

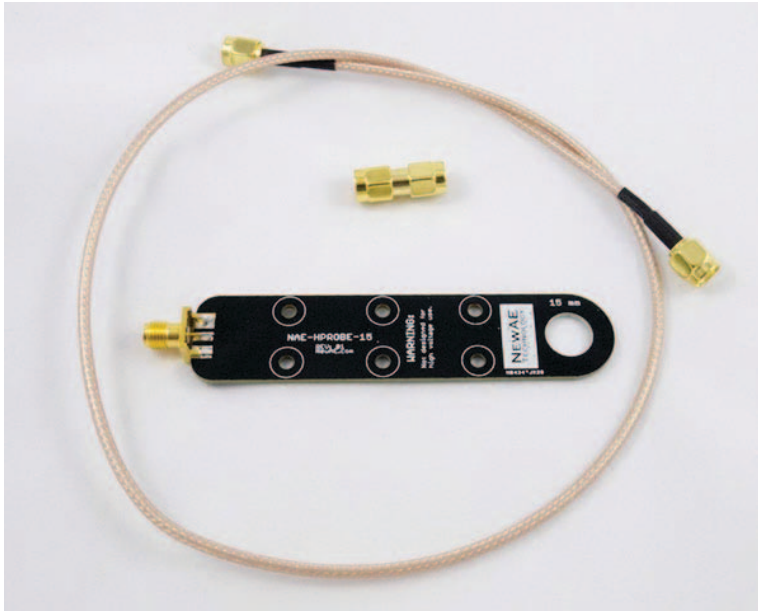


NewAE Technology Inc.  
newae.com

## ChipWhisperer® Embedded Security Analysis Tools Probes

# H-Field Probe, 15mm

## Product Datasheet



The NAE-HPROBE-15 is a simple Planar H-Field probe. It is constructed from a 4-layer PCB for low-cost construction yet reliable and repeatable measurements.

It includes several mounting holes that can be used to fasten it to an XY table or similar to sweep over a device surface.

The H-Field probe is suggested to be used with a low noise amplifier (LNA), especially if not connected to a high-sensitivity device such as the ChipWhisperer or a spectrum analyzer.

The probe comes with a SMA cable and a SMA coupler. A SMA to BNC or SMA to N adapter may be needed for your equipment.

## Product Highlights

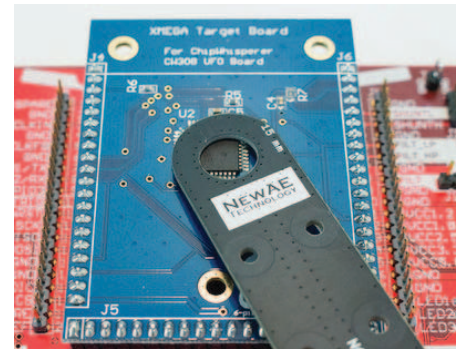
Super-simple design means a low-cost H-Field probe (finally).

SMA connector avoids needing to remember where you put that weird special cable.

Can mount a NewAE Technology Inc. LNA directly onto the probe to minimize noise introduced in cable.

Can be used for injecting EM faults in addition to measurement applications.

See documentation link for video example of power measurement using H-Field probe.



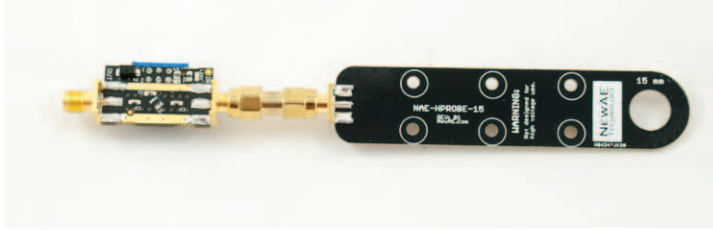
## Ordering Summary

NAE-HPROBE-15 H-Field Probe, 15mm diameter

## Product Links

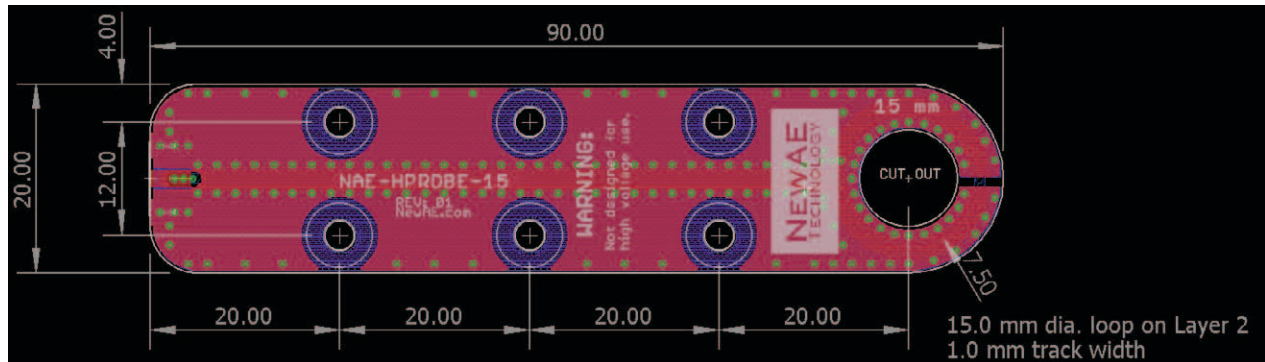
Full Documentation [https://wiki.newae.com/CW505\\_Planar\\_H-Field\\_Probe](https://wiki.newae.com/CW505_Planar_H-Field_Probe)

## LNA Usage



Note the Low Noise Amplifier (LNA) shown at left is NOT included. But this shows how the LNA can be mounted directly onto the probe using the included SMA coupler.

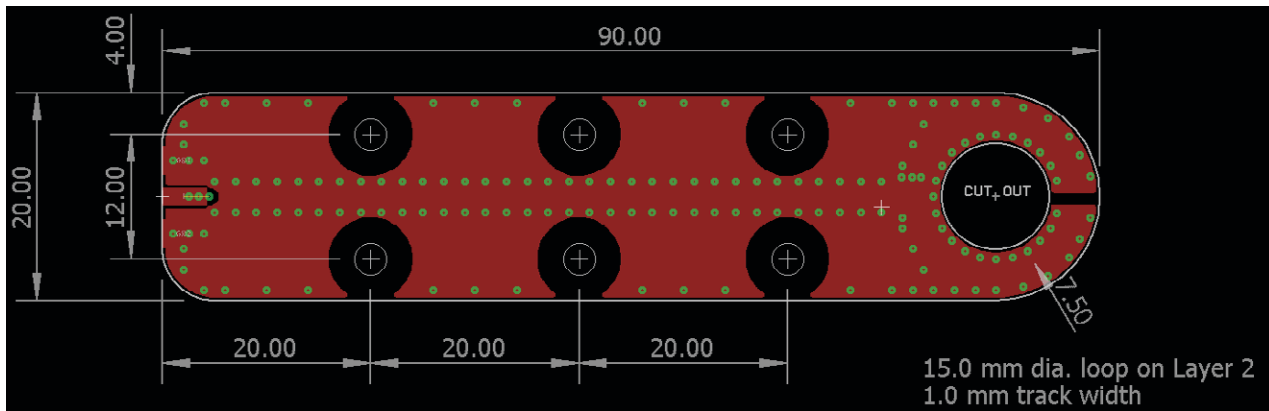
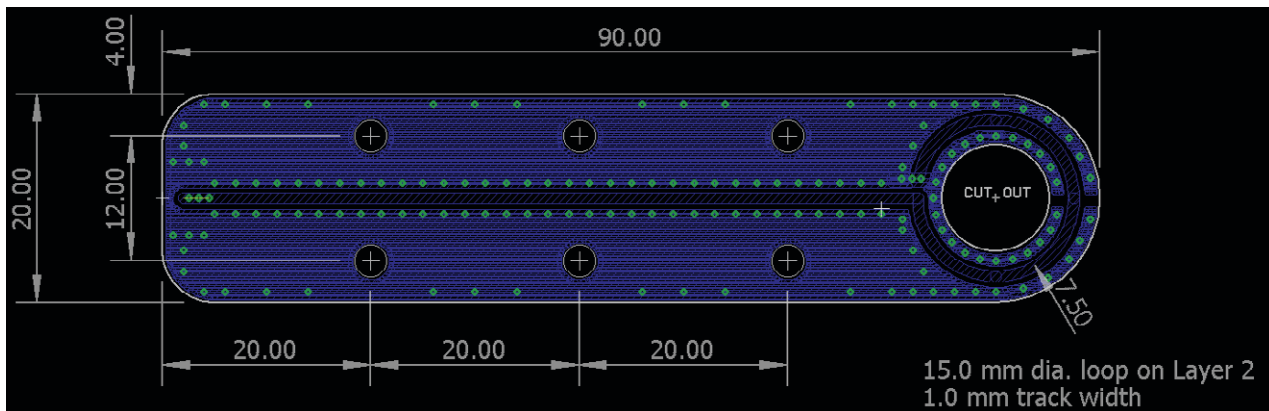
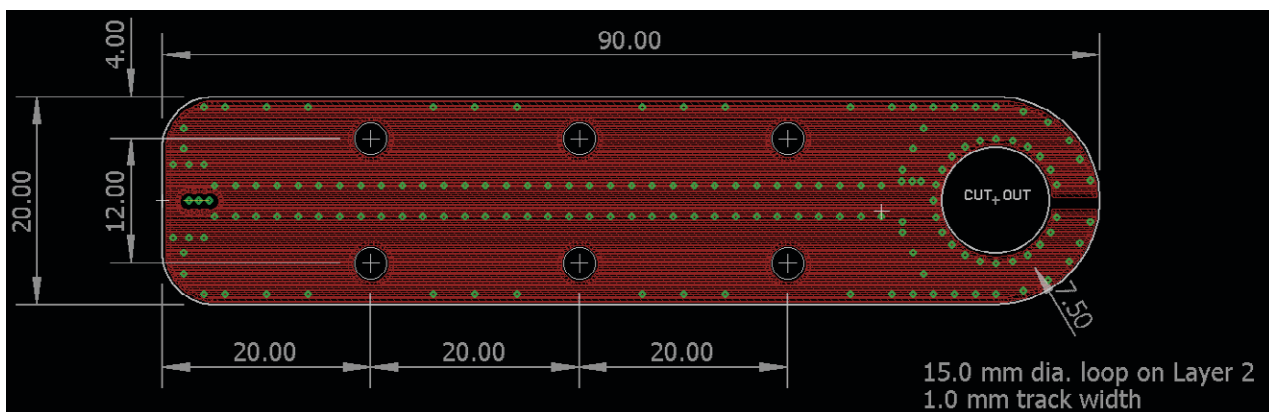
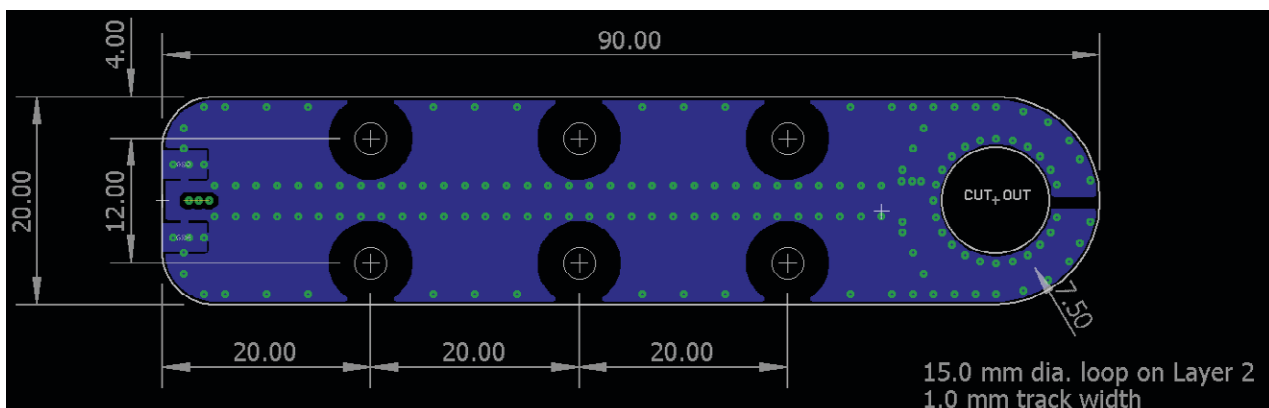
## Probe Construction Overview



The above shows all four layers of the PCB used in the planar H-Field probe. The specific layers are shown on the following page.

<This area left awkwardly empty on purpose>

## Probe Construction Details

**L1****L2****L3****L4**

## Disclaimers

All content is Copyright NewAE Technology Inc., 2018. ChipWhisperer is a trademark of NewAE Technology Inc., registered in the United States of America and Europe. ChipSHOUTER is a trademark of NewAE Technology Inc., registered in Europe. Trademarks are claimed in all jurisdictions and may be registered in other states than specified here.

NewAE Technology makes no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. NewAE Technology does not make any commitment to update the information contained herein. NewAE Technology products are not intended, authorized, or warranted for use as components in applications intended to support or sustain life. NewAE Technology products are designed solely for teaching purposes.

All other product names and trademarks are the property of their respective owners, which are in no way associated or affiliated with NewAE Technology Inc. Use of these names does not imply any co-operation or endorsement.