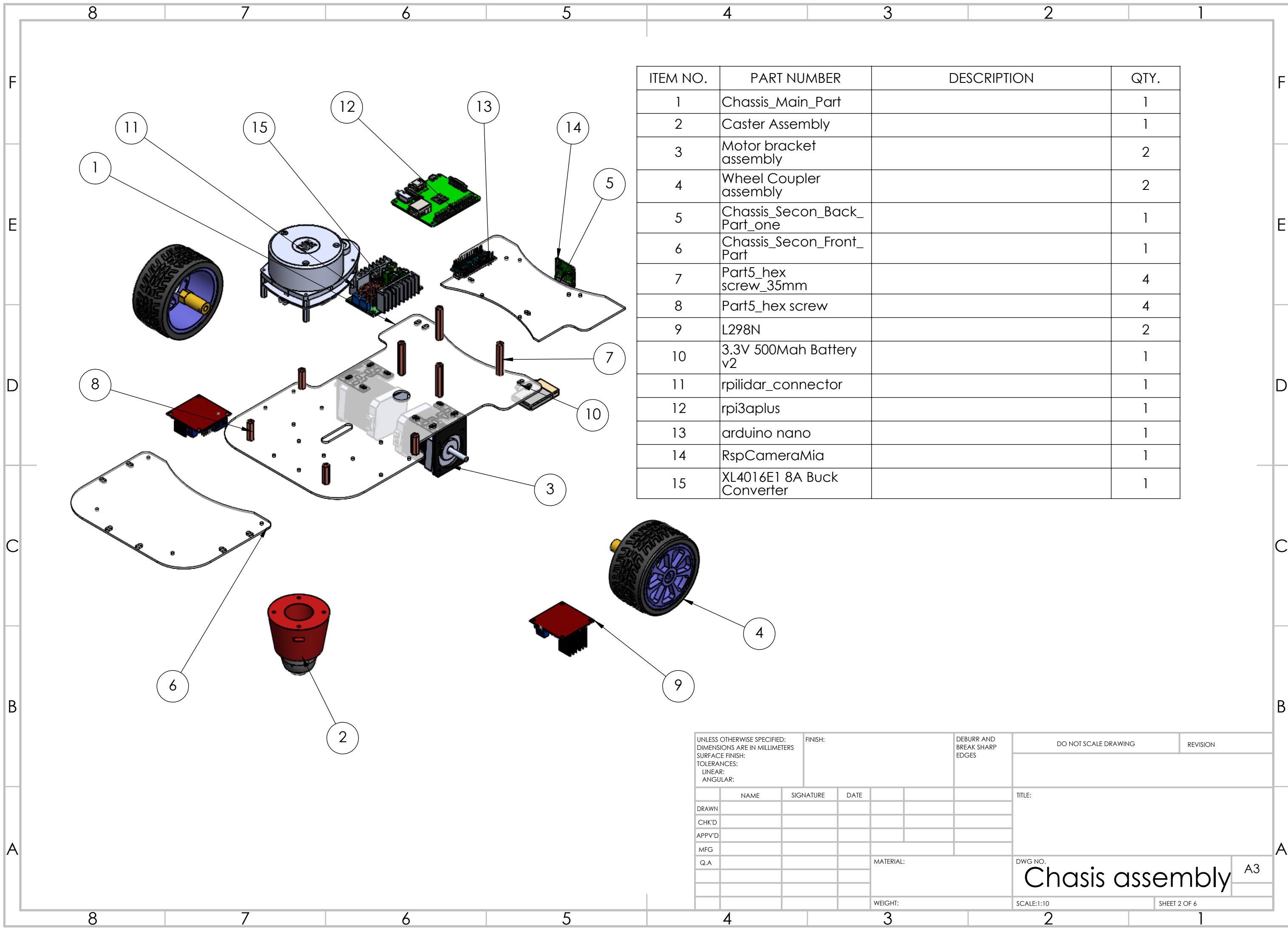
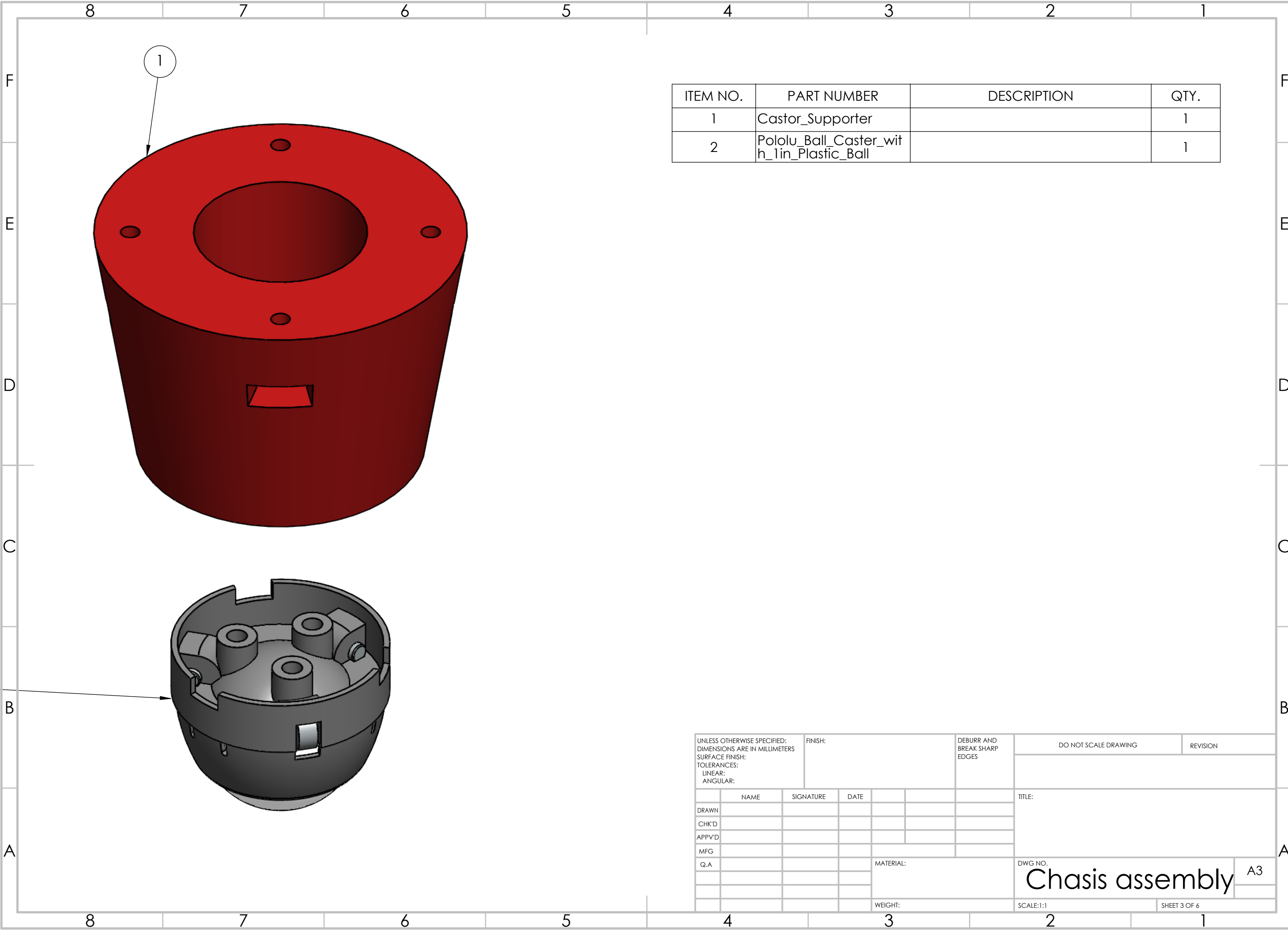


|   |      |           |      |                                    |  |                                |  |   |  |
|---|------|-----------|------|------------------------------------|--|--------------------------------|--|---|--|
| UNLESS OTHERWISE SPECIFIED:<br>DIMENSIONS ARE IN MILLIMETERS<br>SURFACE FINISH:<br>TOLERANCES:<br>LINEAR:<br>ANGULAR: |      | FINISH:   |      | DEBURR AND<br>BREAK SHARP<br>EDGES |  | DO NOT SCALE DRAWING           |  | REVISION  |  |
|   |      |           |      |                                    |  | TITLE:<br><br><br><br><br><br> |  |   |  |
|   | NAME | SIGNATURE | DATE |                                    |  |                                |  |   |  |
| DRAWN   |      |           |      |                                    |  |                                |  |   |  |
| CHK'D   |      |           |      |                                    |  |                                |  |   |  |
| APP'VD  |      |           |      |                                    |  |                                |  |   |  |
| MFG   |      |           |      |                                    |  |                                |  |   |  |
| Q.A   |      |           |      | MATERIAL:                          |  | DWG NO.                        |  | A3<br><div style="font-size: 2em; font-weight: bold;">Chasis assembly</div> |  |
|   |      |           |      |                                    |  |                                |  |   |  |
|   |      |           |      |                                    |  |                                |  |   |  |
|   |      |           |      | WEIGHT:                            |  | SCALE:1:10                     |  | SHEET 1 OF 6  |  |



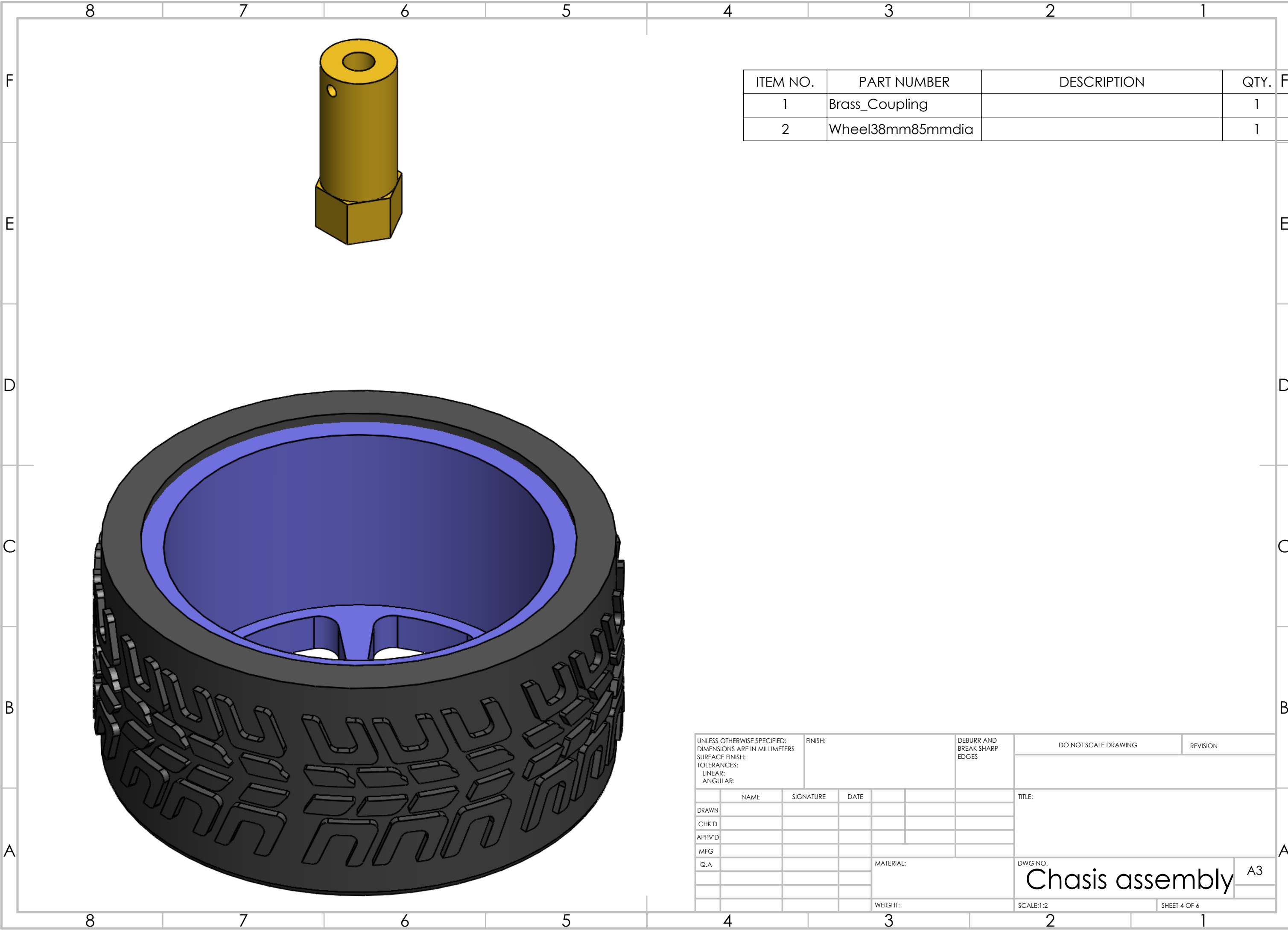
| ITEM NO. | PART NUMBER                 | DESCRIPTION | QTY. |
|----------|-----------------------------|-------------|------|
| 1        | Chassis_Main_Part           |             | 1    |
| 2        | Caster Assembly             |             | 1    |
| 3        | Motor bracket assembly      |             | 2    |
| 4        | Wheel Coupler assembly      |             | 2    |
| 5        | Chassis_Secon_Back_Part_one |             | 1    |
| 6        | Chassis_Secon_Front_Part    |             | 1    |
| 7        | Part5_hex screw_35mm        |             | 4    |
| 8        | Part5_hex screw             |             | 4    |
| 9        | L298N                       |             | 2    |
| 10       | 3.3V 500Mah Battery v2      |             | 1    |
| 11       | rpilidar_connector          |             | 1    |
| 12       | rpi3aplus                   |             | 1    |
| 13       | arduino nano                |             | 1    |
| 14       | RspCameraMia                |             | 1    |
| 15       | XL4016E1 8A Buck Converter  |             | 1    |

|   |  |  |  |         |  |                                    |  |                      |  |                 |  |
|---|--|--|--|---------|--|------------------------------------|--|----------------------|--|-----------------|--|
| UNLESS OTHERWISE SPECIFIED:<br>DIMENSIONS ARE IN MILLIMETERS<br>SURFACE FINISH:<br>TOLERANCES:<br>LINEAR:<br>ANGULAR: |  |  |  | FINISH: |  | DEBURR AND<br>BREAK SHARP<br>EDGES |  | DO NOT SCALE DRAWING |  | REVISION        |  |
| DRAWN   |  |  |  | NAME    |  | SIGNATURE                          |  | DATE                 |  | TITLE:          |  |
| CHK'D   |  |  |  |         |  |                                    |  |                      |  |                 |  |
| APPV'D  |  |  |  |         |  |                                    |  |                      |  |                 |  |
| MFG   |  |  |  |         |  |                                    |  |                      |  |                 |  |
| Q.A   |  |  |  |         |  |                                    |  |                      |  |                 |  |
|   |  |  |  |         |  |                                    |  | MATERIAL:            |  | DWG NO.         |  |
|   |  |  |  |         |  |                                    |  |                      |  | Chasis assembly |  |
|   |  |  |  |         |  |                                    |  | WEIGHT:              |  | SCALE:1:10      |  |
|   |  |  |  |         |  |                                    |  |                      |  | SHEET 2 OF 6    |  |
|   |  |  |  |         |  |                                    |  |                      |  | A3              |  |



| ITEM NO. | PART NUMBER                                  | DESCRIPTION | QTY. |
|----------|--|-------------|------|
| 1        | Castor_Supporter                             |             | 1    |
| 2        | Pololu_Ball_Caster_wit<br>h_1in_Plastic_Ball |             | 1    |

|   |      |           |      |         |  |                                    |                      |          |
|---|------|-----------|------|---------|--|------------------------------------|----------------------|----------|
| UNLESS OTHERWISE SPECIFIED:<br>DIMENSIONS ARE IN MILLIMETERS<br>SURFACE FINISH:<br>TOLERANCES:<br>LINEAR:<br>ANGULAR: |      |           |      | FINISH: |  | DEBURR AND<br>BREAK SHARP<br>EDGES | DO NOT SCALE DRAWING | REVISION |
|   |      |           |      |         |  |                                    |                      |          |
|   | NAME | SIGNATURE | DATE |         |  |                                    | TITLE:               |          |
| DRAWN   |      |           |      |         |  |                                    |                      |          |
| CHK'D   |      |           |      |         |  |                                    |                      |          |
| APPV'D  |      |           |      |         |  |                                    |                      |          |
| MFG   |      |           |      |         |  |                                    |                      |          |
| Q.A   |      |           |      |         |  |                                    | DWG NO.              |          |
|   |      |           |      |         |  |                                    |                      |          |
|   |      |           |      |         |  |                                    | Chasis assembly      |          |
|   |      |           |      |         |  |                                    |                      |          |
|   |      |           |      |         |  |                                    | SCALE:1:1            |          |
|   |      |           |      |         |  |                                    | SHEET 3 OF 6         |          |
|   |      |           |      |         |  |                                    | A3                   |          |

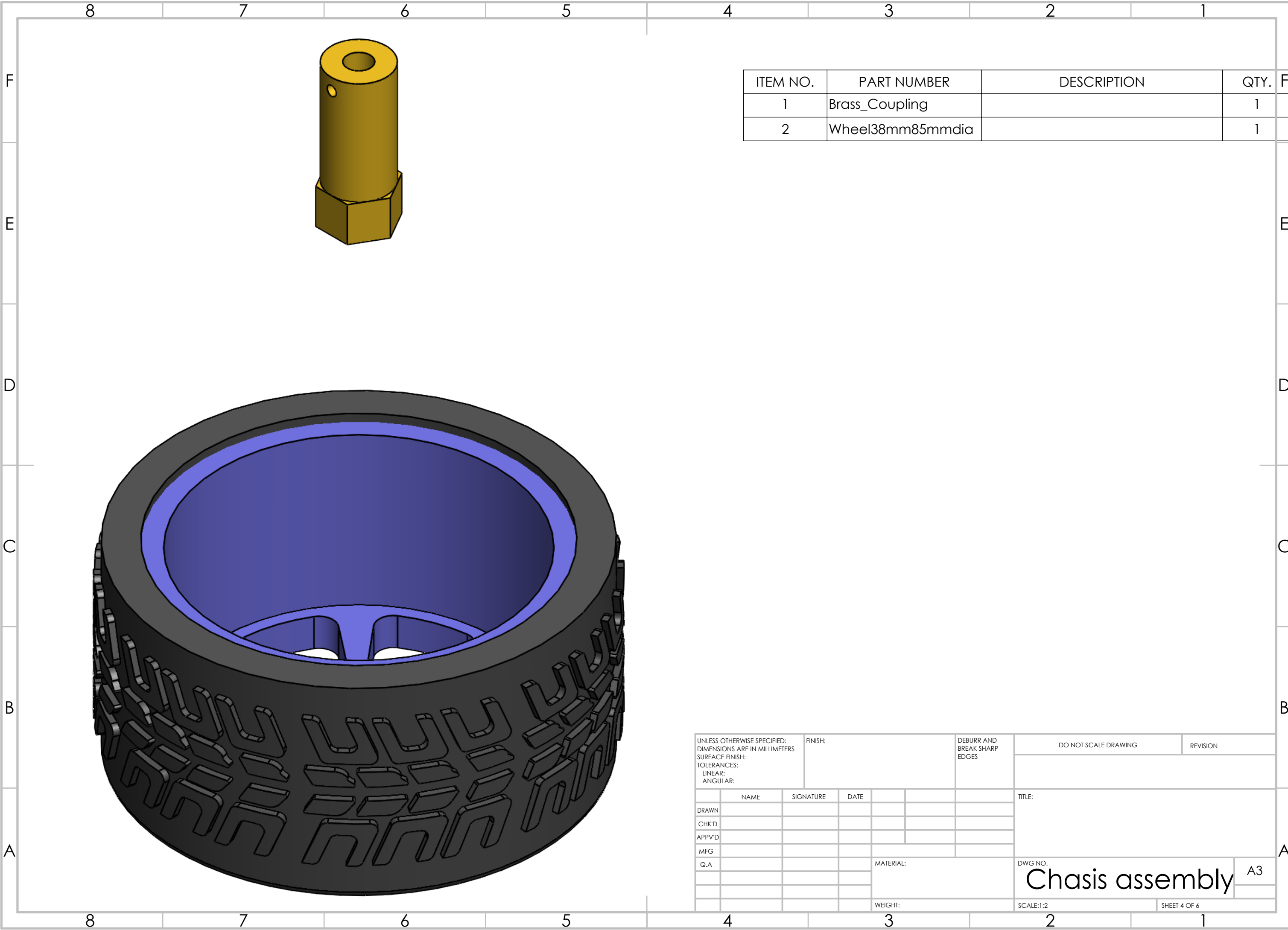


**BOM Table:**

| ITEM NO. | PART NUMBER      | DESCRIPTION | QTY. |
|----------|------------------|-------------|------|
| 1        | Brass_Coupling   |             | 1    |
| 2        | Wheel38mm85mmdia |             | 1    |

**Title Block:**

|   |      |           |      |  |  |           |  |                              |  |                      |  |          |    |
|---|------|-----------|------|--|--|-----------|--|------------------------------|--|----------------------|--|----------|----|
| UNLESS OTHERWISE SPECIFIED:<br>DIMENSIONS ARE IN MILLIMETERS<br>SURFACE FINISH:<br>TOLERANCES:<br>LINEAR:<br>ANGULAR: |      |           |      |  |  | FINISH:   |  | DEBURR AND BREAK SHARP EDGES |  | DO NOT SCALE DRAWING |  | REVISION |    |
| DRAWN   | NAME | SIGNATURE | DATE |  |  | TITLE:    |  |                              |  |                      |  |          |    |
| CHK'D   |      |           |      |  |  |           |  |                              |  |                      |  |          |    |
| APPV'D  |      |           |      |  |  |           |  |                              |  |                      |  |          |    |
| MFG   |      |           |      |  |  |           |  |                              |  |                      |  |          |    |
| Q.A   |      |           |      |  |  | MATERIAL: |  | DWG NO.                      |  | Chasis assembly      |  |          | A3 |
|   |      |           |      |  |  | WEIGHT:   |  | SCALE:1:2                    |  | SHEET 4 OF 6         |  |          |    |



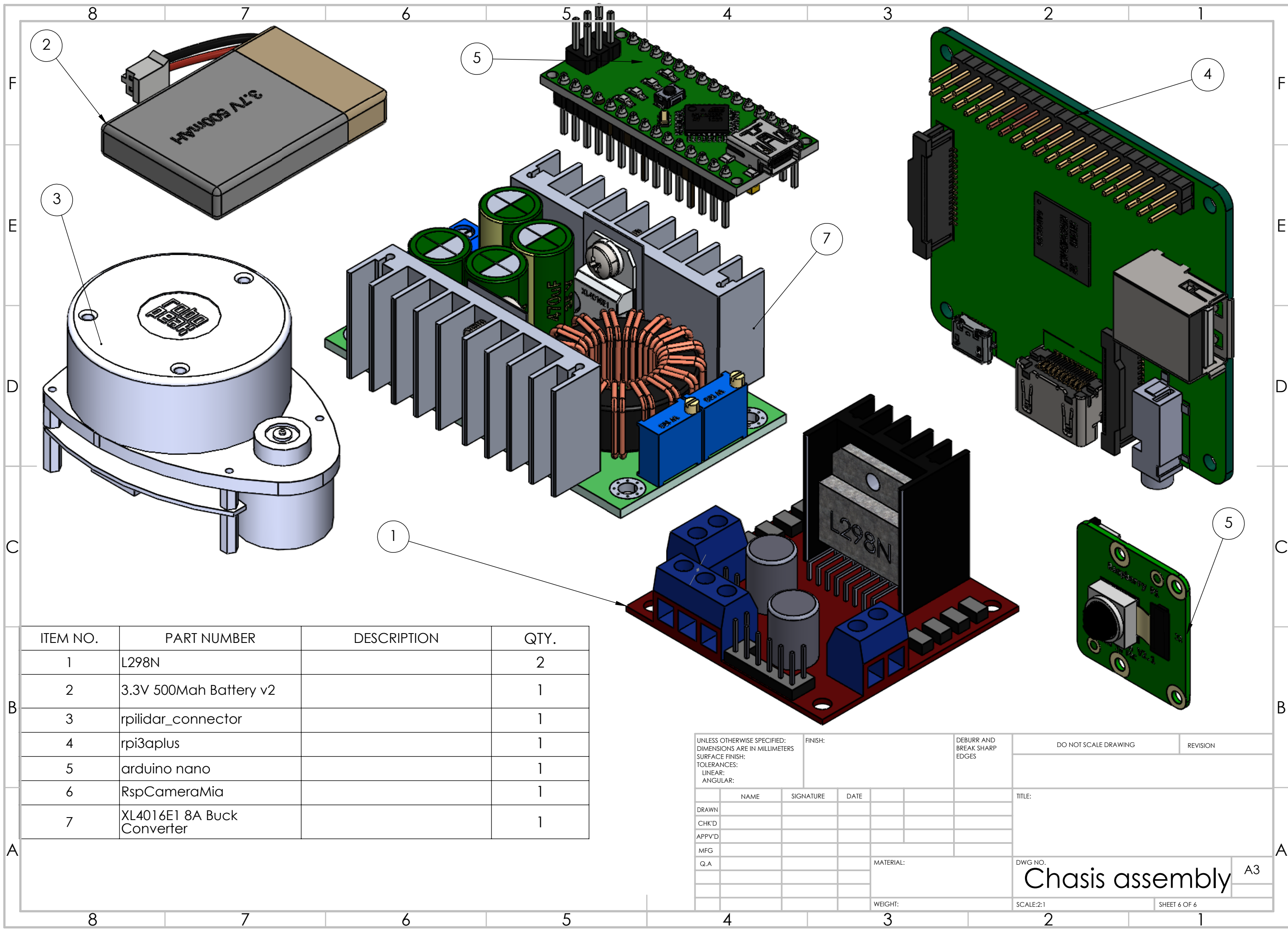
The image displays a 3D CAD model of a chasis assembly. The main component is a dark gray, cylindrical wheel with a complex, treaded outer surface. The interior of the wheel is a light blue color. A brass coupling, a small yellow cylindrical part with a hexagonal base, is positioned above the wheel. The model is set against a white background with a grid. The grid has numerical labels 1 through 8 along the top and bottom edges, and alphabetical labels A through F along the left and right edges.

| ITEM NO. | PART NUMBER      | DESCRIPTION | QTY. |
|----------|------------------|-------------|------|
| 1        | Brass_Coupling   |             | 1    |
| 2        | Wheel38mm85mmdia |             | 1    |

| UNLESS OTHERWISE SPECIFIED:<br>DIMENSIONS ARE IN MILLIMETERS<br>SURFACE FINISH:<br>TOLERANCES:<br>LINEAR:<br>ANGULAR: |  | FINISH: |           | DEBURR AND<br>BREAK SHARP<br>EDGES |  | DO NOT SCALE DRAWING |                            | REVISION |              |  |
|---|--|---------|-----------|------------------------------------|--|----------------------|----------------------------|----------|--------------|--|
| DRAWN   |  | NAME    | SIGNATURE | DATE                               |  |                      | TITLE:                     |          |              |  |
| CHK'D   |  |         |           |                                    |  |                      | DWG NO. Chasis assembly A3 |          |              |  |
| APPV'D  |  |         |           |                                    |  |                      |                            |          |              |  |
| MFG   |  |         |           |                                    |  |                      |                            |          |              |  |
| Q.A   |  |         |           |                                    |  |                      |                            |          |              |  |
|   |  |         |           |                                    |  |                      | WEIGHT:                    |          | SCALE:1:2    |  |
|   |  |         |           |                                    |  |                      |                            |          | SHEET 4 OF 6 |  |







| ITEM NO. | PART NUMBER                | DESCRIPTION | QTY. |
|----------|----------------------------|-------------|------|
| 1        | L298N                      |             | 2    |
| 2        | 3.3V 500Mah Battery v2     |             | 1    |
| 3        | rpi lidar_connector        |             | 1    |
| 4        | rpi3aplus                  |             | 1    |
| 5        | arduino nano               |             | 1    |
| 6        | RspCameraMia               |             | 1    |
| 7        | XL4016E1 8A Buck Converter |             | 1    |

|   |  |         |           |                                    |           |                      |           |          |  |
|---|--|---------|-----------|------------------------------------|-----------|----------------------|-----------|----------|--|
| UNLESS OTHERWISE SPECIFIED:<br>DIMENSIONS ARE IN MILLIMETERS<br>SURFACE FINISH:<br>TOLERANCES:<br>LINEAR:<br>ANGULAR: |  | FINISH: |           | DEBURR AND<br>BREAK SHARP<br>EDGES |           | DO NOT SCALE DRAWING |           | REVISION |  |
|   |  |         |           |                                    |           |                      |           |          |  |
| DRAWN   |  | NAME    | SIGNATURE | DATE                               |           |                      | TITLE:    |          | DWG. NO.<br><b>Chasis assembly</b><br>A3 |
| CHK'D   |  |         |           |                                    |           |                      |           |          |  |
| APPV'D  |  |         |           |                                    |           |                      |           |          |  |
| MFG   |  |         |           |                                    |           |                      |           |          |  |
| Q.A   |  |         |           |                                    | MATERIAL: |                      |           |          |  |
|   |  |         |           |                                    | WEIGHT:   |                      | SCALE:2:1 |          | SHEET 6 OF 6                             |