Board identification

This errata sheet applies to the counter clockwise motors of some batches of the STEVAL-DRONE01 kit, identified by the STEVAL-FCU001V1 flight controller unit lot 2419.

The impacted motors have wires wrongly mounted (refer to Figure 3).

Important: Not the entire lot 2419 is impacted. Refer to Section 1.1 to check whether your kit is impacted.

<table>
<thead>
<tr>
<th>Order code</th>
<th>Device info</th>
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<tbody>
<tr>
<td>STEVAL-DRONE01</td>
<td>Lot 2419 (on the STEVAL-FCU001V1 flight controller unit)</td>
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Figure 1. STEVAL-FCU001V1 flight controller unit identification (lot 2419)
1 Limitation

1.1 Description

The STEVAL-DRONE01 mini drone kit features the high performance STEVAL-FCU001V1 flight controller unit, as well as the motors, propellers, plastic frame and battery you need to assemble your own mini-drone.

Figure 2. STEVAL-DRONE01 reference design kit

Figure 3. STEVAL-DRONE01 - counter clockwise motor with wires correctly mounted
In some STEVAL-DRONE01 batches (lot 2419 on the back of the STEVAL-FCU001V1), the counter clockwise motors have wires wrongly mounted (with respect to Figure 3 and Figure 4): this makes the propellers rotate in the wrong direction and the drone appears too heavy to fly.

To know whether your kit has the motors wrongly wired, you have to:

1. check the white connector of the CCW motors (the correct ones have the flat side as in Figure 4)
2. check the effective rotation of the four motors and compare it with the figure below; in particular, check whether M2 and M4 can rotate in counter clockwise mode.

If M2 and M4 rotate in clockwise mode and the motors have been connected as shown in Figure 6, this means the motors have the wrong wiring connection.
1.2 Workaround

Rotate M2 and M4 connectors when plugging the CCW motors to the STEVAL-FCU001V1 flight controller unit, as shown below.
Figure 7. Motor connectors with correct wiring (white and black wire sequence)
# Revision history

Table 2. Document revision history

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision</th>
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<tbody>
<tr>
<td>10-Mar-2020</td>
<td>1</td>
<td>Initial release.</td>
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