

D

C

B

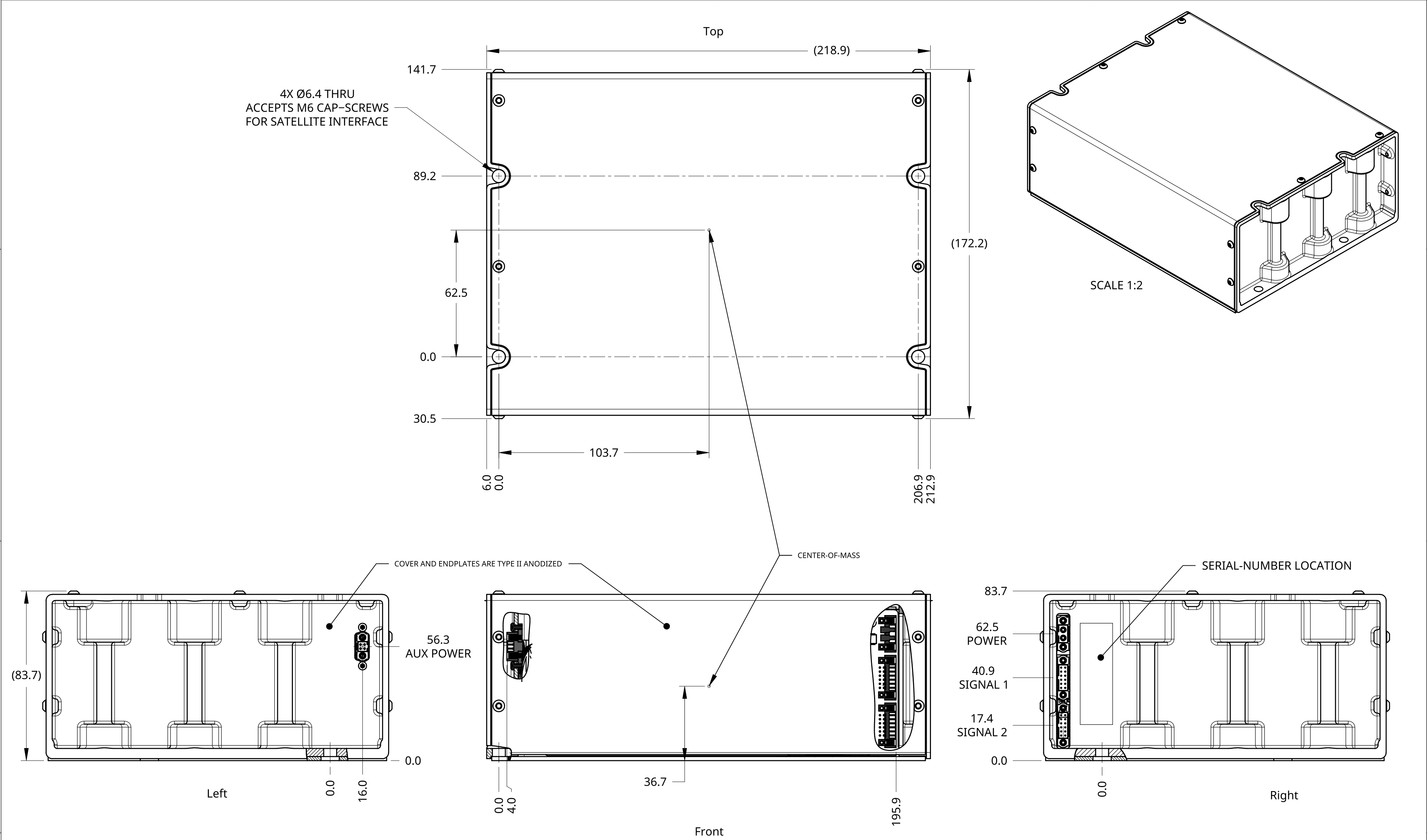
A

D

C

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A



MASS MOMENTS OF INERTIA (g mm²)	
Lxx	3.485E+07
Lxy	-2.905E+07
Lxz	-1.733E+07
Lyx	-2.905E+07
Lyy	7.226E+07
Lyz	-1.040E+07
Lzx	-1.733E+07
Lzy	-1.040E+07
Lzz	9.000E+07

- NOTES:**
- MOUNT BATTERY PACK ACCORDING TO APPROPRIATE THREAD-DEPTH AND TORQUE PER FASTENER AND MATING MATERIAL.
 - EXTERIOR SURFACES MATTE FINISH AND ANODIZED PER NASA/JSC PRC-5006, TYPE II, CLASS 2, COLOR BLACK.
 - PACK MASS IS A CONSERVATIVE ESTIMATE; PRECISE VALUE TBD.

OUTPUT CONNECTORS		
CONNECTOR	BOARD HEADER TYPE	MATING CONNECTOR TYPE
POWER	HARWIN M80-5000000M5-02-PM3-00-00	HARWIN M80-4000000F1-02-PF5-00-000
SIGNAL1	HARWIN M80-5401205	HARWIN M80-4801205
SIGNAL2	HARWIN M80-5401205	HARWIN M80-4801205
AUX POWER	HARWIN M80-5C10405MU	HARWIN M80-4800405

REVISIONS									
Revision	Revision description				Date approved		Approver		
01	SPECIFY EXTERNAL COATINGS; ELIMINATED EXTERNAL TIM				2026-06-10		Jay Manley		
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS TOLERANCE TO STANDARD: ISO 2768-MK ANGULAR ± 2° SURFACE FINISH √				DRAWN	NAME	DATE	MP SPACE PTY LTD		
				CHECKED	COREY	09/13/2025			
				APPROVED	JAY MANLEY	06/10/2026			
DO NOT SCALE DRAWING								TITLE	
BREAK ALL SHARP EDGES AND REMOVE BURRS								ASSEMBLY	
THIRD ANGLE PROJECTION								ICD	
SEE MATERIAL TABLE								PACK2-8S6P-21700	
								ICD-10000070-04-00	
								01	
								1 of 3	

4 3 2 1

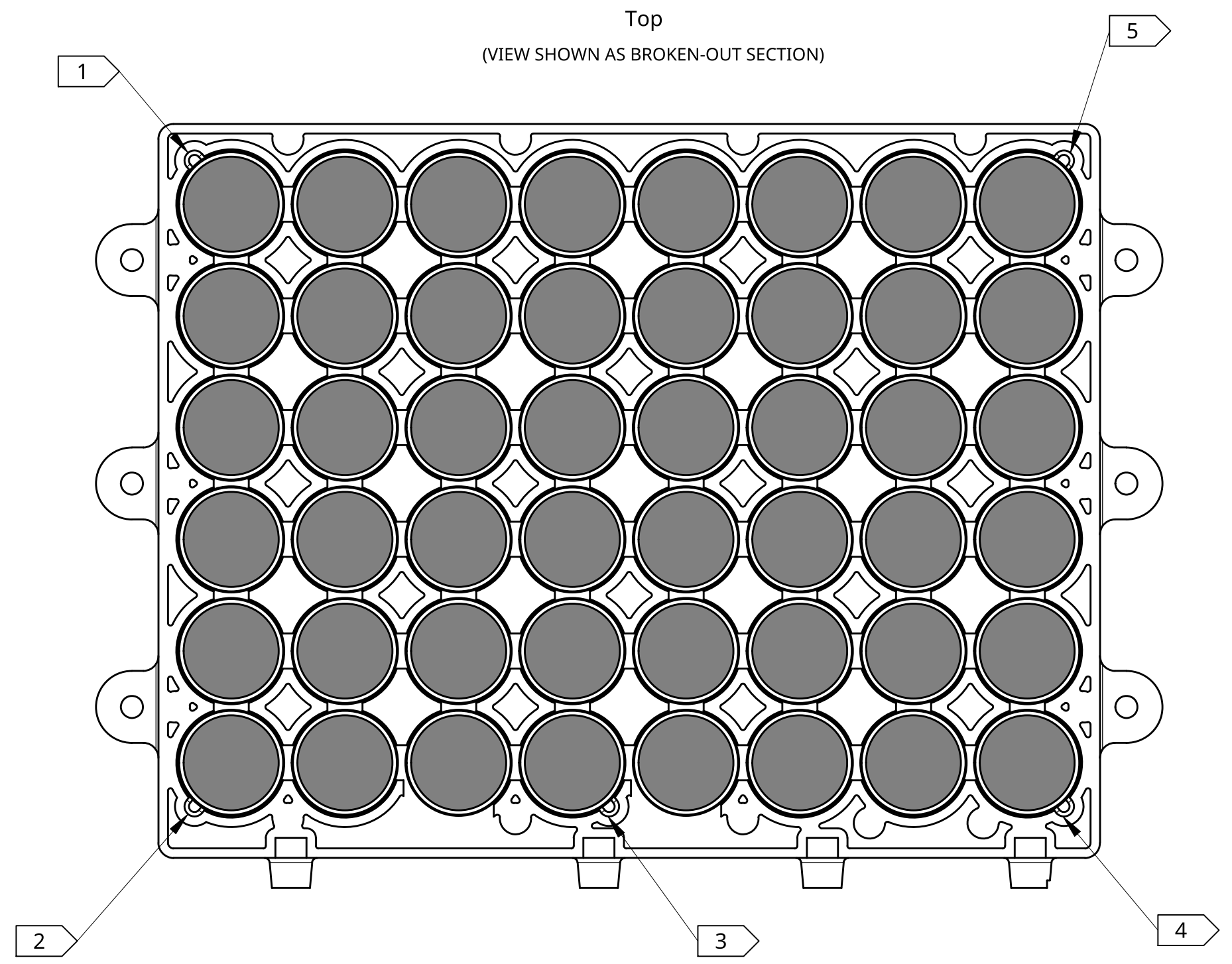
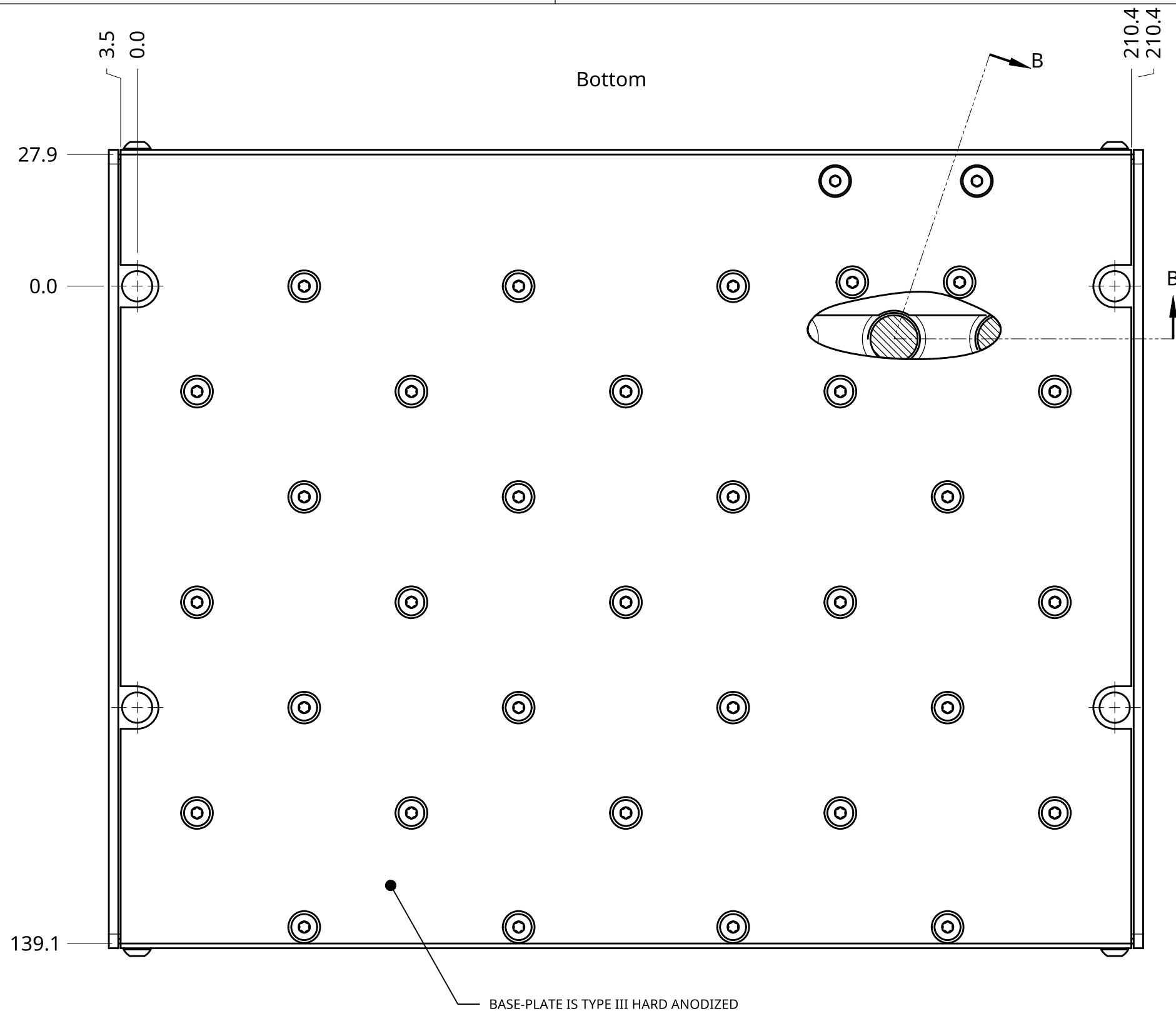
D D

C C

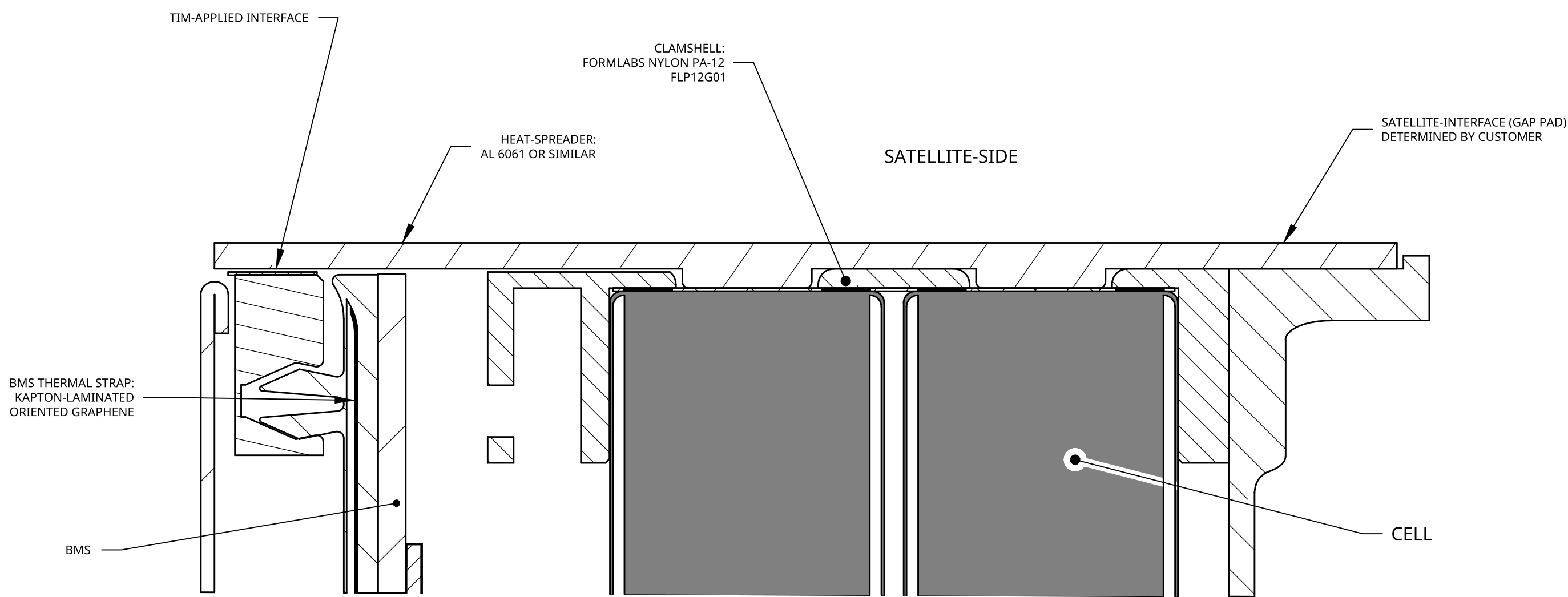
B B

A A

4 3 2 1



TEMPERATURE SENSE:
FLAGS INDICATE CELL AND APPROXIMATE
RADIAL LOCATION WHERE SENSED.



SECTION B - B
SCALE 3:1

REVISIONS			
See sheet 1			
MP SPACE PTY LTD			
TITLE			
ASSEMBLY			
ICD			
PACK2-8S6P-21700			
SIZE	DWG NO.	REV.	
C	ICD-10000070-04-00	01	
SCALE	1:1	WEIGHT	4495 G
		SHEET	2 of 3

D

D

C

C

B

B

A

A

Parameter	Value	Units	Notes
Cell & Interconnect Nominal Resistance	21.5	mΩ	Estimated terminal-to-terminal at 50 % SoC, 23 °C using 10 s DCIR pulse. Use +40% for worst-case modelling. Provided for energy / power efficiency modelling.
BMS Power-Path Resistance	4.2	mΩ	Includes FETs, sense shunt, and contactors. Adds linearly to cell/interconnect resistance. Use +20 % for worst-case. Provided for energy / power efficiency modelling. (Measured at Ambient Temperature)
Power Dissipation - Steady state	5.8	W	at 0.5C-rate continuous discharge
Power Dissipation - Max	49.4	W	38A during charge at 10 degree C.
Thermal Capacitance	4206	J/K	Estimated ±1% margin. Cells comprise 72% of thermal capacitance; additional 10% is well-coupled heat-spreader and endplates.
Heater Power	144	W	Heater is designed to deliver ~3 watts per cell of heater power at nominal pack voltage. Actual power varies with cell voltage and cell temp.
Current Transient Capability	38	A	Maximum discharge current permitted provided cell temperatures stay ≤ 55 °C. Spacecraft thermal model to verify pulse length vs. thermal capacity.

REVISIONS

See sheet 1

MP SPACE PTY LTD

TITLE

DATA TABLE
ICD
PACK2-8S6P-21700

SIZE

C

DWG NO.

ICD-10000070-04-00

REV.

01

SCALE

1:1

WEIGHT

SHEET

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