

## ATWILC3000 DESIGN-IN GUIDELINES

Atmel ATWILC3000 module provides Wi-Fi and Bluetooth capabilities to a Host Processor.

The following connections are required for the proper operation:

- 3.3V power supply,
- VDDIO,
- CHIP\_EN, RESET control signals,
- SPI or SDIO interface.

It is recommended to install 0 Ohm series resistors on interface traces as place holders in case there is a need to add some filtering on those line to reduce interference from the Host Processor.

Module can be installed on a product's carrier board; in this case carrier board must have  $20 \times 7$  (mm) clearance area (no traces or copper on any layer) under module's printed antenna. Clearance area  $20 \times 7$  mm dimension must be along the carrier board edge.

Each module has label with FCC ID, however product User Manual must contain the following statement:

"This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation". Module must be installed into the end product to provide a separation distance of at least 6.8 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. If module's label is not visible when installed, then an additional permanent label referring to the enclosed module: "Contains Transmitter Module FCC ID: 2ADHKWILC3000" must be used.
- (2) This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  - Reorient or relocate the module/product.
  - Increase the separation between the equipment and module/product.
  - Consult the dealer or an experienced radio/TV technician for help.
  - Changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.