AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE		PAGE OF PAGES	1 / 2
2. AMENDMENT/MODIFICATION NO. **107**	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*

6. ISSUED BY CODE

John F. Kennedy Space Center, NASA
Procurement Office – ODIN – OP-OS-ODIN
Kennedy Space Center, FL 32899

7. ADMINISTERED BY *(If other than Item 6)* CODE

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State, and Zip Code)*

OAO Corporation
7375 Executive Place
Seabrook MD 20706

CODE FACILITY CODE

(x) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED *(SEE ITEM 11)*

10A. MODIFICATION OF CONTRACT/ORDER NO.
NAS5-98144/CC90303B

10B. DATED *(SEE ITEM 13)*
December 1, 2001

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

[ ] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers [ ] is extended, [ ] is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:
(a) By completing Items 8 and 15, and returning ____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.1 03(b).

XX C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
FAR CLAUSE 52.212-4 CONTRACT TERMS AND CONDITIONS-COMMERCIAL ITEMS, (c) CHANGES

D. OTHER *(Specify type of modification and authority)*

E. **IMPORTANT:** Contractor [ ] is not, [X] is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

STENNIS SPACE CENTER --- ODIN SERVICES

Subject: Modify Attachment F "Listing of Accepted Seat Certifications" – Quarter 21, January 2004

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*	16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*
Keith L. Spencer Sr. Contract Manager	Penelope A. Ebright Contracting Officer

15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
Keith L. Spencer *(Signature of person authorized to sign)*	6 FEB 2004	BY Penelope A. Ebright *(Signature of Contracting Officer)*	2/12/04

1. As set forth in Part III, Section B, Item 6 of this Delivery Order, entitled "Master Contract Attachment R Baseline Core Seat Components", this modification modifies Delivery Order Attachment F "Listing of Accepted Seat Certifications" to incorporate the PC and Mac seat certifications for Quarter 21, January 2004 as reflected below:

Quarter (Beginning date)	Seat	Platform	System Configuration	Date Alterion Certified	Rating
Q21 (Jan 2004)	GP1 - Entry	PC-Desktop	Dell GX270, P4 2.4 GHz	January 7, 2004	82.8%
Q21 (Jan 2004)	GP2 - Mid Range	PC-Desktop	Dell GX270, P4, 2.6 GHz	January 7, 2004	86.0%
Q21 (Jan 2004)	SE1/SE2 High End	PC-Desktop	Dell GX270 P4, 3.0 GHz	January 7, 2004	88.9%
Q21 (Jan 2004)	SE2 - Premium	PC-Desktop	Dell Precision Workstation 650, Xeon 3.20 GHz	N/A	N/A
Q21 (Jan 2004)	GP3 - Entry	PC-Laptop	Dell Latitude D600, M, 1.4 GHz	January 7, 2004	71.1%
Q21 (Jan 2004)	GP3 - Mid Range	PC-Laptop	Dell Latitude D800, 1.6 GHz	January 7, 2004	81.4%
Q21 (Jan 2004)	GP3 – Lightweight	PC-Laptop	Dell Latitude D400, 1.7 GHz	January 7, 2004	74.8%
Q21 (Jan 2004)	GP1 – Entry	Mac-Desktop	Apple eMac, G4, 1.0 GHz	*	*
Q21 (Jan 2004)	GP2 - Mid Range	Mac-Desktop	Apple iMac, G4, 1.25 GHz	*	*
Q21 (Jan 2004)	SE1/SE2 - High End	Mac-Desktop	Apple PowerMac G5, 1.8 GHz	January 7, 2004	100%
Q21 (Jan 2004)	GP3 - Mid Range	Mac-Laptop	Apple PowerBook G4, 1.33 GHz	January 7, 2004	100%

* Waivers for GP1 Mac Entry and GP2 Mac Mid Range systems are granted in accordance with request by OAO Corporation in letters dated January 7, 2004.

2. Copies of the signed certifications for Quarter 21 and unsigned forms for the waived systems (22 pages total) are attached. The data is hereby incorporated into Attachment F (Master Contract Attachment R), Page F-4.

4. All other terms and conditions remain unchanged

Quarter (Beginning date)	Seat	Platform	System Configuration	Date Alterion Certified	Rating	Mod
Q21 (Jan 2004)	GP1 - Entry	PC-Desktop	Dell GX270, P4 2.4 GHz	January 7, 2004	82.8%	101
Q21 (Jan 2004)	GP2 - Mid Range	PC-Desktop	Dell GX270, P4, 2.6 GHz	January 7, 2004	86.0%	101
Q21 (Jan 2004)	SE1/SE2 High End	PC-Desktop	Dell GX270 P4, 3.0 GHz	January 7, 2004	88.9%	101
Q21 (Jan 2004)	SE2 - Premium	PC-Desktop	Dell Precision Workstation 650, Xeon 3.20 GHz	N/A	N/A	101
Q21 (Jan 2004)	GP3 - Entry	PC-Laptop	Dell Latitude D600, M, 1.4 GHz	January 7, 2004	71.1%	101
Q21 (Jan 2004)	GP3 - Mid Range	PC-Laptop	Dell Latitude D800, 1.6 GHz	January 7, 2004	81.4%	101
Q21 (Jan 2004)	GP3 – Lightweight	PC-Laptop	Dell Latitude D400, 1.7 GHz	January 7, 2004	74.8%	101
Q21 (Jan 2004)	GP1 – Entry	Mac-Desktop	Apple eMac, G4, 1.0 GHz	*	*	101
Q21 (Jan 2004)	GP2 - Mid Range	Mac-Desktop	Apple iMac, G4, 1.25 GHz	*	*	101
Q21 (Jan 2004)	SE1/SE2 - High End	Mac-Desktop	Apple PowerMac G5, 1.8 GHz	January 7, 2004	100%	101
Q21 (Jan 2004)	GP3 - Mid Range	Mac-Laptop	Apple PowerBook G4, 1.33 GHz	January 7, 2004	100%	101

ODIN Attachment R

Contractor: NASA-KSC
Quarter: Q21-January 04
Platform: PC-Entry Level
Alterion Performance Profile Ranking: 82.8%
Alterion ID: D030904002DT

Prime: OAO Corporation
Prime Contract Number: NAS5-98144
System: Dell GX270 P4 2.40Mhz
Date of Alterion Certification: 7 Jan 2004
Certification Expires: 31 March 2004

Desktop System Configuration

Item	Mfg /Type	Number/version	Size/ Speed
System Dimensions	Dell	GX270 SMT	H: 42.6cm/16.75in W: 18.0cm/7.13in D: 44.7cm/17.61in
Case Type	Dell	Small Mini-Tower (SMT)	
Motherboard	Dell	Intel 865G	800MHz Front Side bus
BIOS Version/Date	Dell	A02 8/4/2003	
CPU Type & speed	Intel	Intel® Pentium® 4	2.40GHz
CPU Slots Used/Available	Dell	1 used, 0 available	
Bus slots, # and type	Dell	Four 4.2" high PCI (length: One 9" & three 11"), One 8XAGP full height	
AGP bus speed	Dell	AGP 8X	66 MHz
Video Display Adapter	Dell	Integrated Intel® Extreme Graphics 2 with up to 64MB shared memory	VGA DB-15 (analog)
Video Display Driver (version & date)	Dell	v.PV 13.1 Build 6.13.01.3510, A01 07/11/2003	
Hard Disk Size Access Time Spindle RPM	Dell	EIDE S.M.A.R.T. II Ultra ATA/100	40GB R/ 8.9ms, W 10.9ms 7200 RPM
HD Controller (If RAID compatible list types)	Dell	IDE ATA/100	
CD-ROM and/or DVD	Dell	Internal CD - ROM	48X
Network Interface: Ethernet (wired) Ethernet Wireless Bluetooth	Dell	Integrated Intel® Pro/1000 MT	10/100/1000Gb
Ports and Interfaces Parallel Serial USB Firewire	Dell	1 parallel port 1 serial port 8 USB 2.0 ports, 2 front & 6 back	
USB Memory Key	Dell	USB 2.0	128MB
Keyboard	Dell	Dell Entry QuietKey™ keyboard	104 Keys
Mouse	Dell	Dell Optical USB 2-button scroll	
Power Supply	Dell		250W
Sound Card Full or Half Duplex	Dell	Integrated AC '97 Audio	16-bit / 48 kHz
Speaker(s)	Dell	Altec Lansing® ADA-215	2 External
Headset/Microphone		microphone-in-jack; stereo headphones/speakers jack	

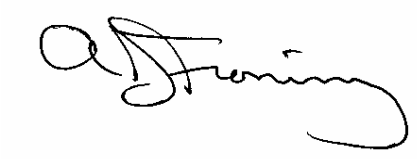
ODIN Attachment R

Item	Mfg /Type	Number/version	Size/ Speed
Monitor – CRT /	Dell	E772p	17” 27 mm Pixel pitch 16” Viewable 1024 x 768 @ 75 Hz Analog

Memory Module Configuration

Item	Mfg / # Slots	Quantity	MB (Total)	Speed	Type
RAM	Dell / 4	2	512MB	400Mhz	DDR SDRAM
Cache		1	512KB	400Mhz	Level 2
Video RAM	Intel / 0		64MB	8.0GB/Sec	DDR SDRAM

I hereby certify the rating listed above as the official Alterion Performance Profile Ranking, based upon the January, 2004 Market Survey. This rating is valid until April 1, 2004.



Andrew J Froning
Senior Partner, Operations

ODIN Attachment R

Contractor: NASA-KSC
Quarter: Q21-January 04
Platform: PC-Desktop-Mid Range
Alterion Performance Profile Ranking: 86.0%
Alterion ID: D030904001DT

Prime: OAO Corporation
Prime Contract Number: NAS5-98144
System: Dell GX270 P4 2.60Mhz
Date of Alterion Certification: 7 Jan 2004
Certification Expires: 31 March 2004

Desktop System Configuration

Item	Mfg /Type	Number/version	Size/ Speed
System Dimensions	Dell	GX270 SMT	H: 42.6cm/16.75in W: 18.0cm/7.13in D: 44.7cm/17.61in
Case Type	Dell	Small Mini-Tower (SMT)	
Motherboard	Dell	Intel 865G	800MHz Front Side bus
BIOS Version/Date	Dell	A02 8/4/2003	
CPU Type & speed	Intel	Intel® Pentium® 4	2.60GHz
CPU Slots Used/Available	Dell	1 used, 0 available	
Bus slots, # and type	Dell	Four 4.2" high PCI (length: One 9" & three 11"), One 8XAGP full height	
AGP bus speed	Dell	AGP 8X	66 MHz
Video Display Adapter	Dell	Integrated Intel® Extreme Graphics 2 with up to 64MB shared memory	VGA DB-15 (analog)
Video Display Driver (version & date)	Dell	v.PV 13.1 Build 6.13.01.3510, A01 07/11/2003	
Hard Disk Size Access Time Spindle RPM	Dell	EIDE S.M.A.R.T. II Ultra ATA/100	40GB R/ 8.9ms, W 10.9ms 7200 RPM
HD Controller (If RAID compatible list types)	Dell	IDE ATA/100	
CD-ROM and/or DVD	Dell	Internal CDRW	48X/24X/48X
Network Interface: Ethernet (wired) Ethernet Wireless Bluetooth	Dell	Integrated Intel® Pro/1000 MT	10/100/1000Gb
Ports and Interfaces Parallel Serial USB Firewire	Dell	1 parallel port 1 serial port 8 USB 2.0 ports, 2 front & 6 back	
USB Memory Key	Dell	USB 2.0	128MB
Keyboard	Dell	Dell Entry QuietKey™ keyboard	104 Keys
Mouse	Dell	Dell Optical USB 2-button scroll	
Power Supply	Dell		250W
Sound Card Full or Half Duplex	Dell	Integrated AC '97 Audio	16-bit / 48 kHz
Speaker(s)	Dell	Altec Lansing® ADA-215	2 External
Headset/Microphone		N/A	

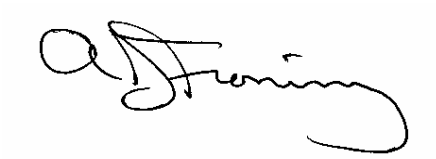
ODIN Attachment R

Item	Mfg /Type	Number/version	Size/ Speed
Monitor – CRT /-Flat Panel	Dell	UltraSharp 1504aFP	15” .297 mm Pixel pitch 15” Viewable 1024 x 768 @ 60 Hz Analog RGB and Digital DVI-D

Memory Module Configuration

Item	Mfg / # Slots	Quantity	MB (Total)	Speed	Type
RAM	Dell / 4	2	512MB	400Mhz	DDR SDRAM
Cache		1	512KB	400Mhz	Level 2
Video RAM	Intel / 0		64MB	8.0GB/Sec	DDR SDRAM

I hereby certify the rating listed above as the official Alterion Performance Profile Ranking, based upon the January, 2004 Market Survey. This rating is valid until April 1, 2004.



Andrew J Froning
Senior Partner, Operations

ODIN Attachment R

Contractor: NASA-KSC
Quarter: Q21-January 04
Platform: PC-Desktop-High End
Alterion Performance Profile Ranking: 88.9%
Alterion ID: D030911002DT

Prime: OAO Corporation
Prime Contract Number: NAS5-98144
System: Dell GX270 P4 3.0Mhz
Date of Alterion Certification: 7 Jan 2004
Certification Expires: 31 March 2004

Desktop System Configuration

Item	Mfg /Type	Number/version	Size/ Speed
System Dimensions	Dell	GX270 SMT	H: 42.6cm/16.75in W: 18.0cm/7.13in D: 44.7cm/17.61in
Case Type	Dell	Small Mini-Tower (SMT)	
Motherboard	Dell	Intel 865G	800MHz Front Side bus
BIOS Version/Date	Dell	A02 8/4/2003	
CPU Type & speed	Intel	Intel® Pentium® 4	3.0GHz
CPU Slots Used/Available	Dell	1 used, 0 available	
Bus slots, # and type	Dell	Four 4.2" high PCI (length: One 9" & three 11"), One 8XAGP full height	
AGP bus speed	Dell	AGP 8X	66 MHz
Video Display Adapter	Dell	Integrated Intel® Extreme Graphics 2 with up to 64MB shared memory	VGA DB-15 (analog)
Video Display Driver (version & date)	Dell	v.PV 13.1 Build 6.13.01.3510, A01 07/11/2003	
Hard Disk Size Access Time Spindle RPM	Dell	EIDE S.M.A.R.T. II Ultra ATA/100	40GB R/ 8.9ms, W 10.9ms 7200 RPM
HD Controller (If RAID compatible list types)	Dell	IDE ATA/100	
CD-ROM and/or DVD	Dell	Internal CDRW	48X/24X/48X
Network Interface: Ethernet (wired) Ethernet Wireless Bluetooth	Dell	Integrated Intel® Pro/1000 MT	10/100/1000Gb
Ports and Interfaces Parallel Serial USB Firewire	Dell	1 parallel port 1 serial port 8 USB 2.0 ports, 2 front & 6 back	
USB Memory Key	Dell	USB 2.0	128MB
Keyboard	Dell	Dell Entry QuietKey™ keyboard	104 Keys
Mouse	Dell	Dell Optical USB 2-button scroll	
Power Supply	Dell		250W
Sound Card Full or Half Duplex	Dell	Integrated AC '97 Audio	16-bit / 48 kHz
Speaker(s)	Dell	Altec Lansing® ADA-215	2 External
Headset/Microphone		N/A	
Monitor – CRT /	Dell	E772p	17" 27 mm Pixel pitch 16" Viewable 1024 x 768 @ 75 Hz Analog

ODIN Attachment R

Memory Module Configuration

Item	Mfg / # Slots	Quantity	MB (Total)	Speed	Type
RAM	Dell / 4	2	512MB	400Mhz	DDR SDRAM
Cache		1	512KB	400Mhz	Level 2
Video RAM	Intel / 0		64MB	8.0GB/Sec.	DDR SDRAM

I hereby certify the rating listed above as the official Alterion Performance Profile Ranking, based upon the January, 2004 Market Survey. This rating is valid until April 1, 2004.

Andrew J Froning
Senior Partner, Operations

ODIN Attachment R

Contractor: NASA-KSC
Quarter: Q21-January 04
Platform: PC-Desktop-Premium
Alterion Performance Profile Ranking:
Alterion ID:

Prime: OAO Corporation
Prime Contract Number: NAS5-98144
System: Dell Workstation 650
Date of Alterion Certification:
Certification Expires:

Desktop System Configuration

Item	Mfg /Type	Number/version	Size/ Speed
System Dimensions	Dell	Precession Workstation 650	(WxHxD) - 8.89" x 19.87" x 19.8
Case Type	Dell	Tower	
Motherboard	Dell	E7505 chipset	533MHz Front Side bus
BIOS Version/Date	Dell	A02 8/4/2003	
CPU Type & speed	Intel	Intel® Xeon™	3.20GHz
CPU Slots Used/Available	Dell	1 used, 1 available	
Bus slots, # and type	Dell	One AGP8X Pro110 Five PCI slots Two 32 bit/33 MHz PCI slots Three 64 bit/100 MHz PCI slots	
AGP bus speed	Dell	AGP8X	66 MHz
Video Display Adapter	Dell	ATI™ FireGL™ X1 9700 Visual Processing Unit (VPU)	VGA / DVI dual monitor capable 16.7M colors
Video Display Driver (version & date)	Dell	v.1036, A10 05/20/2003	
Hard Disk Size Access Time Spindle RPM	Dell	SCSI U160	36GB R/ 4.5ms, W 5.0ms 10,000 RPM
HD Controller (If RAID compatible list types)	Dell	Integrated U320 SCSI	
CD-ROM and/or DVD	Dell	Internal CDRW	48X/24X/48X
Network Interface: Ethernet (wired) Ethernet Wireless Bluetooth	Dell	Intel® 82545EM	10/100/1000Gb
Ports and Interfaces Parallel Serial USB Firewire	Dell	1 parallel port 2 serial port 6 USB 2.0 ports 2 IEEE 1394a ports	
USB Memory Key	Dell	USB 2.0	128MB
Keyboard	Dell	Dell Entry QuietKey™ keyboard	104 Keys
Mouse	Dell	Dell Optical USB 2-button scroll	
Power Supply	Dell		460W
Sound Card Full or Half Duplex	Dell	Integrated AC'97 Full-Duplex Audio	16-bit / 48 kHz
Speaker(s)	Dell	HK-395 external speakers with subwoofer	2 External
Headset/Microphone		1/8-inch Audio headphone miniature audio jack 1/8-inch Audio microphone-in miniature audio jack	

ODIN Attachment R

Item	Mfg /Type	Number/version	Size/ Speed
Monitor – CRT /	Dell	**UltraSharp 1901FP** **Flat Panel** Analog RGB and Digital DVI	19” 294 mm Pixel pitch 19” Viewable 1280 x 1024 @ 60 Hz

Memory Module Configuration

Item	Mfg / # Slots	Quantity	MB (Total)	Speed	Type
RAM	Dell / 4	2	1.0GB	266Mhz	DDR SDRAM
Cache	Dell / 0	1	1.0MB	533Mhz	Level 2
Video RAM	\ATI / 0	1	128MB		DDR SDRAM

ODIN Attachment R

Contractor: NASA-KSC
Quarter: Q21-January 04
Platform: PC-Laptop-Entry Level
Alterion Performance Profile Ranking: 71.1%
Alterion ID: D030623006NB

Prime: OAO Corporation
Prime Contract Number: NAS5-98144
System: Latitude D600
Date of Alterion Certification: 7 Jan 2004
Certification Expires: 31 March 2004

Notebook System Configuration

Item	Mfg /Type	Number/version	Size/ Speed
System Dimensions	Dell	Latitude D600	1.2"(h) x 12.4"(w) x 10.1"(d)
Weight (with AC adapter)	Dell		Laptop 4.68 lbs. With Adapter 5.61 lbs.
Motherboard	Dell		
BIOS Version/Date	Dell	A06 System BIOS 8/21/2003	
CPU Type & speed	Dell	Intel Centrino Mobile Technology	1.4GHz
LCD Screen Size Standard Resolution Response Time	Dell		14.1” XGA 1024x768 pixels, 16.8 million colors 25-ms rise (typical) 35-ms fall (maximum)
Video Display Adapter	Dell	ATI Mobility RADEON 9000	4X AGP 240 MHz
Video Display Driver (version & date)	Dell	v.7.91.2-030729a 010470c, A03	8/20/2003
Hard Disk Size Access Time Spindle RPM	Dell	ATA-100 13 ms 4200 RPM	30GB
CD-ROM and/or DVD	Dell	Internal CDRW	24-10-24X
Network Interface: Ethernet (wired) Ethernet Wireless Bluetooth Modem	Dell	RJ45 Intel PRO Wireless 2100 WLAN (802.11b) mini-PCI RJ11	10/100/1000 Ethernet LAN 11Mbps at 2.4GHz 56K V.92 modem
Ports and Interfaces Parallel Serial USB Firewire Infrared	Dell	1 - 25 pin Parallel 1 – 9 pin Serial 2 – USB 2.0 Compliant 1- Infrared	IrDA Standards 1.1 (Fast IR) and 1.0 (Slow IR)
USB Memory Key	Dell	USB 2.0	128MB
Keyboard	Dell	87 key U.S. Layout	
Mouse/Integrated pointer	Dell	Dell DualPoint pointing device (both Touch Pad & Track Stick)	
Power Supply	Dell		65-watt a/c adapter
Sound Card Full or Half Duplex	Dell	Audio type/controller: AC97 (Soft Audio) / ICH3	Stereo: 20-bit stereo-digital to analog and 18-bit stereo analog to digital
Speaker(s)	Dell	Internal speakers: (Two) 4-ohm	

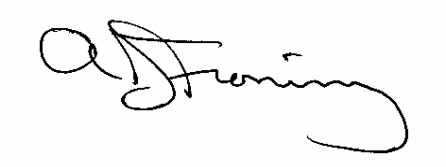
ODIN Attachment R

Item	Mfg /Type	Number/version	Size/ Speed
Headset/Microphone	Dell	microphone-in-jack; stereo headphones/speakers jack	

Memory Module Configuration

Item	Mfg / # Slots	Quantity	MB (Total)	Speed	Type
RAM	Dell / 2	1	256MB	266Mhz	SDRAM
Cache	Dell / 0	1	1.0MB		L2 ECC
Video RAM	ATI / 0	1	32MB		SDRAM

I hereby certify the rating listed above as the official Alterion Performance Profile Ranking, based upon the January, 2004 Market Survey. This rating is valid until April 1, 2004.



Andrew J Froning
Senior Partner, Operations

ODIN Attachment R

Contractor: NASA-KSC
Quarter: Q21-January 04
Platform: PC-Laptop Mid Range
Alterion Performance Profile Ranking: 81.4%
Alterion ID: D030618001NB

Prime: OAO Corporation
Prime Contract Number: NAS5-98144
System: Latitude D800
Date of Alterion Certification: 7 Jan 2004
Certification Expires: 31 March 2004

Notebook System Configuration

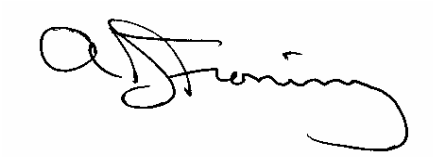
Item	Mfg /Type	Number/version	Size/ Speed
System Dimensions	Dell	Latitude D800	1.5"(h) x 14.2"(w) x 10.9"(d)
Weight (with AC adapter)	Dell		Laptop 7.0 lbs. With Adapter 8.2 lbs.
Motherboard	Dell		
BIOS Version/Date	Dell		
CPU Type & speed	Dell	Intel Centrino Mobile Technology	1.6GHz
LCD Screen Size Standard Resolution Response Time	Dell	active matrix (TFT)	 15.4” WXGA 1280 X 800 pixels, 16.8 million colors 35-ms fall (maximum)
Video Display Adapter	Dell	NVIDIA™ GeForce™ 4 4200 Go	4XAGP 195 MHz
Video Display Driver (version & date)	Dell	v.6.13.10.4258, A03	7/21/2003
Hard Disk Size Access Time Spindle RPM	Dell	ATA-100 13 ms 4200 RPM	30GB (tested at 40GB)
CD-ROM and/or DVD	Dell	Internal CDRW	24-10-24X
Network Interface: Ethernet (wired) Ethernet Wireless Bluetooth Modem	Dell	RJ45 Intel PRO Wireless 2100 WLAN (802.11b) mini-PCI RJ11	10/100/1000 Ethernet LAN 11Mbps at 2.4GHz 56K V.92 modem
Ports and Interfaces Parallel Serial USB Firewire Infrared	Dell	 1 - 25 pin Parallel 1 – 9 pin Serial 2 – USB 2.0 Compliant 1 – IEEE 1394 4 pin 1- Infrared	 IrDA Standards 1.1 (Fast IR) and 1.0 (Slow IR)
USB Memory Key	Dell	USB 2.0	128MB
Keyboard	Dell	87 key U.S. Layout	
Mouse/Integrated pointer	Dell	Dell DualPoint pointing device (both Touch Pad & Track Stick)	
Power Supply	Dell		90-watt a/c adapter
Sound Card Full or Half Duplex	Dell	Audio type/controller: AC97 (Soft Audio) / ICH3	Stereo: 20-bit stereo-digital to analog and 18-bit stereo analog to digital
Speaker(s)	Dell	Internal speakers: (Two) 4-ohm	
Headset/Microphone	Dell	microphone-in-jack; stereo headphones/speakers jack	

ODIN Attachment R

Memory Module Configuration

Item	Mfg / # Slots	Quantity	MB (Total)	Speed	Type
RAM	Dell / 2	2	512MB	266Mhz	SDRAM
Cache	Dell / 0	1	1.0MB		L2 ECC
Video RAM	NVIDA / 0	1	64MB		SDRAM

I hereby certify the rating listed above as the official Alterion Performance Profile Ranking, based upon the January, 2004 Market Survey. This rating is valid until April 1, 2004.



Andrew J Froning
Senior Partner, Operations

ODIN Attachment R

Contractor: NASA-KSC
Quarter: Q21-January 04
Platform: PC-Laptop-Lightweight
Alterion Performance Profile Ranking: 74.8%
Alterion ID: D030924001NB

Prime: OAO Corporation
Prime Contract Number: NAS5-98144
System: Latitude D400
Date of Alterion Certification: 7 Jan 2004
Certification Expires: 31 March 2004

Notebook System Configuration

Item	Mfg /Type	Number/version	Size/ Speed
System Dimensions	Dell	Latitude D400	1.0"(h) x 11.6"(w) x 9.6"(d)
Weight (with AC adapter)	Dell		Laptop 3.7 lbs. With Adapter 4.63 lbs.
Motherboard	Dell		
BIOS Version/Date	Dell	A02 System BIOS 8/21/2003	
CPU Type & speed	Dell	Intel Centrino Mobile Technology	1.7GHz
LCD Screen Size Standard Resolution Response Time	Dell		12.1” XGA 1024x768 pixels, 16.8 million colors 20-ms rise (maximum), 30-ms fall (maximum)
Video Display Adapter	Dell	Intel UMA integrated	855GM chip set
Video Display Driver (version & date)	Dell	v.6.14.10.3553, A04	8/12/2003
Hard Disk Size Access Time Spindle RPM	Dell	ATA-100 13 ms 4200 RPM	30GB
CD-ROM and/or DVD	Dell	External CDRW	24-10-24X
Network Interface: Ethernet (wired) Ethernet Wireless Bluetooth Modem	Dell	RJ45 Intel PRO Wireless 2100 WLAN (802.11b) mini-PCI RJ11	10/100/1000 Ethernet LAN 11Mbps at 2.4GHz 56K V.92 modem
Ports and Interfaces Parallel Serial USB Firewire Infrared	Dell	1 - 25 pin Parallel 1 - 9 pin Serial 1 - USB 2.0 Compliant 1 - IEEE 1394 1 - Infrared	IrDA Standards 1.1 (Fast IR) and 1.0 (Slow IR)
USB Memory Key	Dell	USB 2.0	128MB
Keyboard	Dell	87 key U.S. Layout	
Mouse/Integrated pointer	Dell	Dell DualPoint pointing device (both Touch Pad & Track Stick)	
Power Supply	Dell		65-watt a/c adapter
Sound Card Full or Half Duplex	Dell	Audio type/controller: AC97 (Soft Audio) / ICH3	Stereo: 20-bit stereo-digital to analog and 18-bit stereo analog to digital
Speaker(s)	Dell	Internal speakers: (Two)	4 ohm
Headset/Microphone	Dell	microphone-in-jack; stereo headphones/speakers jack	

ODIN Attachment R

Memory Module Configuration

Item	Mfg / # Slots	Quantity	MB (Total)	Speed	Type
RAM	Dell / 2	2	512MB	266Mhz	SDRAM
Cache	Dell / 0	1	1.0MB		L2 ECC
Video RAM	Intel / 0	1	64MB		SDRAM

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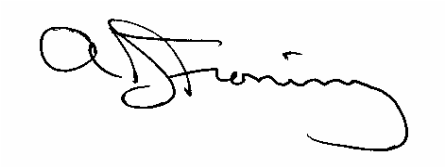

Andrew J Froning
Senior Partner, Operations

ODIN Attachment R

Contractor: NASA – KSC
Quarter: Q21-January 04
Platform: Mac-Desktop – Entry Level
Alterion Performance Profile Ranking:
Alterion ID:

Prime: OAO Corporation
Prime Contract Number: NAS5-98144
System: eMac G4
Date of Alterion Certification:
Certification Expires:

Desktop System Configuration

Item	Mfg /Type	Number/version	Size/ Speed
System Dimensions	Apple G4	M8950LL/A	Height: 15.8 inches (40.6 cm) Width: 15.8 inches (40.6 cm) Depth: 17.1 inches (43.3 cm)
Case Type	Apple	All-In-One	
Motherboard	Apple	1GHz PowerPC G4	133Mhz Bus
BIOS Version/Date	Apple	Firmware Update 4.4.8 1/26/03	
CPU Type & speed	Apple	1GHz PowerPC G4	1Ghz
CPU Slots Used/Available	Apple	1 used / 0 available	
Bus slots, # and type	Apple	0	
AGP bus speed	Apple	AGP 4X	
Video Display Adapter	Apple	ATI Radeon 7500	Up to 1280 by 960 pixels
Video Display Driver (version & date)	Apple	N/A	
Hard Disk Size Access Time Spindle RPM	Apple	Ultra ATA	80GB Disk transfer (sustained) rate: 8-12 megabytes (MB) per second Host transfer (burst) rate maximum: 33 MB per second
HD Controller (If RAID compatible list types)	Apple	Ultra ATA	66MHz
CD-ROM and/or DVD	Apple	DVD/CDRW SuperDrive	writes DVD-R discs at 4x speed, reads DVDs at 8x speed, writes CD-R discs at 16x speed, writes CD-RW discs at 8x speed, reads CDs at 32x speed
Network Interface: Ethernet (wired) Ethernet Wireless Bluetooth	Apple	Built-in 56K V.92 modem (RJ-11 connector) (4) Built-in 10/100BASE-T Ethernet (RJ-45 connector) Built-in antennas and expansion slot for optional 54-Mbps AirPort Extreme Card (5)	10/100Mbps

ODIN Attachment R

Item	Mfg /Type	Number/version	Size/ Speed
Ports and Interfaces Parallel Serial USB Firewire	Apple	Total of five USB 1.1 ports: three on computer (shared on two 12Mbps controllers); two on keyboard Two FireWire 400 ports; 8 watts shared	12Mbps
USB Memory Key	Generic	USB 2.0	128MB
Keyboard	Apple	Apple Pro Keyboard	108 keys (on the ANSI versions)
Mouse	Apple	Apple Pro Mouse	1 button
Power Supply	Apple		170W
Sound Card Full or Half Duplex	Apple	Internal 16-watt digital amplifier	16-watt
Speaker(s)	Apple	Integrated stereo speakers	2
Headset/Microphone	Apple	Headphone jack Built-in microphone	
Monitor – CRT /	Apple	17-inch (16-inch viewable) flat CRT	17” 16” Viewable

Memory Module Configuration

Item	Mfg / # Slots	Quantity	MB (Total)	Speed	Type
RAM	Apple / 2	1	512MB	133Mhz	SDRAM
Cache	Apple / 1	1	256K	133Mhz	
Video RAM	Apple / 1	1	32MB		SDRAM

See Attached Waiver

ODIN Attachment R

Contractor: NASA – KSC
Quarter: Q21-January 04
Platform: Mac-Desktop – Mid range
Alterion Performance Profile Ranking:
Alterion ID:

Prime: OAO Corporation
Prime Contract Number: NAS5-98144
System: iMac G4
Date of Alterion Certification:
Certification Expires:

Desktop System Configuration

Item	Mfg /Type	Number/version	Size/ Speed
System Dimensions	Apple G4	M9168LL/A	Height: 13.03 inches minimum; 20.0 inches maximum Width: 16.7 inches minimum; 17.7 inches maximum Depth: 10.6 inches minimum; 16.7 inches maximum Diameter of base: 10.6 inches
Case Type	Apple	All-In-One	
Motherboard	Apple	1.25GHz PowerPC G4	167Mhz Bus
BIOS Version/Date	Apple	Firmware Update 4.4.8 1/26/03	
CPU Type & speed	Apple	1.25GHz PowerPC G4	1.25Ghz
CPU Slots Used/Available	Apple	1 used / 0 available	
Bus slots, # and type	Apple	0	
AGP bus speed	Apple	AGP 4X	
Video Display Adapter	Apple	NVIDIA GeForce FX 5200 Ultra	1440 by 900 pixels
Video Display Driver (version & date)	Apple	N/A	
Hard Disk Size Access Time Spindle RPM	Apple	Ultra ATA	80GB 7200 RPM
HD Controller (If RAID compatible list types)	Apple	Ultra ATA	66MHz
CD-ROM and/or DVD	Apple	DVD/CDRW SuperDrive	writes DVD-R discs at 4x speed, reads DVDs at 8x speed, writes CD-R discs at 16x speed, writes CD-RW discs at 8x speed, reads CDs at 32x speed
Network Interface: Ethernet (wired) Ethernet Wireless Bluetooth	Apple	Built-in 56K V.92 modem (RJ-11 connector) (4) Built-in 10/100BASE-T Ethernet (RJ-45 connector) AirPort Extreme	 10/100Mbps 54-Mbps
Ports and Interfaces Parallel Serial USB Firewire	Apple	Total of five USB 1.1 ports: three on computer (shared on two 12Mbps controllers); two on keyboard Two FireWire 400 ports; 8 watts shared	12Mbps
USB Memory Key	Generic	USB 2.0	128MB

ODIN Attachment R

Item	Mfg /Type	Number/version	Size/ Speed
Keyboard	Apple	Apple Pro Keyboard	108 keys (on the ANSI versions)
Mouse	Apple	Apple Pro Mouse	1 button
Power Supply	Apple		160W
Sound Card Full or Half Duplex	Apple	Internal 16-watt digital amplifier	16-watt
Speaker(s)	Apple	Integrated speaker	1
Headset/Microphone	Apple	Headphone jack Built-in microphone	
Monitor – CRT / LCD	Apple	Built-in 17-inch TFT active-matrix liquid crystal	17" Viewable

Memory Module Configuration

Item	Mfg / # Slots	Quantity	MB (Total)	Speed	Type
RAM	Apple / 2	1	512MB	266Mhz	SDRAM
Cache	Apple / 1	1	256K	266Mhz	
Video RAM	Apple / 1	1	64MB		SDRAM

See Attached Waiver

ODIN Attachment R

Contractor: NASA – KSC
Quarter: Q21-January 04
Platform: Mac-Desktop – High End
Alterion Performance Profile Ranking: 100%
Alterion ID: A030911001DT

Prime: OAO Corporation
Prime Contract Number: NAS5-98144
System: PowerMac G5
Date of Alterion Certification: 7 January 2004
Certification Expires: 31 March 2004

Desktop System Configuration

Item	Mfg /Type	Number/version	Size/ Speed
System Dimensions	Apple G5	M9031LL/A	Height: 20.1 inches (51.1 cm) Width: 8.1 inches (20.6 cm) Depth: 18.7 inches (47.5 cm)
Case Type	Apple	Tower	
Motherboard	Apple	1.8GHz PowerPC G5	600Mhz Front Side Bus
BIOS Version/Date	Apple	N/A	
CPU Type & speed	Apple	1.8GHz PowerPC G5	1.8Ghz
CPU Slots Used/Available	Apple	1 used / 0 available	
Bus slots, # and type	Apple	One open full-length 64-bit, 133MHz PCI-X slot and two open full-length 64-bit 100MHz PCI-X slots	
AGP bus speed	Apple	8X AGP	
Video Display Adapter	Apple	NVIDIA GeForce FX 5200 Ultra	1440 by 900 pixels
Video Display Driver (version & date)	Apple	N/A	
Hard Disk Size Access Time Spindle RPM	Apple	Serial ATA	160GB 7200 RPM
HD Controller (If RAID compatible list types)	Apple	Serial ATA	150-MBps data throughput
CD-ROM and/or DVD	Apple	DVD/CDRW SuperDrive	writes DVD-R discs at 4x speed, reads DVDs at 8x speed, writes CD-R discs at 16x speed, writes CD-RW discs at 10x speed, reads CDs at 32x speed
Network Interface: Ethernet (wired) Ethernet Wireless Bluetooth	Apple	Built-in 56K V.92 modem (RJ-11 connector) (4) Built-in 10/100BASE-T Ethernet (RJ-45 connector)	10/100Mbps
Ports and Interfaces Parallel Serial USB Firewire	Apple	Three USB 2.0 ports (on one front panel), two USB 1.1 ports on keyboard One FireWire 800 port and two FireWire 400 ports	12Mbps
USB Memory Key	Generic	USB 2.0	128MB
Keyboard	Apple	Apple Pro Keyboard	108 keys (on the ANSI versions)
Mouse	Apple	Apple Pro Mouse	1 button
Power Supply	Apple		Maximum current: 6.5A (low-voltage range) or 7.5A (high-voltage range)

ODIN Attachment R

Item	Mfg /Type	Number/version	Size/ Speed
Sound Card Full or Half Duplex	Apple	Optical digital audio in, optical digital audio out, analog audio in, analog audio out,	
Speaker(s)	Apple	Altec Lansing® ADA-215	2
Headset/Microphone	Apple	Front headphone minijack and speaker Stereo audio in and out minijacks	
Monitor – CRT / LCD	Dell	E772p	17" 27 mm Pixel pitch 16" Viewable 1024 x 768 @ 75 Hz Analog

Memory Module Configuration

Item	Mfg / # Slots	Quantity	MB (Total)	Speed	Type
RAM	Apple / 8	2	512MB	400Mhz	SDRAM
Cache	Apple / 1	1	512K	400Mhz	
Video RAM	Apple / 1	1	64MB		SDRAM

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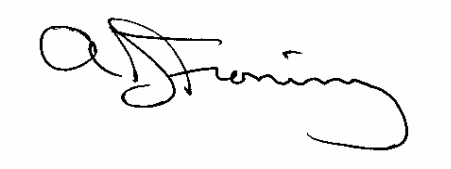

Andrew J Froning
Senior Partner, Operations

ODIN Attachment R

Contractor: NASA – KSC
Quarter: Q21-January 04
Platform: Mac Laptop Mid Range
Alterion Performance Profile Ranking: 100%
Alterion ID: A031229001NB

Prime: OAO Corporation
Prime Contract Number: NAS5-98144
System: PowerBook G4/1.33Ghz
Date of Alterion Certification: 7 January 2004
Certification Expires: 31 March 2004

Notebook System Configuration

Item	Mfg /Type	Number/ Version	Size/ Speed
System Dimensions	Apple	M9110LL/A	Height: 1.0 inches Width: 15.4 inches Depth: 10.2 inches
Weight (with AC adapter)	Apple		Weight: 6.9 pounds with battery and optical drive installed
Motherboard	Apple	UMA	167 MHz
BIOS Version/Date	Apple	Firmware Update 4.1.8	
CPU Type & speed	Apple	PPC G4	1.33Ghz
LCD Screen Size Standard Resolution Response Time	Apple	17.0 inch (diagonal), 1280x854 resolution, TFT widescreen	
Video Display Adapter	Apple	ATI Mobility Radeon 9600	1440-by-900 Resolution
Video Display Driver (version & date)	Apple	N/A	
Hard Disk Size Access Time Spindle RPM	Apple	Ultra ATA/100	80GB 5400 RPM
CD-ROM and/or DVD	Apple	SuperDrive (DVD-R/CD-RW	writes DVD-R discs at up to 2x speed, reads DVDs at up to 8x speed, writes CD-R discs at up to 16x speed, writes CD-RW discs at up to 4x speed, reads CDs at up to 24x speed
Network Interface: Ethernet (wired) Ethernet Wireless Bluetooth Modem	Apple	10/100/1000 BASE-T 56K V.92 modem 11-Mbps AirPort Card	10/100/1000 56K 11-Mbps
Ports and Interfaces Parallel Serial USB Firewire	Apple	One FireWire 400 (IEEE 1394a) port at up to 400 Mbps One FireWire 800 (IEEE 1394b) port at up to 800 Mbps Two USB 2.0 ports at up to 480 Mbps	400-Mbps 800-Mbps Up to 480Mbps
USB Memory Key	Generic	USB 2.0	128MB
Keyboard	Apple	Built-in full-size keyboard with 77 keys	
Mouse/Integrated pointer	Apple	Solid-state trackpad	
Power Supply	Apple		Power adapter with cable management system 61-watt-hour lithium-ion battery

ODIN Attachment R

Item	Mfg /Type	Number/ Version	Size/ Speed
Sound Card Full or Half Duplex	Apple	Built-in stereo speakers with midrange-enhancing third speaker	
Speaker(s)	Apple	built-in stereo speakers	3
Headset/Microphone	Apple	Audio line in (minijack) Headphone out (minijack) Internal omnidirectional microphone	

Memory Module Configuration

Item	Mfg / # Slots	Quantity	MB (Total)	Speed	Type
RAM	Apple	2	512MB	333Mhz	SDRAM
Cache	Apple	1	512K	333MHz	L2 ECC
Video RAM	ATI	1	64MB		SDRAM

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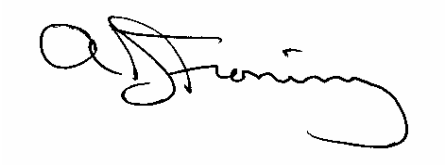

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