



School of Engineering

BOM and 2D Technical Drawings

MNFG601

Board-Lamp

Group 02

Authors:

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Date of Submission: 04/02/2022

Academic Guide: Prof. Dan Hibbert



BILL OF MATERIALS (BOM):

The table below lists all the components in the product. It also shows the quantity and materials used to make the specific parts with respective manufacturing process.

Part Number	Description	Quantity	Material	Manufacturing process
1	PCB	1	Silicon, Conducting metals, Plastic	Printing, Etching, Drilling
2	Casing	1	Acrylonitrile Butadiene Styrene (ABS)	Injection Moulding
3	Back Cover	1	Acrylonitrile Butadiene Styrene (ABS)	Injection Moulding
4	Support	1	Acrylonitrile Butadiene Styrene (ABS)	Injection Moulding
5	Pin	1	Acrylonitrile Butadiene Styrene (ABS)	Extrusion
6	Round-headed screw	2	Stainless Steel	Roll Treading

Table: Bill of materials.



EXPLODED VIEW:

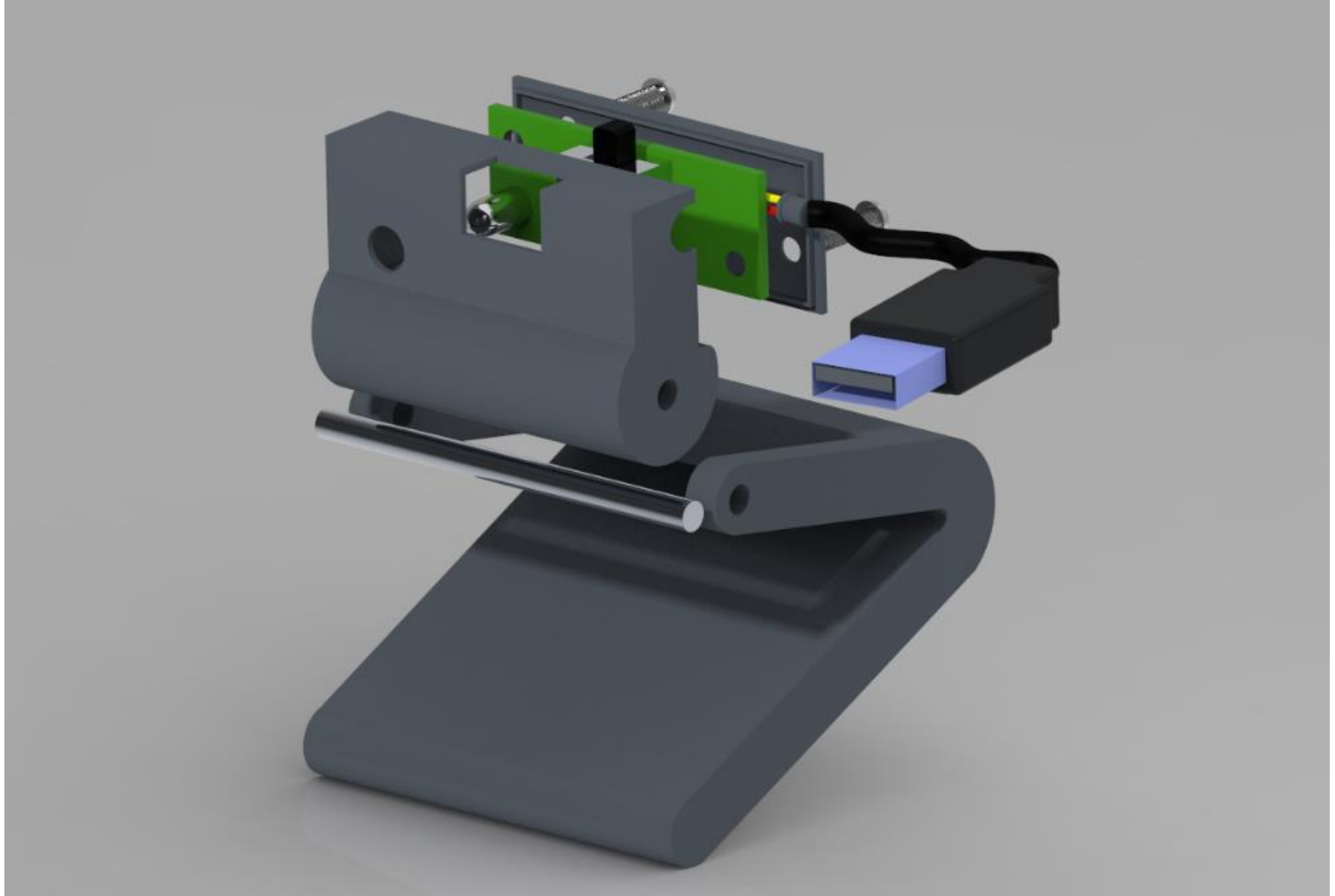


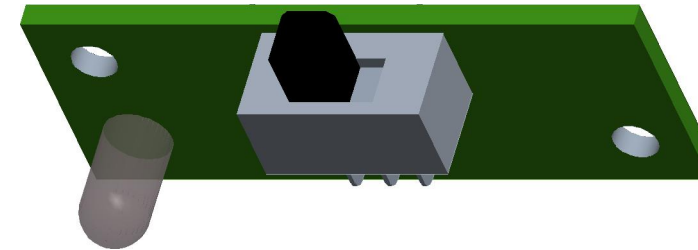
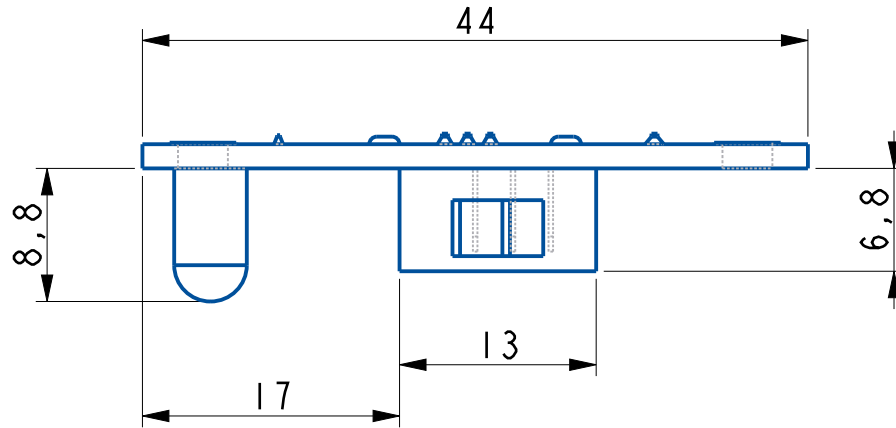
Figure: Exploded View of Board-Lamp.

2D TECHNICAL DRAWINGS:

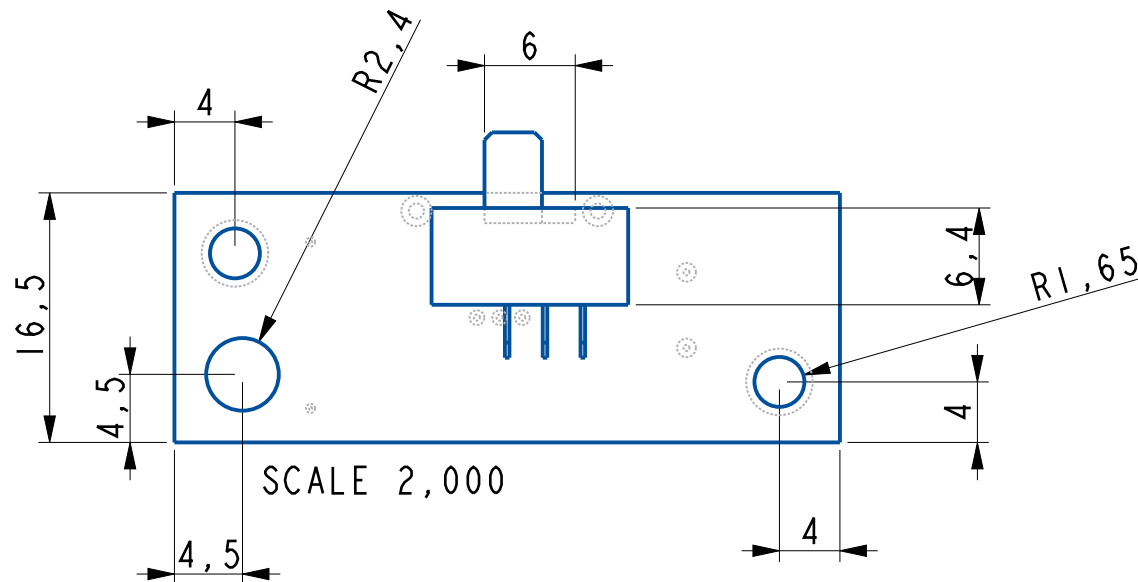
The 2D drawings illustrates PTC Creo Parametric models in 2D drawing format along with an isometric view of the part on the side. These 2D drawings are the refence for actual manufacturing of product. Dimensions are specified wherever required.

The 2D Technical Drawings are in order as:

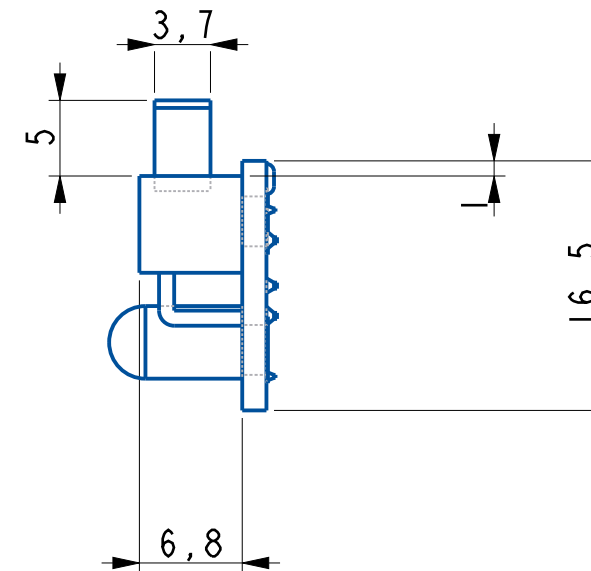
1. PCB (Printed Circuit Board)
2. Casing
3. Casing Cover
4. Support
5. Pin
6. Screw




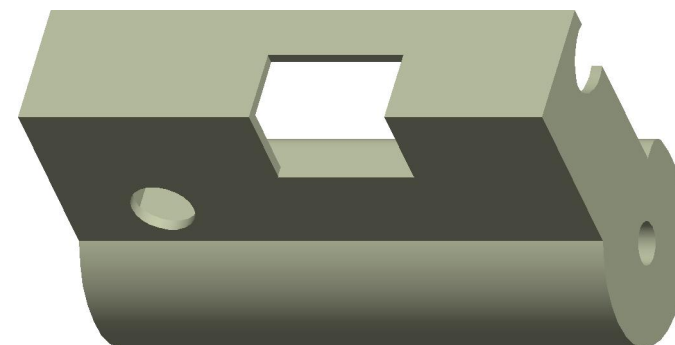
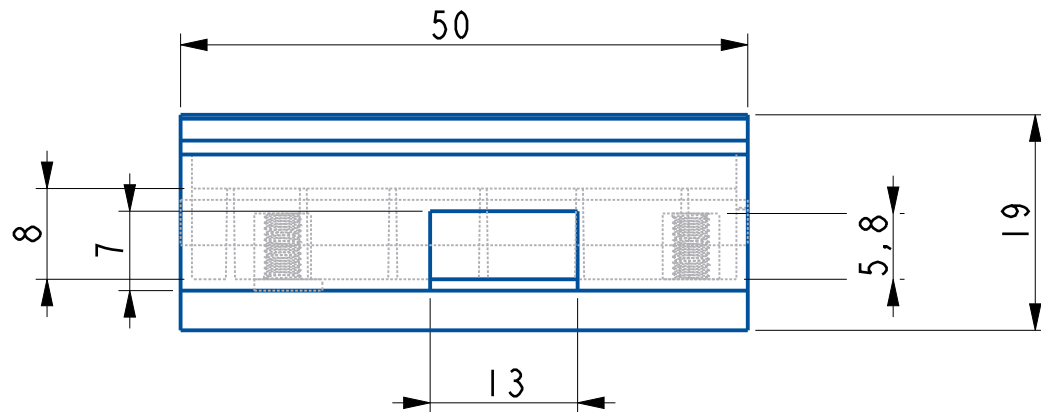
SCALE 2,000



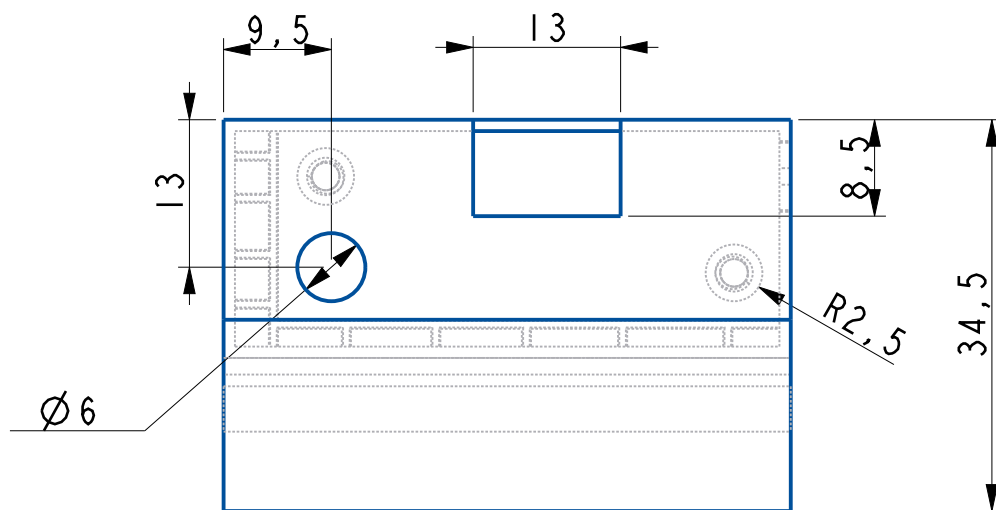
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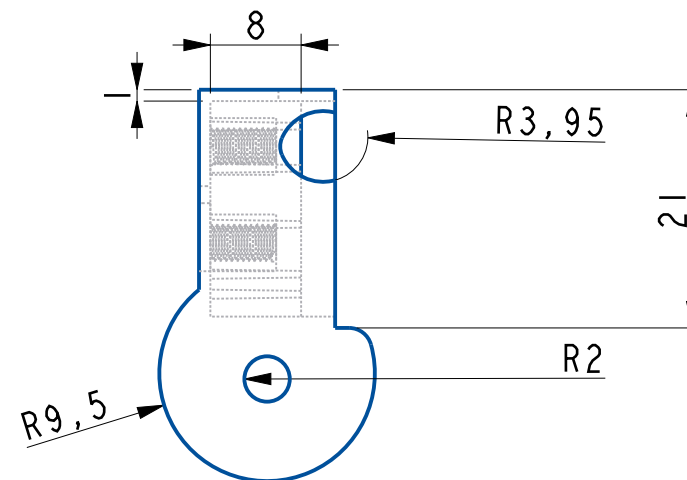
SCHOOL of ENGINEERING UNIVERSITY OF LIVERPOOL	UNLESS OTHERWISE STATED DIMENSIONS $\pm 0.1\text{mm}$ ANGULAR $\pm 0.5^\circ$ GENERAL MACHINING REMOVE SHARP EDGES	3RD ANGLE 	ALL DIMENSIONS IN MM DO NOT SCALE IF IN DOUBT ASK!	DRN:	AADEESH KURDE	MAT:	ABS	NAME:	AADEESH KURDE	SHEETS 1 of 1
				CHK:						
				LEC:	Don Hibbert	QTY:		1 x OFF		
				UID:	YET TO BE AUTHORIZED	PRT:		CIRCUIT		
								DWG:	9/1/2022	

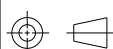


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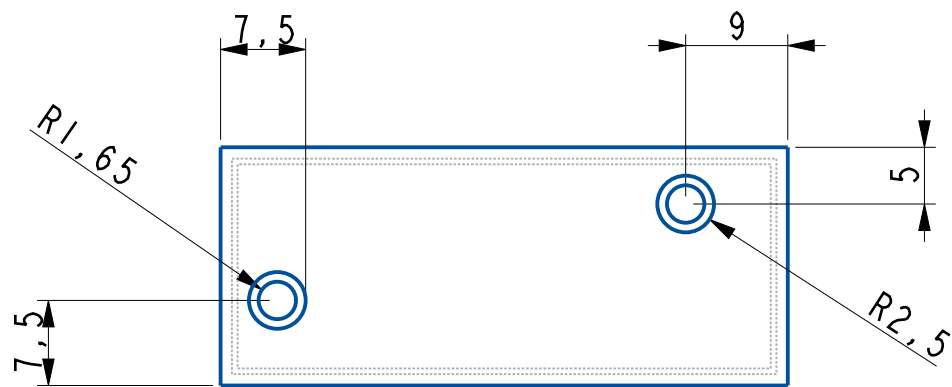
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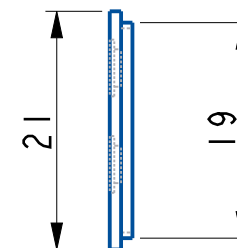
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				CHK:				
				LEC: Dan Hibbert	QTY: 1 x OFF		DWG: 9/1/2022	
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
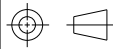


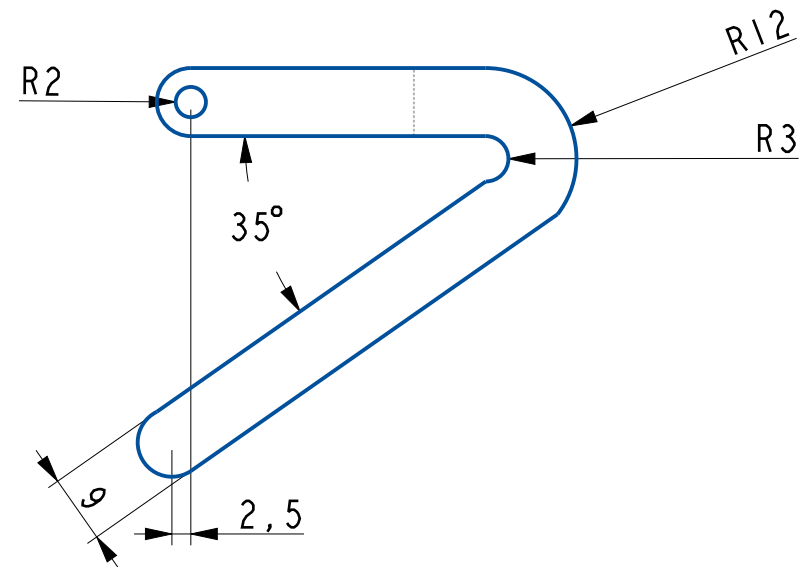
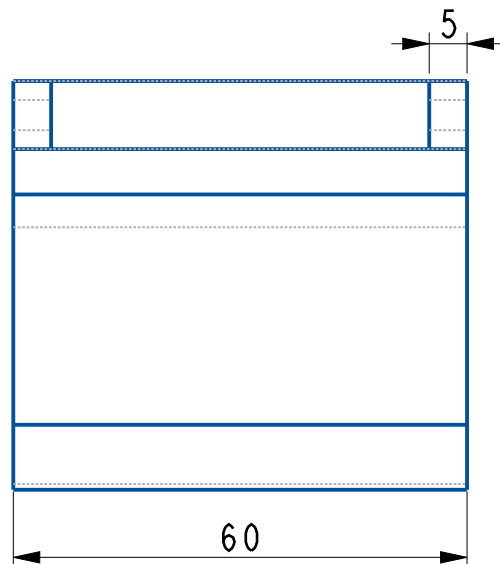
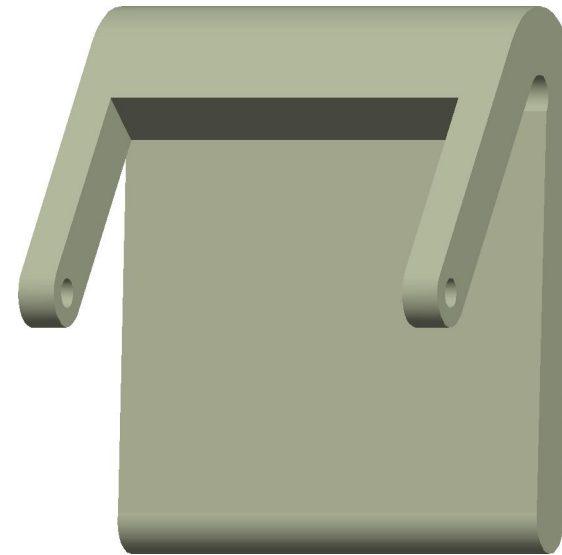
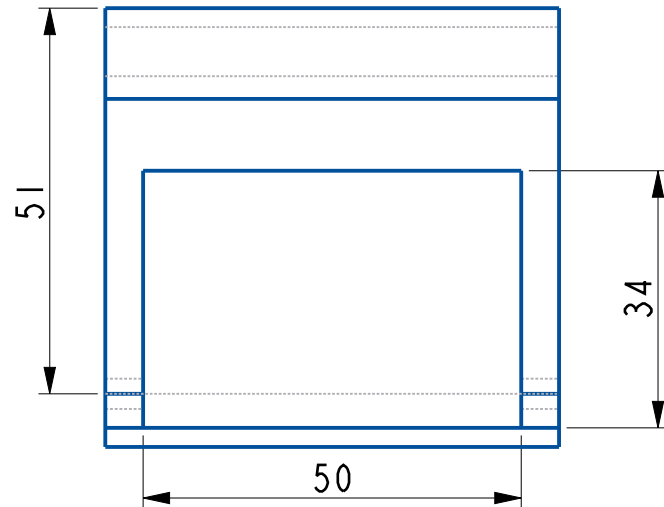
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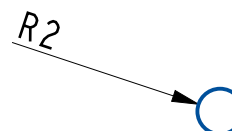
SCALE 1,500




SCHOOL of ENGINEERING UNIVERSITY OF LIVERPOOL	UNLESS OTHERWISE STATED DIMENSIONS $\pm 0.1\text{mm}$ ANGULAR $\pm 0.5^\circ$ GENERAL MACHINING  REMOVE SHARP EDGES	3RD ANGLE 	ALL DIMENSIONS IN MM DO NOT SCALE IF IN DOUBT ASK!	DRN: AADEESH KURDE	MAT:	ABS	NAME: AADEESH KURDE	SHEETS 1 of 1
				CHK:				
				LEC: Dan Hibbert	QTY: 1 x OFF		DWG: 9/1/22	
				UID: YET TO BE AUTHORIZED	PRT: CASING_END			




SCHOOL of ENGINEERING UNIVERSITY OF LIVERPOOL	UNLESS OTHERWISE STATED DIMENSIONS $\pm 0.1\text{mm}$ ANGULAR $\pm 0.5^\circ$ GENERAL MACHINING REMOVE SHARP EDGES		3RD ANGLE ALL DIMENSIONS IN MM DO NOT SCALE IF IN DOUBT ASK!	DRN:	AADEESH KURDE	MAT:	ABS	NAME:	AADEESH KURDE	SHEETS			
				CHK:									
				LEC:	Dan Hibbert	QTY:		1 x OFF			DWG:	2/2/22	1 of 1
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SCALE 1,500

SCHOOL of ENGINEERING UNIVERSITY OF LIVERPOOL	UNLESS OTHERWISE STATED DIMENSIONS ± 0.1mm ANGULAR ± 0.5° GENERAL MACHINING REMOVE SHARP EDGES	3RD ANGLE 	ALL DIMENSIONS IN MM DO NOT SCALE IF IN DOUBT ASK!	DRN:	AADEESH KURDE	MAT:	STAINLESS STEEL	NAME:	AADEESH KURDE	SHEETS 1 of 1		
				CHK:								
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SCHOOL of ENGINEERING UNIVERSITY OF LIVERPOOL	UNLESS OTHERWISE STATED DIMENSIONS $\pm 0.1\text{mm}$ ANGULAR $\pm 0.5^\circ$ GENERAL MACHINING REMOVE SHARP EDGES	3RD ANGLE 	ALL DIMENSIONS IN MM DO NOT SCALE IF IN DOUBT ASK!	DRN:	AADEESH KURDE	MAT:	STAINLESS STEEL	NAME:	AADEESH KURDE	SHEETS	
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