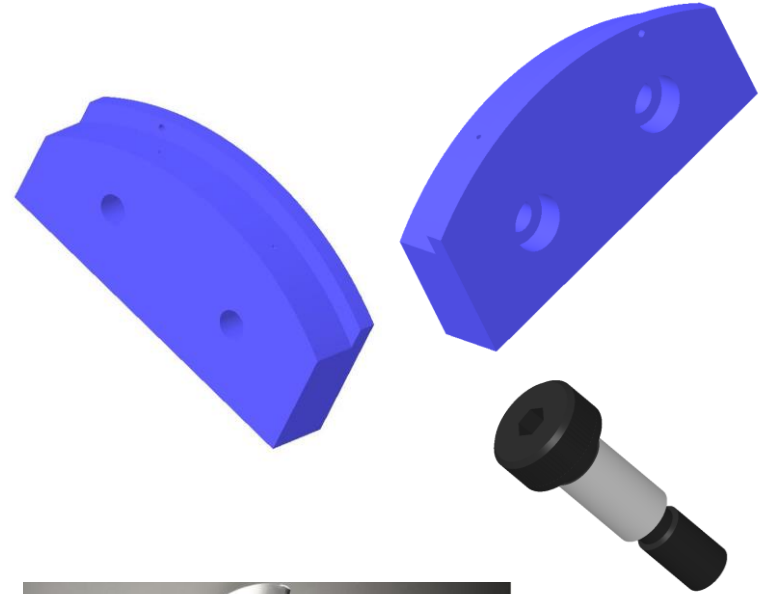
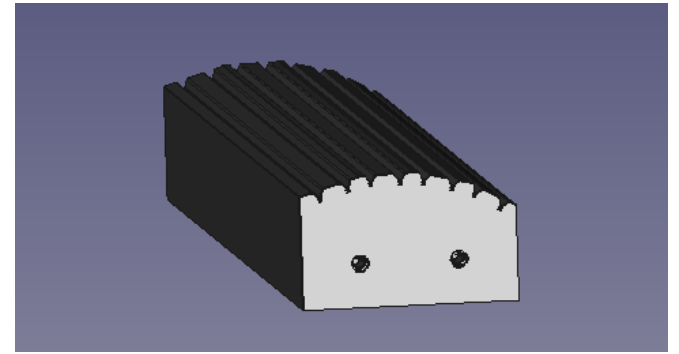


Outer module assembly

# Tooling status

## Module assembly updated tooling

- Main base block (length a few hundred micron below nominal)  
*Manufactured on 3 printer for L3 flex heater modules*
- endpiece mounting blocks mounted with shoulder bolt (L3 manufactured, bolts to order still)
- Set final length with precision peelable 50 micron shims in between base block and mounting block
- Next L4 part for silicon heater module



# Assembly programme – tooling readiness

## Flex heaters

- L4 done, L3 ladders stil some held back for new tooling
- L4 silicon heater need tooling base and endblock manufacture
- For Mupix10 or MuPix11 modules need new (longer) L3 base and endblocks, base and shims for L4

# Input to schedule

Module assembly was < 1 week per module, but this was mostly driven by time to cure glue.

Key now is to assemble a module with ladders with the 90deg bent interposer flexes.

- Test assembly tooling
- Assess need for glue or a clamping mechanism (beyond the existing clamping at the interposer)