

Details of PCB-antenna

This document describes the PCB-antenna for the Bluetooth connectivity of the HMI-module BEF. The HMI-module BEF is used in several battery-powered tools.

General information:

- Implemented in HMI-module: BEF: HW00.29, HW00.30
- Designation in schematics / layout: A1
- Designation of PCB-antenna: 2.4 GHz inverted F antenna
- Designation in electronic-CAD: CMP-0039-A.01

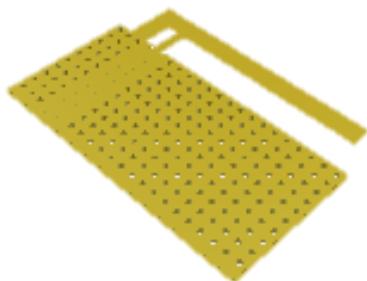


Figure 1: layout of PCB-antenna

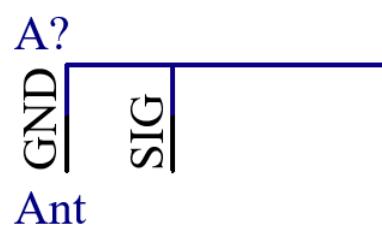


Figure 2: symbol in schematic

The implementation of the PCB-antenna is based on the application note AN91445, Cypress:

- Document: Document: Cypress, Document No. 001-91445 Rev. *H
- File name: 001-91445_AN91445_Antenna_Design_and_RF_Layout_Guidelines.pdf
- Link to document: [Antenna Design and RF Layout Guidelines \(infineon.com\)](http://infineon.com)
- Chapter/page: 7.4 Inverted-F Antenna (IFA), page 15, 16

Implementation in HMI-module BEF:

The following figures gives a short overview from the implementation of the PCB-antenna in the HMI-module BEF.

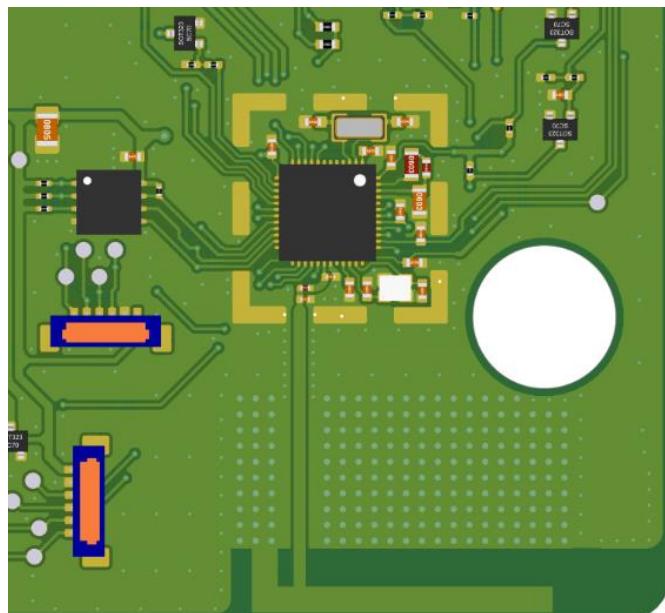


Figure 3: Implemented PCB-antenna on HMI-module BEF