

AMC Module Face Plates - implementation example

B

B.1 Purpose

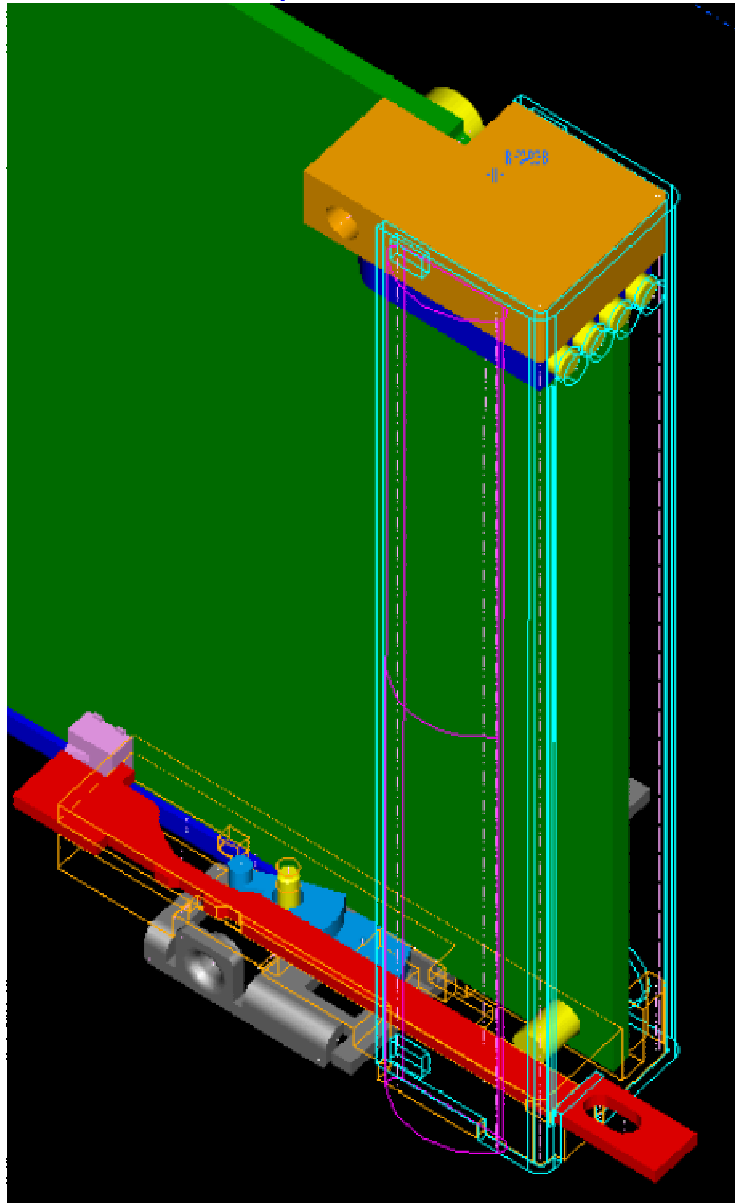
In Section 2 of the AMC Specification some features concerning the Module Face Plate assembly are left open for various design solutions:

- The shape and manufacturing technology of the Face Plate may be different from the sheet metal construction.
- The fixation of the Face Plate to the Module PCB is implementation dependent.
- The location of the LED's may vary in a small range at the top of the Face Plate.
- The extraction lever and the locking mechanism may adopt different solutions.
- The location and choice of the Hot Swap microswitch depends on the choice of the locking mechanism.
- The purpose of Appendix B is to show different examples of mechanical implementations, including specific board layouts and keepout areas.

B.2 Schroff's implementation

Schroff's example is a AMC Module Face Plate unit, consisting of a U-shaped profile with two die-cast flanges and a rotating locking latch.

Figure B-1 Overview of Schroff's Implementation



B.3 Front of the Face Plate unit

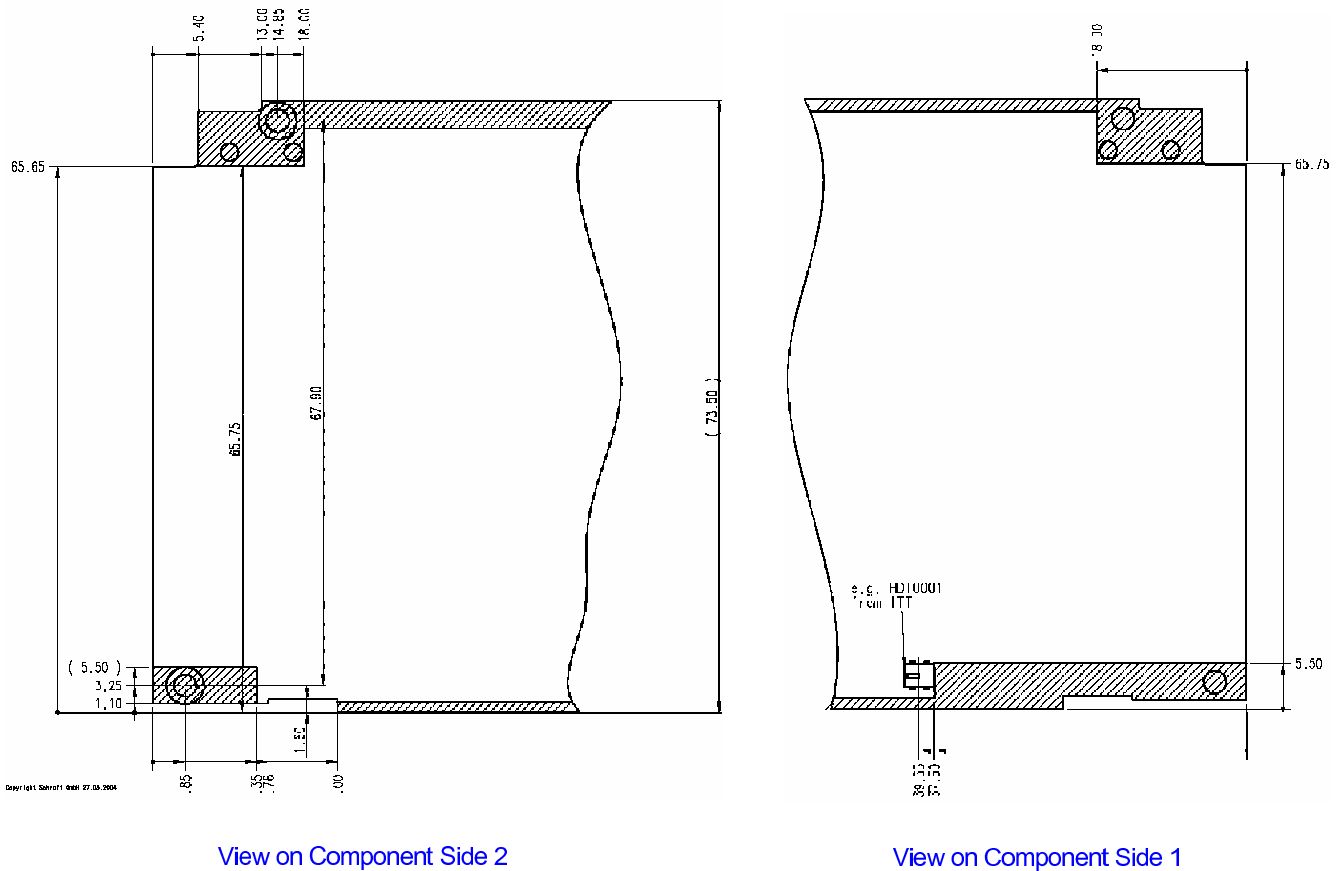
Schroff's implementation specifies fixed dimensions for:

- The location of the LEDs
- The location and front dimensions of the extraction lever
- The available area for Cable Connector arrangements

B.4 Fixation to the Module PCB

The following figure shows the specific method of mounting and the layout of the Module PCB with the milled contours, the mounting holes and the keepout areas.

Figure B-2 Layout of the mounting features on a Single-Width Module PCB

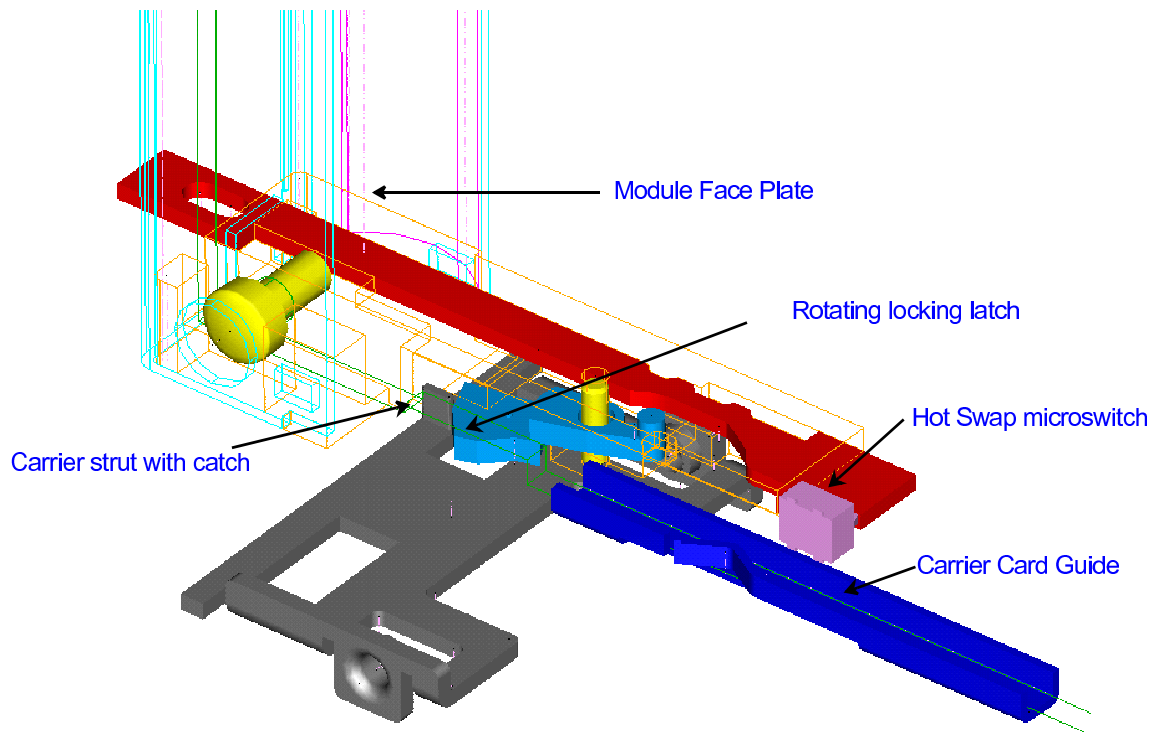


B.5 Cross section through the Face Plate unit

Schroff's implementation also specifies the space for components inside the faceplate unit, on both sides of the Module PCB. It defines how the return flanges of the Faceplate Unit fit into the cutouts of the Carrier Board and their position versus the Carrier Struts and Card Guides. It clarifies the maximum dimensions of a faceplate cutout for the implementation of Cable Connectors.

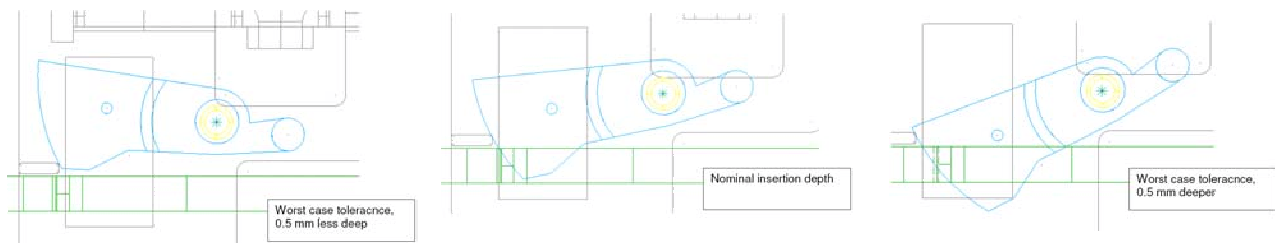
B.6 Locking mechanism

Figure B-3 AMC Module in position for normal operation



B.7 Locking latch and its catch in the Carrier strut

Figure B-4 Compensation for 1 mm insertion depth tolerance



Three situations in case the Module PCB bottoms in the AMC Connector 0.5 mm before it reaches its nominal position, in its nominal position, and 0.5 mm beyond its nominal position

B.8 Extraction lever

Shape and dimensions of the Knob and the Extraction Lever, including hole for extraction tool.
Travel of the Extraction Lever during the unlocking sequence.
Actuating forces during the unlocking and extraction sequence.

Figure B-5 Dimensions of extraction lever

Under preparation

B.9 Other implementations