This is the official documentation for InnoPhase IoT Solutions – Evaluation & Development.

InnoPhase IoT is a fabless wireless semiconductor platform company specializing in extreme low power wireless radio solutions. InnoPhase IoT is focused on developing wireless semiconductor SoCs and modules for high volume, battery-based consumer, commercial, medical, and industrial wireless IoT products.

Talaria TWO module family (INP1010 / 1011 / 1012 / 1013 / 1014 / 1015) are complete solutions with integrated wireless connectivity plus microcontroller for IoT designs.

InnoPhase IoT offers two types of solution architectures:

1. Hostless (Stand-alone) Solution
2. Hosted Solution

**Hostless (Stand-alone mode)**:

1. In this case, there is no external host involved and the application runs on the internal MCU of the Talaria TWO.
2. Available as part of the SDK release package. For example: sdk\_x.y.zip.

Note: x and y in sdk\_x.y refers to the SDK version of the release package.

1. Beneficial for development of integrated applications on Talaria TWO with InnoOS RTOS, lwIP network stack and GCC compiler-based SDK.
2. Enables application, networking and wireless (BLE/Wi-Fi) functionality on Talaria TWO.

**Hosted**:

Talaria TWO works by communicating with a host application through a series of message exchanges back and forth. In this case, the host application contains the logic to execute a sequence of the events.

* AT Commands
  + Interface with native commands to communicate with the Talaria TWO module.
* Serial-to-Wireless Multi-Proto (SMP)
  + The SMP application resides on Talaria TWO and communicates with the application being executed on the Host MCU
* Low-power Dual-Stack solution
  + Host package can be run on a Linux-based platform
  + Linux host for data application, and Talaria TWO for low power/sleep, and router and cloud keep alive mechanism.
  + UART (2W/4W), SDIO and SPI interface.
  + Wi-Fi/BLE User Space C library (HAPI) host package.