

## Declaration of HW change on peiker module series V1140

### HW change 02/2014: Change of shield frame and shield cover

To fulfill new mechanical test requirements of our customers, peiker has redesigned the shielding of the V1140 module family. The redesign was made to have better reliability in 300g mechanical shock tests and also in real car crash tests that our customers are doing frequently with new or face lifted cars.

To increase the holding force between the shield and the cover it was necessary to increase the height of the frame and to redesign the tothing between shield and cover. In addition the thickness of the iron sheet raw material of the cover is slightly increased by 0.1mm.

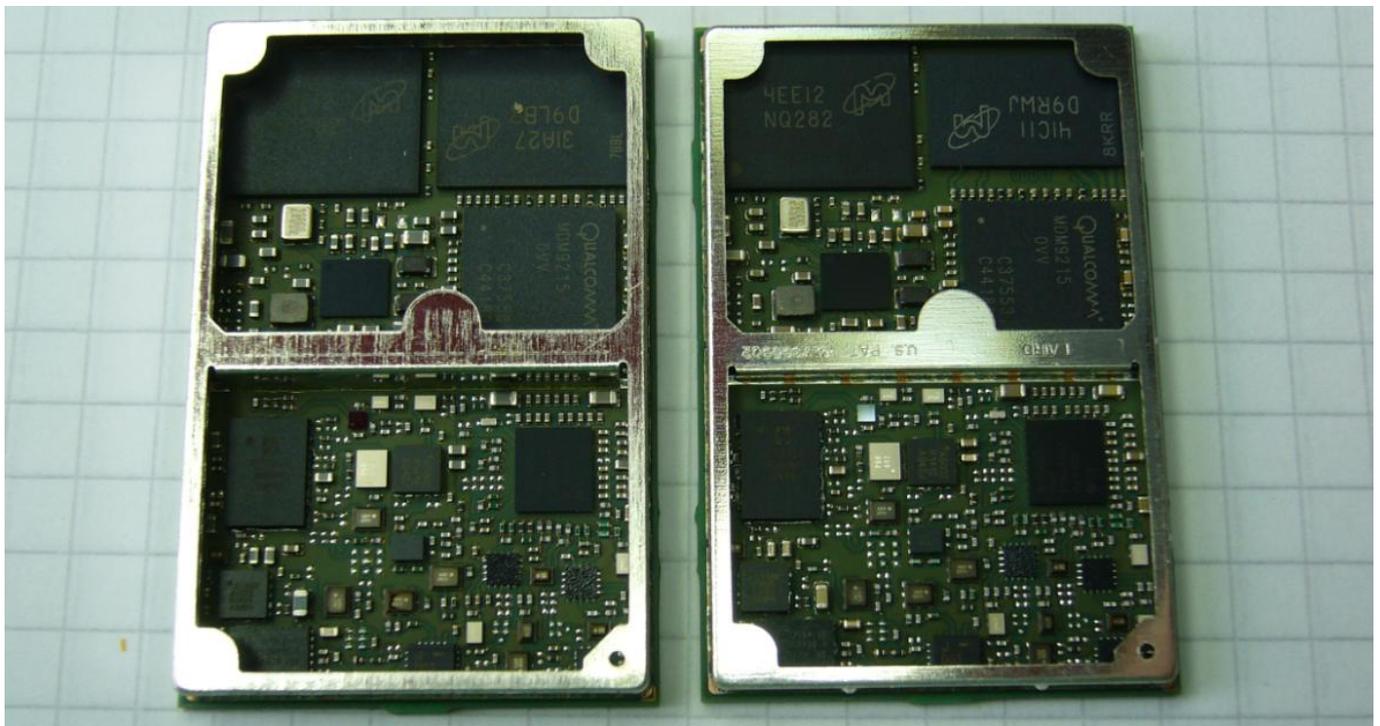


Fig. 1: The right module shows the old shield frame, the left module the new shield frame with increased height

In Fig. 1 is shown that the shielding frame's footprint remains unchanged and that only the height of the frame is increased. The shield wall between RF and baseband shield compartment is still present.

Fig. 2 shows the profile view of the module with changed shield frame and shield cover. The height of both the frame and the cover are increased. The construction of the clips is changed in such a way, that contact area between frame and shield is increased and more clips are available. Thus, along with stronger mechanical connection also the electrical connection between shield and frame is improved.

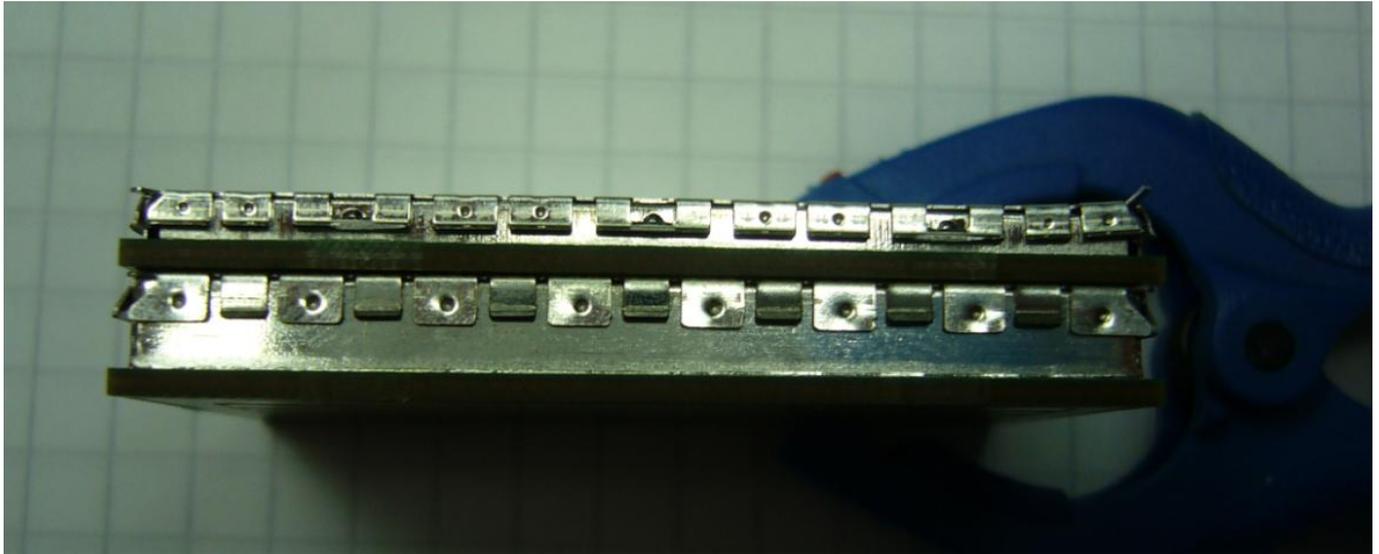


Fig. 2: Upper module (old shield system), lower module (new shield system) with increased height as well as more and stronger shield cover clips

**Affected Modules:**

V1140-100, V1140-101

Note: The change will be made only in those modules produced after the change is authorized.

**PCB:**

PCB Layout is not changed.

Shielding frame is still soldered down on PCB with same unchanged footprint.

**Expected performance impact:**

peiker has validated the new shielding system and does not expect degradation<sup>1</sup> in EMC or RF or CPU characteristics reported to and accepted by the Commission.

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<sup>1</sup> Degradation for EMC parameters as defined by FCC in “178919 D01 Permissive Change Policy v05r04”, May 2014, Page 1