Operating Instructions for Finetech Lambda at SNF:

1. Turn the main power on. This will turn on all the modules (Figures 1 & 2)



Figure 1. Main Control

2. Turn computer on (Figure 3)

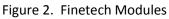




Figure 3. Main Computer



Figure 4: WinFlipChip Software Icon

3. Double click on WinFlipChip icon to open the control software (Figure 4).

- 4. In the login screen (Figure 5), type in your name for operator, choose "Modification mode" for the Program mode. The password is "finetech".
- 5. "Open Process Data File" window will pop up (Figure 6). Choose the Process data file. (\*.WFCprocess)

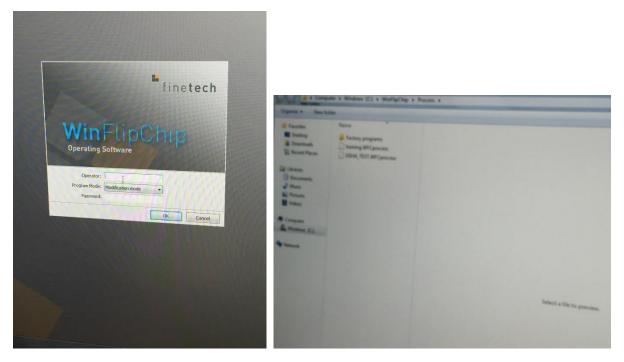
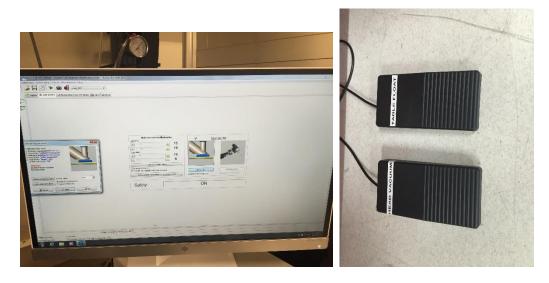


Figure 5: Login window

Figure 6: Process Data File Selection Window

- 6. Place the substrate (bonding face up) on the substrate heating module and turn the vacuum on by pressing heat plate vacuum 1 in the program.
- 7. Keep the die either on the tray carrier or on the substrate heating module (outside the vacuum area) bonding face down.
- 8. Calibrate tool vacuum without the die on the tool (Figure ).



- 9. Move the xyz table so that the die is underneath the camera by floating the table and moving it. Ensure that the die has the right rotation alignment relative to the substrate
- 10. Adjust lighting to see the tool vacuum hole as well as the die clearly.
- 11. Focus on the area where the die is sitting on with Z knob.
- 12. Match the tool vacuum hole to roughly the center of the die. Make sure that the die is covering the vacuum hole.
- 13. Move camera away and bring the pick & place arm down (big lever first followed by the fine lever).
- 14. Turn Vacuum on by pressing the vacuum pedal.
- 15. Move arm up (fine lever first) followed by the big lever.
- 16. Calibrate the tool vacuum with die.
- 17. Move camera back to the left.
- 18. Use head focus to focus on the face of the die.
- 19. Move substrate under the camera by floating the table and focus on the top bonding surface of the substrate at maximum zoom.
- 20. Align samples using x and y knobs. For fine rotation, use the micrometer on the pick and place arm.
- 21. Make sure the right force is chosen on the tool.
- 22. Move camera and bring tool down (big lever first followed by the fine lever).
- 23. Choose start profile.
- 24. When completed, release vacuum and move the tool up.
- 25. Save process in the right folder.
- 26. Misc adjustments camera, choose location for saving pictures etc
- 27. When finished using the tool, choose "Finish" from the main menu.
- 28. Turn main power off
- 29. Turn computer off
- 30. Disable.