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Error Codes, Apple Hardware Test - PowerBook v.2.5

for PowerBook G4 (12-inch 1.5GHz), PowerBook G4 (15-inch 1.67/1.5GHz), PowerBook G4 (17-inch 1.67GHz),
PowerBook G4 (12-inch 1.33GHz), PowerBook G4 (15-inch 1.5/1.33GHz), PowerBook G4 (17-inch 1.5GHz) PowerBook G4 (12-inch DVI), PowerBook G4 (15-inch FW800)
PowerBook G4 (17-inch 1.33GHz), PowerBook G4 17-inch and PowerBook G4 12-inch **vers. f1-2005/2/04, sdu**

NOTES *1) The "a", "b" and "cc" listed in error codes mean that any number qualifies (if it is not one mentioned before). The "xxxxx" indicates a string.*
2) The "Target Component" is the device that requires attention for the stated Error Code. Typically the Error Code will provide detail on which device is concerned.

ERROR CODES

FAMILY STATUS MESSAGES

Apple Hardware Test gathers this information during its start up by checking for the presence of these devices. These messages appear in the Test Results area at the top of the Hardware Test panel.

AirPort	**No Device Found**	"**Check Removable Card - I**" procedure
Modem	**No Device Found**	"**Check Removable Card - I**" procedure

POST ERROR CODES

Apple Hardware Test gathers this information during its start up. These error codes appear in the Test Results area at the bottom of the Hardware Test panel.

post /0 /a xxxxx		"**Check Memory**" procedure

TEST ERROR CODES

Apple Hardware Test displays this information when an error is detected during testing. These error codes appear in the Test Results area at the bottom of the Hardware Test panel.

2AIR /a /b cc:cc:cc:cc:cc:cc	"**Check Removable Card - I**" procedure
2ATI /a /b c	"**Check Main Logic Board - I** " procedure
2CDB /a /b c	"**Check Removable Card - II**" procedure first, then "**Check Main Logic Board - I** " procedure if problem persists
2CPU /a /b xxxxx	"**Check Main Logic Board - I** " procedure
2DIS /a /b xxxxx	"**Check External Display**" procedure
2DIS /a /b (c)	The display monitor currently connected is unsupported (disconnect it)
2FAN /a /b xxxxx	"**Check Main Logic Board - I** " procedure
2GMC /a /b built-in	when 'a' is 3,4 or 5 "**Check Network**" procedure otherwise "**Check Main Logic Board - I** " procedure
2I2C /a /b c	"**Check Main Logic Board - I** " procedure
2ISB /a /b c	"**Check Main Logic Board - I** " procedure
2ISS /a /b c	"**Check Main Logic Board - I** " procedure
2MEM /a /b xxxxx	"**Check Memory**" procedure
2MLB /a /b c	"**Check Memory**" procedure
2NVD /a /b c	"**Check Main Logic Board - I** " procedure
2PFW /a /b xxxxx	"**Check Main Logic Board - I** " procedure
2PUS /a /b xxxxx	"**Check Main Logic Board - I** " procedure
2ROM /a /b c	"**Check Main Logic Board - II** " procedure
2STF /a /b xxxxx	"**Check Mass Storage**" procedure
2STH /a /b xxxxx	"**Check Main Logic Board - I** " procedure
2STR /a /b xxxxx	"**Check Mass Storage**" procedure
2SVM /a /b xxxxx	"**Check Main Logic Board - I** " procedure
2VSP /a /b xxxxx	"**Check Main Logic Board - I** " procedure

ACTION PROCEDURES

WARNING: Any Action recommendation here implies that it is being done while the **Unit Under Test is powered down, disconnected from power outlet (and with no main battery installed) and that ESD precautions are followed**.

	Target Component is:	Procedure:
Check External Display		
2DIS /a /b xxxxx	Any External Display connected to the UUT	a) Disconnect the display, then retest b) If problem persists, replace **Main Logic Board** c) Replace **Target Component**
Check Main Logic Board - I	Target Component is:	Procedure:
2ATI /a /b c	Main Logic Board	For "2GMC" errors, make sure there is no Ethernet cable connected.
2CPU /a /b xxxxx	Main Logic Board	a) Shutdown, power up, then retest
2FAN /a /b xxxxx	Main Logic Board	b) Reset NVRAM, then retest
2GMC /a /b built-in	Main Logic Board (Ethernet cell)	c) Replace **Main Logic Board**
2I2C /a /b c	Main Logic Board	
2ISB /a /b c	Main Logic Board	
2ISS /a /b c	Main Logic Board	
2NVD /a /b c	Main Logic Board	
2PFW /a /b xxxxx	Main Logic Board	
2PUS /a /b xxxxx	Main Logic Board	
2STH /a /b xxxxx	Main Logic Board	
2SVM /a /b xxxxx	Main Logic Board	
2VSP /a /b xxxxx	Main Logic Board	
Check Main Logic Board - II	Target Component is:	Procedure:
2ROM /a /b cc	Main Logic Board	a) Restore firmware if possible, then retest b) Replace **Main Logic Board**
Check Mass Storage	Target Component is:	Procedure:
2STF /a /b xxxxx	Fixed Mass Storage (eg. "MAC-IO ata-4 - Master")	a) Reseat drive cable, then retest
2STR /a /a xxxxx	Removable Mass Storage (eg. "MAC-IO ata-4 - Slave")	b) Replace drive cable, then retest c) Replace **Target Component at "xxxxx"**
Check Memory	Target Component is:	Procedure:
post /0 /b xxxxx	Memory Module "xxxxx" (eg "SODIMM0/J20STANDARD")	a) Reseat/Move **DIMM(s) "xxxxx"**, then retest
2MEM /a /b xxxxx	Memory Module "xxxxx" (eg "SODIMM0/J20STANDARD")	b) Replace or remove **DIMM(s) "xxxxx"**, then retest
2MLB /a /b c	Memory Module or Main Logic Board	c) Replace **Main Logic board**
Check Network	Target Component is:	Procedure:
2GMC /3 /b built-in	Main Logic Board (Ethernet cell)	a) Disconnect any connected network/crossover cable, then retest
2GMC /4 /b built-in	Main Logic Board (Ethernet cell)	b) If error disappears, check **network configuration** (hub,switch,etc).
2GMC /5 /b built-in	Main Logic Board (Ethernet cell)	c) If error persists, replace **Main Logic Board**
Check Removable Card - I	Target Component is:	Procedure:
AirPort: No Device Found	AirPort card	a) If installed, reseat and retest
Modem: No Device Found	Modem card	b) Check for cable or connector damage
2AIR /a /b cc:cc:cc:cc:cc:cc	AirPort card	c) Replace the **Target Component**
Check Removable Card - II	Target Component is:	Procedure:
2CDB /a /b c	PC Card/Cardbus	a) If a PC Card is present, eject it, then retest b) Check for cable or connector damage c) do procedure "**Check Main Logic Board - I**"

Hardware Tests Tab Panel Keyboard Shortcuts

g -- starts the Quick Test	**Period** -- stops testing	**shift S -- Shutdown (MUST use Shift Key)**
e -- starts the Extended Test	**ctrl L** -- Toggle Looping mode (MUST use control key)	**shift R -- Restart (MUST use Shift Key)**

NOTE: *When looping mode is ON, the words "Looping ON" will appear at the bottom of the "Test Results" log area; otherwise nothing will appear. When looping mode is in effect, all tests will loop indefinitely, until stopped by the user, or a failure occurs. Looping mode stays in effect until turned off by the user. While looping, a loop counter is displayed at the bottom of the "Test Results" log area. The loop count remains after testing has stopped, but will be cleared if tests are run again.*

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