Bambu Lab X1 Series – General Tutorials

The **Bambu Lab X1 Series** is a high-speed 3D printer designed for precision, automation, and multi-material printing through the **AMS (Automatic Material System)**. It is known for its fast print speeds, enclosed build chamber (X1C), and integrated monitoring system.

Build Volume:
256 × 256 × 256 mm (10.1” × 10.1” × 10.1”)

Supported Materials

- PLA, PETG, ABS, ASA
- PC (Polycarbonate)
- PA (Nylon)
- Carbon fiber / glass fiber composites (X1 Carbon recommended)

Supported File Formats

- **3MF** (preferred for Bambu Studio, retains settings and color data)
- **STL** (geometry only, requires slicing)
- **G-code** (generated after slicing)
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Step-by-Step Guide to Slicing with Bambu Studio

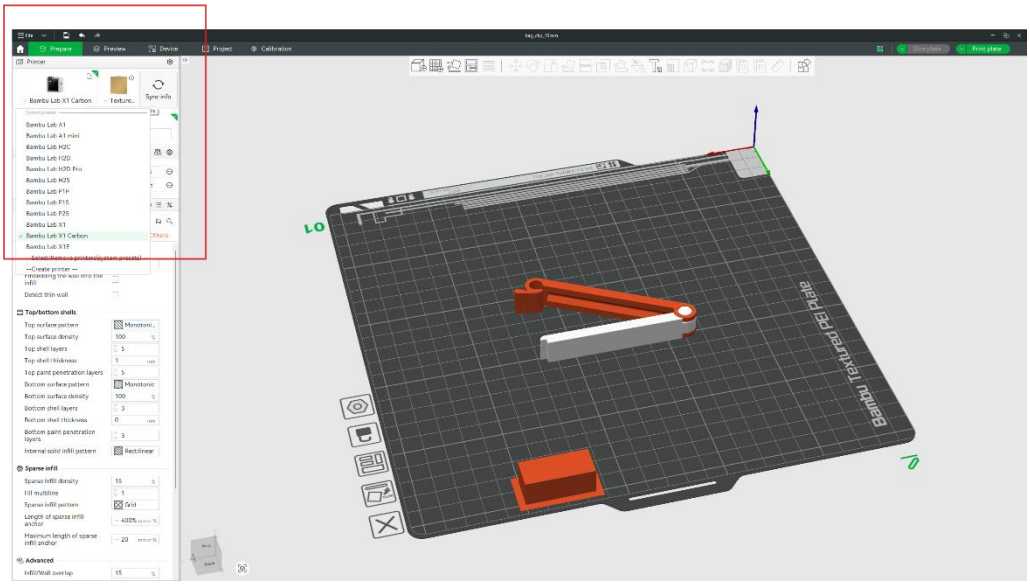
Important: Hovering over each setting in Bambu Studio provides detailed explanations.

Step 1: Open / Download Bambu Studio

1. Download the latest version of **Bambu Studio**
2. Log into your Bambu account (required for cloud printing and monitoring)

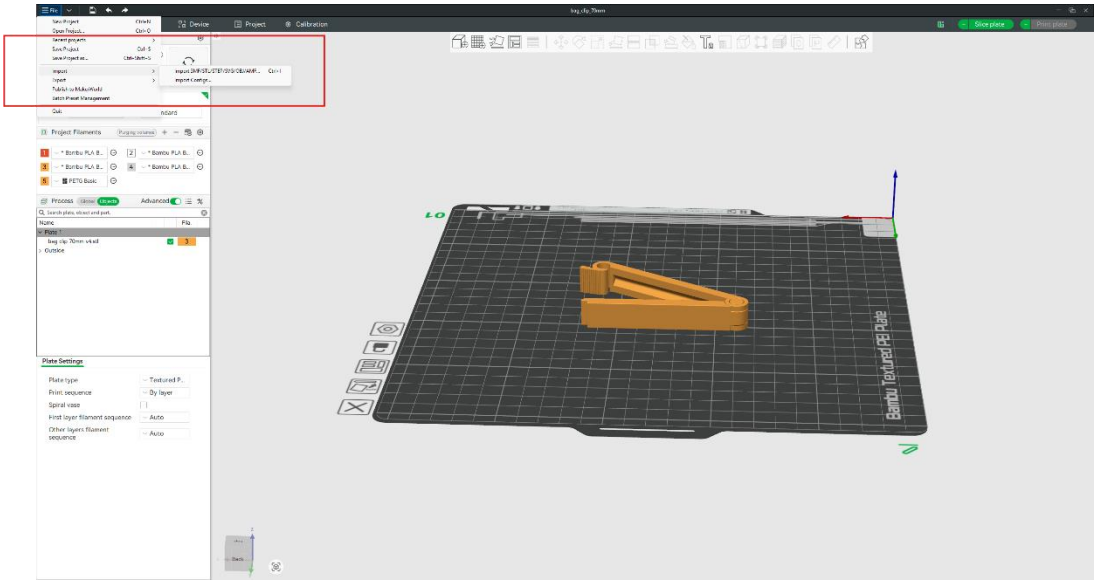
Step 2: Set Up Printer

1. Open **Bambu Studio**
2. Select your printer: X1 Carbon (X1C) or X1

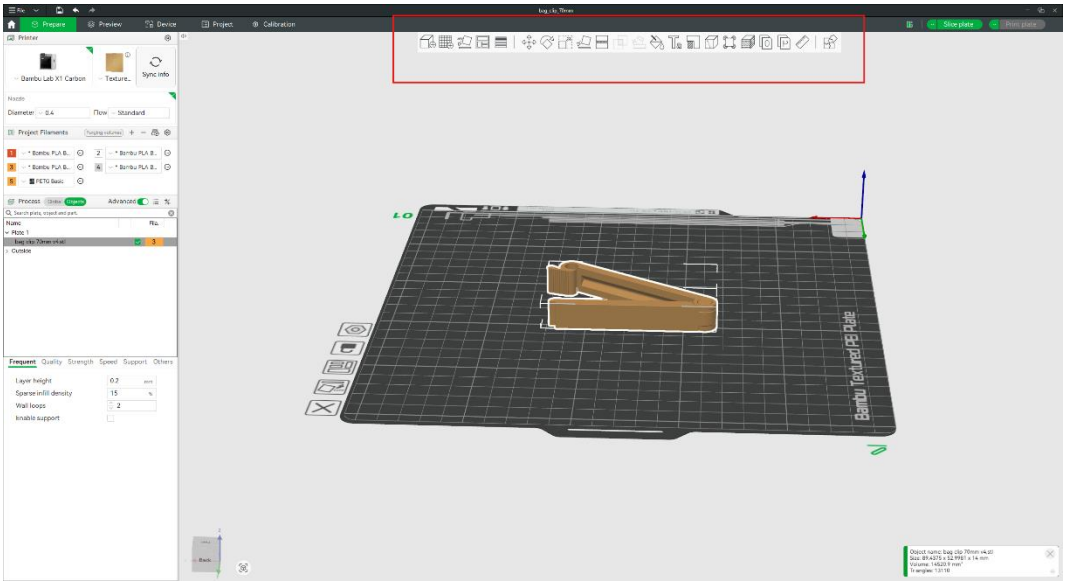


Step 3: Prepare Your Model

1. Click **Import** and load your model (STL / 3MF)



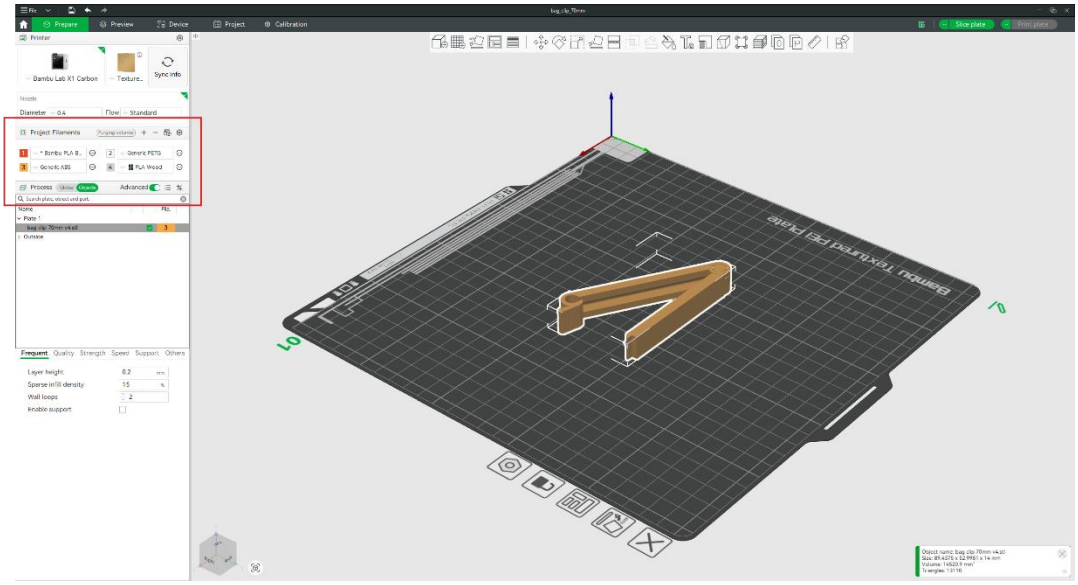
2. Use tools such as Move, Scale, rotate to manipulate the object.



Step 4: Configure Print Settings

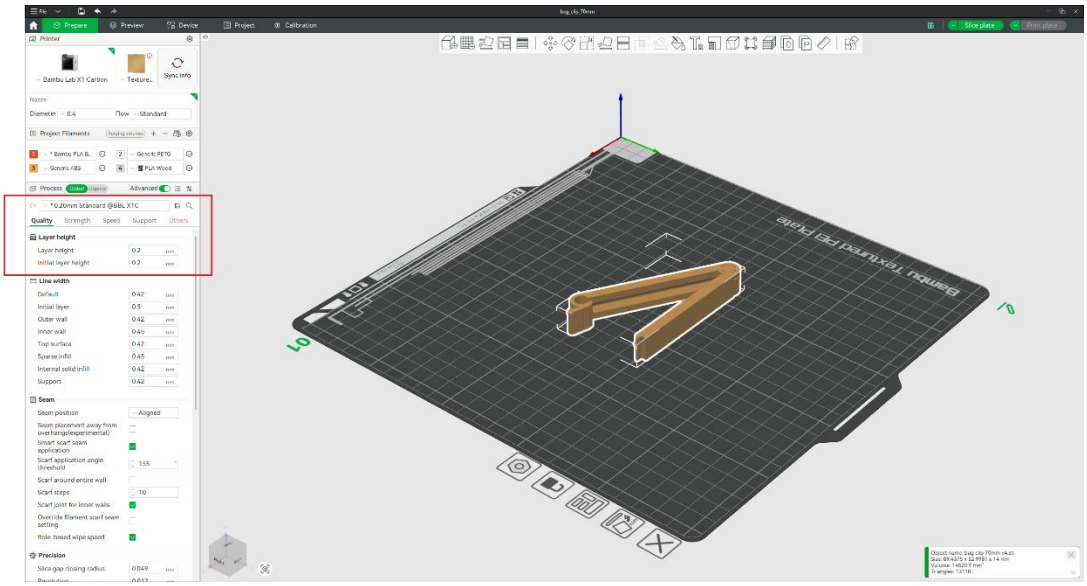
1. Select Material

- Choose filament type (PLA, PETG, etc.)
- Assign each slot a material and color



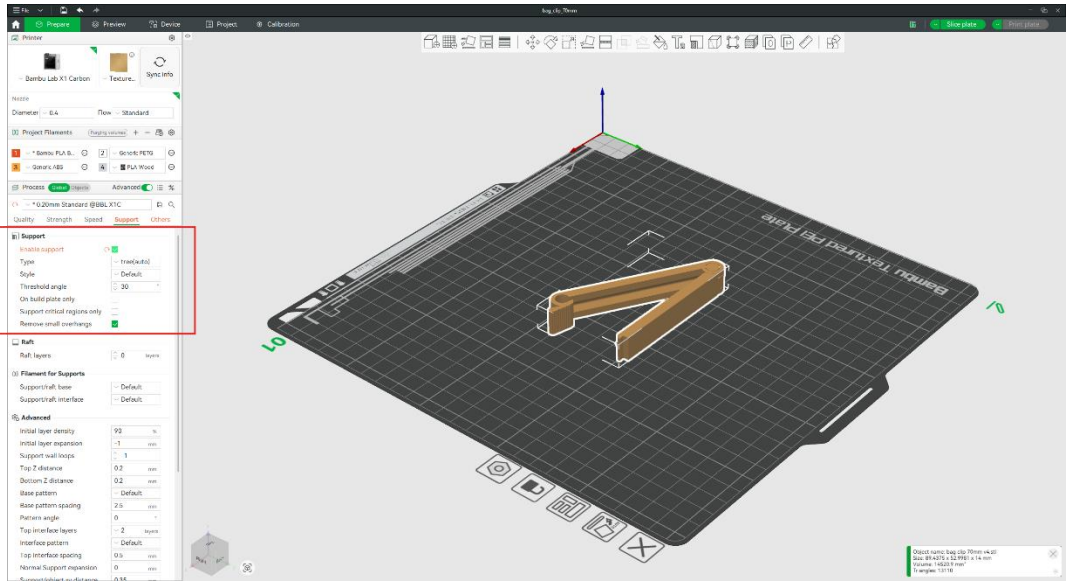
2. Layer Height

- 0.2 mm → standard
- 0.12 mm → high quality



3. Supports

- Enabled if needed
    - Tree support (recommended for complex geometry)
    - Normal support

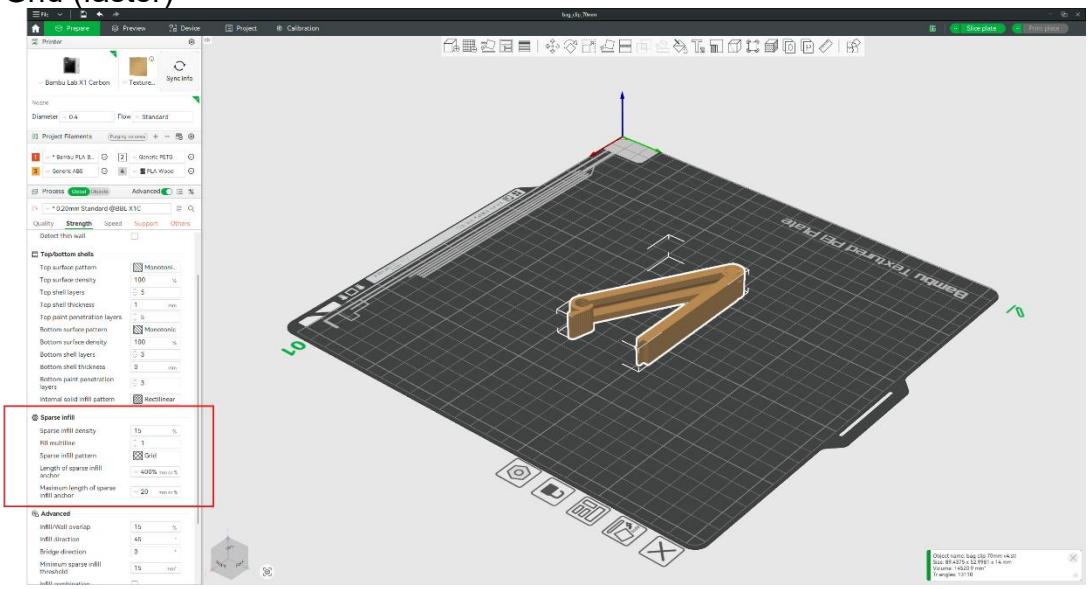


4. Infill

- 5–10% → draft
- 10–20% → standard

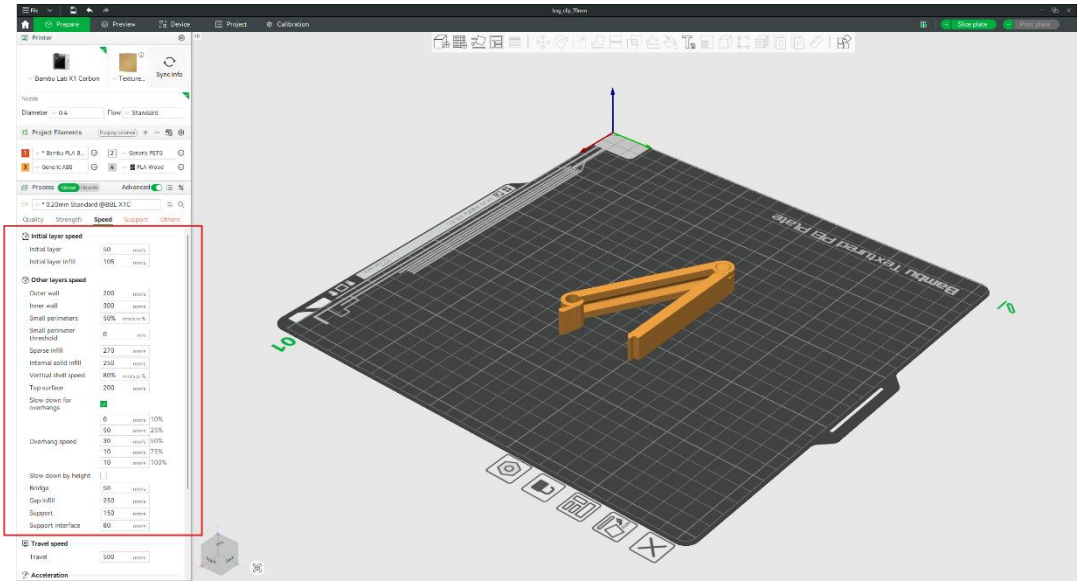
Patterns:

- Gyroid (strength)
- Grid (faster)



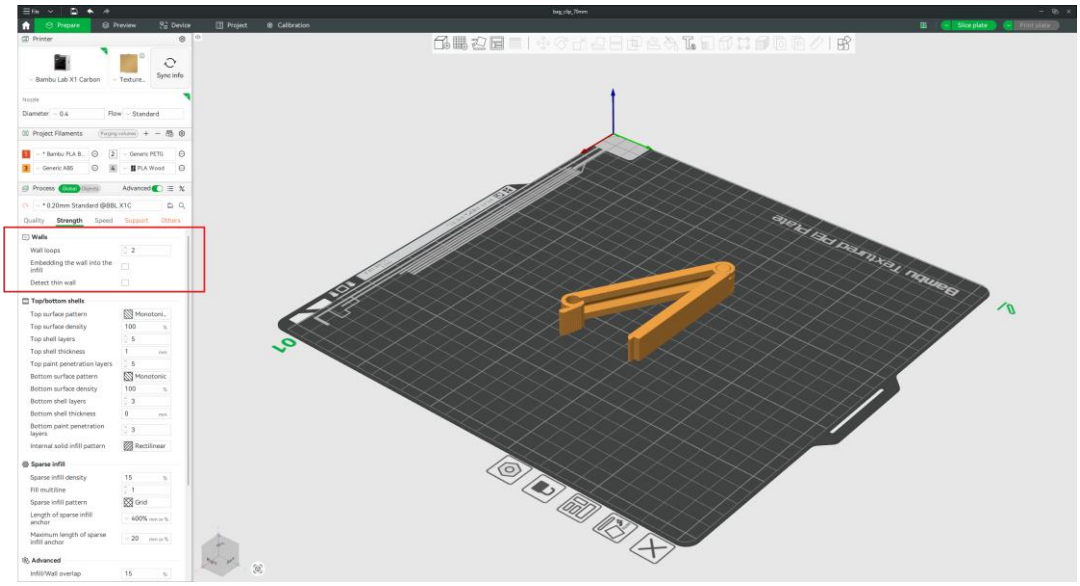
5. Speed Settings - Bambu printers are optimized for high speed automatically.

- Standard: ~200–300 mm/s
- Max (machine-controlled): up to ~500 mm/s



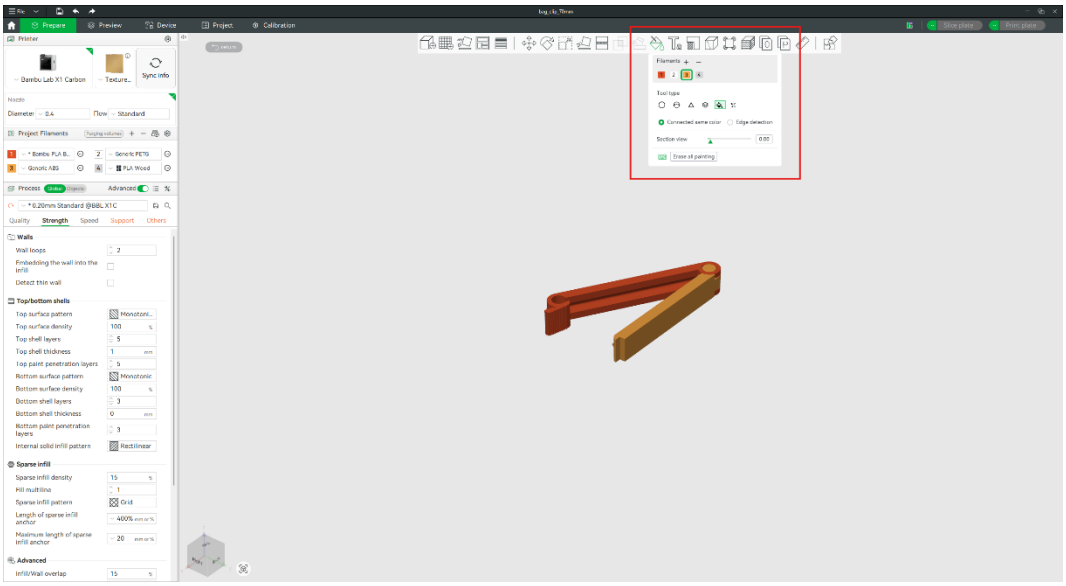
6. Wall / Shell Settings

- 2–3 walls → standard
- 4–6 walls → structural strength



Step 5: Multi-Material / Multi-Color Printing (AMS)

1. In Bambu Studio:
    - Assign colors/materials to parts
2. Use:
    - **Color Painting Tool** for surface coloring
    - **Per-object assignment** for separate bodies

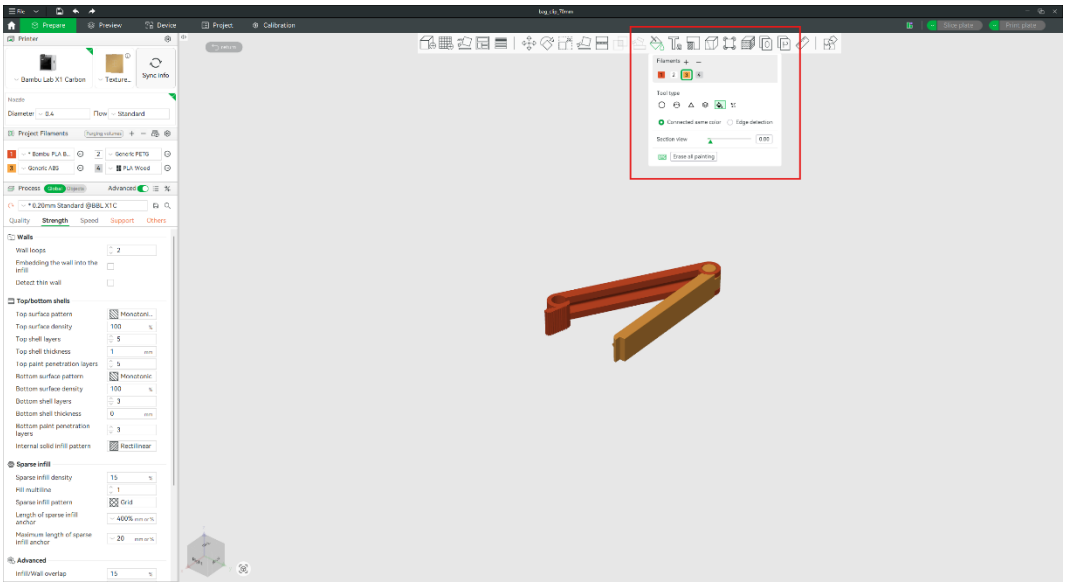


Notes:

- AMS automatically switches filaments
- Purge towers are generated automatically

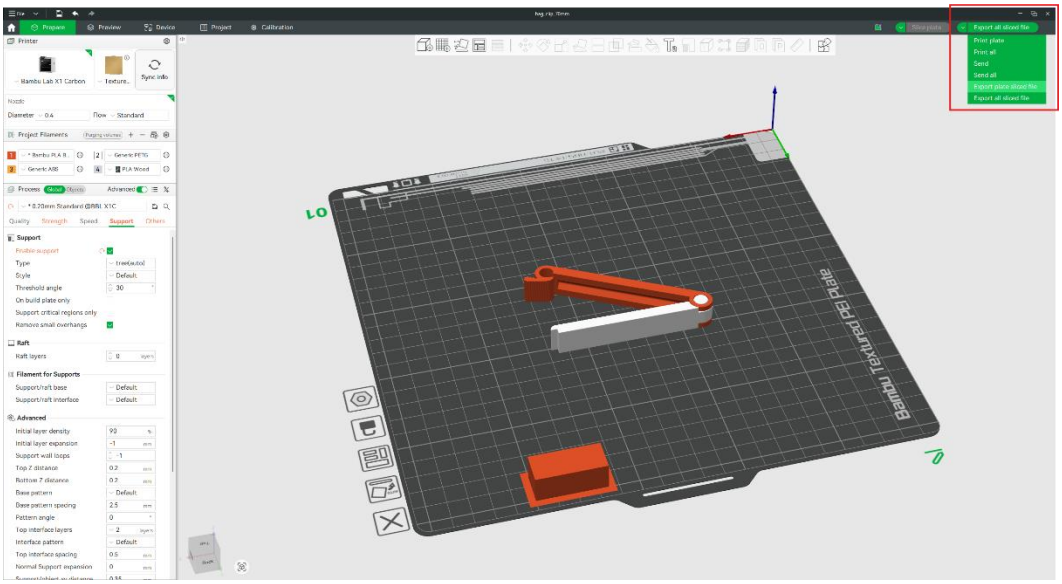
Step 6: Slice and Preview the Print

1. Click **Preview**
2. Check:
    - Layer transitions
    - Support placement
    - Color changes
    - Print time



Step 7: Export G-code

1. Click Export in the upper-right corner.
2. Save G to your storage device.
3. Submit the G-code to Simply Print and await AT team approval.


Prepare
Preview
Device
Project
Calibration
Export all sliced file
Print plate
Print all
Send
Send all
Export plate sliced file
Export all sliced file
Printer
Sync info
Support
Enable support
Raft
Filament for Supports
Advanced
Bambu Textured PEI Plate