

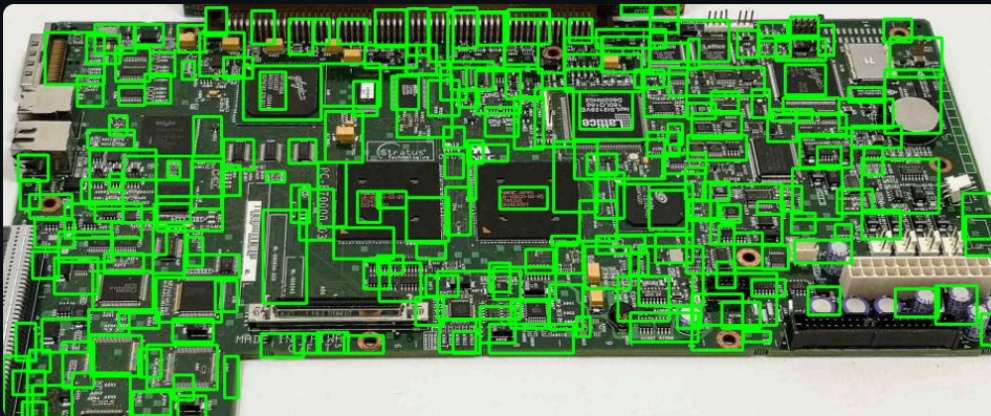
Input image:



Detected Components:

Analysis

Detected Object Type: PCB



Detected Components

Components Detected: 221

> Component Data (JSON)

Component data:

```
Components Detected: 221

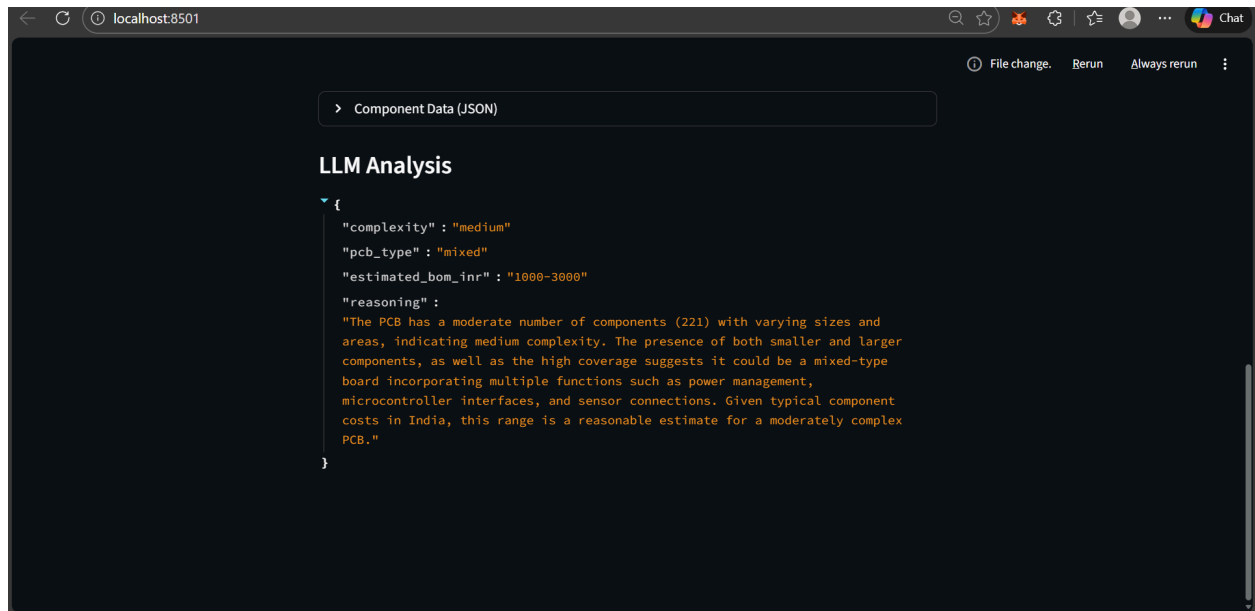
Component Data (JSON)

[
  {
    "bbox": {
      "x": 168
      "y": 377
      "w": 27
      "h": 22
    }
    "area": 594
    "normalized_area": 0.001546875
    "aspect_ratio": 1.2272727272727273
    "centroid": {
      "x": 0.1890625
      "y": 0.97
    }
    "mean_intensity": 114.41077441077441
  }
]
```

Streamlit GUI:



Llm output:



The screenshot shows a web browser window with the address bar displaying 'localhost:8501'. The page title is 'Component Data (JSON)'. The main content area is titled 'LLM Analysis' and displays a JSON object with the following fields:

```
{
  "complexity": "medium",
  "pcb_type": "mixed",
  "estimated_bom_inr": "1000-3000",
  "reasoning": "The PCB has a moderate number of components (221) with varying sizes and areas, indicating medium complexity. The presence of both smaller and larger components, as well as the high coverage suggests it could be a mixed-type board incorporating multiple functions such as power management, microcontroller interfaces, and sensor connections. Given typical component costs in India, this range is a reasonable estimate for a moderately complex PCB."
}
```