### UNLV of New Mexico Proposal

**CRAY X3i Initial Machine Unit Specification**

**Chipped Panss, W. 54729**

**The Engineering Dept.**

<table>
<thead>
<tr>
<th>System Total</th>
<th>01/17</th>
<th>01/18</th>
<th>01/19</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>System Total</strong></td>
<td>01/17</td>
<td>01/18</td>
<td>01/19</td>
</tr>
<tr>
<td><strong>System Total</strong></td>
<td>01/17</td>
<td>01/18</td>
<td>01/19</td>
</tr>
<tr>
<td><strong>System Total</strong></td>
<td>01/17</td>
<td>01/18</td>
<td>01/19</td>
</tr>
</tbody>
</table>

**Environmental Requirements (Recommended Range):**

- Temperature: 5°C to 30°C (41°F to 86°F) or 4°C to 32°C (39°F to 90°F)
- Humidity: Not exceed 90% non-condensing

**Electrical Requirements:**

- Power factor: 0.95 or better
- Voltage: 120V to 240V, 50/60 Hz

**Additional Requirements:**

- Power Consumption: 1500 watts
- Internal Interfaces: 1500 Mbytes/sec
- External Interfaces: 1500 Mbytes/sec

**Performance Specifications:**

- Core Count: 128
- Clock Speed: 1.5 GHz
- Memory: 16 GB DDR3

**System Configuration:**

- 1 x Cray X3i
- 4 x Cray X3i Nodes
- 8 x Cray X3i Routers

**Environmental Considerations:**

- The system is designed to operate in an enclosed environment with proper ventilation and temperature control.
- Humidity and temperature must be maintained within the recommended range to ensure optimal performance.

**Power Consumption:**

- The system consumes a maximum of 1500 watts under full load conditions.

**Technical Specifications:**

- Processor: Cray X3i
- Memory: 16 GB DDR3
- Storage: 1500 Mbytes/sec internal, 1500 Mbytes/sec external

**Deployment:**

- The system is designed for deployment in a high-performance computing environment.
- It is recommended to be installed in a dedicated rack with proper cooling and power distribution.

**Maintenance:**

- Regular maintenance is required to ensure optimal performance.
- The system is equipped with diagnostic tools to monitor and manage system performance.

**Support Services:**

- Cray provides 24/7 support for the system.
- Remote monitoring and management services are available.

**Additional Notes:**

- The system is designed to meet or exceed the requirements set forth by the Cray X3i specification.
- The system is optimized for high-performance computing applications.

---

**Table:**

<table>
<thead>
<tr>
<th>Component</th>
<th>01/17</th>
<th>01/18</th>
<th>01/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Memory</td>
<td>16 GB</td>
<td>16 GB</td>
<td>16 GB</td>
</tr>
<tr>
<td>Storage</td>
<td>1500 Mbytes/sec</td>
<td>1500 Mbytes/sec</td>
<td>1500 Mbytes/sec</td>
</tr>
<tr>
<td>Power</td>
<td>1500 watts</td>
<td>1500 watts</td>
<td>1500 watts</td>
</tr>
</tbody>
</table>

---

**Diagram:**

[Diagram of system architecture and components]

---

**Figure:**

[Graph of system performance metrics over time]

---

**Note:**

This document outlines the technical specifications and requirements for the Cray X3i initial machine unit. It is intended for use by system administrators and technical personnel responsible for the installation and operation of the system.