

Date of Notification	Change		Part Numbers Affected
April 22, 2015	<input type="checkbox"/> Major	<input checked="" type="checkbox"/> Minor	E2

Notification

<input type="checkbox"/> Product Obsolescence	<input type="checkbox"/> Product Marking	<input type="checkbox"/> Process Change	<input checked="" type="checkbox"/> Design Change
<input checked="" type="checkbox"/> Material Change	<input checked="" type="checkbox"/> Specification Change	<input type="checkbox"/> Component Change	<input type="checkbox"/> Other

Notification Description (Including Extent, Purpose / Reason, and Effect on Form, Fit and Function)

Mold Update

As part of our ongoing continuous improvement efforts, and in order to enhance both function and appearance of the E2 product line, multiple improvements are being incorporated into a plastic component redesign.

The plastic base and cover components have been redesigned with improved aesthetics and will be made from a glass filled PBT material that offers many advantages over the glass filled PC material previously used. Additionally, the plastic base component will now come with its threaded inserts overmolded into the plastic instead of being pressed in, and the embossed encoder pinout text on the cover as well as the product label are being replaced by a more durable laser marked equivalent.

The option of ordering this part with a transfer adhesive pre-attached to the mounting surface (T-option) will be discontinued as part of this design change.

Design changes are primarily alteration of surface drafts and additional or increased corner radii. The updates were done to preserve the size and shape of the encoder. With exception to a few features outlined below, the new parts are dimensionally equivalent and will fit within the envelope of the previous parts.

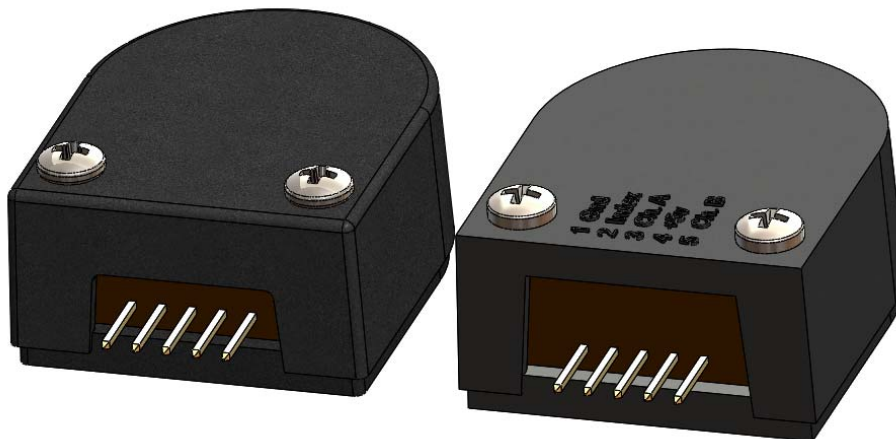


Figure 1, Side by side comparison of new E2 product (left) and previous design (right)

Design Changes:

The main functional difference in the design was to increase the diameter all .109" mounting holes to .125". By doing so the installation of screws is easier as well as the additional clearance provides easier use of our centering tool during Installation. These improvements involve two holes in the Default and A-Option bases and four holes in the G-Option version.

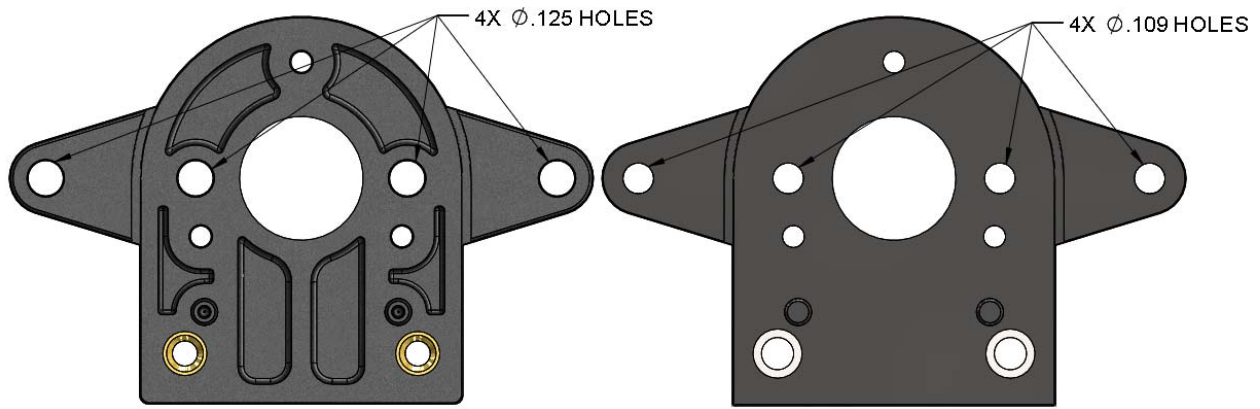


Figure 2, G-Option bases side by side showing new hole sizes (left) vs previous design (right)

Another design change is the removal of the module alignment posts in the underside of the cover. The posts were not functionally needed to ensure proper installation and alignment of the EM1 or EM2 module.



Figure 3, Default cover internal view side by side new (left) vs previous design (right)

The E-Option cover extension is the only design change that protrudes from the previous design envelope. Although the extension is the same height, and will accommodate equivalent shaft lengths as previous versions, the external diameter of the extension has been increased by 0.050" due to molding requirements.



Figure 4, E-Option covers side by side showing new design (left) vs previous design (right)

Insert Overmold

In an effort to enhance the robustness of our E2 encoder, the two threaded inserts pressed into the base are being replaced with similar threaded inserts that will be insert-molded into the encoder base. This change in process will retain the insert with much greater strength.

The previous design utilized two tin plated carbon steel #4-40 threaded inserts for mounting the cover to the encoder base plate. The revised design will instead come with two #4-40 threaded brass inserts. The new brass inserts maintain RoHS compliance and are functionally identical to the previous inserts. Our testing indicates that these new overmolded brass inserts can withstand higher torque as compared to the press in inserts previously used.

Alternate Parts (as applicable)

N/A

Effective Date (Including Last Time Buy Date and Conditions, as applicable)

Changes will go in to effect August 1, 2015 or until current inventory is consumed.

*US Digital's Customer Communication of Product/Process Changes complies with the basic commercial practice quality requirements, under the JEDEC standard.