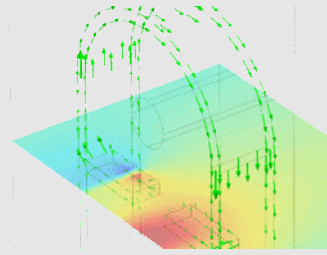


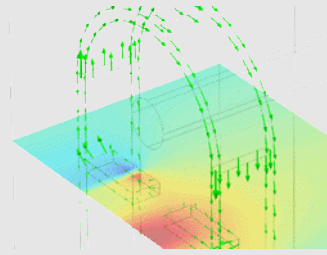
Shield Attachment



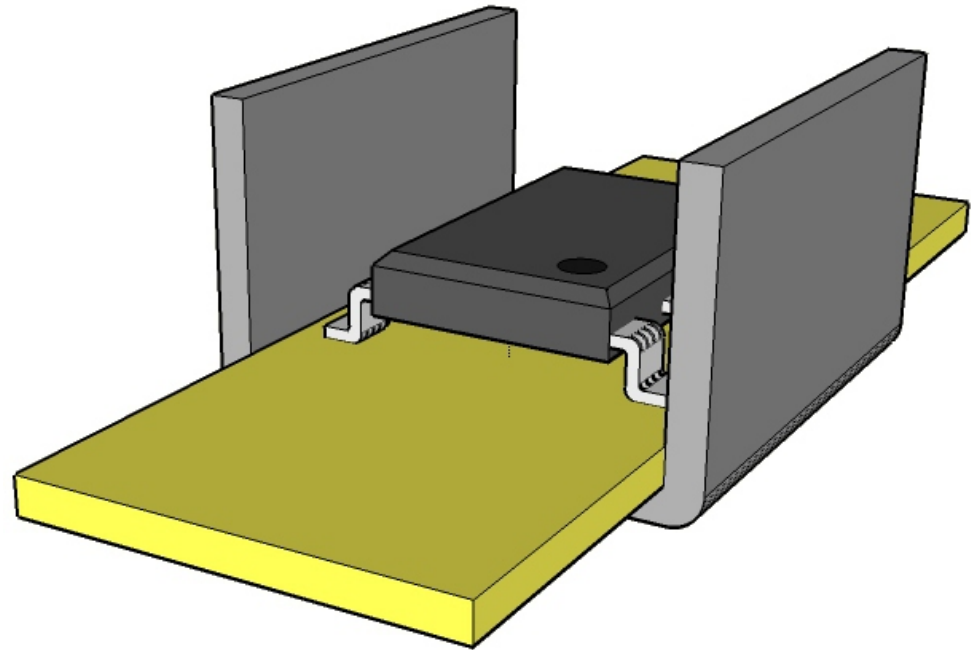
“Notes on the Attachment and Assembly of Magnetic Shields and Cores”

26 Aug 2016
P. Krummenacher

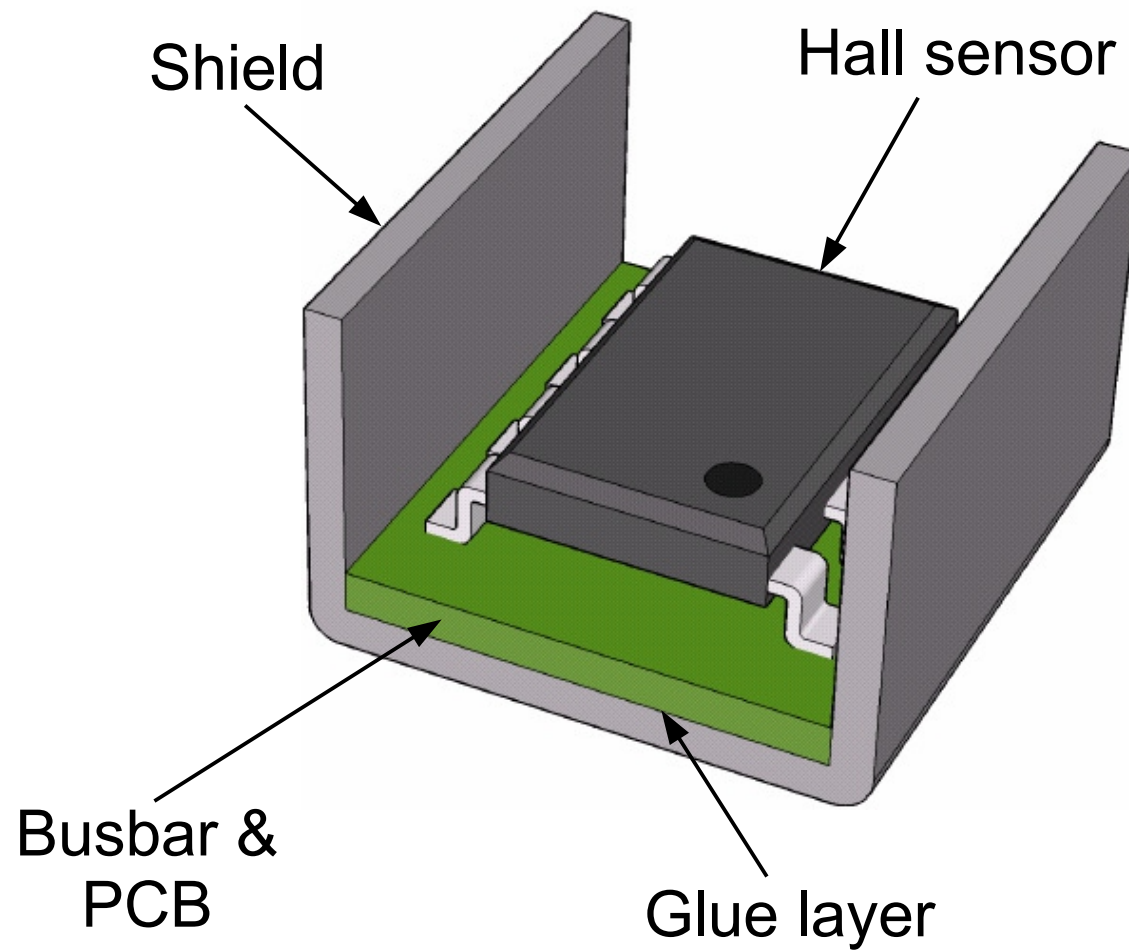
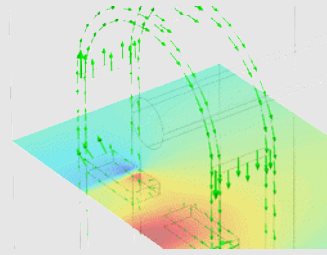
Assembly Methods



- The following methods for the shield attachment and assembly are established
 - + Glue
 - + Plastic mold
 - + PCB assembly and soldering
 - + Crimp
 - + Screw

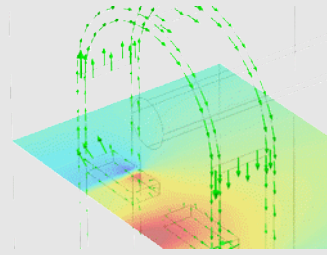


Glue



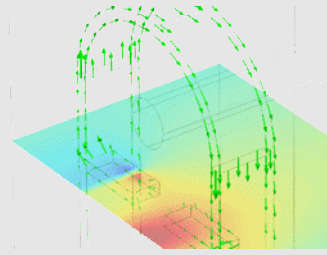
magnetic

Glue (II)



- Masterbond adhesives (www.masterbond.com)
- Suitable products
 - + Supreme10HT (one component), note the minimum cure temperature of +125°C
 - + EP21TDCHT (two component), curing overnight at room temperature followed by a few hours at a temperature between 70°C and 90°C

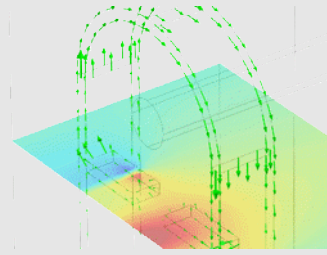
Glue (III)



- Protaviv adhesives (www.protaviv.com)
- Suitable products include:
 - + One component epoxies (e.g. ANE17794)
 - + Two component epoxies (e.g. ANE36142)
 - + Ferrite bonding epoxies

magmatic

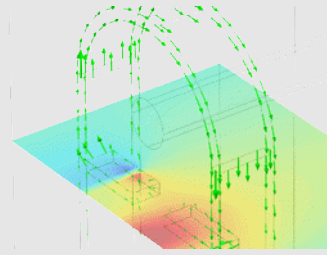
Glue (IV)



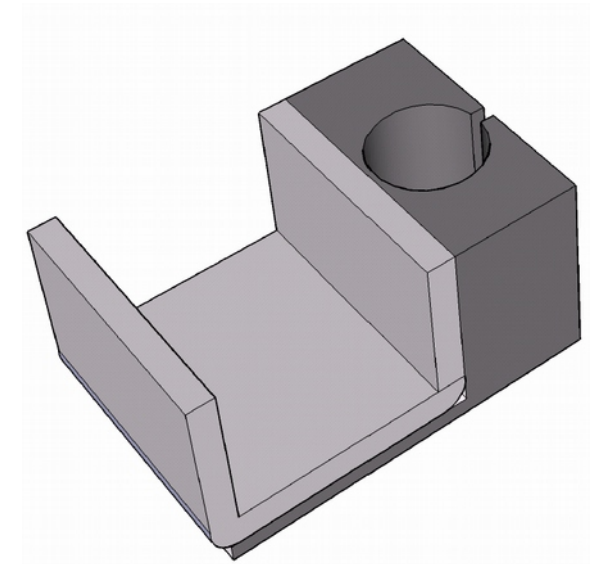
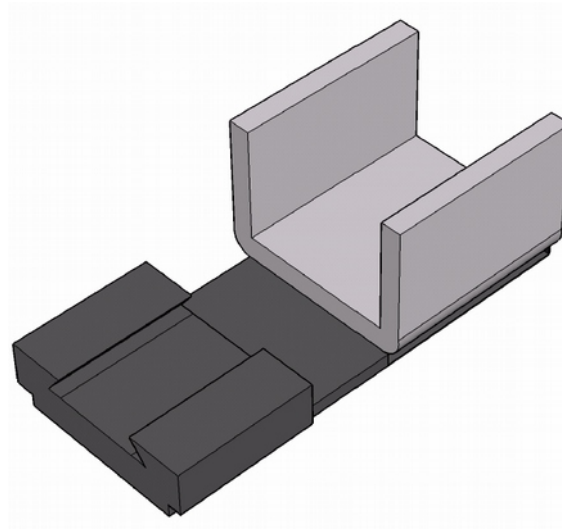
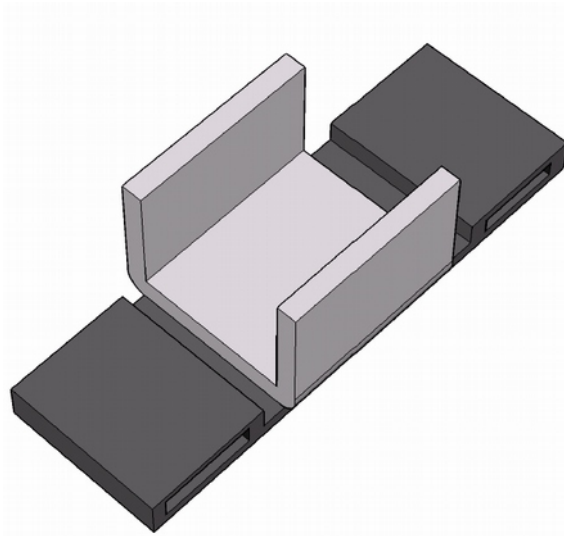
- 3M adhesive tapes (www.3m.com)
- Suitable products:
 - + High performance tape with adhesive 200MP, e.g. 468MP
 - + Transfer tape with adhesive 100MP

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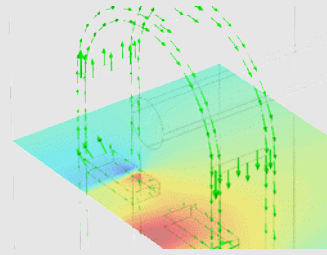
Plastic Mold



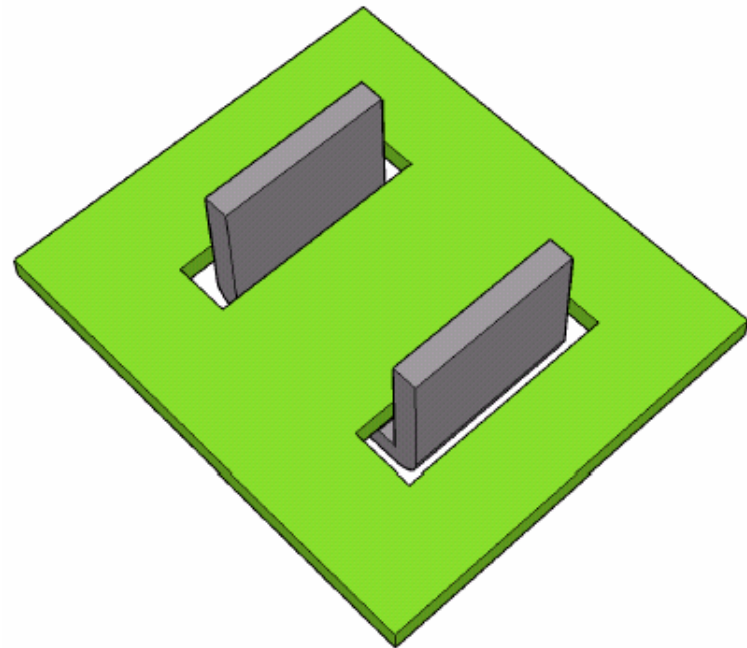
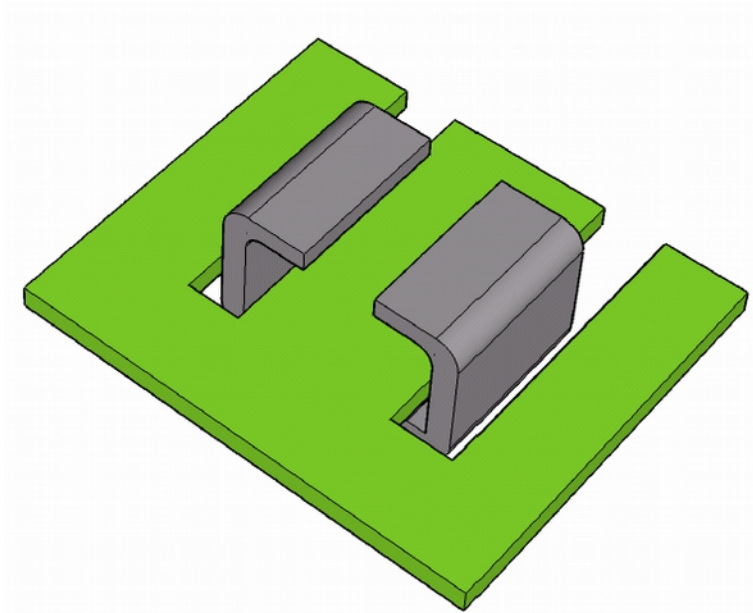
- Mechanical attachment of the shield in the final product via the molded plastic



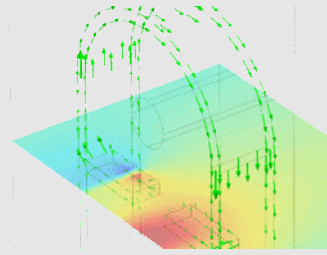
PCB Assembly



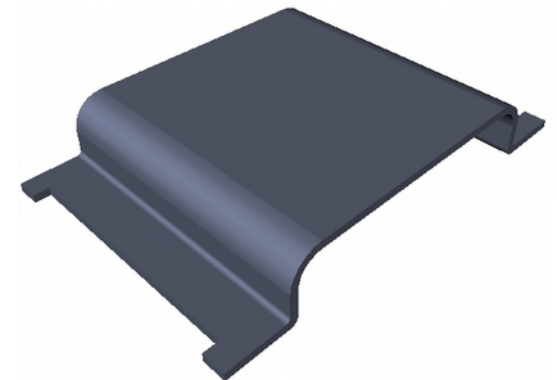
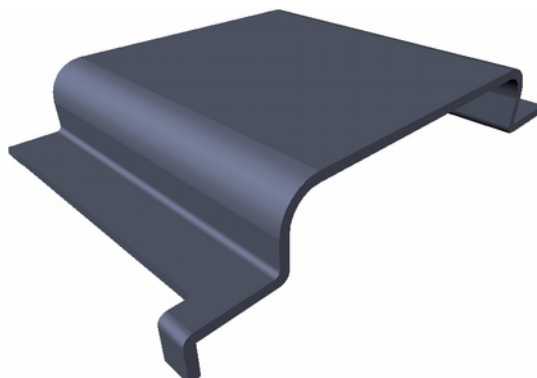
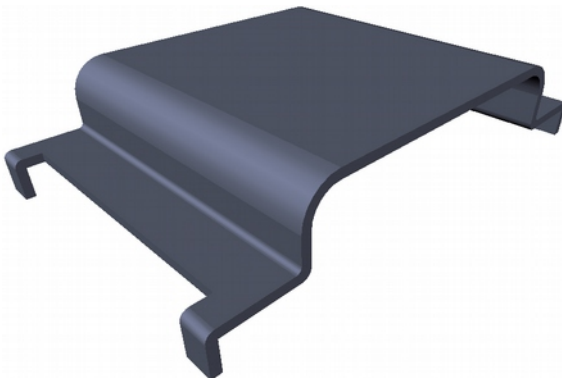
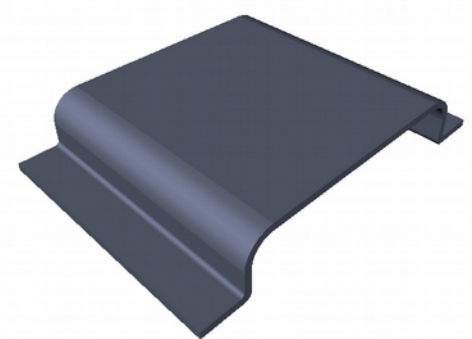
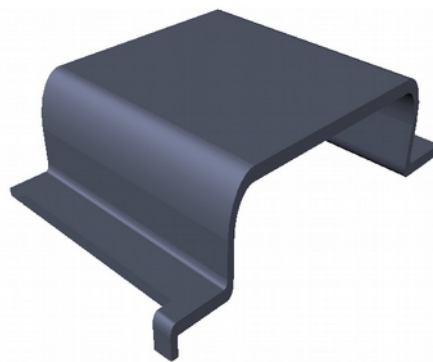
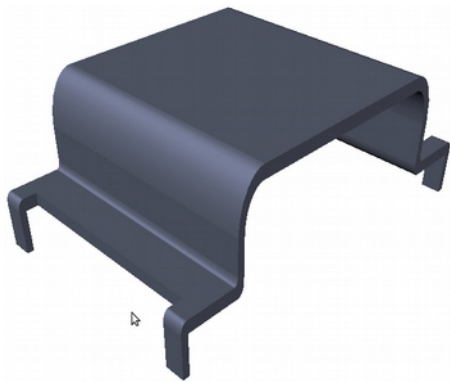
- Slot / slit solution examples



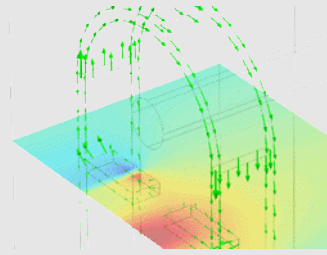
PCB Assembly (II)



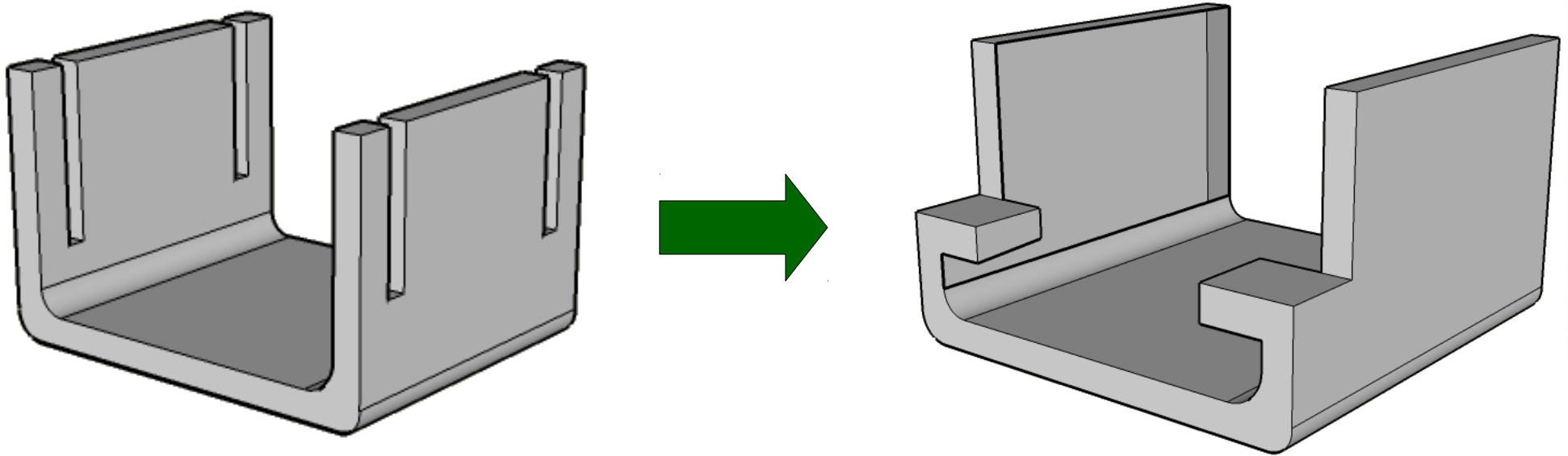
- Conventional through pin or SMD assembly
- Shields with tinned soldering leads



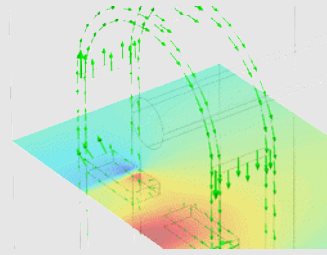
Crimp



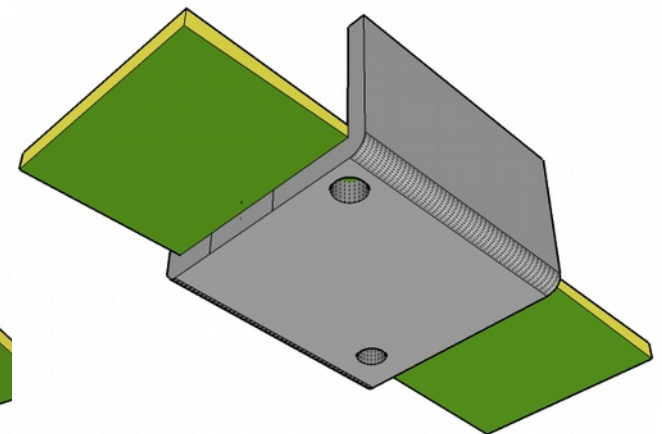
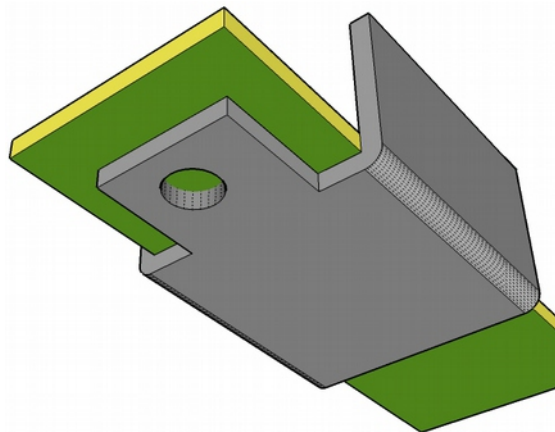
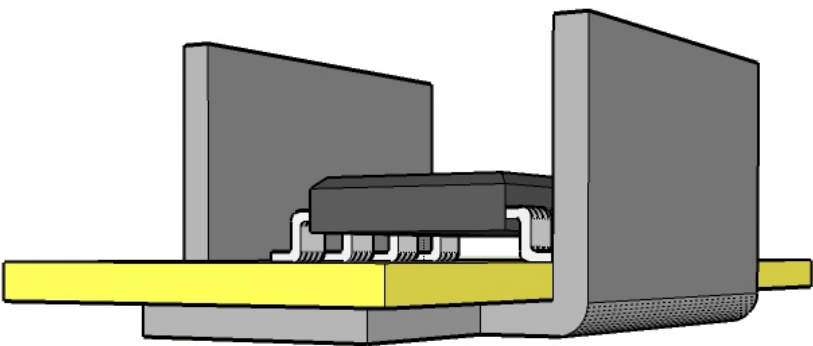
- Crimping by bending a small part of the shield, far from the center where the sensor is located



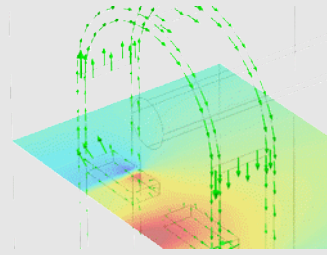
Screw



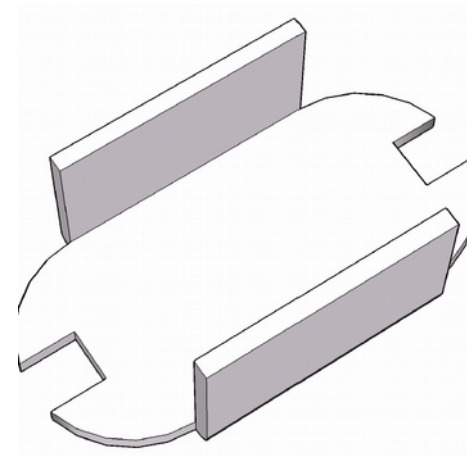
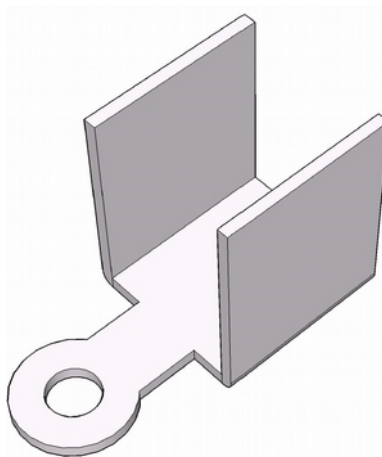
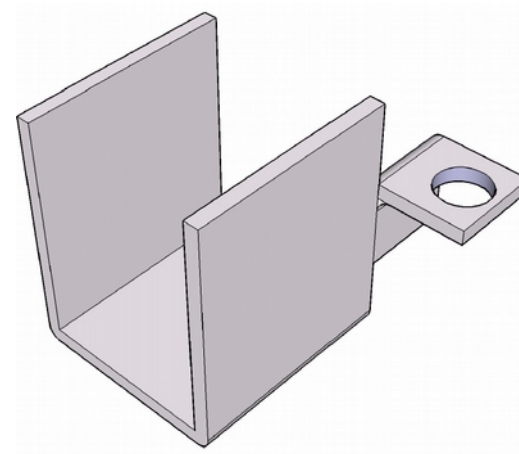
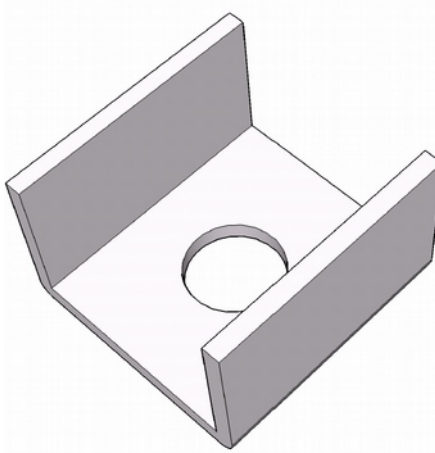
- Dedicated screwing terminal or holes

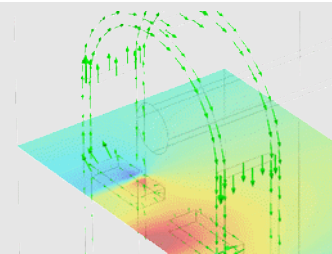


Screw (II)



- Shield models with screwing capability





Thank you
for choosing **maglab**

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