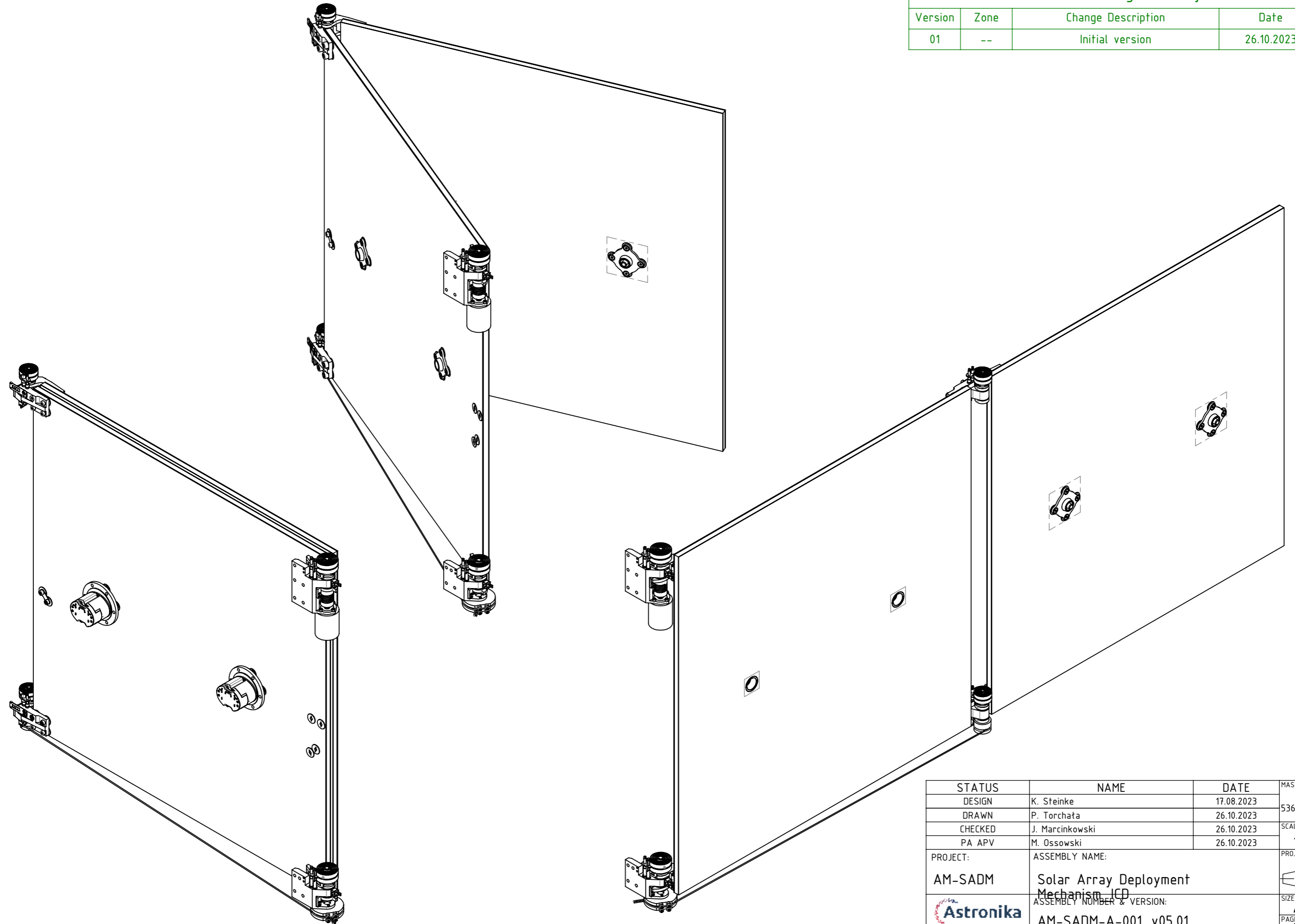


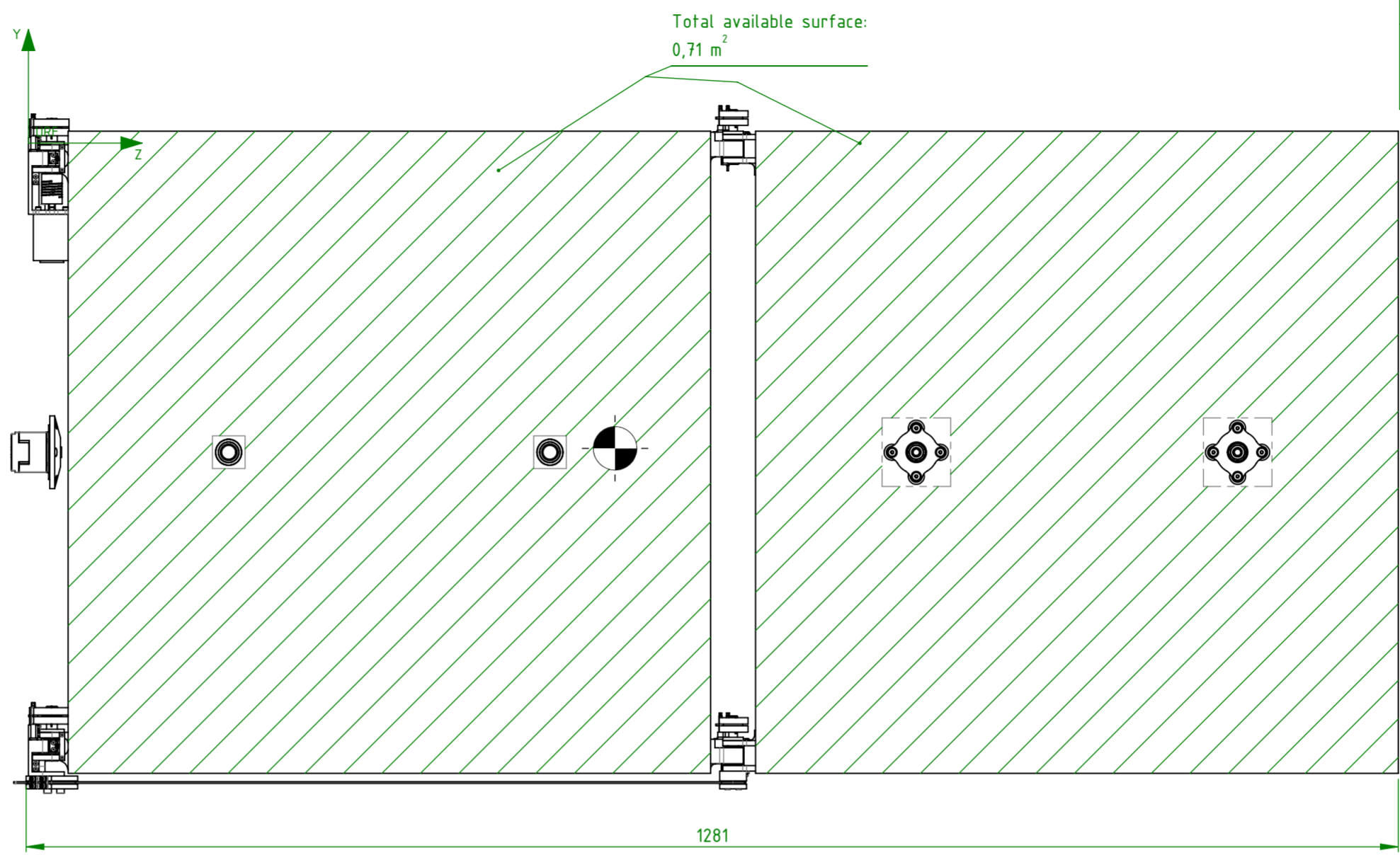
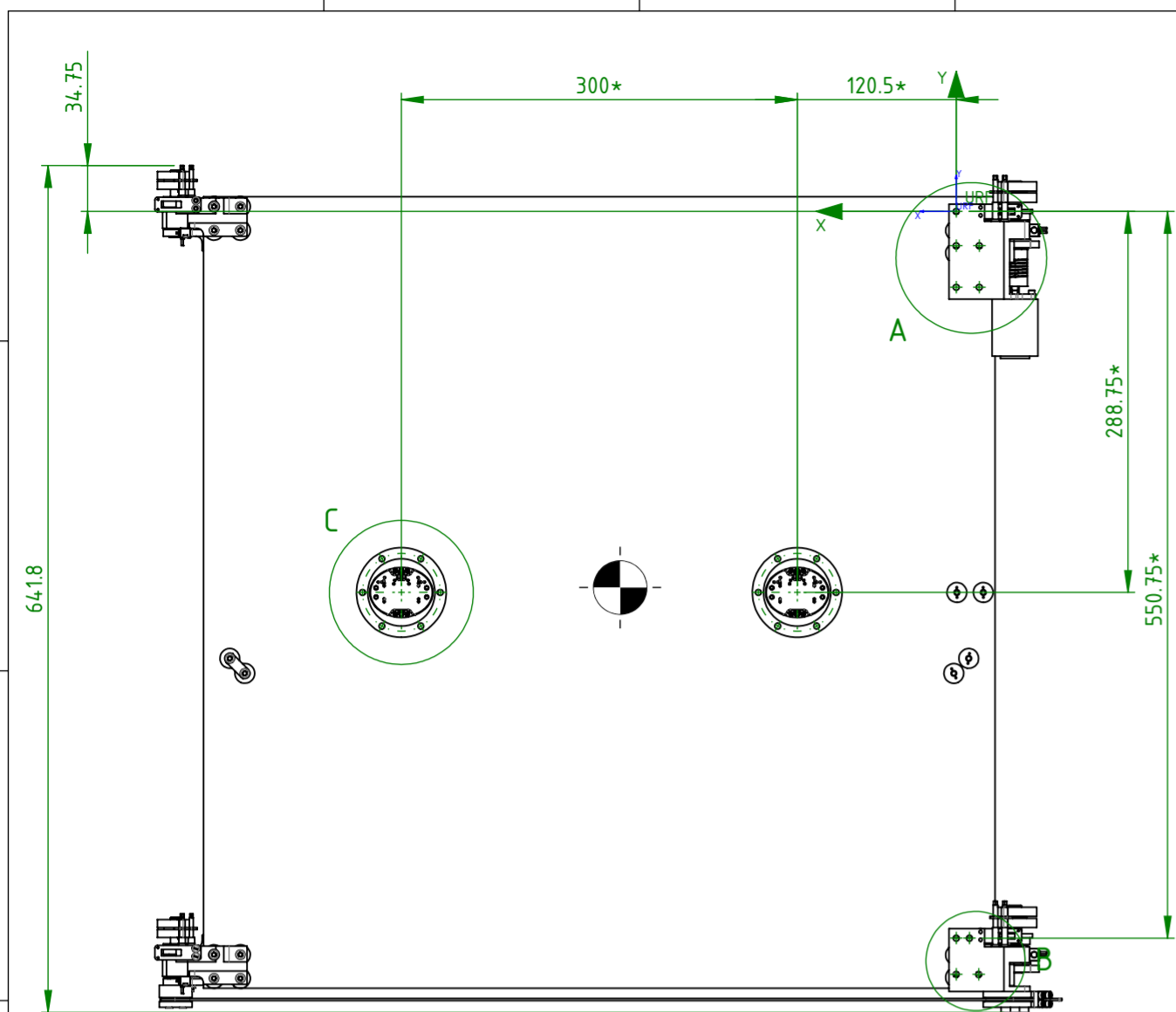
### Version Change History

Version	Zone	Change Description	Date
01	--	Initial version	26.10.2023



STATUS	NAME	DATE	MASS:
DESIGN	K. Steinke	17.08.2023	5360.08 g
DRAWN	P. Torchata	26.10.2023	
CHECKED	J. Marcinkowski	26.10.2023	SCALE:
PA APV	M. Ossowski	26.10.2023	1:5
PROJECT:	ASSEMBLY NAME:	PROJECTION:	
AM-SADM	Solar Array Deployment Mechanism_ICD		
ASSEMBLY NUMBER & VERSION:			SIZE:
AM-SADM-A-001_v05.01			A3
			PAGE:
			1/2





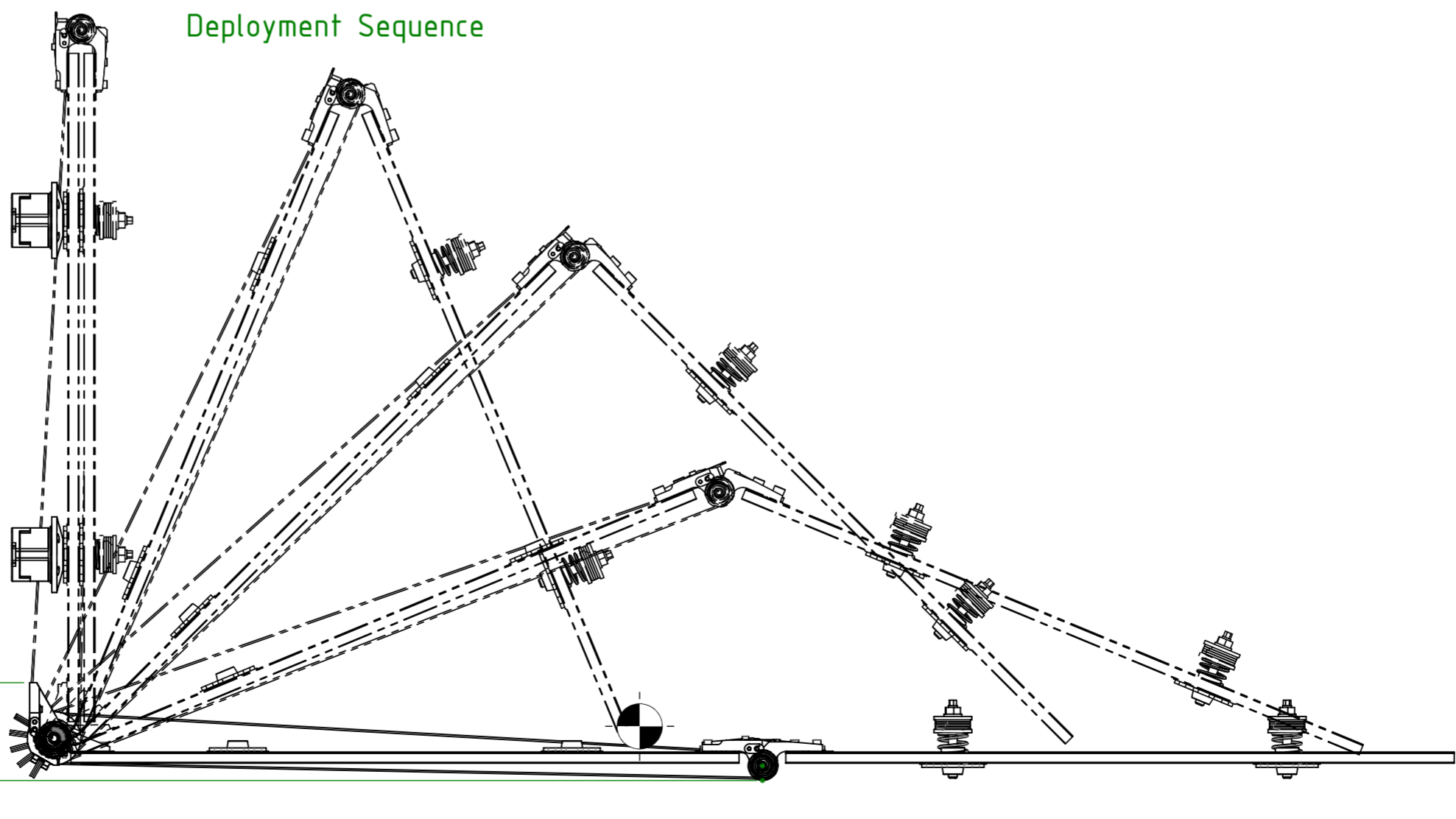
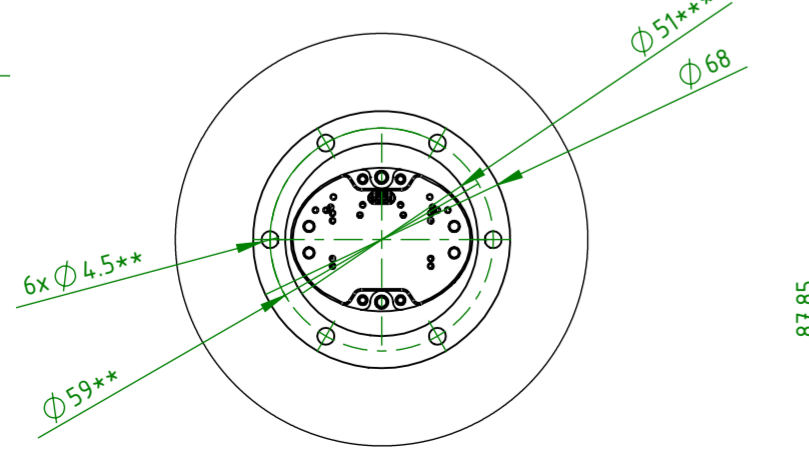
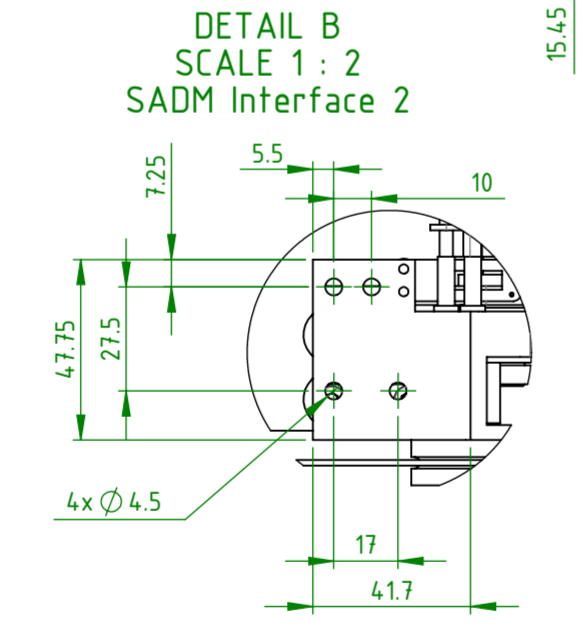
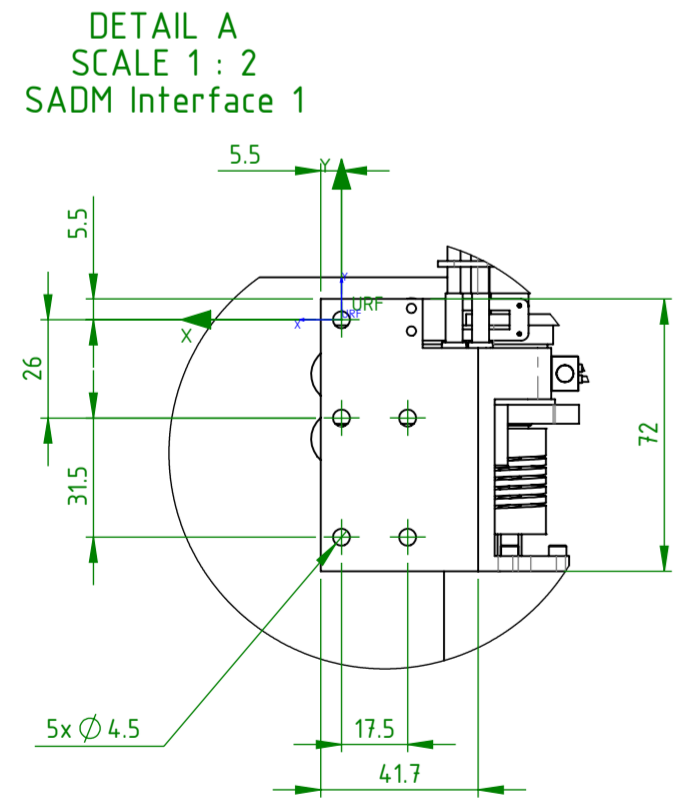
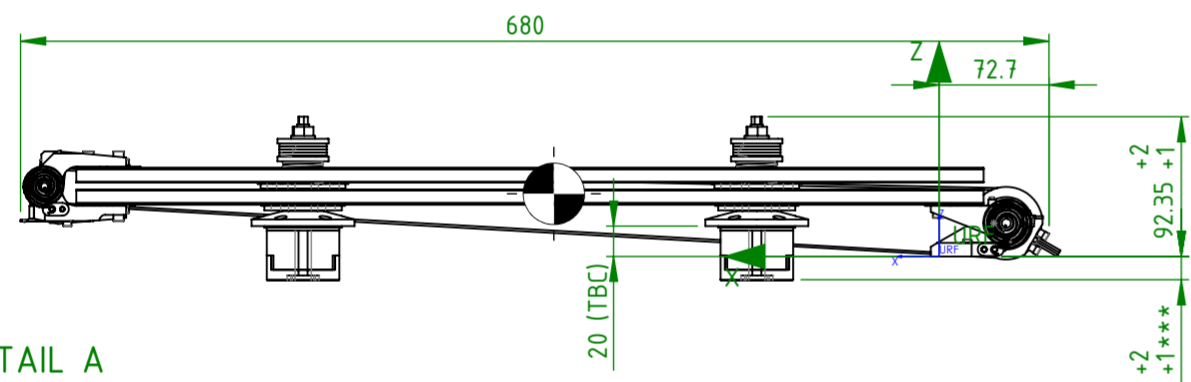
SADM Connectors				
No	Name	Function	Q-ty	Type
1	Main connector	8 wires HDRM 8 wires sensors		TBD

SADM Moments of Inertia at CoG wrt URF ( $\pm 10\%$ )					
Stowed					
lxx	184338 kg*mm <sup>2</sup>				
lxy	-10887 kg*mm <sup>2</sup>	lyy	220390 kg*mm <sup>2</sup>		
lxz	4824 kg*mm <sup>2</sup>	lyz	-680 kg*mm <sup>2</sup>	lzz	402032 kg*mm <sup>2</sup>
Deployed					
lxx	1065793272 kg*mm <sup>2</sup>				
lxy	123613 kg*mm <sup>2</sup>	lyy	930990188 kg*mm <sup>2</sup>		
lxz	-74022134 kg*mm <sup>2</sup>	lyz	-15639037 kg*mm <sup>2</sup>	lzz	231247697 kg*mm <sup>2</sup>

SADM Center of Gravity wrt URF ( $\pm 10\%$ )	
Stowed	
X	254.66 mm
Y	-285.06 mm
Z	41.43 mm
Deployed	
X	-33.68 mm
Y	-285.08 mm
Z	547.80 mm

SADM Attachment Pads Surface	
Structure material	Aluminium 7075-T651
Surface coating	Surftec 650/Hard adonising
Roughness [um]	Ra < 6.4
Flatness [mm]	$\pm 0.1$ per 100 mm
Total area [mm <sup>2</sup> ]	7420



General remarks:  
 1. Unit fasteners:  
 2 x 6 x M4 holes for HDRMs interface  
 9 x M4 holes for SADM interface  
 2. SADM total mass: 5360 g  $\pm 10\%$  (excluding harness and connector)  
 Total mass of panels: 3568 g  $\pm 10\%$   
 SADM mass w/o panels: 1792 g  $\pm 10\%$   
 General tolerances:  
 ISO 2768-mK (PN-EN ISO 22768-1:1999-mK)  
 PN-EN ISO 286-1:2011, PN-EN ISO 286-2:2010

URF - Unit Reference Frame  
 \* tolerances depend on solar panel manufacturing tolerances  
 \*\* same in both HDRMs interfaces  
 \*\*\* minium depth/diameter inside S/C

STATUS	NAME	DATE	SCALE
DRAWN	P. Torchała	26.10.2023	1:5
PROJECT:	ASSEMBLY NAME:		PROJECTION:
AM-SADM	Solar Array Deployment Mechanism_ICD		
	ASSEMBLY NUMBER & VERSION:		SIZE:
	AM-SADM-A-001_v05.01		A2
			PAGE:
			2/2