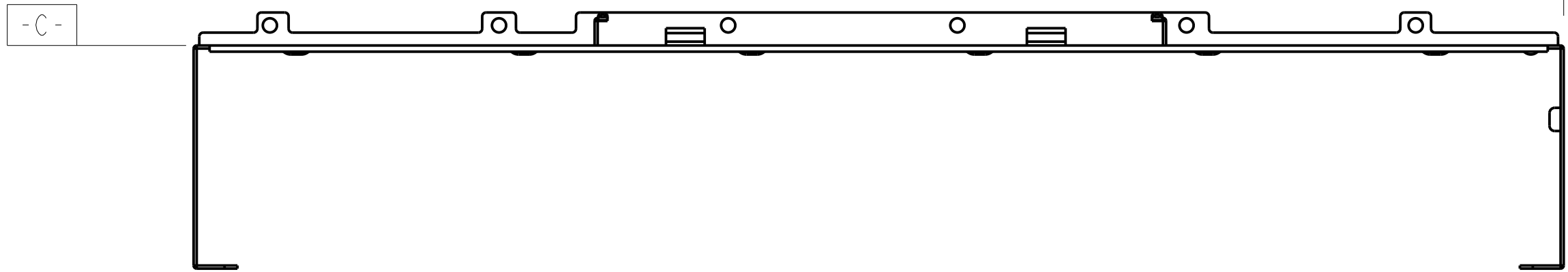


REV	ECO NO	DESCRIPTION	DRAWN	APVD DATE
A	-	INITIAL RELEASE.	PENSAR	11/6/13
B	-	DFM FEEDBACK CHANGES. PG 1, ZN A5: ADDED LABEL MARK	BROILLI	1/22/14
C	-	UPDATED NOTE 1, ADDED NOTE 18, MOD TOLS 18,19	N. TOLCHIN	5/15/14
D	-	INCREASED TOLERANCES ON SEVERAL DIMENSIONS. TITLE WAS: PSU CAGE BRACKET LES. ADDED FLAG NOTE 5 TO DIMS 44, 54, 55.	G. HAZEN	7/29/14

NOTES UNLESS OTHERWISE SPECIFIED:

1. INTERPRET DRAWING PER ASME Y14.100. DRAWING IS FOR INSPECTION PURPOSES ONLY. ACTUAL PART GEOMETRY IS CONTROLLED BY 3D CAD DATABASE.
2. MATERIAL: HOT-DIPPED-GALV-STEEL-SGCC
THICKNESS: 1.200±0.05mm
HARDNESS: 50-60 ROCKWELL B
SPECIFICATION: JIS G3302
PLATING/COATING: ZCS(A)X, ZINC COATING MASS: Z08, MINIMIZED SPANGLE,
SKIN PASSED, CHROMATE (ANTI-FINGER PRINT) TREATED, UNOILED
MATERIAL SHALL CONTAIN 0.02% MIN TO 0.15% MAX CARBON.
3. PART WEIGHT: (1389.174 GRAMS), (49.010 OZ)
4. PART SHALL BE CLEAN AND FREE OF CONTAMINANTS, METAL FLAKES, AND OIL.
5. AS DIMENSIONED OR Ø3.60. STANDARD TOLERANCE APPLIES.
6. ACCESSIBLE SHARP EDGES NOT PERMITTED. BURR SHALL BE TOWARDS SURFACE INDICATED
MAX BURR SIZE TO BE 10% OF MATERIAL THICKNESS AND IN COMPLIANCE WITH
UL1439 STANDARD ON ALL ACCESSIBLE EDGES.

18. DIMENSIONS AND TOLERANCES NOT MARKED CRITICAL, TOOLING OR PROCESS SHALL BE CONSIDERED REFERENCE DIMENSIONS. ONLY CRITICAL, TOOLING AND PROCESS DIMENSIONS ARE REQUIRED TO BE COMPLIANT FOR FAI. ADDITIONAL MEASUREMENTS REQUIRED AT ENGINEERING REQUEST.



7. REFERENCE THE LATEST REVISION OF THE FOLLOWING DOCUMENTS FOR INSPECTION AND ACCEPTANCE CRITERIA:
 - A. MICROSOFT METAL QUALIFICATION PROCESS (D00435)
 - B. MICROSOFT SHEET METAL PART WORKMANSHIP STANDARDS (D00034)
 - C. MICROSOFT RESTRICTED SUBSTANCES FOR HARDWARE PRODUCTS (H00594)
 - D. MICROSOFT RESTRICTED SUBSTANCES CONTROL SYSTEM (H00642)
 - E. MICROSOFT PAINTED PRODUCT WORKMANSHIP AND TEST SPECIFICATION (H00388)
 - F. MICROSOFT SYSTEM EMC DESIGN RULES AND GUIDELINES (D00755)
 - G. MICROSOFT METAL STAMPING DIE MINIMUM TOOL GUIDELINES (D02520)
 - H. MICROSOFT METAL STAMPING DIE MAINTENANCE GUIDELINE (D02522)
8. THE FOLLOWING INFORMATION SHALL BE MARKED IN A PERMANENT AND LEGIBLE MANNER, LOCATED WHERE INDICATED. CHARACTERS SHALL BE A MINIMUM OF 3.0mm TALL.
 - A. MICROSOFT PART NUMBER
 - B. CURRENT REVISION
 - C. MANUFACTURING DATE CODE (DD MMM YYYY)
 - D. SUPPLIER ID (SUPPLIER ID LOCATION)
9. VENDOR SHALL SUPPLY A CERTIFICATE OF REGULATORY COMPLIANCE WITH EACH SHIPMENT THAT INCLUDES THE FOLLOWING INFORMATION:
 - A. NAME OF THE SUPPLIER
 - B. PRODUCTION DATE
 - C. MATERIAL MANUFACTURER'S NAME OR TRADE NAME AND MATERIAL DESIGNATION
 - D. NAME OF THE COMPANY BUYING THE PRODUCT
 - E. PART NUMBER AND REVISION
 - F. PURCHASE ORDER NUMBER
 - G. SHIPMENT DATE
 - H. QUANTITY OF PARTS SHIPPED
 - I. MANUFACTURER REPRESENTATIVE'S NAME, SIGNATURE OR FUNCTION TO ATTEST TO THE ACCURACY OF THE INFORMATION.

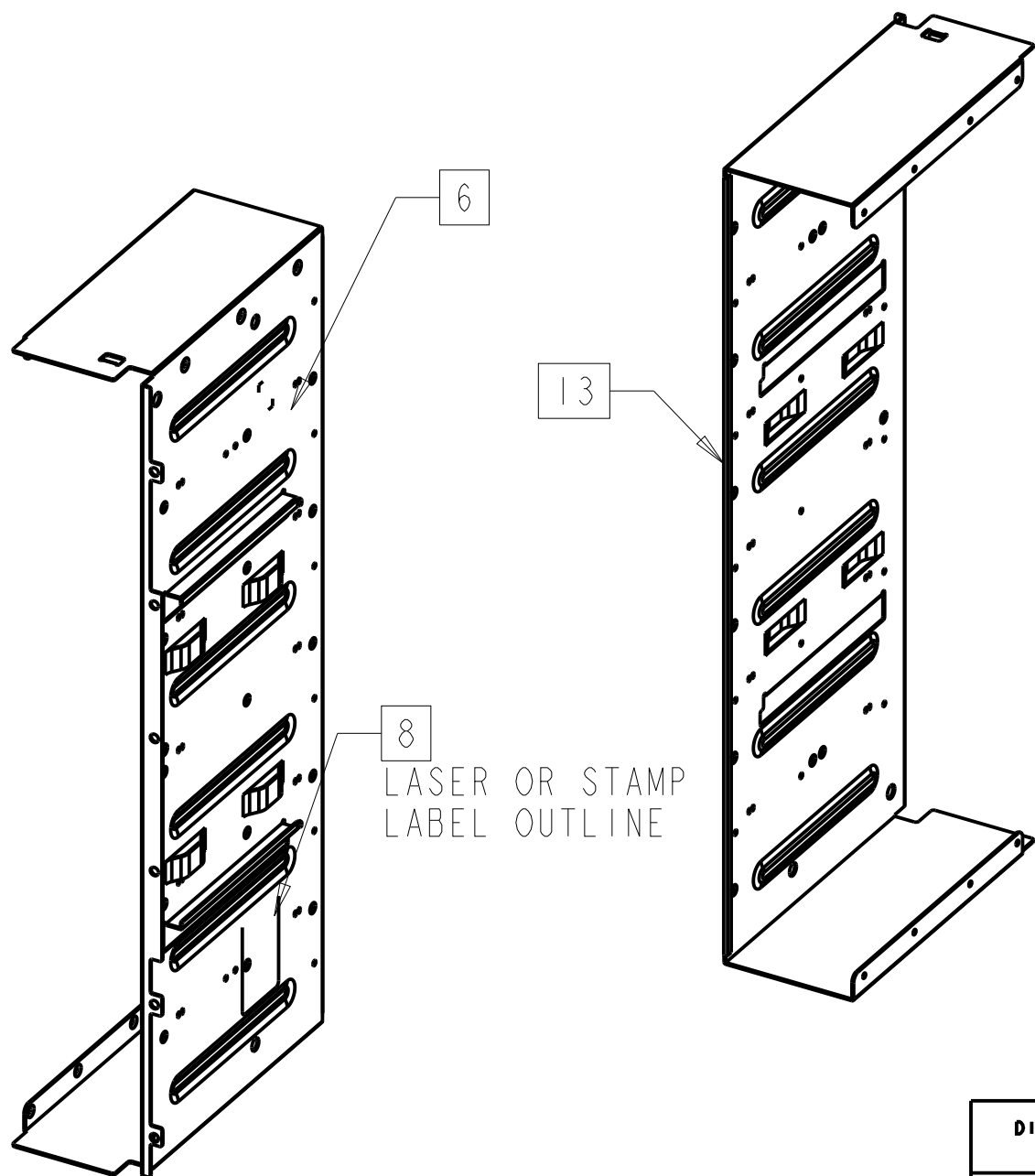
10. PART TOOLING IS THE PROPERTY OF MICROSOFT AND SHALL BE PERMANENTLY MARKED WITH "PROPERTY OF MICROSOFT", THE PART NUMBER, AND THE TOOL ASSET NUMBER.
11. FAI IQC/OQC FIXTURES REQUIRED AND MUST BE APPROVED BY MICROSOFT ENGINEERING. FREE STATE INSPECTION CONDITIONS REQUIRED FOR FAI. ON-GOING PROCESS CONTROL INSPECTIONS SHALL BE DONE IN FREE STATE.
12. PARTS SHALL BE PACKAGED FOR SUPPLIER INTERNAL DISTRIBUTION.
13. COIN EDGES WHERE INDICATED TO REMOVE SHARP EDGES. BREAKS IN COINING FOR CARRYING WEBS REQUIRE APPROVAL OF MICROSOFT ENGINEERING.
14. BEND RADII AND RELIEFS SHALL COMPLY TO ELECTRONIC DATABASE.
15. CARRY POINTS SHALL BE RECESSED BY 0.25mm MAX. TOOLING HOLES OR OTHER DEVIATIONS REQUIRE APPROVAL BY MICROSOFT ENGINEERING.

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16. TOLERANCE KEY FOR NON-DIMENSIONED ITEMS:
HOLE DIAMETER: PUNCH DIRECTION ± 0.08
CHAMFERED HOLE DIAMETER: BURR SIDE ± 0.15
HOLE TO HOLE: ± 0.13
HOLE TO EDGE: ± 0.13
EDGE TO EDGE: ± 0.13
HOLE TO BEND: ± 0.13
EDGE TO BEND: ± 0.21
BEND TO BEND: ± 0.26
EMBOSS DEPTH: ± 0.26
ANGLE: $\pm 1.0^\circ$





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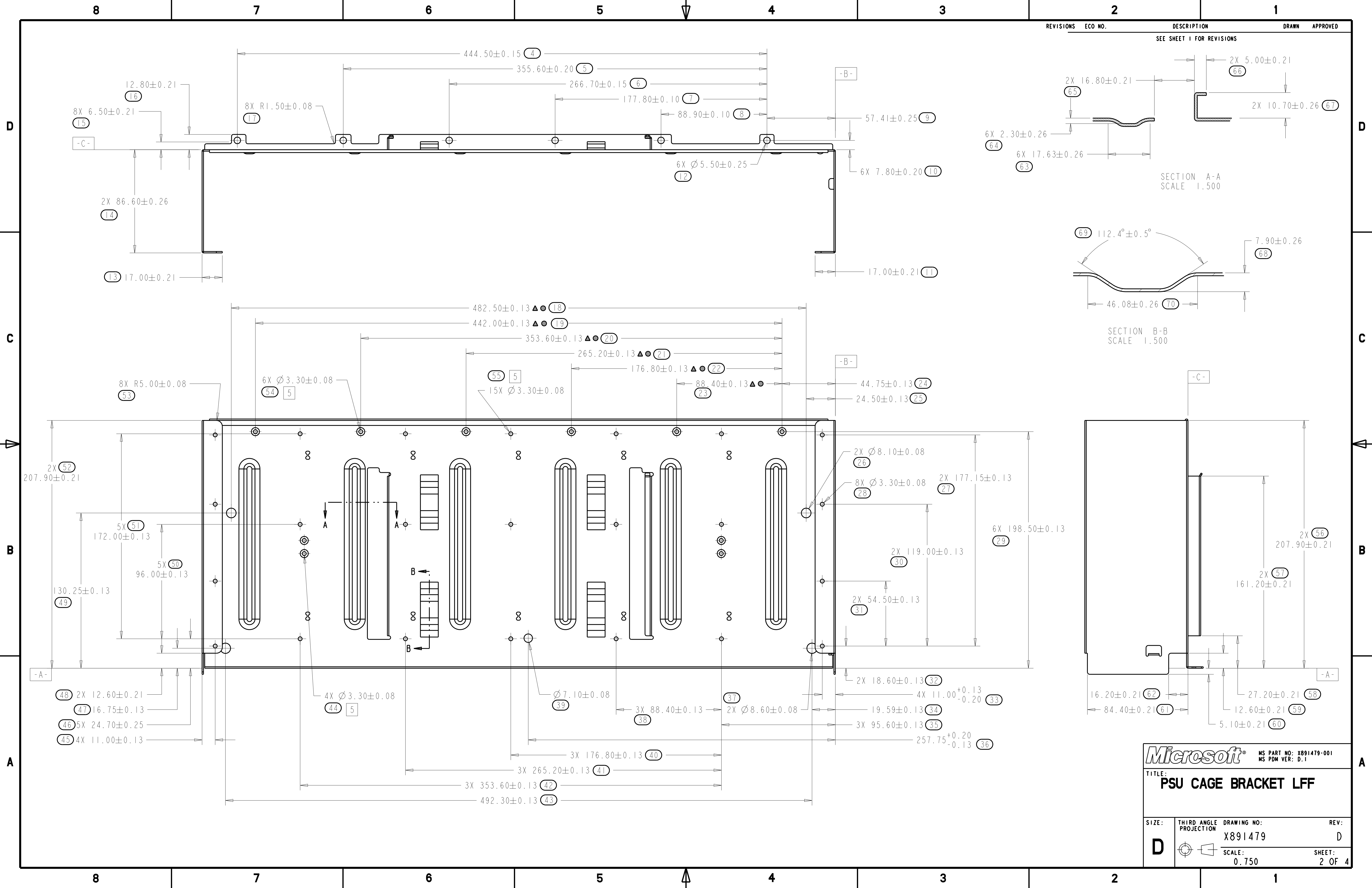
17. VENDOR MODIFICATION OF HOLE FEATURE SIZING AND TOLERANCES FOR PRESS-IN HARDWARE IS ALLOWED FOR VENDOR SPECIFIC HARDWARE PER MICROSOFT APPROVAL.



|                               |           |     |      |                                                                                                                                                                                                                                                                  |                     |
|-------------------------------|-----------|-----|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| DIMENSIONS ARE IN MILLIMETERS |           |     |      | -                                                                                                                                                                                                                                                                | -                   |
| GENERAL TOLERANCES            |           |     |      | SEE NOTES                                                                                                                                                                                                                                                        | SEE NOTES           |
|                               | X         | X.X | X.XX | DOCUMENT NO                                                                                                                                                                                                                                                      | GENERAL DESCRIPTION |
| STD. DIM                      | SEE NOTES |     |      | APPLICABLE SPECIFICATION TABLE                                                                                                                                                                                                                                   |                     |
| ANGLE                         |           |     |      | THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN ARE PROPRIETARY TO MICROSOFT CORPORATION AND SHALL NOT BE USED BY, OR DISCLOSED IN WHOLE OR IN PART TO ANYONE OUTSIDE OF MICROSOFT CORPORATION WITHOUT THE PRIOR WRITTEN PERMISSION OF MICROSOFT CORPORATION. |                     |
| RADIUS                        |           |     |      |                                                                                                                                                                                                                                                                  |                     |

|          |         |
|----------|---------|
| DRAWN    | DATE    |
| PENSAR   | 11/4/13 |
| CHECKED  | DATE    |
| -        | -       |
| ENGINEER | DATE    |
| BRUBEN   | 11/4/13 |
| ENGINEER | DATE    |
| -        | -       |
| COG ENGR | DATE    |
| -        | -       |
| MFG ENGR | DATE    |
| -        | -       |
| TOOLING  | DATE    |
| -        | -       |
| QUALITY  | DATE    |
| -        | -       |
| RELEASED | DATE    |
| -        | -       |

|                                                                                                         |                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                          |                                                                                          |                                                                                                                        |                                                                                    |                                                                                          |                                                          |  |                                                                              |  |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------|--|------------------------------------------------------------------------------|--|
|                    |                                                                                                                        | MS PART NO: X891479-001<br>MS PDM VER: D.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                          |                                                                                          |                                                                                                                        |                                                                                    |                                                                                          |                                                          |  |                                                                              |  |
| UNLESS OTHERWISE SPECIFIED<br>DIMENSIONS ARE: MILLIMETERS<br>TOLERANCES ARE:<br><br>SEE TOLERANCE BLOCK |                                                                                                                        | TITLE:<br><h2 style="margin: 0;">PSU CAGE BRACKET LFF</h2>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                          |                                                                                          |                                                                                                                        |                                                                                    |                                                                                          |                                                          |  |                                                                              |  |
| DO NOT SCALE DRAWING                                                                                    |                                                                                                                        | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%; vertical-align: top;">           SIZE:<br/><br/> <div style="font-size: 2em; font-weight: bold; text-align: center;">D</div> </td> <td style="width: 15%; vertical-align: top;">           THIRD ANGLE<br/>           PROJECTION<br/><br/>  </td> <td style="width: 40%; vertical-align: top;">           DRAWING NO:<br/><br/> <div style="font-size: 1.5em; font-weight: bold;">X891479</div> </td> <td style="width: 30%; vertical-align: top;">           REV:<br/><br/> <div style="font-size: 1.5em; font-weight: bold; text-align: right;">D</div> </td> </tr> <tr> <td colspan="2" style="vertical-align: top;">           SCALE:<br/><br/> <div style="font-size: 1.2em;">0.500</div> </td> <td colspan="2" style="vertical-align: top;">           SHEET:<br/><br/> <div style="text-align: right; font-size: 1.2em;">1 OF 4</div> </td> </tr> </table> |                                                                                          | SIZE:<br><br><div style="font-size: 2em; font-weight: bold; text-align: center;">D</div> | THIRD ANGLE<br>PROJECTION<br><br> | DRAWING NO:<br><br><div style="font-size: 1.5em; font-weight: bold;">X891479</div> | REV:<br><br><div style="font-size: 1.5em; font-weight: bold; text-align: right;">D</div> | SCALE:<br><br><div style="font-size: 1.2em;">0.500</div> |  | SHEET:<br><br><div style="text-align: right; font-size: 1.2em;">1 OF 4</div> |  |
| SIZE:<br><br><div style="font-size: 2em; font-weight: bold; text-align: center;">D</div>                | THIRD ANGLE<br>PROJECTION<br><br> | DRAWING NO:<br><br><div style="font-size: 1.5em; font-weight: bold;">X891479</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | REV:<br><br><div style="font-size: 1.5em; font-weight: bold; text-align: right;">D</div> |                                                                                          |                                                                                                                        |                                                                                    |                                                                                          |                                                          |  |                                                                              |  |
| SCALE:<br><br><div style="font-size: 1.2em;">0.500</div>                                                |                                                                                                                        | SHEET:<br><br><div style="text-align: right; font-size: 1.2em;">1 OF 4</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                          |                                                                                          |                                                                                                                        |                                                                                    |                                                                                          |                                                          |  |                                                                              |  |



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REVISIONS

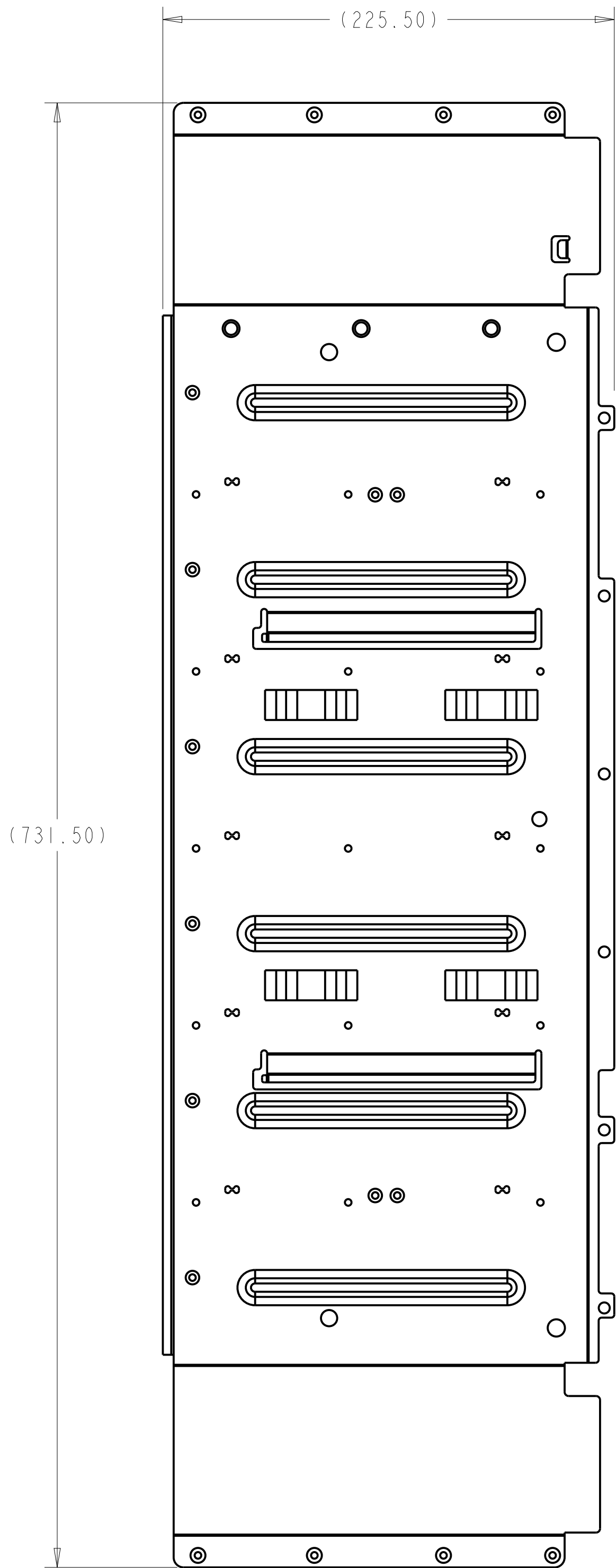
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DESCRIPTION

DRAWN

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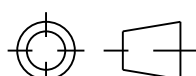
SEE SHEET 1 FOR REVISIONS

**Microsoft**MS PART NO: X891479-001  
MS PDM VER: D.1

TITLE:

**PSU CAGE BRACKET LFF**

SIZE:

**D**THIRD ANGLE  
PROJECTION

DRAWING NO:

X891479

SCALE:  
0.500

REV:

D

SHEET:

3 OF 4

