

# Servicing the Lenovo ThinkSystem ST50 server

Lenovo

ES71875

November 2018

# Prerequisites

ES51780B - Servicing the Lenovo ThinkSystem storage controllers

<https://lenovoedu.lenovo.com/course/view.php?idnumber=ES51780B>

# Objectives

After completing the course, you will be able to:

- Describe the ThinkSystem ST50 server.
- Describe the server features and specifications.
- Identify the server diagram.
- Describe the problem determination procedures for ST50.

# Product overview

Front, rear, inside view, product description

Lenovo

# Lenovo ThinkSystem ST50 server product overview

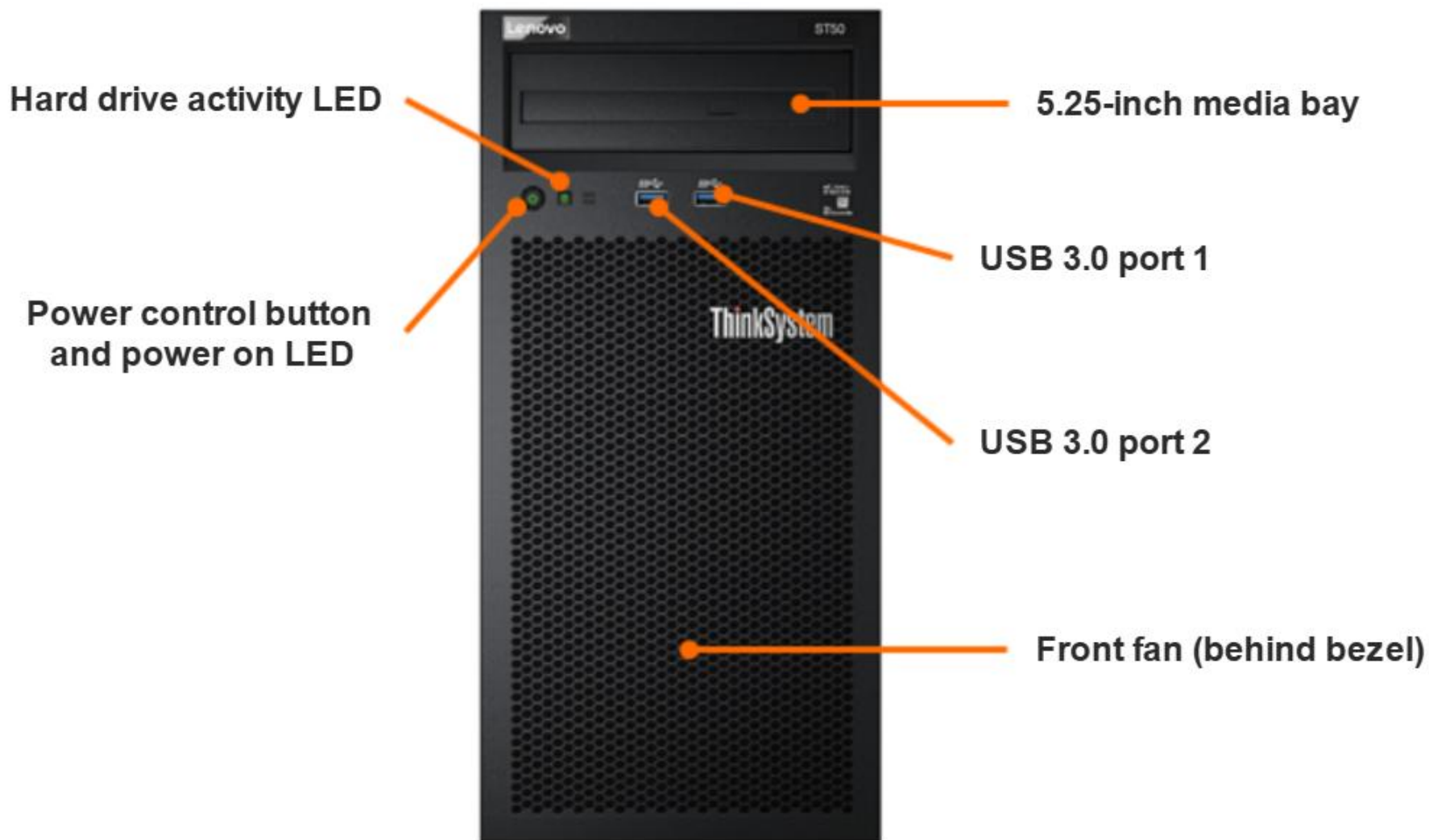
The ThinkSystem ST50 is a one-socket 4U tower server with Intel Xeon processors, up to six cores at 95W. It was designed to support small to medium sized businesses; file management, printing, email server, and web services. The ST50 supports limited configurations and provides the following features:

- Up to 64 GB in four UDIMM slots using 16 GB UDIMMs; 2666 MHz TruDDR4
- I/O expansion provides three PCIe Gen3 slots (one PCIe 3.0 x16, one PCIe 3.0 x1, and one PCIe 3.0 x4)
- Up to four 3.5-inch simple-swap drive bays; supports hybrid drive configuration with HDDs and SSDs
- The ST50 contains two machine types: 7Y49 (one-year warranty) and 7Y48 (three-year warranty) with model type CTO1WW



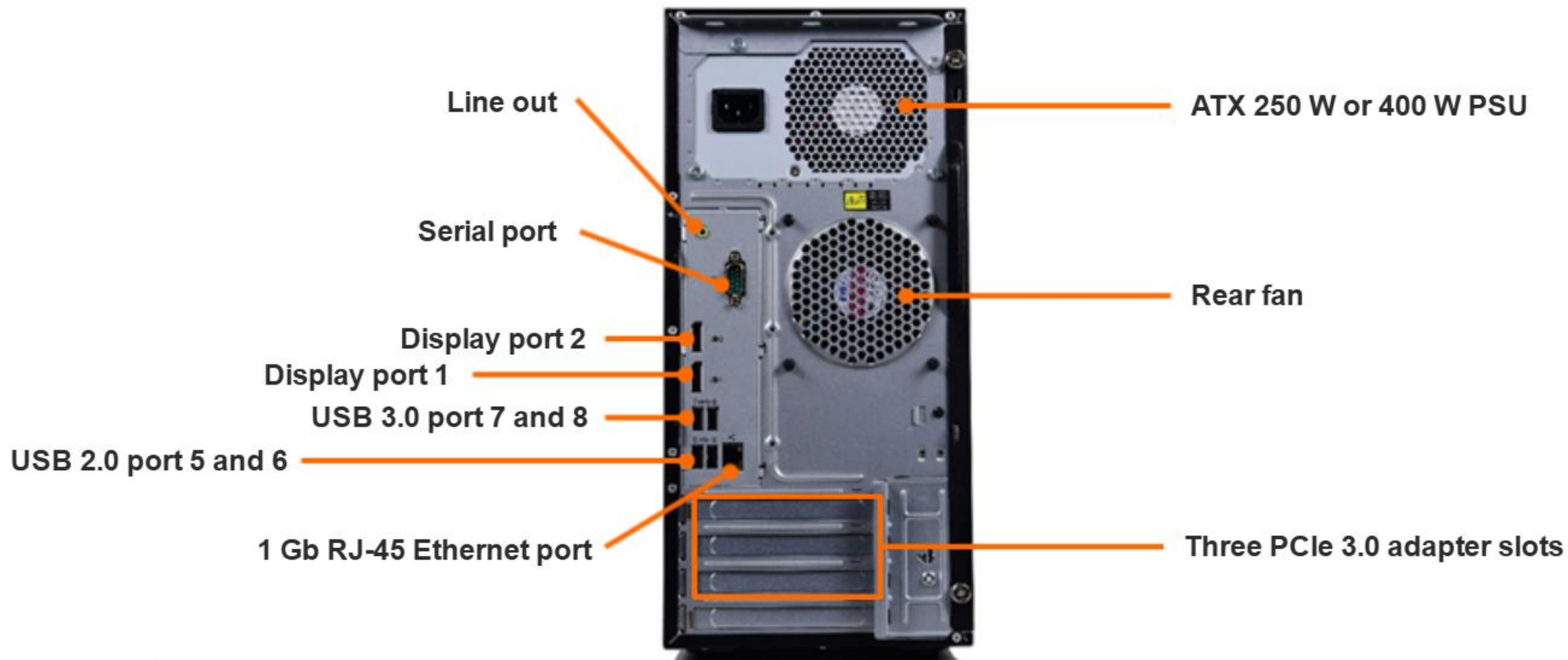
## Front view

The following graphic shows the front of ThinkSystem ST50 with one 5.25-inch media bay.



## Rear view

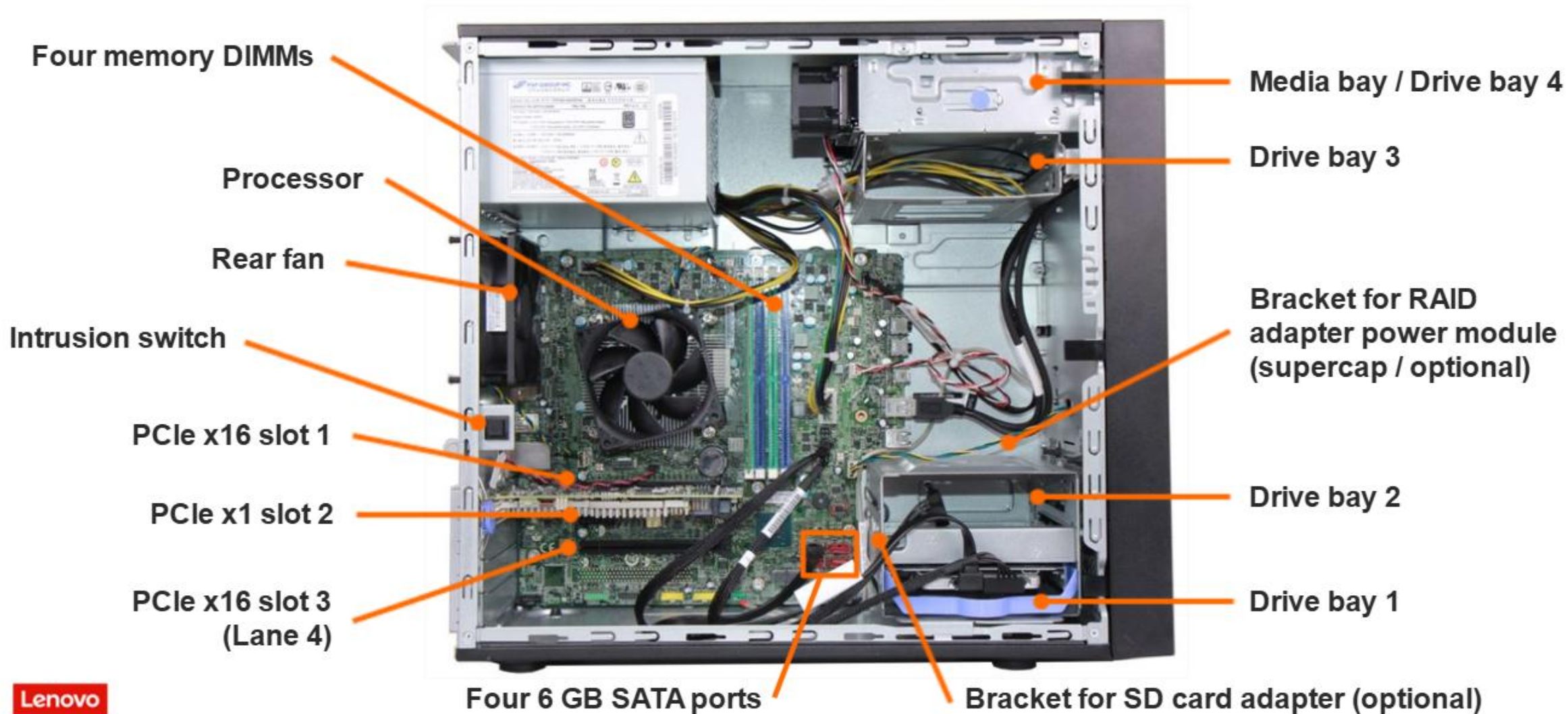
The following graphic shows the rear of ST50 with three PCIe slots and one fixed power supply.



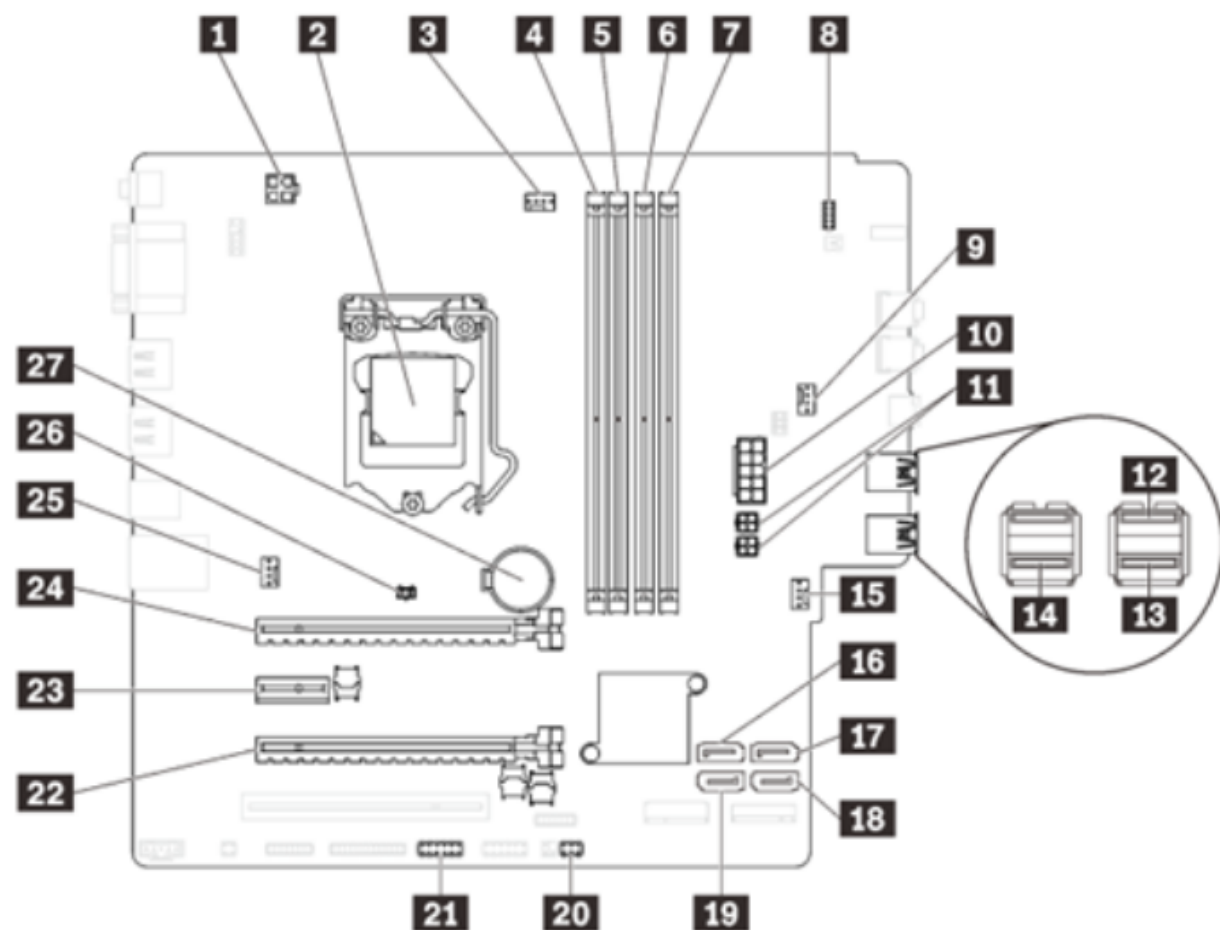


# Inside view

The following graphic shows the locations of components inside the ST50.



# ThinkSystem ST50 system board components



## Label / Component

|  |  |
|--|--|
| <b>1</b> Processor power connector               | <b>15</b> Front fan power connector              |
| <b>2</b> Processor socket                        | <b>16</b> SATAconnector 3                        |
| <b>3</b> Processor fan connector                 | <b>17</b> SATAconnector 4                        |
| <b>4</b> DIMM slot 1                             | <b>18</b> SATAconnector 2                        |
| <b>5</b> DIMM slot 2                             | <b>19</b> SATAconnector 1                        |
| <b>6</b> DIMM slot 3                             | <b>20</b> Thermal sensor connector               |
| <b>7</b> DIMM slot 4                             | <b>21</b> USB connector for dual SD card adapter |
| <b>8</b> Front panel connector                   | <b>22</b> PCIe slot 3                            |
| <b>9</b> Drive bay 3 adapter fan power connector | <b>23</b> PCIe slot 2                            |
| <b>10</b> System power connector                 | <b>24</b> PCIe slot 1                            |
| <b>11</b> SATApower connector                    | <b>25</b> Rear fan power connector               |
| <b>12</b> Front panel USB connector              | <b>26</b> Intrusion switch connector             |
| <b>13</b> Front panel USB connector              | <b>27</b> 3 V CMOS battery(CR2032)               |
| <b>14</b> Slim optical drive USB connector       |  |