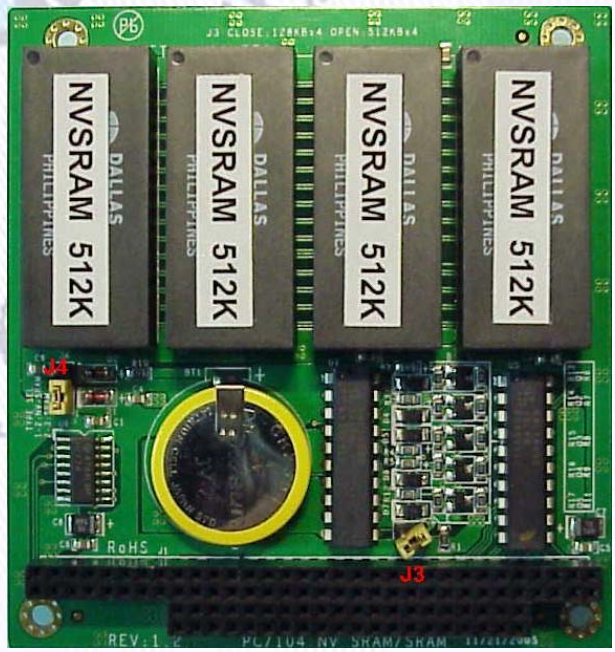
Jumper setting & Test procedure

D. NVSRAM 512K

D-1. Jumper setting

	FLASH DISK Type	J3	J4
	SRAM 128K	Short	2-3
	SRAM 512K	Open	2-3
	NVSRAM 128K	Short	1-2
V	**NVSRAM 512K**	**Open**	**1-2**

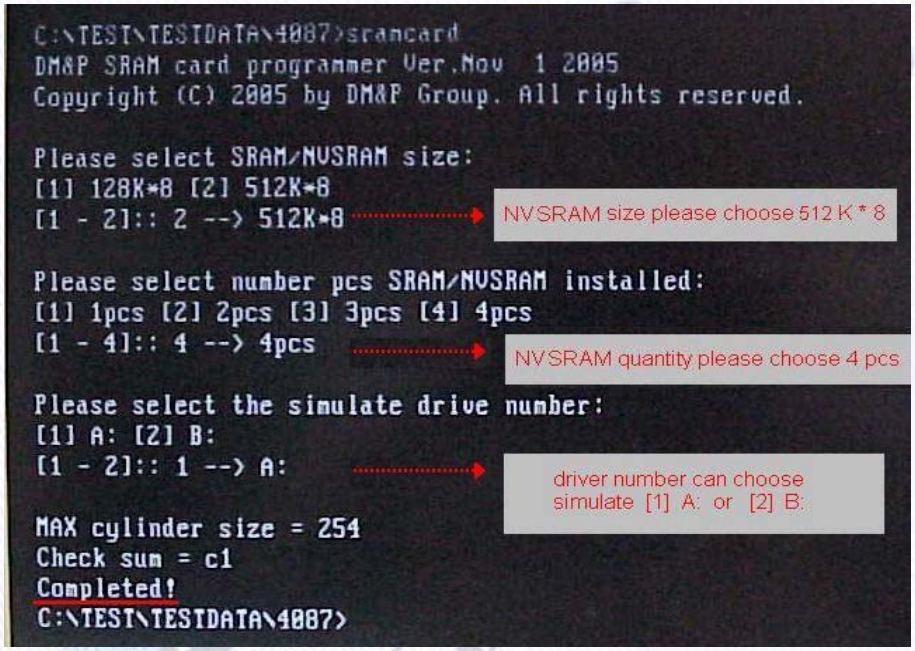
NVSRAM 512K in U1.U2.U3.U4 and Item is Dallas-DS1250Y-100



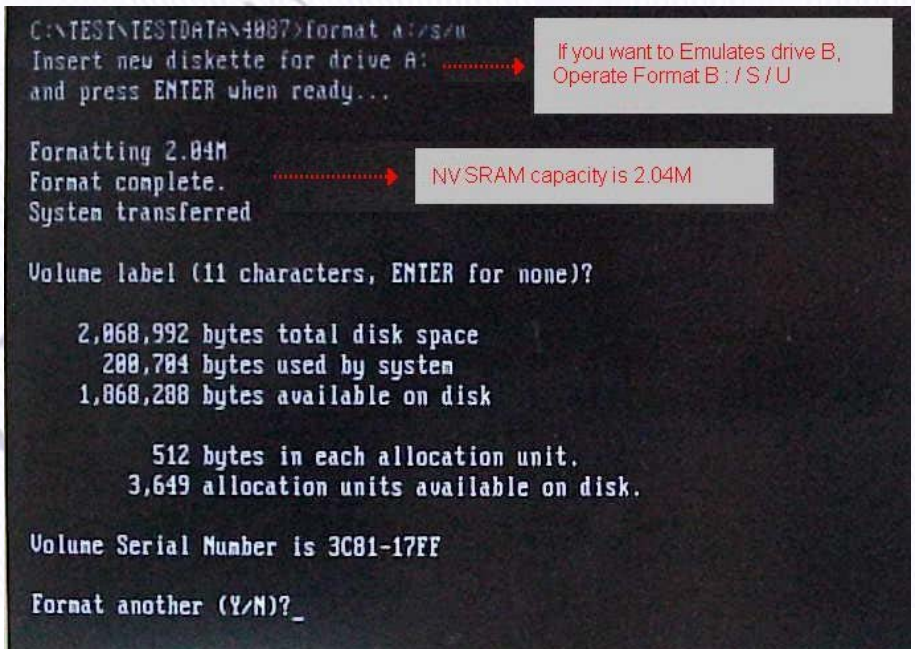
D-2. Test procedure

i. Operate SRAMCARD.EXE，Emulates drive A，Please see as below。

(If you want to Emulates drive B，drive number can choose [2] B：)



ii. Reboot and Operate Format A： / S / U ，Please see as below。



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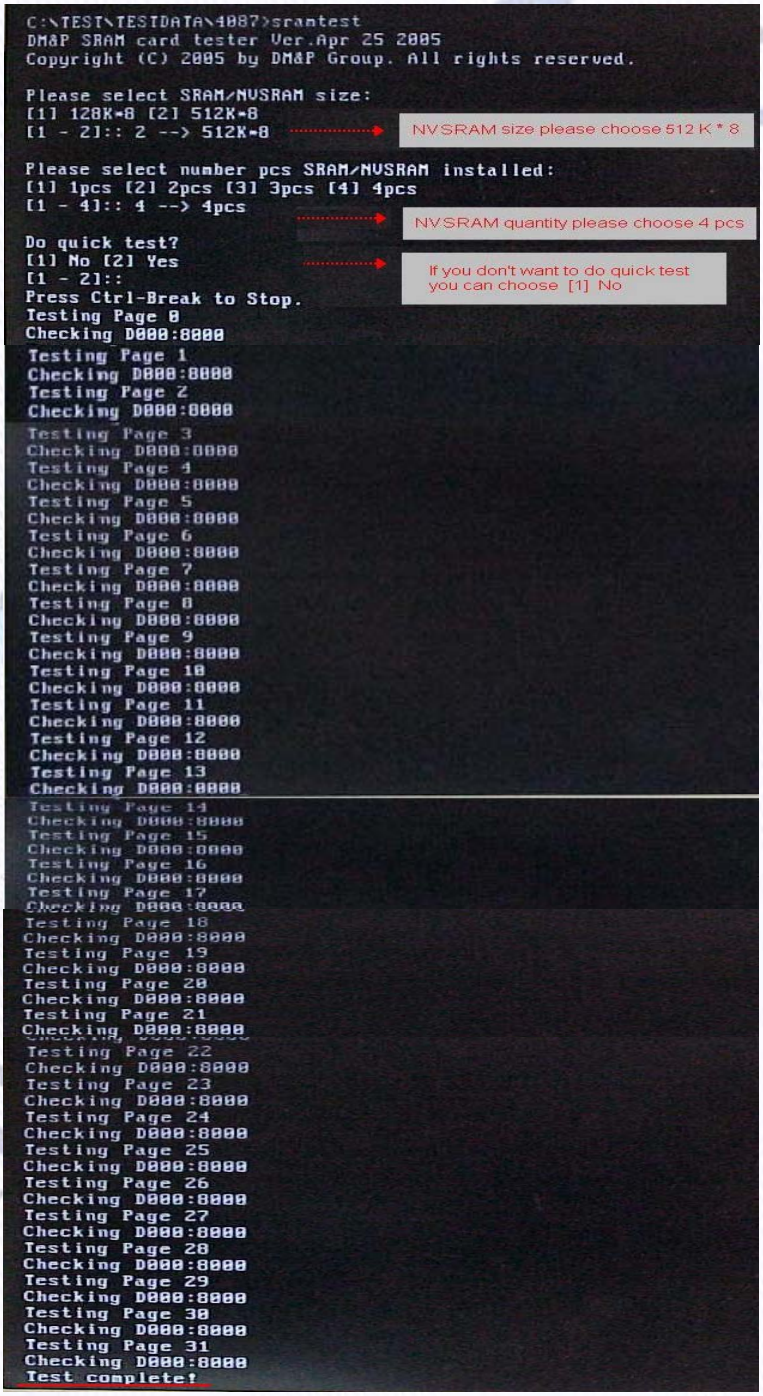

Warranty

This product is warranted to be in good working order for a period of one year from the date of purchase. Should this product fail to be in good working order at any time during this period, we will, at our option, replace or repair it at no additional charge except as set forth in the following terms. This warranty does not apply to products damaged by misuse, modifications, accident or disaster. Vendor assumes no liability for any damages, lost profits, lost savings or any other incidental or consequential damage resulting from the use, misuse of, or inability to use this product. Vendor will not be liable for any claim made by any other related party. Return authorization must be obtained from the vendor before returned merchandise will be accepted. Authorization can be obtained by calling or faxing the vendor and requesting a Return Merchandise Authorization (RMA) number. Returned goods should always be accompanied by a clear problem description.