

RTLS asset tracking with SimpleLink™ Wi-Fi® devices: Enabling smart management inventory

RTLS asset tracking has developed from passive RFID tags to smart active, programmable tags that utilize Wi-Fi.

RTLS asset tracking with Wi-Fi enables efficient inventory management for high value assets and allows assets to be tracked within a local network or remotely through the cloud.

These RTLS tags can leverage the existing Wi-Fi infrastructure or can be deployed within a customized Wi-Fi network, which is commonly seen in hospitals and enterprise environments.



FEATURES	BENEFITS
<p>Industry's lowest power Wi-Fi network processor with configurable power states for initialization</p> <ul style="list-style-type: none"> Shutdown mode (1uA, 275 mSec – 1.375 Sec wake up time for external and internal clock respectively) Hibernate mode (4.5uA, 60mSec wake up time) 	<p>Maximize the battery life of your system</p> <ul style="list-style-type: none"> With a 1200mAh battery running this profile periodically every 5 minutes battery could last ~16 years Sending a profile of two 100 byte RTLS packets on channels 1,6,11 will consume ~ 0.7μAh
<p>Switchable two power profiles for 802.11 RTLS and Client interoperability</p> <p>Tag profile</p> <ul style="list-style-type: none"> Transitions from hibernate/shutdown mode to transmission of user's customized packets, without connection to an AP <p>Connected profile</p> <ul style="list-style-type: none"> Connects to an AP and uses all OSI layers L6 through L1 	<p>Monitor and protect tagged assets from unauthorized removal</p> <p>Tag profile</p> <ul style="list-style-type: none"> The developer can customize the packet payload and the interval of data transmission <p>Connected profile</p> <ul style="list-style-type: none"> Fast connection to the cloud, while maintaining low power
<p>Configurable Transceiver mode</p> <ul style="list-style-type: none"> Bypass layer 2 through layer 6 Select Wi-Fi channel Set TX power Wi-Fi rate - from 11b/g/n 	<ul style="list-style-type: none"> Supports any proprietary spec that is based on Wi-Fi radio physical layer (2.4GHz) Provide configuration to the Wi-Fi physical layer
<p>Wi-Fi and networking security features</p> <ul style="list-style-type: none"> Secured Wi-Fi connection: including WPA2 enterprise Secured internet connection – HTTPS, SSL/TLS User data and code protection 	<p>Secure data exchange from end-to-end</p> <ul style="list-style-type: none"> Personal and enterprise Wi-Fi-security Security features that enable developers protect against threats on the network Secure storage that provides encryption, authentication and authorization
<p>The SimpleLink SDK includes:</p> <ul style="list-style-type: none"> Over-the-air library and example for software updates Plugins for multiple cloud solutions 	<ul style="list-style-type: none"> Leverage SDK libraries and sample codes to reduce development costs and enable faster time-to-market Cloud services enable easy monitor, maintenance and control of the tag

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