**1. Project Overview**

* **Project Name: PocketChip v2.0**
* **Purpose of the PCB: Connect keyboard and joystick to a raspberry pi**
* **Expected Functionality:**
* **Target Specifications (Voltage, Power Consumption, etc.):**

**2. Mechanical & Physical Constraints**

* **Board Dimensions (Length x Width x Height):**
* **Shape (Rectangular, Circular, Custom):**
* **Mounting Requirements (Screw holes, enclosures, connectors):**
* **Number of PCB Layers:**

**3. Electrical Requirements**

* **Power Input and Regulation (Voltage levels, max current):**
* **Signal Requirements (Analog, Digital, RF, High-speed):**
* **Connector and Interfaces (USB, Ethernet, GPIO, SPI, I2C, etc.):**
* **Grounding & Shielding Considerations:**

**4. Component Selection**

* **Preferred Microcontrollers/ICs:**
* **Passive Components (Resistors, Capacitors, Inductors):**
* **Special Modules or Sensors (Wi-Fi, Bluetooth, GPS, etc.):**
* **Custom Components or Special Requests:**

**5. Design Rules & Manufacturing Preferences**

* **PCB Material (FR4, Aluminum, Flexible PCB, etc.):**
* **Trace Width & Clearance Requirements:**
* **Via Types (Through-hole, Blind/Buried Vias):**
* **Solder Mask & Silkscreen Requirements:**

**6. Assembly & Testing Instructions**

* **Prototype Validation Tests:**
* **Manufacturing Standards (IPC, RoHS, CE, etc.):**
* **Required Gerber Files & Fabrication Outputs:**
* **Any Special Assembly Notes:**

**7. Budget & Timeline**

* **Budget Range:**
* **Expected Delivery Date:**
* **Urgency Level (Standard, Priority, Rush):**

**8. Additional Notes**

* **Reference Designs or Sketches Attached? (Yes/No)**
* **Flexibility in Component Selection (Strict/Moderate/Open):**
* **Preferred Communication Method with Designer (Chat, Video Call, Email):**