# AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

| | | | |
|---|---|---|---|
| 1. CONTRACT ID CODE | | PAGE OF PAGES 1 | 2 |
| 2. AMENDMENT/MODIFICATION NO. 73 | 3. EFFECTIVE DATE See Block 16C | REQUISITION/PURCHASE REQ. NO. | 5. PROJECT NO. *(If applicable)* |
| 6. ISSUED BY CODE | John F. Kennedy Space Center, NASA<br>Procurement Office –OP-OS – ODIN<br>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)*<br>OAO Corporation<br>7375 Executive Place<br>Seabrook, MD 20706<br>CODE / FACILITY CODE | (x) | 9A. AMENDMENT OF SOLICITATION NO.<br>9B. DATED *(SEE ITEM 11)*<br>10A. MODIFICATION OF CONTRACT/ORDER NO. **NAS5-98144/NNK05OA14D**<br>10B. DATED *(SEE ITEM 13)* December 1, 2004 |

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, [ ] found. 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)*

No Change

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

| | |
|---|---|
| | |
| | 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 43.103(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.)*

## *KENNEDY SPACE CENTER - ODIN SERVICES*

### Subject: Incorporate Quarter 31 Seat Certifications

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)*<br>Martha E. Knox<br>Contracts Manager | | 16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*<br>Gloria Marsh<br>Contracting Officer | |
| 15B. CONTRACTOR/OFFEROR<br>Martha E. Knox<br>*(Signature of person authorized to sign)* | 15C. DATE SIGNED<br>7/17/06 | 16B. UNITED STATES OF AMERICA<br>BY Gloria Marsh<br>*(Signature of Contracting Officer)* | 16C. DATE SIGNED<br>7/19/06 |

1. The purpose of this modification is to incorporate Attachment K, Listing of Accepted Seat Certifications, and the accepted systems for Quarter 31 as defined in paragraphs 4 and 5.
2. The listing of accepted seat certifications is hereby incorporated into Attachment K of the Delivery Order. The slip page for Delivery Order page K-3 is attached to this Modification.
3. Part VIII, List of Documents, Exhibits, and Other Attachments, is revised to reflect the change in Attachment K. The slip page for Delivery Order page VIII-1 is attached to this Modification.
4. The following Qtr 31 PC and MAC seat configurations are hereby accepted and incorporated into Attachment K of the Delivery Order.

| Quarter | Seat | Platform | System Configuration | Date Certified | Rating |
|---|---|---|---|---|---|
| Q31(July 2006) | GP1 - Entry | PC-Desktop | HP DC7600, PD, 3.0GHz | July 5, 2006 | 80.7% |
| Q31(July 2006) | GP2 - Mid Range | PC-Desktop | HP DC7600, PD, 3.2GHz | July 5, 2006 | 81.6% |
| Q31(July 2006) | SE1/SE2 High End | PC-Desktop | HP DC7600, 3.40GHz | July 5, 2006 | 89.5% |
| Q31(July 2006) | SE2 – Premium | PC-Desktop | HP XW6200, 3.60GHz | July 5, 2006 | 97.2% |
| Q31(July 2006) | GP3 – Entry | PC-Laptop | HP NC6430, 2.0GHz | July 5, 2006 | 96.2% |
| Q31(July 2006) | GP3 - Mid Range | PC-Laptop | HP NC8430, 1.83GHz | July 5, 2006 | 90.7% |
| Q31(July 2006) | GP3 – High End | PC-Laptop | HP NC8430, 2.0GHz | July 5, 2006 | 100% |
| Q31(July 2006) | GP3 – Lightweight* | PC-Laptop | HP NC4400, 2.0GHz | July 5, 2006 | 94.7% |
| Q31(July 2006) | GP3 – Tablet | PC-Laptop | HP TC4400, 2.0GHz* | July 5, 2006 | 94.5% |
| Q31(July 2006) | GP2 - Mid Range | MAC-Desktop | Apple IMac, 1.83GHz | July 5, 2006 | 100% |
| Q31(July 2006) | SE1/SE2 - High End | MAC-Desktop | Apple PowerMac G5, 2.0GHz | July 5, 2006 | 100% |
| Q31(July 2006) | SE2 – Premium | MAC-Desktop | Apple PowerBook G5 Quad, 2.5GHz | July 5, 2006 | 100% |
| Q31(July 2006) | GP3 - Mid Range | MAC-Laptop | Apple MacBook Pro, 2.1GHz | July 5, 2006 | 100% |

* Approval is granted for the Waiver Request dated July 7, 2006 from OAO for the GP3-Lightweight Laptop, HP NC4400.

Approval is also granted for the Waiver Request dated July 7, 2006 from OAO for the Apple GP1 Entry MAC-Desktop system. At such time that Apple offers a system configured as a GP1, OAO will have performance testing completed by Alterion and the system will be included in future submissions.

5. Copies of the signed certifications for Quarter 31 PC and MAC seats are attached (26 pages).
6. All other terms and conditions of the Delivery Order remain unchanged and in full force and effect.

# PART VIII
## LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

| Attachment Number | Title | Dated | Number of pages |
|---|---|---|---|
| A | PRICE LIST FOR YEARS 1, 2, 3 | Dec. 1, 2004 | 82 |
| B | SUMMARY OF EXPANDED MA2 MAINTENANCE SUPPORT | Feb.27, 2001 | 1 |
| C | DATA REQUIREMENT DESCRIPTIONS | Dec. 1, 2004 | 20 |
| D | SOFTWARE TRIAGE LIST (RESERVED) | N/A | N/A |
| E | REVISED SEAT AND SERVICE LEVEL TABLE E | Dec. 1, 2004 | 17 |
| F | LIST OF INSTALLATION-ACCOUNTABLE GOVERNMENT PROPERTY | Nov. 17, 2005 | 4 |
| G | LIST OF GOVERNMENT-FURNISHED PROPERTY (RESERVED) | N/A | N/A |
| H | LISTING OF PRINTERS SUPPORTED AS SHARED PERIPHERALS | Dec 2005 | 10 |
| I | PRICE LIST FOR TONER REIMBURSEMENT | Dec 2005 | 4 |
| J | APPROPRIATION AND ACCOUNTING DATA | Dec, 1, 2004 | 1 |
| K | LISTING OF ACCEPTED SEAT CERTIFICATIONS | July 7, 2006 | 3 |

## ATTACHMENT K – LISTING OF ACCEPTED SEAT CERTIFICATIONS

Reference: Part III, Section B, Item 8, SEMI-ANNUAL ATTACHMENT R CONFIGURATION PROCESS

The systems that have been certified and accepted by the Government are set forth below:

| Quarter | Seat | Platform | System Configuration | Date Certified | Rating |
|---|---|---|---|---|---|
| Q30 (Apr 2006) | SE2 - Premium | PC-Desktop | HP XW6200, P4, 3.4 GHz | Apr 3, 2006 | 91.8% |
| Q30 (Apr 2006) | GP3 – Entry | PC-Laptop | HP NC6230, 1.73 GHz | Apr 3, 2006 | 78.3% |
| Q30 (Apr 2006) | GP3 - Mid Range | PC-Laptop | HP NC8230, 1.86 GHz | Apr 3, 2006 | 88.1% |
| Q30 (Apr 2006) | GP3 – High End | PC-Laptop | HP NC8230, 2.0 GHz | Apr 3, 2006 | 98.6% |
| Q30 (Apr 2006) | GP3 – Lightweight | PC-Laptop | HP NC4200, 1.86 GHz | Apr 3, 2006 | 88.4% |
| Q30 (Apr 2006) | GP3 – Tablet | PC-Laptop | HP TC4200, 2.0GHz* | Apr 3, 2006 | 86.5% |
| Q30 (Apr 2006) | GP2 - Mid Range | MAC-Desktop | Apple MacBook Pro, 1.83 GHz | Apr 3, 2006 | 100% |
| Q30 (Apr 2006) | SE1/SE2 - High End | MAC-Desktop | Apple PowerMac G5, 2.0 GHz | Apr 3, 2006 | 100% |
| Q30 (Apr 2006) | SE2 – Premium | MAC-Desktop | Apple PowerBook G5 Quad, 2.5 GHz | Apr 3, 2006 | 100% |
| Q30 (Apr 2006) | GP3 - Mid Range | MAC-Laptop | Apple MacBook Pro G4, 1.83 GHz | Apr 3, 2006 | 100% |
| Q31(July 2006) | GP1 - Entry | PC-Desktop | HP DC7600, PD, 3.0GHz | July 5, 2006 | 80.7% |
| Q31(July 2006) | GP2 - Mid Range | PC-Desktop | HP DC7600, PD, 3.2GHz | July 5, 2006 | 81.6% |
| Q31(July 2006) | SE1/SE2 High End | PC-Desktop | HP DC7600, 3.40GHz | July 5, 2006 | 89.5% |
| Q31(July 2006) | SE2 – Premium | PC-Desktop | HP XW6200, 3.60GHz | July 5, 2006 | 97.2% |
| Q31(July 2006) | GP3 – Entry | PC-Laptop | HP NC6430, 2.0GHz | July 5, 2006 | 96.2% |
| Q31(July 2006) | GP3 - Mid Range | PC-Laptop | HP NC8430, 1.83GHz | July 5, 2006 | 90.7% |
| Q31(July 2006) | GP3 – High End | PC-Laptop | HP NC8430, 2.0GHz | July 5, 2006 | 100% |
| Q31(July 2006) | GP3 – Lightweight* | PC-Laptop | HP NC4400, 2.0GHz | July 5, 2006 | 94.7% |
| Q31(July 2006) | GP3 – Tablet | PC-Laptop | HP TC4400, 2.0GHz* | July 5, 2006 | 94.5% |
| Q31(July 2006) | GP2 - Mid Range | MAC-Desktop | Apple IMac, 1.83GHz | July 5, 2006 | 100% |
| Q31(July 2006) | SE1/SE2 - High End | MAC-Desktop | Apple PowerMac G5, 2.0GHz | July 5, 2006 | 100% |
| Q31(July 2006) | SE2 – Premium | MAC-Desktop | Apple PowerBook G5 Quad, 2.5GHz | July 5, 2006 | 100% |
| Q31(July 2006) | GP3 - Mid Range | MAC-Laptop | Apple MacBook Pro, 2.1GHz | July 5, 2006 | 100% |

ALTERION

# ODIN Attachment R

**Contractor: NASA-SOMD**
**Quarter: Q31-July 06**
**Platform: PC-Entry Level**
**Alterion Performance Profile Ranking: 80.7%**
**Alterion ID: H060534002DT_30**

**Prime: OAO Corporation**
**Prime Contract Number: NAS5-98144**
**System: HP DC7600 PD 3.0Ghz**
**Date of Alterion Certification: 5 July 2006**
**Certification Expires: 31 October 2006**

## Desktop System Configuration

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| System Dimensions | HP | HP Compaq Business Desktop DC7600 Series | 17.65 x 6.6 x 17.8 in |
| Case Type | HP | Convertible Minitower | |
| Motherboard | Intel | 945G chipset | |
| BIOS Version/Date | HP | | |
| CPU Type & speed | Intel | 3.0Ghz<br>Intel Pentium D | with 800-MHz Front Side Bus, 2.0MB L2 cache with HyperThread |
| CPU Slots Used/Available | HP | 1/0 | |
| Bus slots, # and type | HP | PCI<br>PCI-E 1x<br>PCI-E 16x | 2 full-height<br>1 full height<br>1 full height |
| AGP bus speed | HP | N/A | |
| Video Display Adapter | ATI | Radeon X300 SE | |
| Video Display Driver (version & date) | ATI | N/A | |
| Hard Disk Size<br>Seek Time<br>Spindle RPM | HP | Serial ATA | 80-GB 7200 rpm<br>Average 8.5 ms |
| HD Controller<br>( If RAID compatible list types) | HP | Serial ATA | |
| CD-ROM, DVD ,CDRW | HP | DVD/CDRW Combo | 48X/32X/48X |
| Network Interface:<br>Ethernet (wired)<br>Ethernet Wireless<br>Bluetooth | HP | Broadcom 5751 PCI-E LAN Controller<br>Broadcom NetXtreme Gigabit ethernet for HP | 10/100/1000 Mbps |
| Ports and Interfaces<br>Parallel<br>Serial<br>USB<br>Firewire | HP | | 1 Parallel<br>1 Serial<br>8 USB 2.0,(2 front, 6 rear)<br>1394 Firewire (option via PCI) |
| USB Memory Key | HP | USB | 128mb |
| Keyboard | HP | PS/2 Keyboard | |
| Mouse | HP | PS/2 Mouse | 2-Button w/Scroll |
| Power Supply | HP | | 365W ATX Power Supply |
| Sound Card<br>Full or Half Duplex | HP | SoundMax Digital AC97 integrated audio | |
| Speaker(s) | Generic | External | 2 Speakers |
| Headset/Microphone | HP | Audio In, Audio Out / Headphone, Mic In | |

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## ODIN Attachment R

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| Monitor – CRT / Flat Panel | HP | L1706FP | 17" 264 mm Pixel pitch<br>17" Viewable<br>1280 x 1024 @ 60 Hz and 75 Hz |

### Section 1.01 Memory Module Configuration

| Item | Mfg / # Slots | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | HP/ 4 | 1 | 1.0GB | 533Mhz | DDR SDRAM |
| Cache | | 1 | 2.0MB | 800Mhz | Level 2 |
| Video RAM | ATI / 0 | | 128MB | 266 MHz | PCI-E |

I hereby certify the rating listed above as the official Alterion Performance Profile Ranking, based upon the July 3rd, 2006 Market Survey. This rating is valid until October 1, 2006.

Andrew J Froning
Director of Operations

ALTERION

# ODIN Attachment R

**Contractor: NASA-SOMD**
**Quarter: Q31-July 06**
**Platform: PC-Desktop-Mid Range**
**Alterion Performance Profile Ranking: 81.6%**
**Alterion ID: H060524002DT_32**

**Prime: OAO Corporation**
**Prime Contract Number: NAS5-98144**
**System: HP DC7600 PD 3.2Ghz**
**Date of Alterion Certification: 5 July 2005**
**Certification Expires: 31 October 2006**

## Desktop System Configuration

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| System Dimensions | HP | HP Compaq Business Desktop DC7600 Series | 17.65 x 6.6 x 17.8 in |
| Case Type | HP | Convertible Minitower | |
| Motherboard | Intel | 945G chipset | |
| BIOS Version/Date | HP | | |
| CPU Type & speed | Intel | 3.2Ghz Intel Pentium D | with 800-MHz Front Side Bus, 2.0MB L2 cache with HyperThread |
| CPU Slots Used/Available | HP | 1/0 | |
| Bus slots, # and type | HP | PCI<br>PCI-E 1x<br>PCI-E 16x | 2 full-height<br>1 full height<br>1 full height |
| AGP bus speed | HP | N/A | |
| Video Display Adapter | ATI | Radeon X300 SE | |
| Video Display Driver (version & date) | ATI | N/A | |
| Hard Disk Size<br>Seek Time<br>Spindle RPM | HP | Serial ATA | 80-GB 7200 rpm<br>Average 8.5 ms |
| HD Controller<br>( If RAID compatible list types) | HP | Serial ATA | |
| CD-ROM, DVD ,CDRW | HP | DVD/CDRW Combo | 48X/32X/48X |
| Network Interface:<br>Ethernet (wired)<br>Ethernet Wireless<br>Bluetooth | HP | Broadcom 5751 PCI-E LAN Controller<br>Broadcom NetXtreme Gigabit ethernet for HP | 10/100/1000 Mbps |
| Ports and Interfaces<br>Parallel<br>Serial<br>USB<br>Firewire | HP | | 1 Parallel<br>1 Serial<br>8 USB 2.0,(2 front, 6 rear)<br>1394 Firewire (option via PCI) |
| USB Memory Key | HP | USB | 128mb |
| Keyboard | HP | PS/2 Keyboard | |
| Mouse | HP | PS/2 Mouse | 2-Button w/Scroll |
| Power Supply | HP | | 365W ATX Power Supply |
| Sound Card<br>Full or Half Duplex | HP | SoundMax Digital AC97 integrated audio | |
| Speaker(s) | Generic | External | 2 Speakers |

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## ODIN Attachment R

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| Headset/Microphone | HP | Audio In, Audio Out / Headphone, Mic In | |
| Monitor – CRT / Flat Panel | HP | L1706FP | 17" 264 mm Pixel pitch<br>17" Viewable<br>1280 x 1024 @ 60 Hz and 75 Hz |

**Section 1.02 Memory Module Configuration**

| Item | Mfg / # Slots | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | HP/ 4 | 1 | 1.0GB | 533Mhz | DDR SDRAM |
| Cache | | 1 | 2.0MB | 800Mhz | Level 2 |
| Video RAM | ATI/0 | | 128MB | 266 MHz | PCI-E |

I hereby certify the rating listed above as the official Alterion Performance Profile Ranking, based upon the July 3rd, 2006 Market Survey. This rating is valid until October 1, 2006.

Andrew J Froning
Director of Operations

ALTERION

# ODIN Attachment R

**Contractor: NASA-SOMD**
**Quarter: Q31-July 06**
**Platform: PC-Desktop-High End**
**Alterion Performance Profile Ranking: 89.5%**
**Alterion ID: H060622001DT**

**Prime: OAO Corporation**
**Prime Contract Number: NAS5-98144**
**System: HP DC7600 PD 3.4Ghz**
**Date of Alterion Certification: 5 July 2006**
**Certification Expires: 31 October 2006**

## Desktop System Configuration

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| System Dimensions | HP | HP Compaq Business Desktop DC7600 Series | 17.65 x 6.6 x 17.8 in |
| Case Type | HP | Convertible Minitower | |
| Motherboard | Intel | 945G chipset | |
| BIOS Version/Date | HP | | |
| CPU Type & speed | Intel | 3.4Ghz Intel Pentium D | with 800-MHz Front Side Bus, 2.0MB L2 cache with HyperThread |
| CPU Slots Used/Available | HP | 1/0 | |
| Bus slots, # and type | HP | PCI<br>PCI-E 1x<br>PCI-E 16x | 2 full-height<br>1 full height<br>1 full height |
| AGP bus speed | HP | N/A | |
| Video Display Adapter | ATI | Radeon X300 SE | |
| Video Display Driver (version & date) | ATI | N/A | |
| Hard Disk Size<br>Seek Time<br>Spindle RPM | HP | Serial ATA | 80-GB 7200 rpm<br>Average 8.5 ms |
| HD Controller<br>( If RAID compatible list types) | HP | Serial ATA | |
| CD-ROM, DVD ,CDRW | HP | DVD/CDRW Combo | 48X/32X/48X |
| Network Interface:<br>Ethernet (wired)<br>Ethernet Wireless<br>Bluetooth | HP | Broadcom 5751 PCI-E LAN Controller<br>Broadcom NetXtreme Gigabit ethernet for HP | 10/100/1000 Mbps |
| Ports and Interfaces<br>Parallel<br>Serial<br>USB<br>Firewire | HP | | 1 Parallel<br>1 Serial<br>8 USB 2.0,(2 front, 6 rear)<br>1394 Firewire (option via PCI) |
| USB Memory Key | HP | USB | 128mb |
| Keyboard | HP | PS/2 Keyboard | |
| Mouse | HP | PS/2 Mouse | 2-Button w/Scroll |
| Power Supply | HP | | 365W ATX Power Supply |
| Sound Card<br>Full or Half Duplex | HP | SoundMax Digital AC97 integrated audio | |
| Speaker(s) | Generic | External | 2 Speakers |
| Headset/Microphone | HP | Audio In, Audio Out / Headphone, Mic In | |

ALTERION

## ODIN Attachment R

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| Monitor – CRT / Flat Panel | HP | L1706FP | 17" 264 mm Pixel pitch<br>17" Viewable<br>1280 x 1024 @ 60 Hz and 75 Hz |

### Section 1.03 Memory Module Configuration

| Item | Mfg / # Slots | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | HP / 4 | 1 | 1.0GB | 533Mhz | DDR SDRAM |
| Cache | | 1 | 2.0MB | 800Mhz | Level 2 |
| Video RAM | ATI / 0 | | 128MB | 266 MHz | PCI-E |

I hereby certify the rating listed above as the official Alterion Performance Profile Ranking, based upon the July 3rd, 2006 Market Survey. This rating is valid until October 1, 2006.

Andrew J Froning
Director of Operations

ALTERION

# ODIN Attachment R

**Contractor: NASA-SOMD**
**Quarter: Q31-July 06**
**Platform: PC-Desktop-Premium**
**Alterion Performance Profile Ranking: 97.2%**
**Alterion ID: H051202006WS**

**Prime: OAO Corporation**
**Prime Contract Number: NAS5-98144**
**System: HP XW6200**
**Date of Alterion Certification: 5 July 2006**
**Certification Expires: 31 October 2006**

## Desktop System Configuration

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| System Dimensions | HP | HP Workstation xw6200 | 17.3 x 6.5 X 17.3 in |
| Case Type | HP | Tower | |
| Motherboard | HP | E7525 chipset | 800MHz Front Side bus |
| BIOS Version/Date | HP | 08/01/04 Rev 1.04A | |
| CPU Type & speed | Intel | Dual capable Intel® Xeon™ | 3.60GHz * |
| CPU Slots Used/Available | HP | 1 used,1 available | |
| Bus slots, # and type | HP | Four PCI slots<br>1 PCI Express X16 | |
| PCI-E bus speed | HP | PCI Express | 16X |
| Video Display Adapter | ATI | FireGL V3100 | VGA / DVI<br>dual monitor capable<br>16.7M colors |
| Video Display Driver (version & date) | HP | 08/16/04 Rev. 61.71A | |
| Hard Disk Size<br>Access Time<br>Spindle RPM | HP | Serial ATA | 160GB<br><br>7200 RPM |
| HD Controller<br>( If RAID compatible list types) | HP | Integrated Serial ATA | SATA/150 |
| CD-ROM and/or DVD | HP | Internal DVD/CDRW | 48X/32X/48X/16X |
| Network Interface:<br>Ethernet (wired)<br>Ethernet Wireless<br>Bluetooth | HP | Integrated Broadcom 5782 Gb (10/100/1000) Network Interface | 10/100/1000Gb |
| Ports and Interfaces<br>Parallel<br>Serial<br>USB<br>Firewire | HP | <br>1 parallel port<br>1 serial port<br>6 USB 2.0 ports | |
| USB Memory Key | HP | USB 2.0 | 128MB |
| Keyboard | HP | Entry QuietKey™ keyboard | 104 Keys |
| Mouse | HP | Optical USB 2-button scroll | |
| Power Supply | HP | | 500W |
| Sound Card<br>Full or Half Duplex | HP | Integrated AC'97 Full-Duplex Audio | 16-bit / 48 kHz |
| Speaker(s) | HP | Dual Speakers /W Sub | 31 watts |

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## ODIN Attachment R

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| Headset/Microphone | HP | 1/8-inch Audio headphone miniature audio jack<br>1/8-inch Audio microphone-in miniature audio jack | |
| Monitor – CRT / | HP | L1906FP | 19" .294 mm Pixel pitch<br>19" Viewable<br>1280 x 1024 @ 60 Hz and 75 Hz |

**Section 1.04 Memory Module Configuration**

| Item | Mfg / # Slots | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | HP / 4 | 2 | 2.0GB | 400Mhz | DDR SDRAM |
| Cache | HP / 0 | 1 | 2.0MB | | Level 2 |
| Video RAM | ATI / 0 | 1 | 128MB | | DDR SDRAM |

* Tested with 2 processors

I hereby certify the rating listed above as the official Alterion Performance Profile Ranking, based upon the July 3rd, 2006 Market Survey. This rating is valid until October 1, 2006.

Andrew J Froning
Director of Operations

ALTERION

# ODIN Attachment R

**Contractor: NASA-SOMD**
**Quarter: Q31-July 06**
**Platform: PC-Laptop-Entry Level**
**Alterion Performance Profile Ranking: 96.2%**
**Alterion ID: H060621002NB**

**Prime: OAO Corporation**
**Prime Contract Number: NAS5-98144**
**System: HP NC6430**
**Date of Alterion Certification: 5 July 2006**
**Certification Expires: 31 October 2006**

## Notebook System Configuration

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| System Dimensions | HP | HP NC6430 | 1.1x13.0x9.4in (hxwxd). |
| Weight (without AC adapter) | HP | | Laptop 5.0 lbs. |
| Motherboard | HP | 945GM | 667mhz FSB |
| BIOS Version/Date | HP | | |
| CPU Type & speed | HP | Intel Core Duo T2500 | 2.0GHz |
| LCD Screen<br>Size<br>Standard Resolution<br>Response Time | HP | active matrix (TFT) | <br>14.1"<br>WXGA 1280 X 800 pixels,<br>16.8 million colors |
| Video Display Adapter | ATI | ATI Mobility RadeonX1300 Graphics Controller | PCI-E |
| Video Display Driver (version & date) | ATI | | |
| Hard Disk Size<br>Access Time<br>Spindle RPM | HP | SATA<br><br>5400 RPM | 60GB |
| CD-ROM and/or DVD | HP | Internal DVD/CDRW | 24x/8x/24x/24x |
| Network Interface: Ethernet (wired)<br>Ethernet Wireless<br>Bluetooth<br>Modem | HP | RJ45<br>Intel PRO Wireless 34959 WLAN (802.11b/g) mini-PCI<br>RJ11 | 10/100/1000 Ethernet LAN<br>54Mbps<br><br>56K V.92 modem |
| Ports and Interfaces<br>Parallel<br>Serial<br>USB<br>Firewire<br>Infrared | HP | <br>3 – USB 2.0 Compliant<br>1- Infrared | <br><br><br>IrDA Standards 1.1 (Fast IR) and 1.0 (Slow IR) |
| USB Memory Key | HP | USB 2.0 | 128MB |
| Keyboard | HP | 102 key U.S. Layout | |
| Mouse/Integrated pointer | HP | DualPoint pointing device (both Touch Pad & Track Stick) | |
| Power Supply | HP | | 65-watt a/c adapter |

ALTERION

## ODIN Attachment R

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| Sound Card<br>Full or Half Duplex | HP | ADI High Definition CODEC | 16 Bit Sound Blaster Pro Compatible |
| Speaker(s) | HP | Internal speakers: (Two) 4-ohm | 2-watts |
| Headset/Microphone | HP | microphone-in-jack; stereo headphones/speakers jack | |
| Carry Case | HP | Nylon carrying Case | |

**Section 1.05**

**Section 1.06 Memory Module Configuration**

| Item | Mfg / # Slots | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | HP / 2 | 1 | 1.0GB | 533Mhz | SDRAM |
| Cache | HP / 0 | 1 | 2.0MB | | L2 ECC |
| Video RAM | ATI / 0 | 1 | 128MB* | | SDRAM |

*Tested with 512MB RAM.

I hereby certify the rating listed above as the official Alterion Performance Profile Ranking, based upon the July 3rd, 2006 Market Survey. This rating is valid until October 1, 2006.

Andrew J Froning
Director of Operations

ALTERION

# ODIN Attachment R

**Quarter: Q31-July 06**
**Platform: PC-Laptop Mid Range**
**Alterion Performance Profile Ranking: 90.7%**
**Alterion ID: H060602001NB**

**Prime Contract Number: NAS5-98144**
**System: HP NC8430**
**Date of Alterion Certification: 5 July 2006**
**Certification Expires: 31 October 2006**

## Notebook System Configuration

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| System Dimensions | HP | HP NC8430 | 1.1x14.1x10.2in (hxwxd). |
| Weight (without AC adapter) | HP | | Laptop 5.9 lbs. with Multi-Bay device |
| Motherboard | HP | 945PM | 667mhz |
| BIOS Version/Date | HP | | |
| CPU Type & speed | HP | Intel Core Duo T2400 | 1.83GHz |
| LCD Screen<br>Size<br>Standard Resolution<br>Response Time | HP | active matrix (TFT) | <br>15.4"<br>WXGA 1280 X 800,<br>16.8 million colors |
| Video Display Adapter | ATI | ATI Mobility Radeon X1600Graphics Controller | PCI-E |
| Video Display Driver (version & date) | ATI | | |
| Hard Disk Size<br>Access Time<br>Spindle RPM | HP | SATA<br><br>5400 RPM | 80GB |
| CD-ROM and/or DVD | HP | Internal DVD/CDRW | 24x/8x/24x/24x |
| Network Interface: Ethernet (wired)<br>Ethernet Wireless<br>Bluetooth<br>Modem | HP | RJ45<br>Intel PRO Wireless 3495 WLAN (802.11a/b/g) mini-PCI<br>RJ11 | 10/100/1000 Ethernet LAN<br>54Mbps<br><br>56K V.92 modem |
| Ports and Interfaces<br>Parallel<br>Serial<br>USB<br>Firewire<br>Infrared | HP | <br>1 – 9 pin Serial<br>3 – USB 2.0 Compliant<br>1 – IEEE 1394 4 pin<br>1- Infrared | <br><br><br><br>IrDA Standards 1.1 (Fast IR) and 1.0 (Slow IR) |
| USB Memory Key | HP | USB 2.0 | 128MB |
| Keyboard | HP | 102 key U.S. Layout | |
| Mouse/Integrated pointer | HP | DualPoint pointing device (both Touch Pad & Track Stick) | |
| Power Supply | HP | | 90-watt a/c adapter |

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## ODIN Attachment R

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| Sound Card<br>Full or Half Duplex | HP | ADI High Definition CODEC | 16 Bit Sound Blaster Pro Compatible |
| Speaker(s) | HP | Internal speakers: (Two) 4-ohm | 2-watts |
| Headset/Microphone | HP | microphone-in-jack; stereo headphones/speakers jack | |
| Carry Case | HP | Nylon carrying Case | |

**Section 1.07**

**Section 1.08 Memory Module Configuration**

| Item | Mfg / # Slots | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | HP / 2 | 1 | 1.0GB* | 533Mhz | SDRAM |
| Cache | HP / 0 | 1 | 2.0MB | | L2 ECC |
| Video RAM | ATI / 0 | 1 | 256MB | | SDRAM |

*Tested with 512MB RAM.

I hereby certify the rating listed above as the official Alterion Performance Profile Ranking, based upon the July 3rd, 2006 Market Survey. This rating is valid until October 1, 2006.

Andrew J Froning
Director of Operations

ALTERION

# ODIN Attachment R

**Contractor: NASA-SOMD**
**Quarter: Q31-July 06**
**Platform: PC-Laptop High End**
**Alterion Performance Profile Ranking: 100%**
**Alterion ID: H060602002NB**

**Prime: OAO Corporation**
**Prime Contract Number:**
**System: HP NC8430**
**Date of Alterion Certification: 5 July 2006**
**Certification Expires: 31 October 2006**

## Notebook System Configuration

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| System Dimensions | HP | HP NC8430 | 1.1x14.1x10.2in (hxwxd). |
| Weight (without AC adapter) | HP | | Laptop 5.9 lbs. with Multi-Bay device |
| Motherboard | HP | 945PM | 667mhz |
| BIOS Version/Date | HP | | |
| CPU Type & speed | HP | Intel Core Duo T2500 | 2.0GHz |
| LCD Screen<br>Size<br>Standard Resolution<br>Response Time | HP | active matrix (TFT) | <br>15.4"<br>WXGA 1280 X 800,<br>16.8 million colors |
| Video Display Adapter | ATI | ATI Mobility Radeon X1600Graphics Controller | PCI-E |
| Video Display Driver (version & date) | ATI | | |
| Hard Disk Size<br>Access Time<br>Spindle RPM | HP | SATA<br><br>5400 RPM | 80GB |
| CD-ROM and/or DVD | HP | Internal DVD/CDRW | 24x/8x/24x/24x |
| Network Interface: Ethernet (wired)<br>Ethernet Wireless<br>Bluetooth<br>Modem | HP | RJ45<br>Intel PRO Wireless 3495 WLAN (802.11a/b/g) mini-PCI<br>RJ11 | 10/100/1000 Ethernet LAN<br>54Mbps<br><br>56K V.92 modem |
| Ports and Interfaces<br>Parallel<br>Serial<br>USB<br>Firewire<br>Infrared | HP | <br>1 – 9 pin Serial<br>3 – USB 2.0 Compliant<br>1 – IEEE 1394 4 pin<br>1- Infrared | <br><br><br><br><br>IrDA Standards 1.1 (Fast IR) and 1.0 (Slow IR) |
| USB Memory Key | HP | USB 2.0 | 128MB |
| Keyboard | HP | 102 key U.S. Layout | |
| Mouse/Integrated pointer | HP | DualPoint pointing device (both Touch Pad & Track Stick) | |
| Power Supply | HP | | 90-watt a/c adapter |

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## ODIN Attachment R

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| Sound Card<br>Full or Half Duplex | HP | ADI High Definition CODEC | 16 Bit Sound Blaster Pro Compatible |
| Speaker(s) | HP | Internal speakers: (Two) 4-ohm | 2-watts |
| Headset/Microphone | HP | microphone-in-jack; stereo headphones/speakers jack | |
| Carry Case | HP | Nylon carrying Case | |

**Section 1.09**

**Section 1.10 Memory Module Configuration**

| Item | Mfg / # Slots | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | HP / 2 | 1 | 1.0GB* | 533Mhz | SDRAM |
| Cache | HP / 0 | 1 | 2.0MB | | L2 ECC |
| Video RAM | ATI / 0 | 1 | 256MB | | SDRAM |

*Tested with 512MB RAM.

I hereby certify the rating listed above as the official Alterion Performance Profile Ranking, based upon the July 3rd, 2006 Market Survey. This rating is valid until October 1, 2006.

Andrew J Froning
Director of Operations

ALTERION

# ODIN Attachment R

**Contractor: NASA-SOMD**
**Quarter: Q31-July 06**
**Platform: PC-Laptop-Lightweight**
**Alterion Performance Profile Ranking: 94.7%**
**Alterion ID: H060627001LW**

**Prime: OAO Corporation**
**Prime Contract Number: NAS5-98144**
**System: HP NC4400**
**Date of Alterion Certification: 5 July 2006**
**Certification Expires: 31 October 2006**

## Notebook System Configuration

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| System Dimensions | HP | HP NC4400 | 1.19" x 11.22" x 9.25" |
| Weight (without AC adapter) | HP | | Laptop 3.9 lbs. |
| Motherboard | HP | 945GM | 667mhz |
| BIOS Version/Date | HP | | |
| CPU Type & speed | HP | Intel Core Duo T2500 | 2.0GHz |
| LCD Screen<br>Size<br>Standard Resolution<br>Response Time | HP | active matrix (TFT) | <br>12.1"<br>XGA 1280 X 800 pixels,<br>16.8 million colors |
| Video Display Adapter | Intel | Intel Graphics Media Accelerator 950 | |
| Video Display Driver (version & date) | Intel | | |
| Hard Disk Size<br>Access Time<br>Spindle RPM | HP | SATA<br><br>5400 RPM | 60GB |
| CD-ROM and/or DVD | HP | Internal DVD/CDRW | 24x/8x/24x/24x |
| Network Interface: Ethernet (wired)<br>Ethernet Wireless<br>Bluetooth<br>Modem | HP | RJ45<br>Intel PRO Wireless 3945 WLAN (802.11a/b/g) mini-PCI<br>RJ11 | 10/100/1000 Ethernet LAN<br>54Mbps at 2.4GHz<br><br>56K V.92 modem |
| Ports and Interfaces<br>USB<br>Infrared | HP | <br>2 – USB 2.0 Compliant<br>1- Infrared | <br>IrDA Standards 1.1 (Fast IR) and 1.0 (Slow IR) |
| USB Memory Key | HP | USB 2.0 | 128MB |
| Keyboard | HP | 102 key U.S. Layout | |
| Mouse/Integrated pointer | HP | DualPoint pointing device (both Touch Pad & Track Stick) | |
| Power Supply | HP | | 65-watt a/c adapter |
| Sound Card<br>Full or Half Duplex | HP | ADI High Definition CODEC | 16 Bit Sound Blaster Pro Compatible |
| Speaker(s) | HP | Internal speaker: 4-ohm | 2-watts |

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## ODIN Attachment R

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| Headset/Microphone | HP | microphone-in-jack; stereo headphones/speakers jack | |
| Carry Case | HP | Nylon carrying Case | |

Section 1.11

**Section 1.12**
**Section 1.13**
**Section 1.14**
**Section 1.15 Memory Module Configuration**

| Item | Mfg / # Slots | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | HP / 2 | 1 | 1.0GB* | 533Mhz | SDRAM |
| Cache | HP / 0 | 1 | 2.0MB | | L2 ECC |
| Video RAM | Intel / 0 | 1 | 128 MB | | SDRAM |

*Tested with 512MB RAM.

I hereby certify the rating listed above as the official Alterion Performance Profile Ranking, based upon the July 3rd, 2006 Market Survey. This rating is valid until October 1, 2006.

Andrew J Froning
Director of Operations

ALTERION

# ODIN Attachment R

**Contractor: NASA-SOMD**
**Quarter: Q31-July 06**
**Platform: PC-Laptop-Tablet**
**Alterion Performance Profile Ranking: 94.5%**
**Alterion ID: H060626001LW**

**Prime: OAO Corporation**
**Prime Contract Number: NAS5-98144**
**System: HP TC4400**
**Date of Alterion Certification: 5 July 2006**
**Certification Expires: 31 October 2006**

## Notebook System Configuration

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| System Dimensions | HP | TC4400 | WxDxH<br>11.22" x 9.25" x 1.35" |
| Weight (with AC adapter) | HP | | Tablet 4.6 lbs.<br>With Adapter 5.22 |
| Motherboard | HP | Intel 945GM Chipset | 667Mhz Bus |
| BIOS Version/Date | HP | | |
| CPU Type & speed | HP | Intel Core Duo T2500 | 2.0GHz |
| LCD Screen<br>Size<br>Standard Resolution<br>Response Time | HP | | 12.1"<br>XGA 1024 X 768<br>16M colors |
| Video Display Adapter | HP | Intel Media Accelerator 950 | |
| Hard Disk Size<br>Access Time<br>Spindle RPM | HP | SATA<br><br>5400 RPM | 80GB |
| CD-ROM and/or DVD | HP | External DVD/CDRW | USB 2.0 |
| Network Interface: Ethernet (wired)<br>Ethernet Wireless<br>Bluetooth<br>Modem | HP | RJ45<br>Intel PRO Wireless 3945 WLAN (802.11a/b/g) mini-PCI<br><br>RJ11 | 10/100/1000 Ethernet LAN<br>54Mbps<br><br><br>56K V.92 modem |
| Ports and Interfaces<br><br>Parallel<br>Serial<br>USB<br>Firewire<br>Infrared | HP | <br><br><br><br>2 – USB 2.0 Compliant<br><br>1- Infrared | <br><br><br><br><br><br>IrDA Standards 1.1 (Fast IR) and 1.0 (Slow IR) |
| USB Memory Key | HP | USB 2.0 | 128MB |
| Keyboard | HP | 102 key U.S. Layout | |
| Mouse/Integrated pointer | HP | Digitizer Tablet Pen Touch pad, and Point Stick | |
| Power Supply | HP | | 65-watt a/c adapter |
| Sound Card<br>Full or Half Duplex | HP | ADI High Definition CODEC | 16 Bit Sound Blaster Pro Compatible |
| Speaker(s) | HP | Internal speakers: (Two) 4-ohm | |

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## ODIN Attachment R

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| Headset/Microphone | HP | microphone-in-jack; stereo headphones/speakers jack | |
| Carry Case | HP | Nylon carrying Case | |

**Section 1.16**

**Section 1.17**
**Section 1.18**
**Section 1.19**
**Section 1.20**
**Section 1.21 Memory Module Configuration**

| Item | Mfg / # Slots | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | HP / 2 | 1 | 1.0GB | 533Mhz | SDRAM |
| Cache | HP / 0 | 1 | 2.0MB | 533Mhz | L2 ECC |
| Video RAM | Intel / 0 | 1 | 128MB | | SDRAM |

I hereby certify the rating listed above as the official Alterion Performance Profile Ranking, based upon the July 3rd, 2006 Market Survey. This rating is valid until October 1, 2006.

Andrew J Froning
Director of Operations

ALTERION

# ODIN Attachment R

**Contractor: NASA – SOMD**
**Quarter: Q31-July 06**
**Platform: Mac-Desktop – Mid Range**
**Alterion Performance Profile Ranking: 100%**
**Alterion ID: A060321001DT**

**Prime: OAO Corporation**
**Prime Contract Number: NAS5-98144**
**System: iMac Intel Duo**
**Date of Alterion Certification: 5 July 2006**
**Certification Expirees: 31 October 2006**

## Desktop System Configuration

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| System Dimensions | Apple | MA199LL | Height: 16.9 inches<br>Width: 16.8 inches<br>Depth: 6.8 inches |
| Case Type | Apple | All-In-One | |
| Motherboard | Apple | 1.83 Core Duo | 667Mhz Bus |
| BIOS Version/Date | Apple | | |
| CPU Type & speed | Apple | Intel 1.83 Core Duo | 1.83Ghz |
| CPU Slots Used/Available | Apple | 1 used / 0 available | |
| Bus slots, # and type | Apple | 0 | |
| AGP bus speed | Apple | | |
| Video Display Adapter | Apple | ATI Radeon X1600 | 1920 by 1200 pixels |
| Video Display Driver (version & date) | Apple | N/A | |
| Hard Disk Size<br>Access Time<br>Spindle RPM | Apple | SATA | 160GB<br><br>7200 RPM |
| HD Controller<br>( If RAID compatible list types) | Apple | SATA | |
| 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:<br>Ethernet (wired)<br>Ethernet Wireless<br>Bluetooth | Apple | Built-in10/100/1000BASE-T Ethernet (RJ-45 connector)<br><br>AirPort Extreme | 10/100/1000Mbps<br><br>54-Mbps 802.11g |
| Ports and Interfaces<br>Parallel<br>Serial<br>USB<br>Firewire | Apple | Total of five 3-USB 2.0 ports: three on computer<br>2- 1.1USB on keyboard<br>2 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 | | 160W |
| Sound Card<br>Full or Half Duplex | Apple | Internal 12-watt digital amplifier | 12-watt |
| Speaker(s) | Apple | Integrated speaker | 1 |

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# ODIN Attachment R

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| Headset/Microphone | Apple | Headphone jack<br>Built-in microphone | |
| Monitor – CRT / LCD | Apple | Built-in 17-inch TFT active-matrix liquid crystal | 17" Viewable |

**Section 1.22 Memory Module Configuration**

| Item | Mfg / # Slots | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | Apple / 2 | 2 | 1.0GB | 667Mhz | DDR2 |
| Cache | Apple / 1 | 1 | 2.0MB | 667Mhz | L2 |
| Video RAM | Apple / 1 | 1 | 128MB | | GDDR3 |

ALTERION

# ODIN Attachment R

**Contractor: NASA – SOMD**
**Quarter: Q31-July 06**
**Platform: Mac-Desktop – High End**
**Alterion Performance Profile Ranking: 100%**
**A051212004DP**

**Prime: OAO Corporation**
**Prime Contract Number: NAS5-98144**
**System: PowerMac G5**
**Date of Alterion Certification: 5 July 2006Alterion ID:**
**Certification Expires: 31 October 2006**

## Desktop System Configuration

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| System Dimensions | Apple G5 | M9590LL/A | Height: 20.1 inches (51.1 cm)<br>Width: 8.1 inches (20.6 cm)<br>Depth: 18.7 inches (47.5 cm) |
| Case Type | Apple | Tower | |
| Motherboard | Apple | Dual Core 2.0GHz PowerPC G5 | 1.0 Ghz Front Side Bus per Processor |
| BIOS Version/Date | Apple | N/A | |
| CPU Type & speed | Apple | 2.0GHz PowerPC G5 | 2.0Ghz |
| CPU Slots Used/Available | Apple | 2 in use / 0 available | |
| Bus slots, # and type | Apple | Three open PCI Express expansion slots | |
| AGP bus speed | | | |
| Video Display Adapter | Apple | NVIDIA GeForce 6600 LE | 1440 by 900 pixels |
| Video Display Driver (version & date) | Apple | N/A | |
| Hard Disk Size<br>Access Time<br>Spindle RPM | Apple | Serial ATA | 160GB<br>7200 RPM |
| HD Controller<br>( If RAID compatible list types) | Apple | Serial ATA | 150-MBps data throughput |
| CD-ROM and/or DVD | Apple | DVD/CDRW SuperDrive | 16X Super Drive |
| Network Interface:<br>Ethernet (wired)<br>Ethernet Wireless<br>Bluetooth | Apple | Built-in 10/100/1000BASE-T Ethernet and 56K V.92 modem | 10/100/1000Mbps |
| Ports and Interfaces<br>Parallel<br>Serial<br>USB<br>Firewire | Apple | Four 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) |

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## ODIN Attachment R

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| Sound Card<br>Full or Half Duplex | Apple | Optical digital audio in, optical digital audio out, analog audio in, analog audio out, | |
| Speaker(s) | Generic | Generic | 2 |
| Headset/Microphone | Apple | Front headphone minijack and speaker<br>Stereo audio in and out minijacks | |
| Monitor – CRT / LCD | HP | L1706 17" Flat Panel | 17" 264 mm Pixel pitch<br>17" Viewable<br>1280 x 1024 @ 60 Hz and 75 Hz |

**Section 1.23**
**Section 1.24**
**Section 1.25 Memory Module Configuration**

| Item | Mfg / # Slots | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | Apple / 8 | 4 | 1.0GB | 533Mhz | SDRAM |
| Cache | Apple / 1 | 1 | 1.0MB | 533Mhz | |
| Video RAM | Apple / 1 | 1 | 128MB | | SDRAM |

I hereby certify the rating listed above as the official Alterion Performance Profile Ranking, based upon the July 3rd, 2006 Market Survey. This rating is valid until October 1, 2006.

Andrew J Froning
Director of Operations

ALTERION

# ODIN Attachment R

**Contractor: NASA – SOMD**
**Quarter: Q31-July 06**
**Platform: Mac-Desktop – Premium**
**Alterion Performance Profile Ranking: 100%**
**Alterion ID: A051212003DP**

**Prime: OAO Corporation**
**Prime Contract Number: NAS5-98144**
**System: PowerMac G5 Quad**
**Date of Alterion Certification: 5 July 2006**
**Certification Expires: 31 October 2006**

## Desktop System Configuration

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| System Dimensions | Apple G5 | M9592LL/A | Height: 20.1 inches (51.1 cm)<br>Width: 8.1 inches (20.6 cm)<br>Depth: 18.7 inches (47.5 cm) |
| Case Type | Apple | Tower | |
| Motherboard | Apple | Quad 2.5GHz PowerPC G5 | 1.25Ghz Front Side Bus per Processor |
| BIOS Version/Date | Apple | N/A | |
| CPU Type & speed | Apple | Quad 2.5GHz PowerPC G5 | Quad 2.5Ghz |
| CPU Slots Used/Available | Apple | 2 used / 0 available | |
| Bus slots, # and type | Apple | Three open full-length slots | |
| Video Display Adapter | Apple | NVIDIA GeForce 6600 | 1440 by 900 pixels |
| Video Display Driver (version & date) | Apple | N/A | |
| Hard Disk Size<br>Access Time<br>Spindle RPM | Apple | Serial ATA | 250GB<br>7200 RPM |
| HD Controller<br>( 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:<br>Ethernet (wired)<br>Ethernet Wireless<br>Bluetooth | Apple | Built-in<br>10/100/1000BASE-T Ethernet | 10/100/1000Mbps |
| Ports and Interfaces<br>Parallel<br>Serial<br>USB<br>Firewire | Apple | 4 - USB 2.0 ports<br>2 – USB 1.1 ports<br>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 |

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## ODIN Attachment R

| Item | Mfg /Type | Number/version | Size/ Speed |
|---|---|---|---|
| Power Supply | Apple | | Maximum current: At least 10A (low-voltage range) or 5A (high-voltage range) |
| Sound Card<br>Full or Half Duplex | Apple | Optical digital audio in, optical digital audio out, analog audio in, analog audio out, | |
| Speaker(s) | Apple | JBL CREATURE II ALUMINUM | |
| Headset/Microphone | Apple | Front headphone minijack and speaker Stereo audio in and out minijacks | |
| Monitor – CRT / LCD | Apple | 20" Apple Cinema Display | 1680 x 1050 pixels |

**Section 1.26 Memory Module Configuration**

| Item | Mfg / # Slots | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | Apple / 8 | 2 | 1.0GB | 533Mhz | SDRAM |
| Cache | Apple | 1.0MB/CPU | 4.0MB | 533Mhz | |
| Video RAM | Apple / 1 | 1 | 256MB | | SDRAM |

I hereby certify the rating listed above as the official Alterion Performance Profile Ranking, based upon the July 3rd, 2006 Market Survey. This rating is valid until October 1, 2006.

Andrew J Froning
Director of Operations

ALTERION

# ODIN Attachment R

**Contractor: NASA – SOMD**
**Quarter: Q31-July 06**
**Platform: Mac Laptop Mid Range**
**Alterion Performance Profile Ranking: 100%**
**Alterion ID: A062606002NB**

**Prime: OAO Corporation**
**Prime Contract Number: NAS5-98144**
**System: MacBook Pro 2.1Ghz**
**Date of Alterion Certification: 5 July 2006**
**Certification Expires: 31 October 2006**

## Notebook System Configuration

| Item | Mfg /Type | Number/ Version | Size/ Speed |
|---|---|---|---|
| System Dimensions | Apple | MA601LL | Height: 1.0 inches<br>Width: 14.1 inches<br>Depth: 9.6 inches |
| Weight (with AC adapter) | Apple | | Weight: 5.6 pounds with battery and optical drive installed |
| Motherboard | Apple | Front Side Bus | 667 MHz |
| BIOS Version/Date | Apple | | |
| CPU Type & speed | Apple | Intel Core Duo | 2.1Ghz |
| LCD Screen<br>Size<br>Standard Resolution<br>Response Time | Apple | 15.4 inch (diagonal), 1440x900 resolution, TFT widescreen | |
| Video Display Adapter | Apple | ATI Mobility RadeonX1600 | DVI |
| Video Display Driver (version & date) | Apple | N/A | |
| Hard Disk Size<br>Access Time<br>Spindle RPM | Apple | SATA | 100GB<br><br>5400 RPM |
| CD-ROM and/or DVD | Apple | SuperDrive (DVD-R/CD-RW | 4X Super Drive |
| Network Interface:<br>Ethernet (wired)<br>Ethernet Wireless<br>Bluetooth<br>Modem | Apple | <br>10/100/1000 BASE-T<br>54-Mbps AirPort Card<br>56K V.92 modem | <br>10/100/1000<br>54-Mbps 802.11g<br>56K |
| Ports and Interfaces<br>Parallel<br>Serial<br>USB<br>Firewire | Apple | One FireWire 400 (IEEE 1394a) port at up to 400 Mbps<br>Two USB 2.0 ports at up to 480 Mbps | 400-Mbps<br><br><br><br>Up to 480Mbps |
| USB Memory Key | Generic | USB 2.0 | 128MB |
| Keyboard | Apple | Built-in full-size keyboard with 78 keys | |
| Mouse/Integrated pointer | Apple | Solid-state trackpad | Includes Apple Pro 1 Button Mouse |
| Power Supply | Apple | | 85WPower adapter with cable management system<br>60-watt-hour lithium-ion battery |

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## ODIN Attachment R

| Item | Mfg /Type | Number/ Version | Size/ Speed |
|---|---|---|---|
| Sound Card<br>Full or Half Duplex | Apple | Built-in stereo speakers with midrange-enhancing third speaker | |
| Speaker(s) | Apple | built-in stereo speakers | 2 |
| Headset/Microphone | Apple | Audio line in (mini-jack)<br>Headphone out (mini-jack)<br>Internal omni-directional microphone | |
| Carry Case | Targus | Nylon carrying Case | |

**Section 1.27**
**Section 1.28**
**Section 1.29**
**Section 1.30 Memory Module Configuration**

| Item | Mfg / # Slots | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | Apple | 1 | 1.0GB* | 667Mhz | DDR2 |
| Cache | Apple | 1 | 2.0MB | 667MHz | L2 ECC |
| Video RAM | ATI | 1 | 256MB | | GDDR3 |

* Tested with 512MB RAM.

I hereby certify the rating listed above as the official Alterion Performance Profile Ranking, based upon the July 3rd, 2006 Market Survey. This rating is valid until October 1, 2006.

Andrew J Froning
Section 1.31 Director of Operations