



**Department of Electronic &
Telecommunication Engineering**

University of Moratuwa

Sri Lanka

Solidworks and Mold Design -PLC

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29/03/2024

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1 Enclosure

1.1 Model Tree

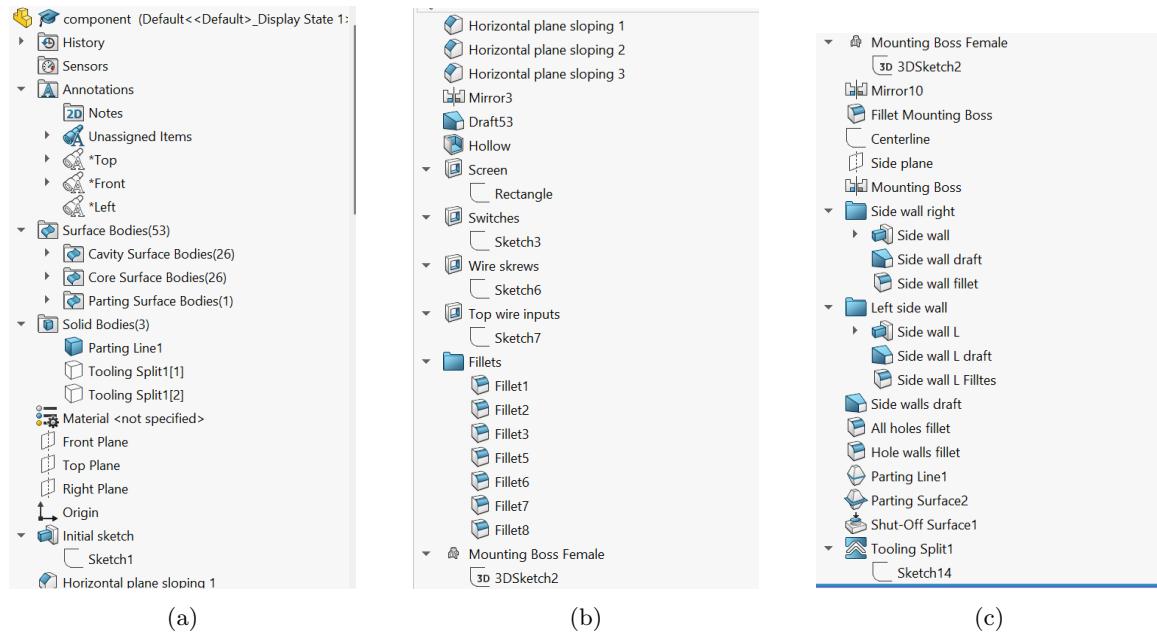


Figure 1: Model tree of Enclosure

1.2 Primary sketch

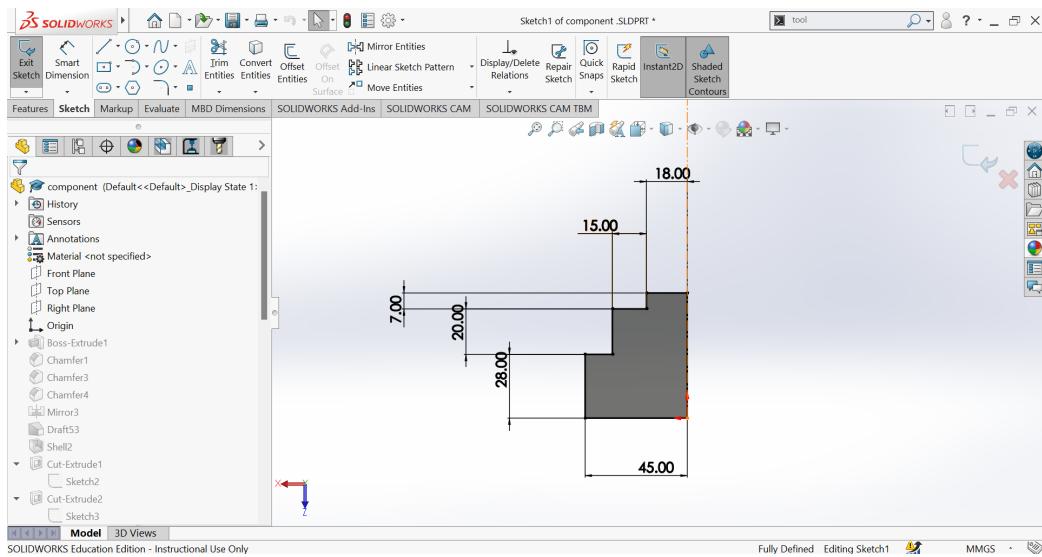


Figure 2: Primary sketch

1.3 Draft angles

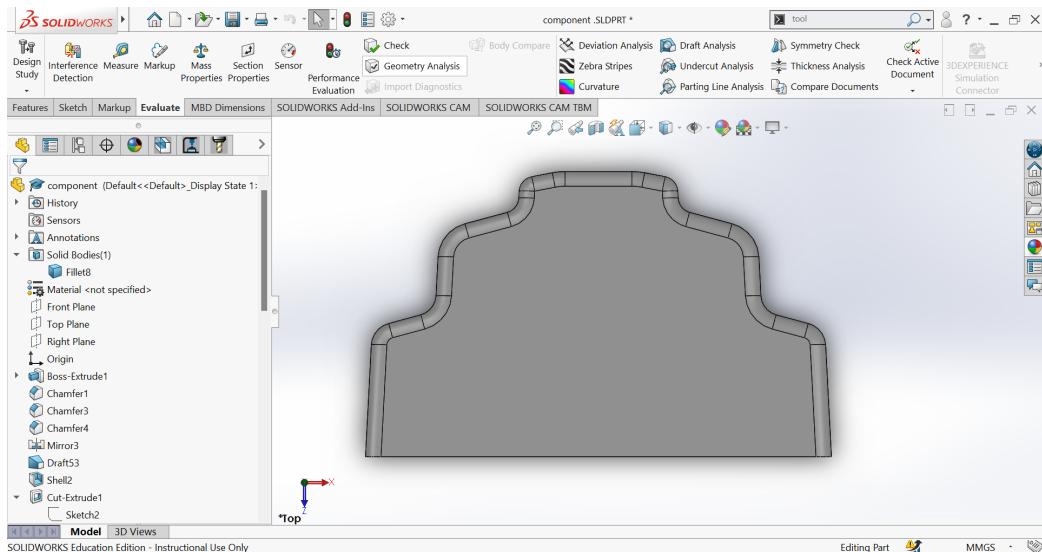


Figure 3: Enter Caption

1.4 Enclosure

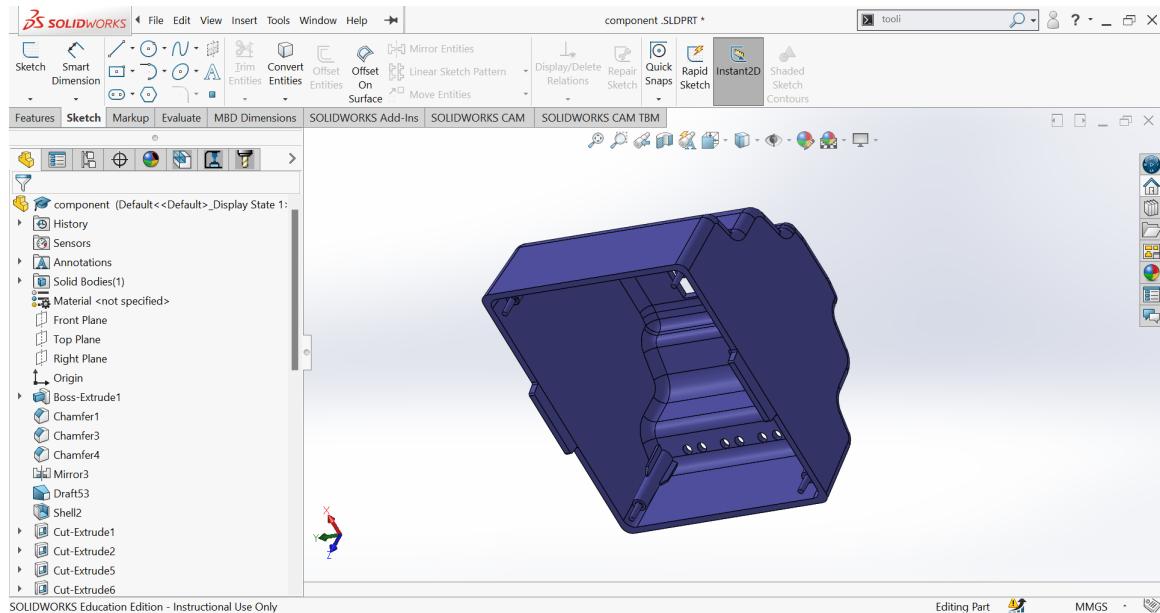


Figure 4: Enclosure view 1

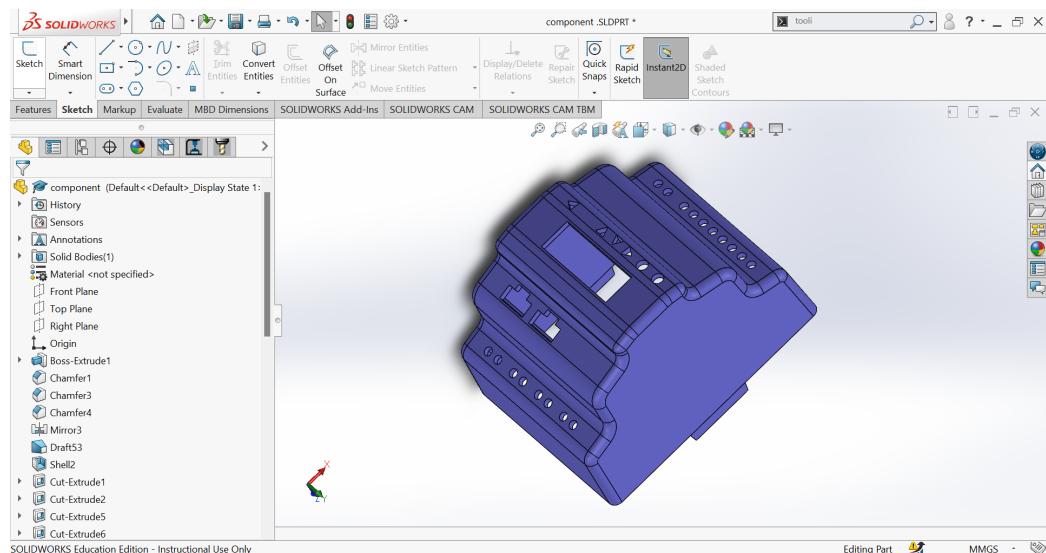


Figure 5: Enclosure view 2

1.5 Mounting boss

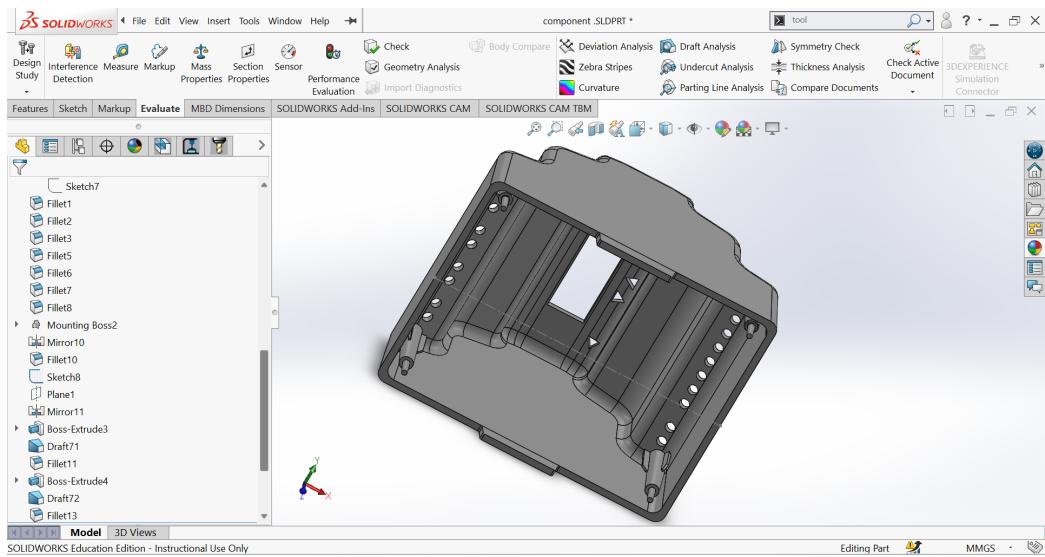


Figure 6: Enclosure with mounting bosses

2 Mold- Enclosure

2.1 Draft analysis

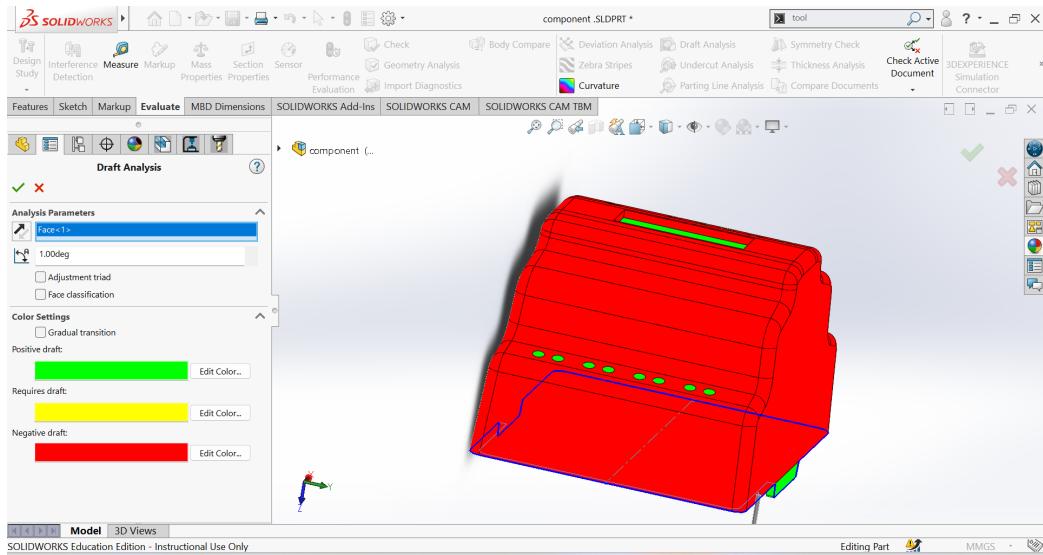


Figure 7: Enter Caption

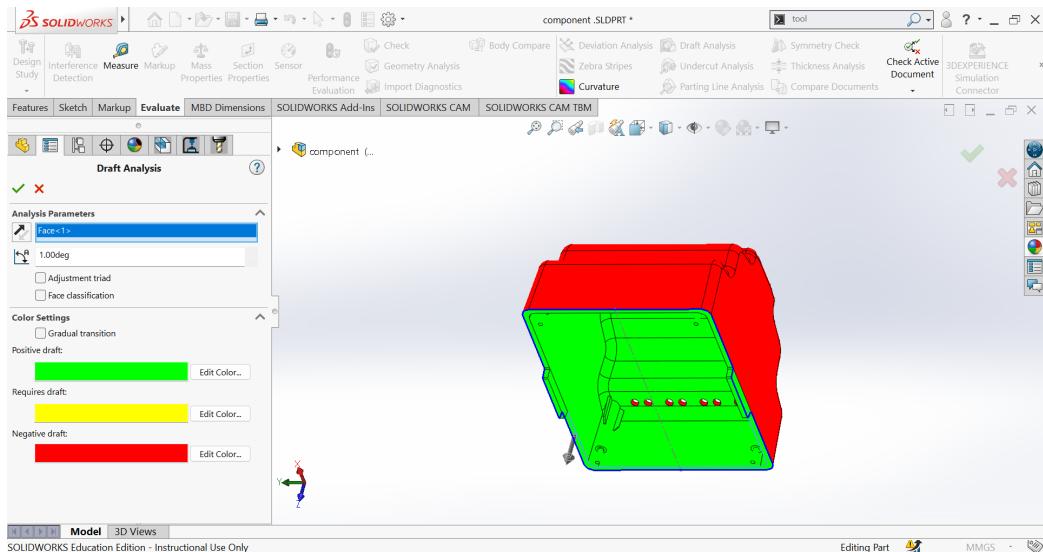


Figure 8: Enter Caption

2.2 Cavity

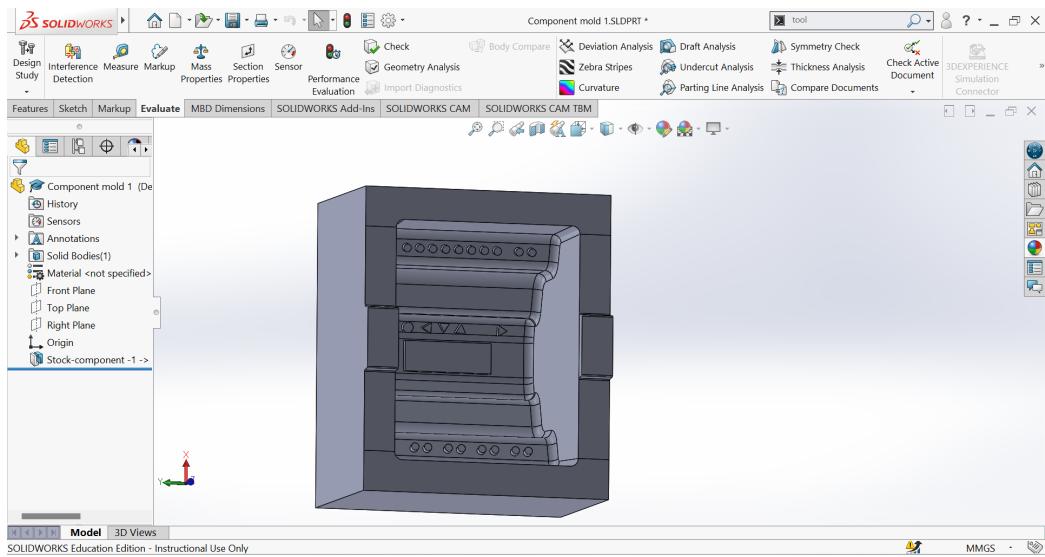


Figure 9: Cavity-Enclosure mold

2.3 Core

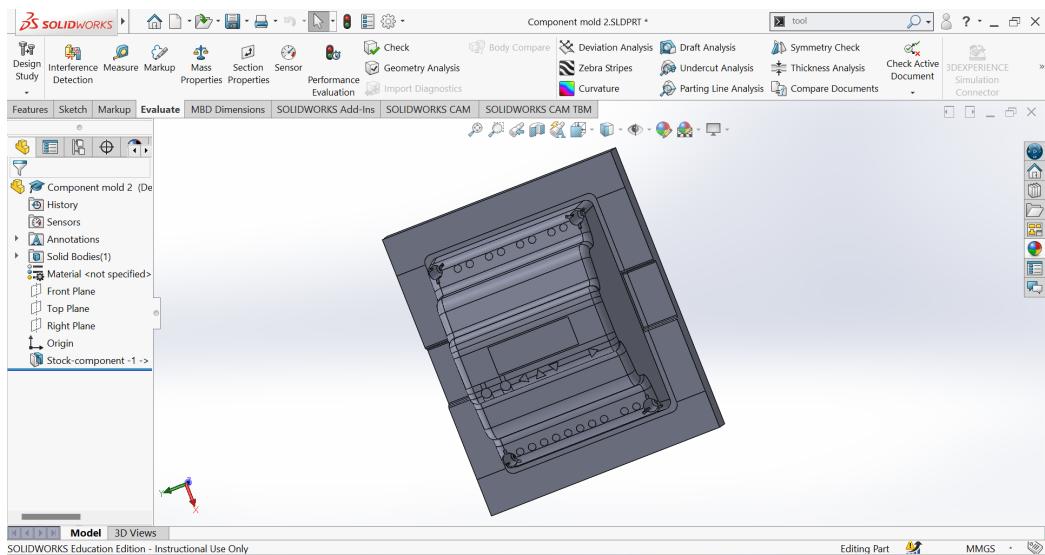


Figure 10: Enter Caption

2.4 Assembly

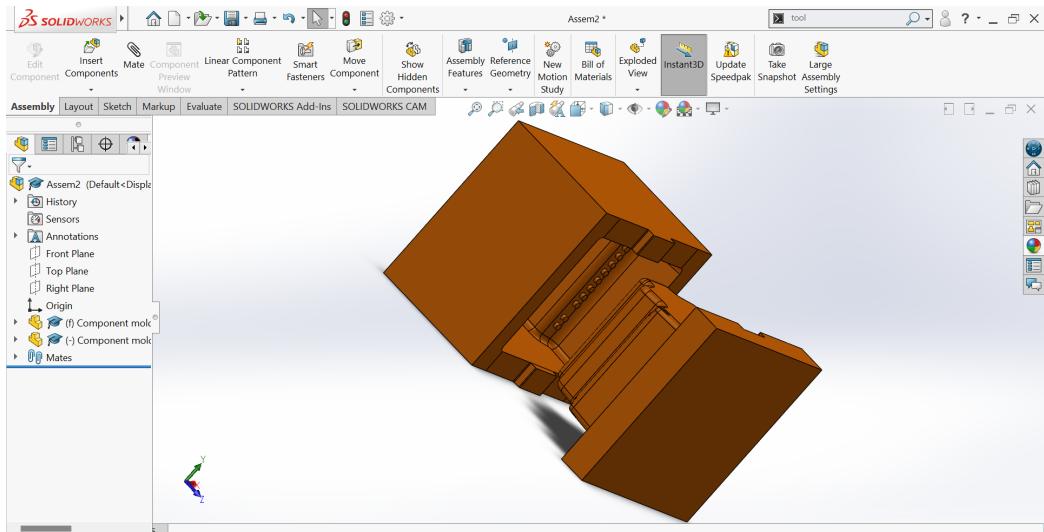


Figure 11: Enter Caption

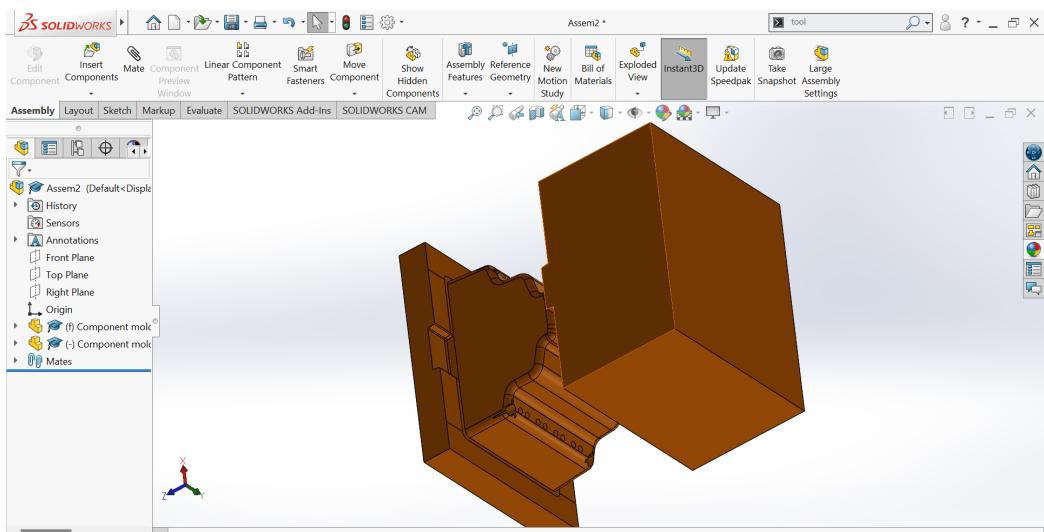


Figure 12: Enter Caption

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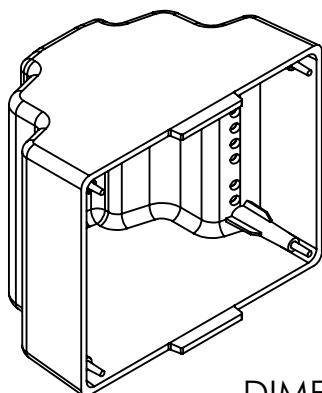
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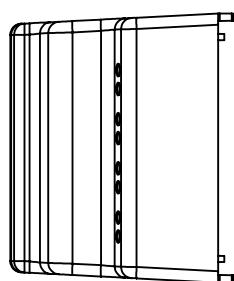
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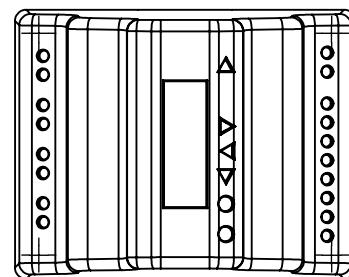
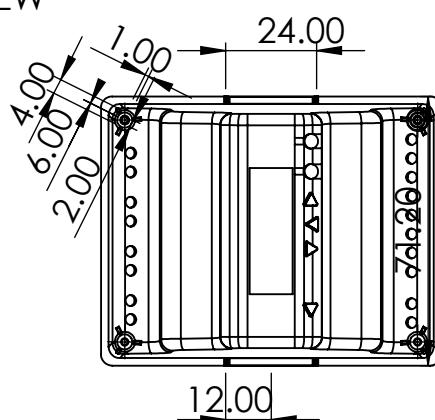
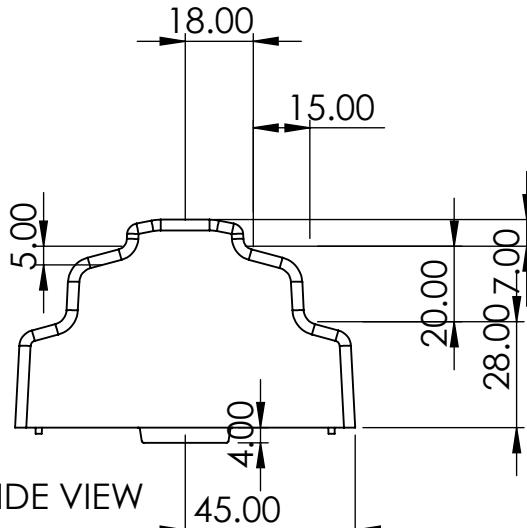
A



DIMETRIC VIEW



TOP VIEW



FRONT VIEW

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS
SURFACE FINISH:
TOLERANCES:
LINEAR:
ANGULAR:

FINISH:

DEBURR AND
BREAK SHARP
EDGES

DO NOT SCALE DRAWING

REVISION

DRAWN

NAME

SIGNATURE

DATE

TITLE:

CHK'D

APP'D

MFG

Q.A.

MATERIAL:

DWG NO.

WEIGHT:

component

A4

SCALE:1:2

SHEET 1 OF 3

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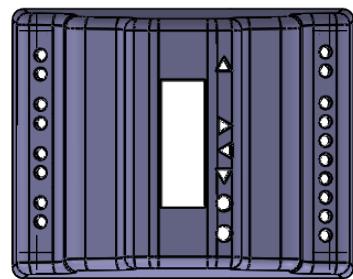
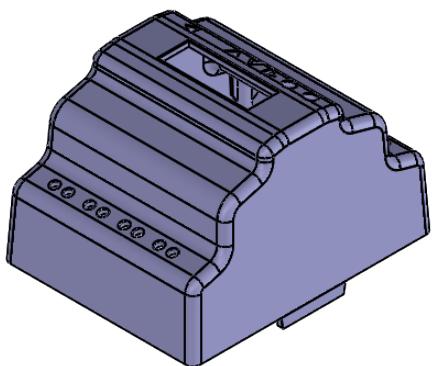
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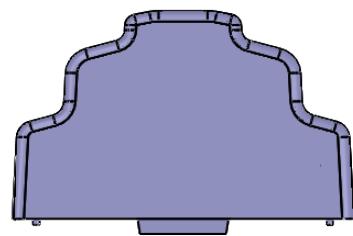
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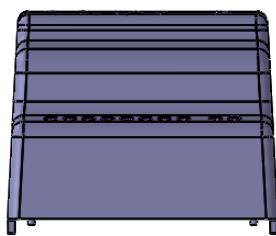
TRIMETRIC VIEW



FRONT VIEW



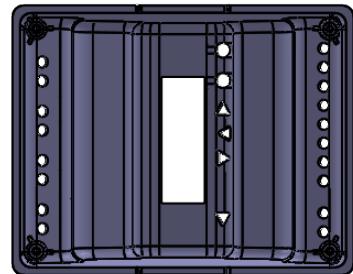
SIDE VIEW



TOP VIEW

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REAR VIEW

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UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS
SURFACE FINISH:
TOLERANCES:
LINEAR:
ANGULAR:

FINISH:

DEBURR AND
BREAK SHARP
EDGES

DO NOT SCALE DRAWING

REVISION

| | | | | | |
|-------|----------------|-----------|--------------------|-----------|-----------------------------|
| DRAWN | NAME RISINI | SIGNATURE | DATE 2024/03/29 | | TITLE: 3D VIEW ENCLOSURE |
| CHK'D | | | | | |
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| MFG | | | | | |
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| | | | | MATERIAL: | DWG NO. |
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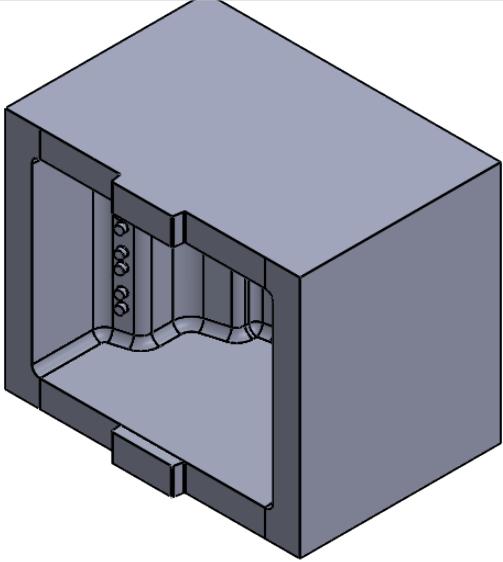
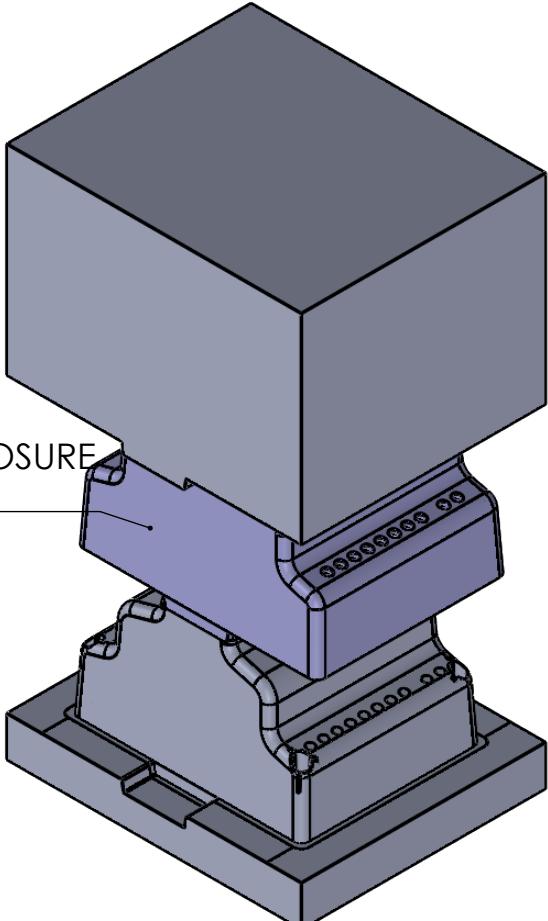
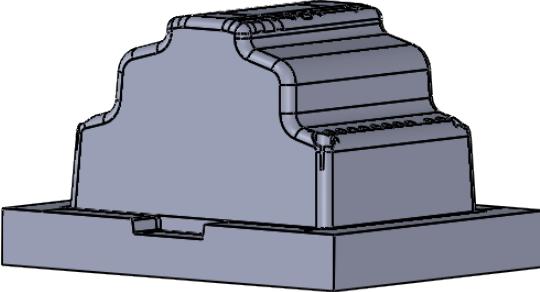
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|  <p>CAVITY</p> |  <p>ENCLOSURE</p> <p>ASSEMBLY</p> |  <p>CORE</p> | | | |
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| <p>UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: TOLERANCES: LINEAR: ANGULAR:</p> | | <p>FINISH:</p> | <p>DEBURR AND BREAK SHARP EDGES</p> | <p>DO NOT SCALE DRAWING</p> | <p>REVISION</p> |
| DRAWN | RISINI | SIGNATURE | DATE | 2024.03.29 | |
| CHK'D | | | | | |
| APP'D | | | | | |
| MFG | | | | | |
| Q.A. | | | | | |
| <p>MATERIAL:</p> | | | | TITLE: MOLD | |
| <p>WEIGHT:</p> | | | | DWG NO. component | |
| | | | | SCALE:1:5 | |
| | | | | SHEET 3 OF 3 | |

3 Enclosure Lid

3.1 Model Tree

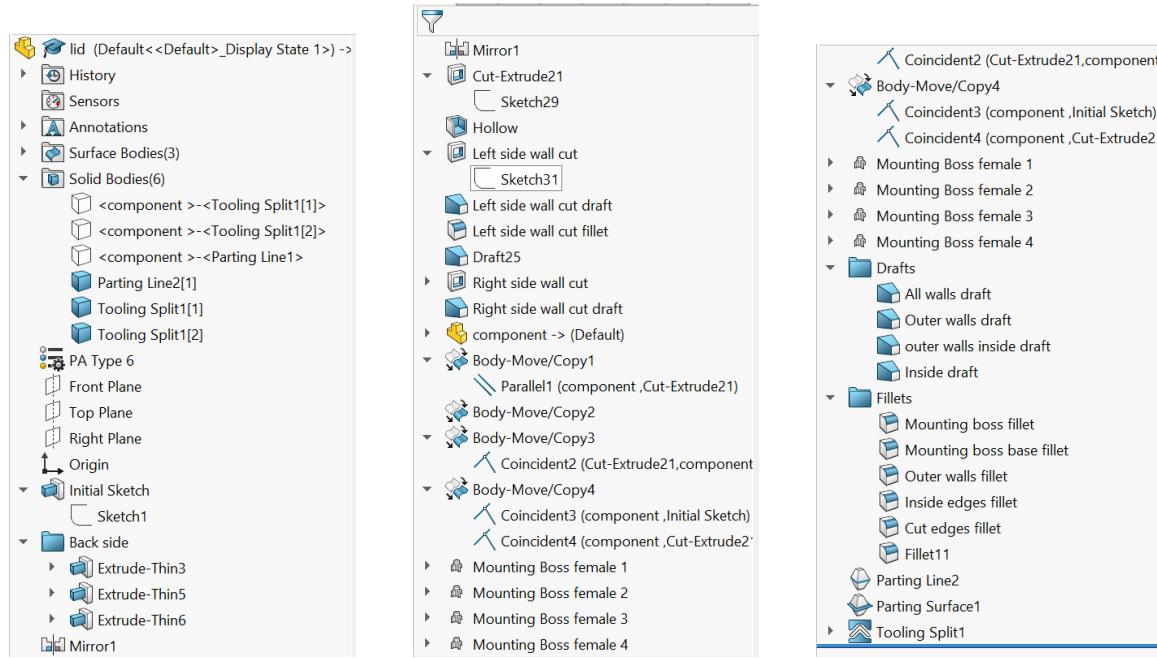


Figure 13: Model tree of Lid

3.2 Enclosure

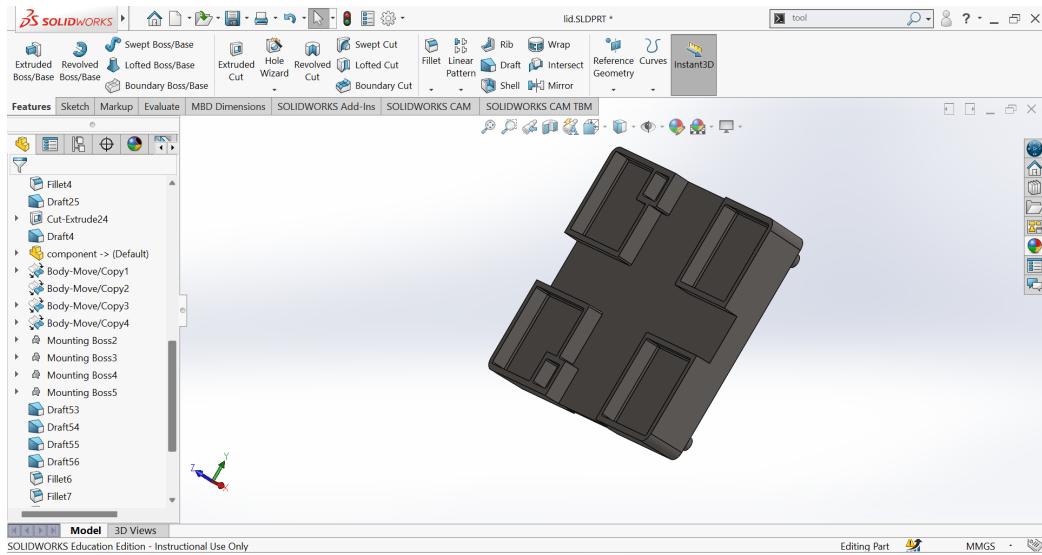


Figure 14: Enclosure- Lid

3.3 Lid with mounting boss

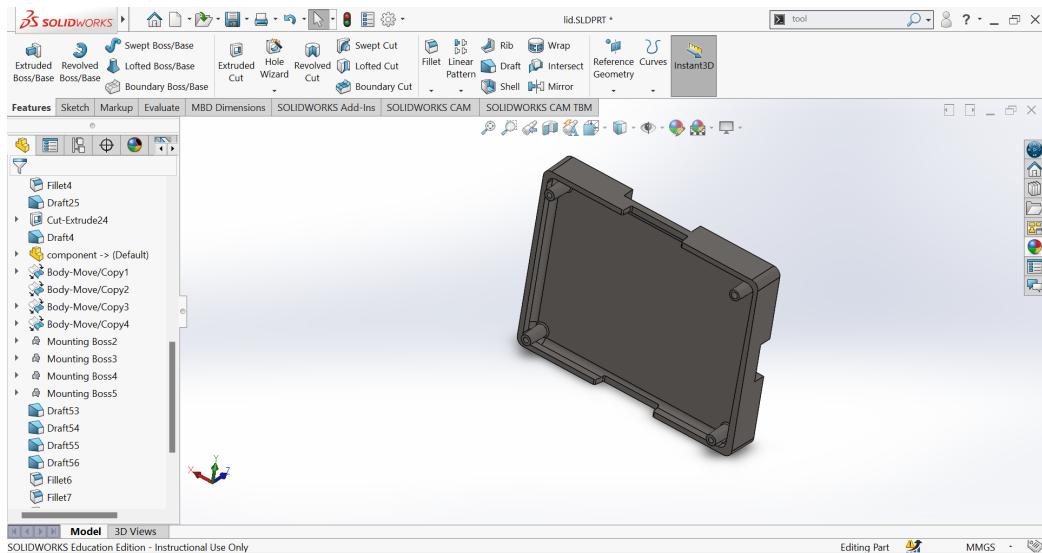


Figure 15: Lid with mounting boss

4 Mold- Lid

4.1 Draft analysis

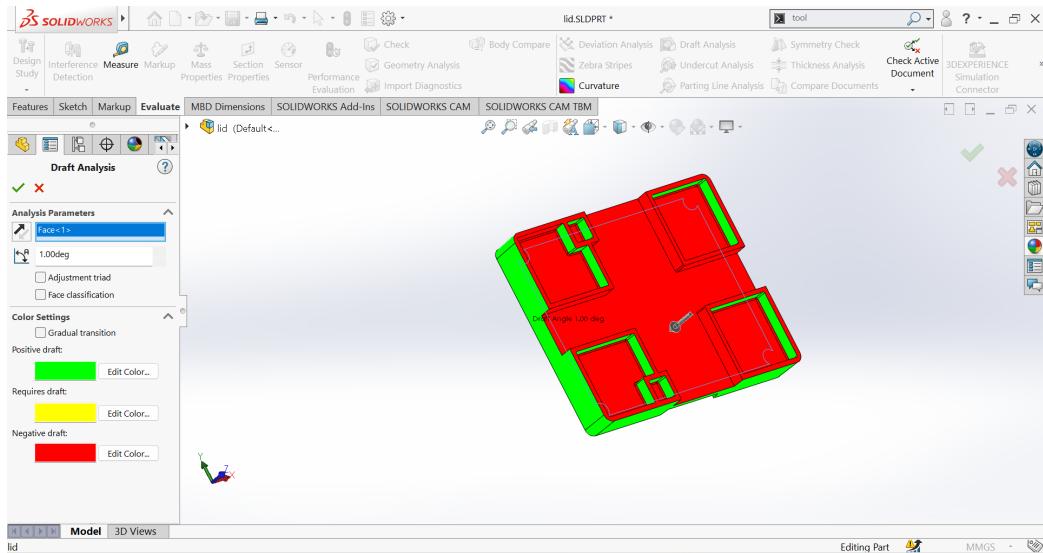


Figure 16: Draft analysis-View 1

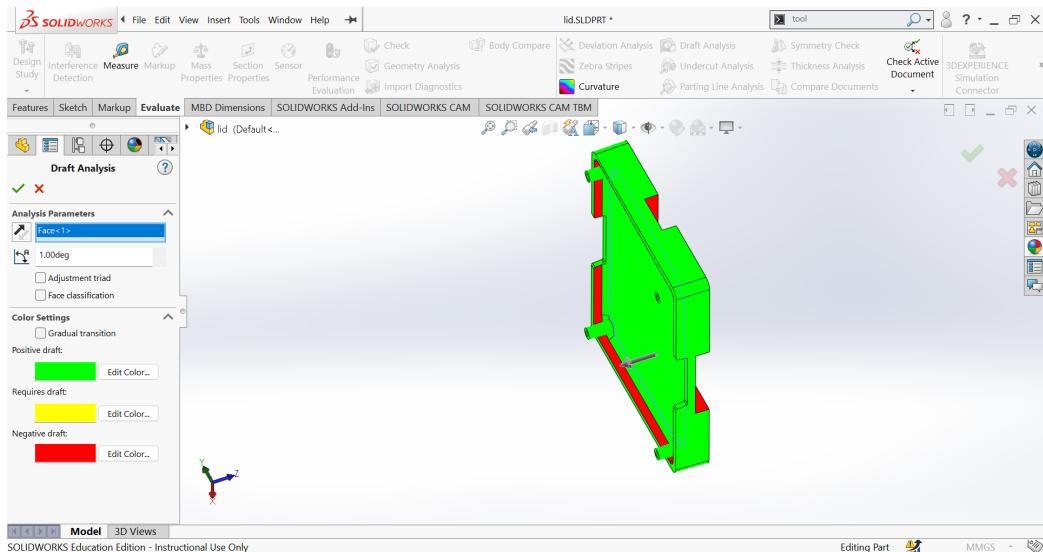


Figure 17: Draft analysis-View 2

4.2 Core

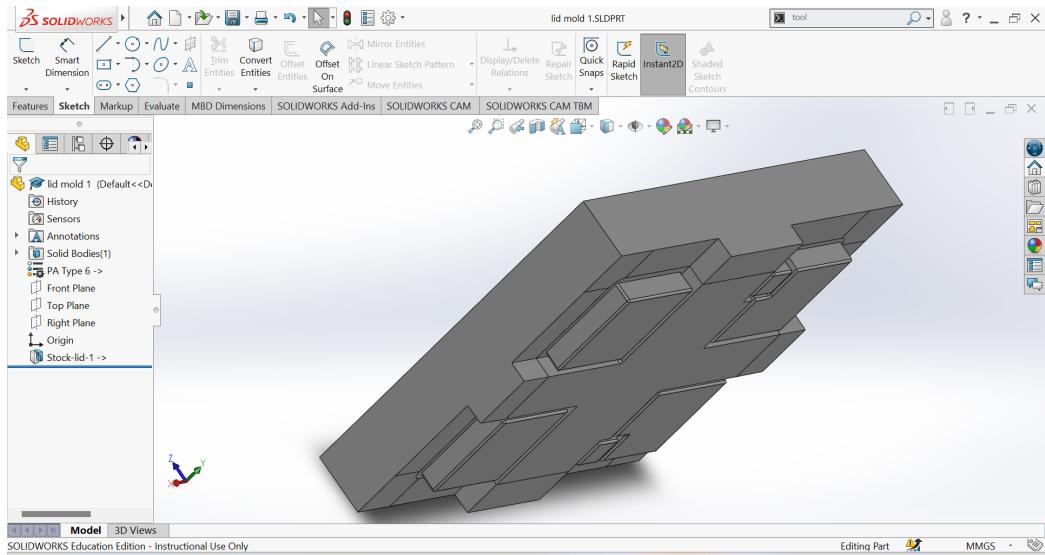


Figure 18: MOld- Cavity

4.3 Cavity

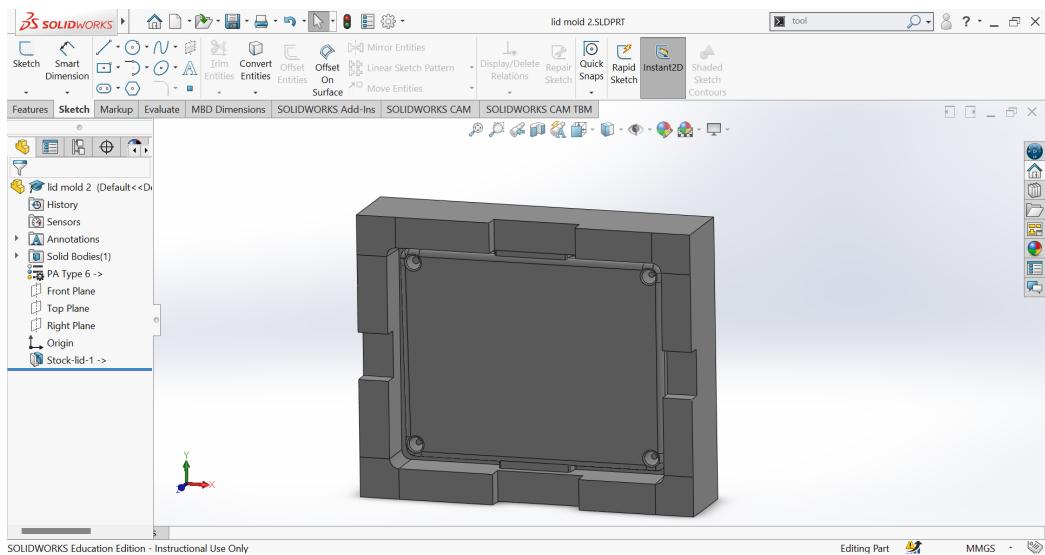


Figure 19: Mold-Core

4.4 Assembly

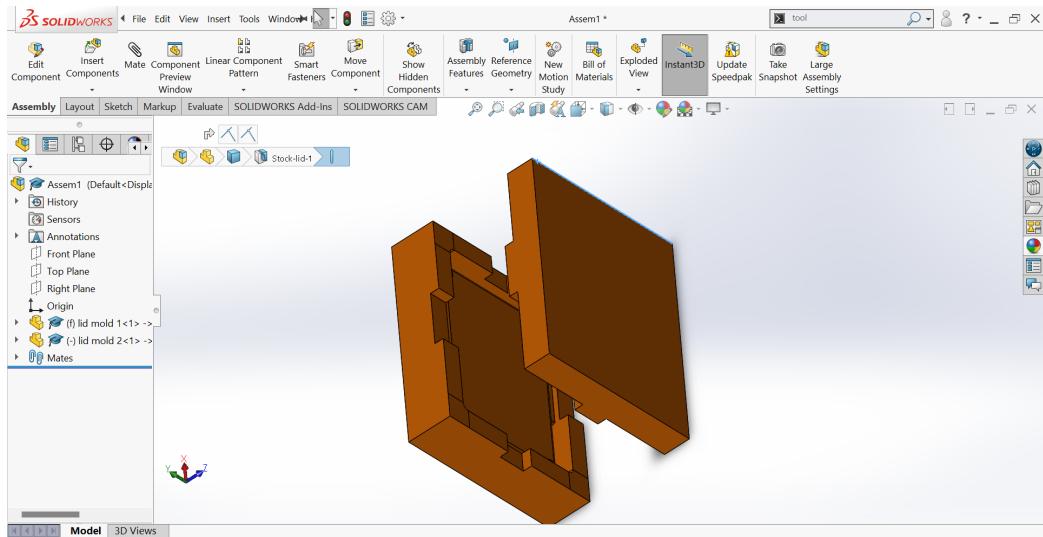


Figure 20: Mold Assembly-view 1

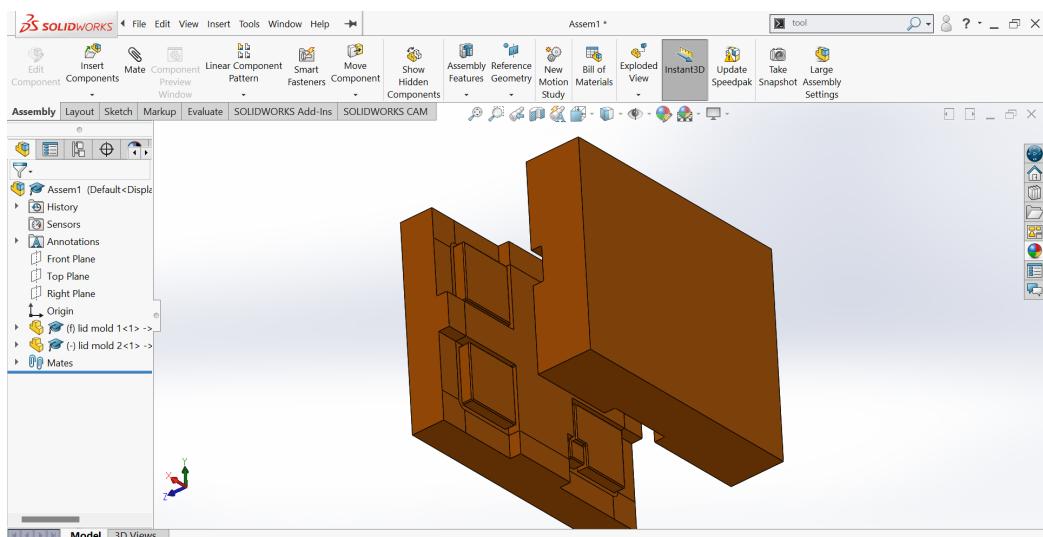


Figure 21: Mold Assembly-view 2

5 Assemblies

5.1 Assembly- Lid and Enclosure

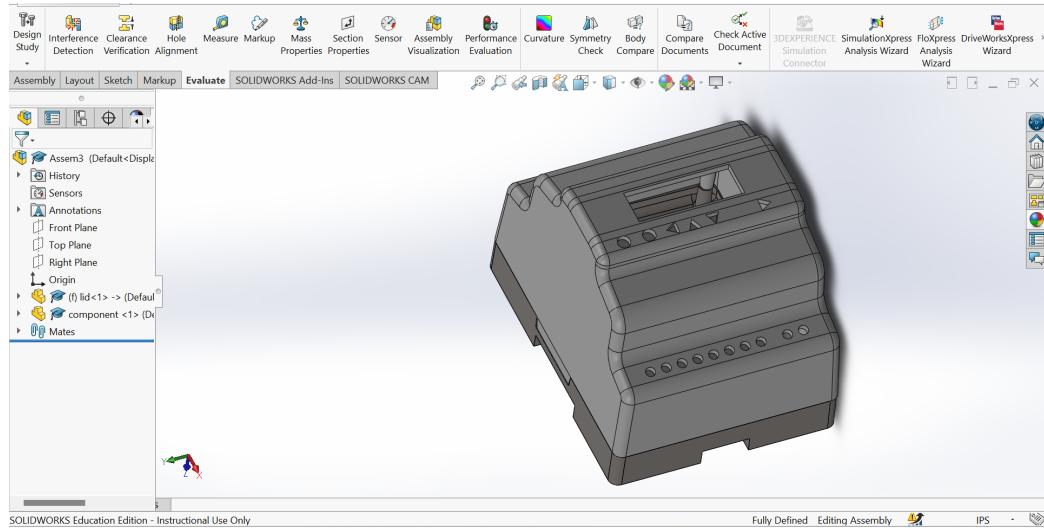


Figure 22: Assembly- Lid and Enclosure

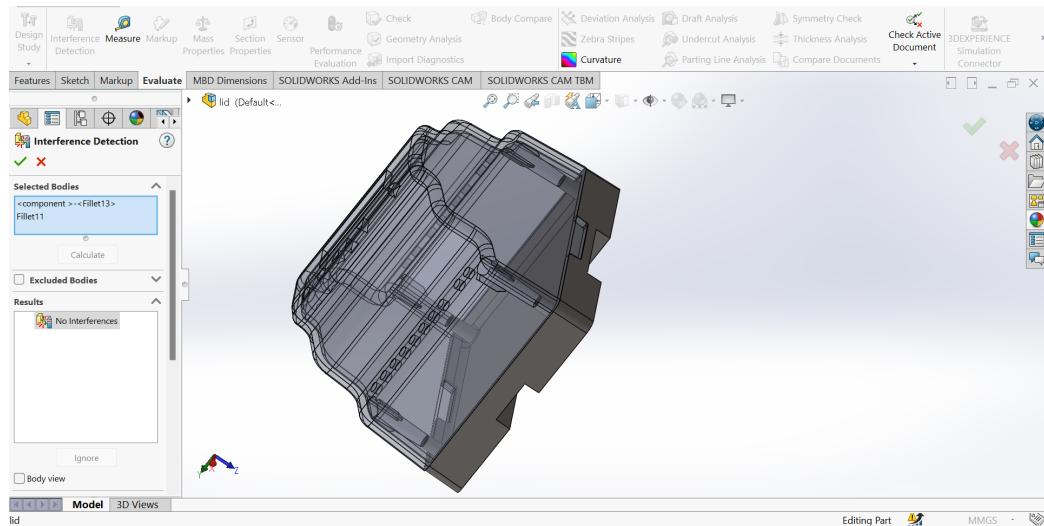


Figure 23: Interference detection

5.2 Assembly- Enclosure and Mold

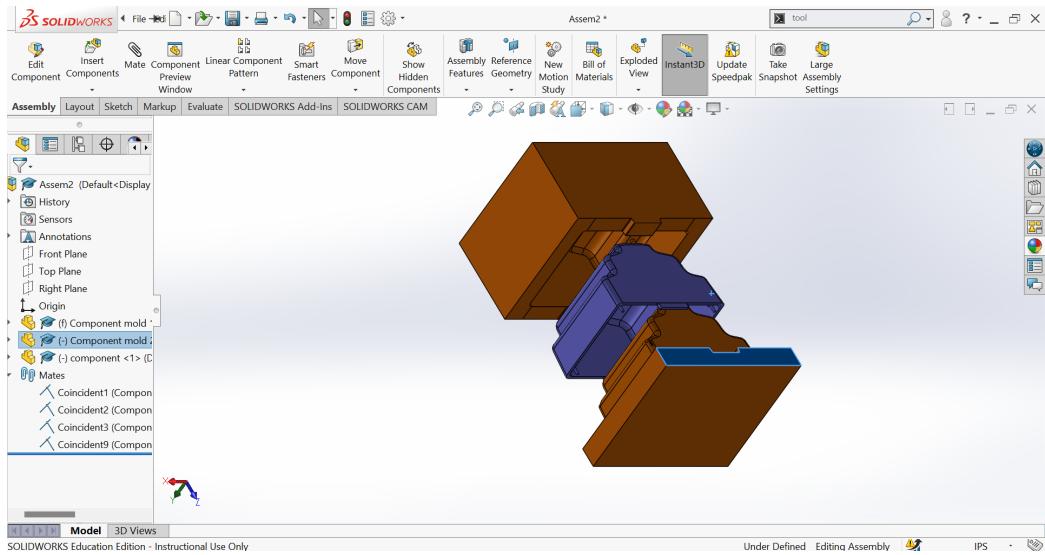


Figure 24: Assembly- Enclosure and Mold-View 1

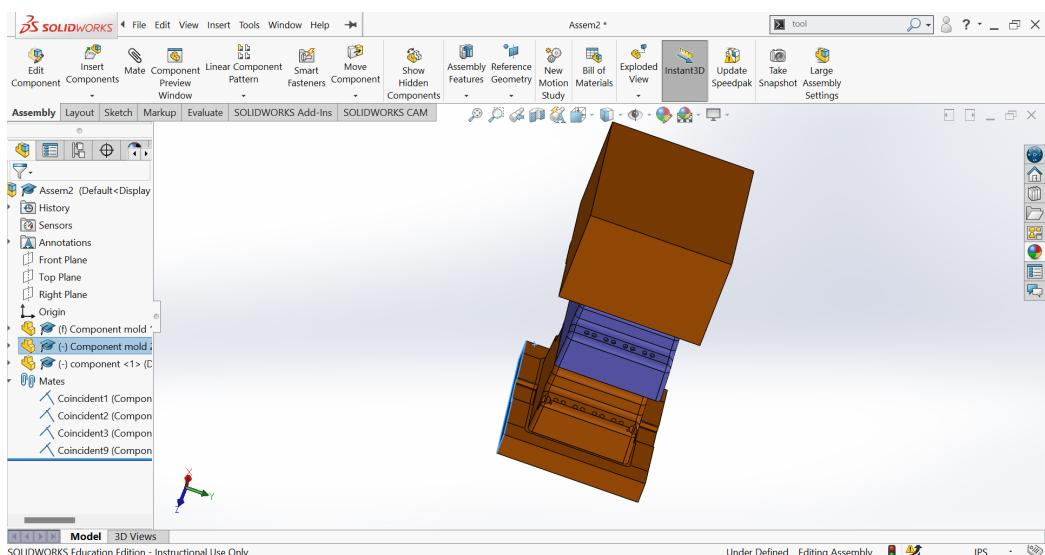


Figure 25: Assembly- Enclosure and Mold-View 2

5.3 Assembly- Lid and Mold

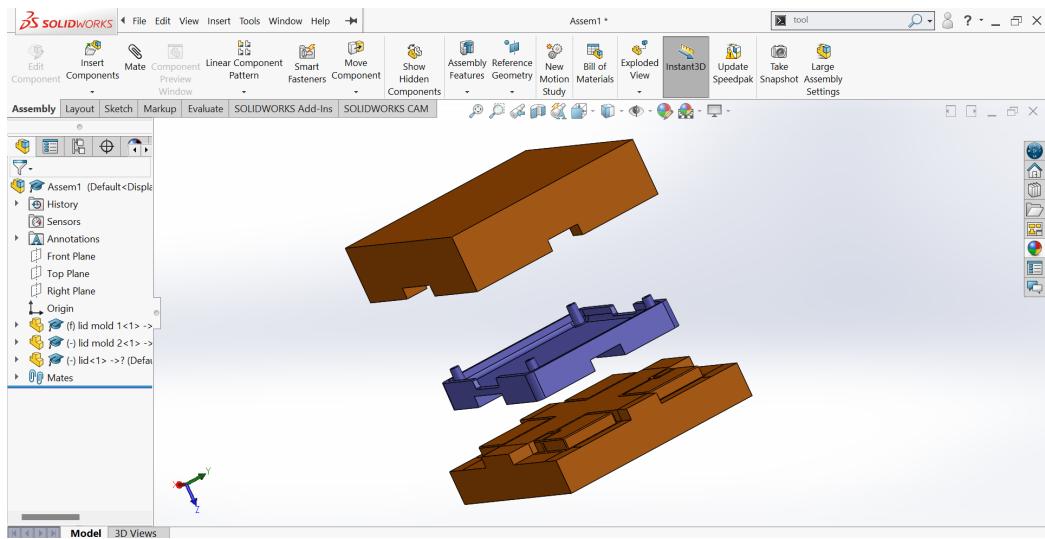


Figure 26: Assembly- Lid and Mold-view 1

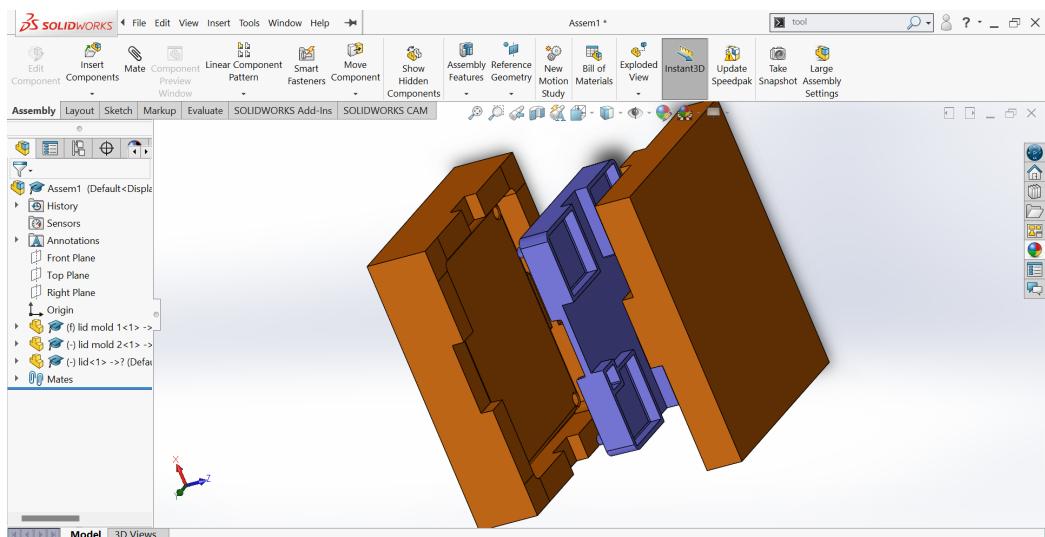


Figure 27: Assembly- Lid and Mold-view 1

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UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN MILLIMETERS
 SURFACE FINISH:
 TOLERANCES:
 LINEAR:
 ANGULAR:

FINISH:

DEBURR AND
 BREAK SHARP
 EDGES

DO NOT SCALE DRAWING

REVISION

LID PLC

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| DRAWN | NAME RISINI | SIGNATURE | DATE 2024/03/29 | | TITLE: |
| CHK'D | | | | | |
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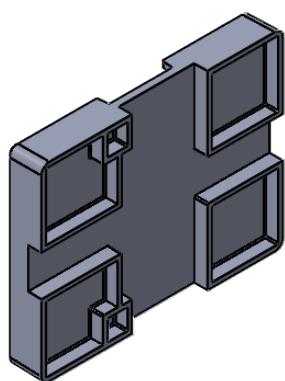
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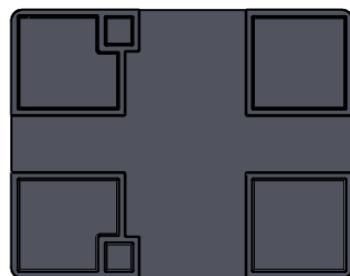
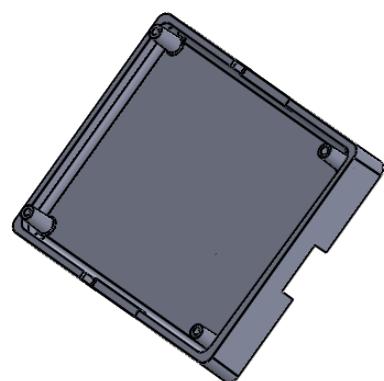
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SIDE VIEW



REAR VIEW



TOP VIEW

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS
SURFACE FINISH:
TOLERANCES:
LINEAR:
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DEBURR AND
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EDGES

DO NOT SCALE DRAWING

REVISION

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| DRAWN | NAME RISINI | SIGNATURE | DATE 2024.03.29 | | TITLE: 3D VIEW |
| CHK'D | | | | | |
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| MFG | | | | | |
| Q.A. | | | | MATERIAL: | DWG NO. lid |
| | | | | | A4 |
| | | | WEIGHT: | SCALE:1:10 | SHEET 2 OF 3 |

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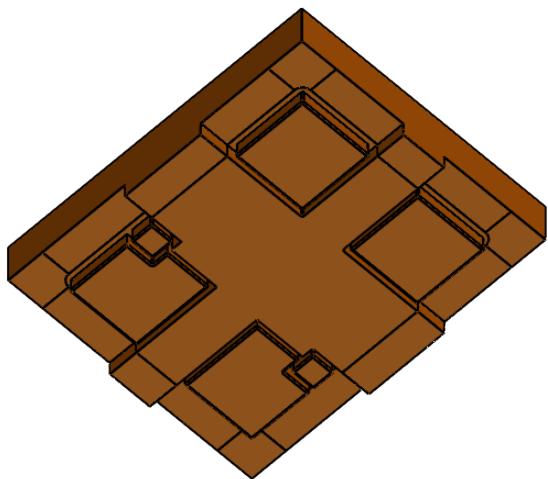
DEBURR AND
BREAK SHARP
EDGES

DO NOT SCALE DRAWING

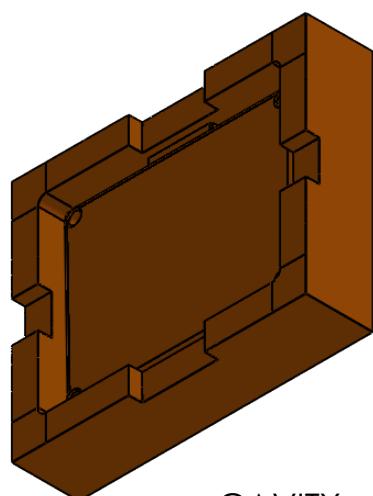
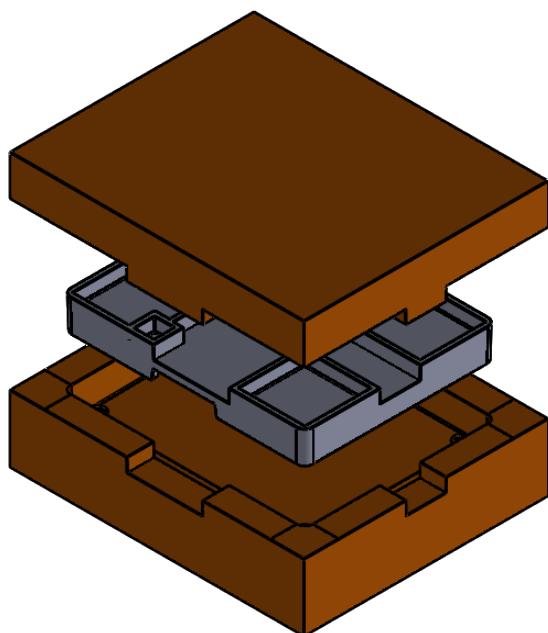
REVISION

MOLD -LID

| | | | | | |
|-------|----------------|-----------|--------------------|-----------|--------------|
| DRAWN | NAME RISINI | SIGNATURE | DATE 2024/03.29 | | TITLE: |
| CHK'D | | | | | |
| APP'D | | | | | |
| MFG | | | | | |
| Q.A. | | | | MATERIAL: | DWG NO. |
| | | | | | lid |
| | | | | WEIGHT: | SCALE:1:2 |
| | | | | | SHEET 3 OF 3 |



CORE



CAVITY

4

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6 Enclosure with sockets on side surfaces

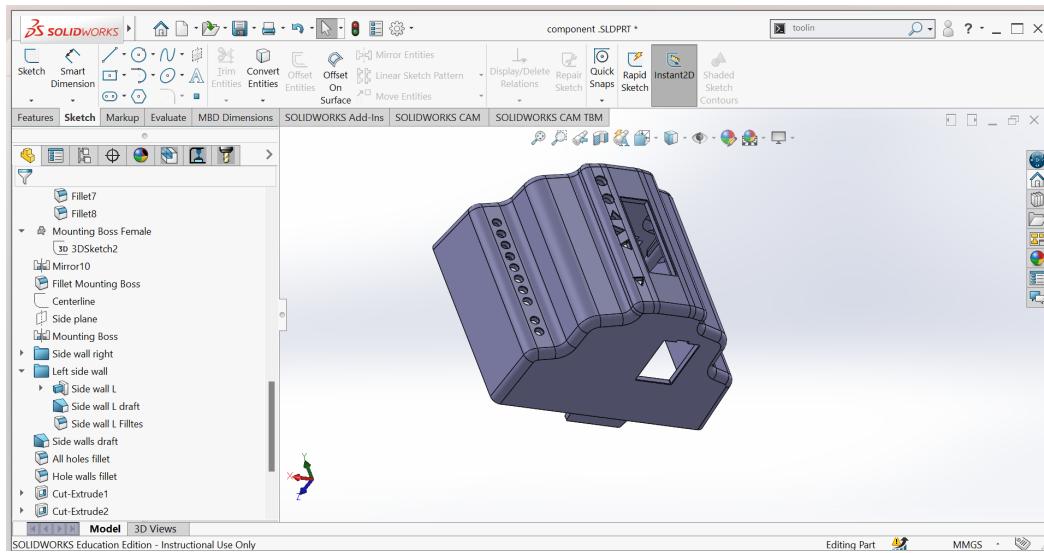


Figure 28: Enter Caption

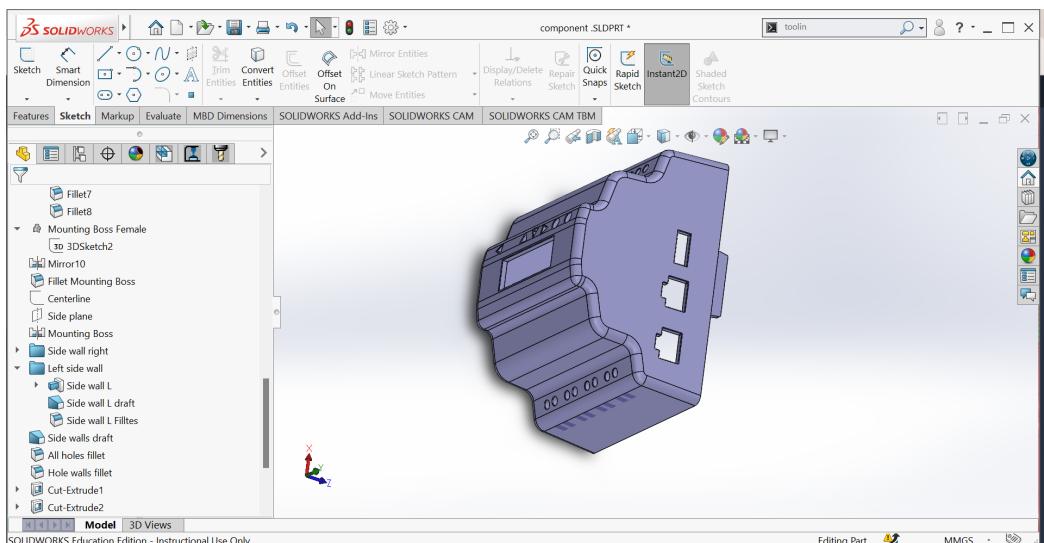


Figure 29: Enter Caption