

# Q26B/C GenZ Functional Test Coverage

APPLE - Need to Know only

Worldwide Diagnostic and Test, PCB Functional Test Development Group

Rev	Comments			Released by
DVT	6/10/2003	Q26B/C		Steve Oakes
Build	Rom ver	System SW ver	Diag Release	Test time
DVT	4.6.7b1	BlackRider 6R7	Indy2.1.6	670 sec

Script file version	Q26B.tdf
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\* Test matrix does not necessarily signify sequence of tests.

Application	OS	Version
GZControl	9.2.2	1.0a3
LVServer	9.2.2	1.60 2/17/03
FireECHO	9.2.2	1.3.5

OF Diagnostics				
Package ID	Test Step	Test Step Name	Enabled?	Remarks
<b>Airport (OF)</b>				
0x81000000	1	Card Presence	√	
<b>CPU (OF)</b>				
0x84000000	1	Simple FPU Test	√	
<b>Display (OF)</b>				
0x86000000	1	White Screen		
0x86000000	2	Black Screen		
0x86000000	3	Red Screen	√	during DAC test on ext/internal display
0x86000000	4	Green Screen	√	during DAC test on ext/internal display
0x86000000	5	Blue Screen	√	during DAC test on ext/internal display
0x86000000	6	Grey Screen		
0x86000000	7	Checker		
0x86000000	8	Checker 2		
0x86000000	9	Vertical Color Bars		

0x86000000	10	Horizontal Color Bars		
0x86000000	11	Border		
0x86000000	16	EDID checksum Test	√	
<b>FireWire (OF)</b>				
0x97000000	1	100Mb/s block write request test	√	port 1
0x97000000	2	100Mb/s quad write request test		
0x97000000	3	100Mb/s block read request test	√	port 1
0x97000000	4	100Mb/s quad read request test		
0x97000000	5	100Mb/s isochronous test	√	port 1
0x97000000	6	200Mb/s block write request test		
0x97000000	7	200Mb/s quad write request test	√	port 1
0x97000000	8	200Mb/s block read request test		
0x97000000	9	200Mb/s quad read request test	√	port 1
0x97000000	10	200Mb/s isochronous test		
0x97000000	11	400Mb/s block write request test	√	ports 1 and 2
0x97000000	12	400Mb/s quad write request test	√	ports 1 and 2
0x97000000	13	400Mb/s block read request test	√	ports 1 and 2
0x97000000	14	400Mb/s quad read request test	√	ports 1 and 2
0x97000000	15	400Mb/s isochronous test	√	ports 1 and 2
<b>PCI.GMAC (OF)</b>				
0x8c070000	1	Register test	√	
0x8c070000	2	Internal loopback test	√	
0x8c070000	3	PHY loopback - 10 Mbps test	√	
0x8c070000	4	PHY loopback - 100 Mbps test	√	
0x8c070000	6	Tx FIFO RAM test	√	
0x8c070000	7	Rx FIFO RAM test	√	
0x8c070000	12	*External loopback - 10 Mbps test	√	
0x8c070000	13	*External loopback - 100 Mbps test	√	
0x8c070000	16	Patch cable connected test		
0x8c070000	17	Cross-over connected test		
<b>PCI.Nvidia (OF)</b>				
0x8c030000	1	Frame Buffer Address As Data Test	√	
<b>PCI.OHCIFirewire (OF)</b>				
0x8c050000	1	Register Test	√	
0x8c050000	2	Set/Clear Register Test	√	

0x8c050000	3	PHY Register Test	√	
<b>PCI.OHCIUSB (OF)</b>				
0x8c060000	1	USB Register Test	√	
<b>MLB.POST (OF)</b>				
0x8a030000	1	POST Results	√	
0x8a030000	3	Clear PMU Data		
0x8a030000	15	Select 1 pass		
0x8a030000	4	Select Memory Quick Test	√	
0x8a030000	5	Select Forward Mod 3 RAM Test		
0x8a030000	6	Select Reverse Mod 3 RAM Test		
0x8a030000	7	Select Simple RAM Test	√	
0x8a030000	8	Select ROM Test		
0x8a030000	9	Select Data Line Test		
0x8a030000	12	Select Address Line Test		
0x8a030000	13	Select Address Pattern Test		
0x8a030000	14	Select Memory Stress Test		
0x8a030000	17	Select Burst Flag		
0x8a030000	2	Setup to Run Tests		
<b>MLB.ROM (OF)</b>				
0x8a040000	1	ROM Checksum	√	
<b>I2S.Snapper (OF)</b>				
0x9a010000	1	Init TAS Chip	√	
0x9a010000	2	I2S A & I2C Registers	√	
<b>Storage.Fixed (OF)</b>				
0x8f010000	1	Device Simple Test	√	
0x8f010000	2	PIO Read Single Block	√	
0x8f010000	3	PIO Read Many Blocks		
0x8f010000	4	PIO 4 Corner Read Test	√	
0x8f010000	5	DMA Read Single Block		
0x8f010000	6	DMA Read Many Blocks		
0x8f010000	7	DMA 4 Corner Read Test	√	
0x8f010000	8	DMA Random Multiblock Read		
0x8f010000	10	DMA Full Read Scan at 1250		
0x8f010000	13	Non-Destructive Write .01 Test		
<b>Storage.Remove (OF)</b>				

0x8f020000	1	Device Simple Test	√	
0x8f020000	2	CDRW Track At Once		
0x8f020000	4	Random Read 1		
0x8f020000	5	Random Read 2		
0x8f020000	6	Random Read 2 Quick	√	
<b>MLB.VSP (OF)</b>				
0x8a060000	1	Local Memory Test	√	
0x8a060000	2	Instruction Cache Data RAM Test	√	
0x8a060000	3	Instruction Cache Tag RAM Test	√	
<b>OS Diagnostics</b>				
<b>Airport (OF)</b>				
0x81000000	3	Link Quality Test in Range 3		
<b>USBPort (OS)</b>				
0x98000000	2	USB 2.0 Speed Verification Test	√	ports 2 and 3
<b>MLB.VSP (OS)</b>				
0x8a060000	1	VSP TB Suite	√	
0x8a060000	2	VSP DMA Verify Test	√	
<b>AudiolO (OS)</b>				
0x96000000	1	Headphone Detection Test	√	
0x96000000	2	THDN Test	√	
0x96000000	3	Channel Separation Test	√	
0x96000000	4	Left/Right Speaker Test	√	
0x96000000	6	Internal Microphone Test		
0x96000000	10	Speaker-Out Detection Test		
<b>Bluetooth (OS)</b>				
0x83000000	1	Bluetooth USB Interface Test	√	
0x83000000	2	Bluetooth Data Transfer Test		
<b>CPU.G4 (OS)</b>				
0x84010000	1	MaxVV	√	
0x84010000	2	vBasicOpsTest	√	
0x84010000	3	vBigNumberTest		
0x84010000	4	vectorOpsTest		
0x84010000	5	vMathLibTest	√	
<b>Network (OS)</b>				

0x87000000	1	4MB File transfer test		
0x87000000	2	Ping test	√	
0x87000000	3	10MBit Ping test		
0x87000000	4	100MBit Ping test		
0x87000000	6	1/2MB File transfer test		
<b>PCI.Nvidia (OS)</b>				
0x8c030000	17	JsMemSize	√	
0x8c030000	3	Mats	√	
0x8c030000	19	FastMats	√	
0x8c030000	4	MemInterface	√	
0x8c030000	23	MemPatt	√	
0x8c030000	5	Class039	√	
0x8c030000	29	AgpTest	√	
0x8c030000	7	Class04a	√	
0x8c030000	10	Class05f	√	
0x8c030000	21	Class07a	√	
0x8c030000	15	Class077	√	
0x8c030000	48	Class089	√	
0x8c030000	49	Class3174		
0x8c030000	16	glr_hwtest	√	
0x8c030000	200	Run gpu test suite		
0x8c030000	201	Run short test suite		
<b>MLB.PMU (OS)</b>				
0x8a020000	1	Sleep Test	√	
0x8a020000	2	Manual Sleep Test		
<b>MLB.POST (OS)</b>				
0x8a030000	1	POST Results	√	
0x8a030000	3	Clear PMU Data		
0x8a030000	15	Select 1 pass		
0x8a030000	4	Select Memory Quick Test		
0x8a030000	5	Select Forward Mod 3 RAM Test		
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