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

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Assembly Methods

The following methods for the shield attachment and assembly are established:

- Glue
- Plastic mold
- PCB assembly and soldering
- Crimp
- Screw
Glue

- Shield
- Hall sensor
- Busbar & PCB
- Glue layer
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)

- Protavic adhesives (www.protavic.com)
- Suitable products include:
  - One component epoxies (e.g. ANE17794)
  - Two component epoxies (e.g. ANE36142)
  - Ferrite bonding epoxies
Glue (IV)

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