PRODUCT BRIEF.

Roving Networks
RN-41 apl-bp
Roving Networks Bluetooth Solution

Roving Networks has worked with the Apple Made for iPod program to provide a Bluetooth Data communications solution for the iPhone and iPad. Simply connect PWR, GND, RX, TX and three PIO signals to the Apple authentication co-processor and your accessory is Bluetooth enabled.

Developing Bluetooth Enabled iPhone, iPad and iPod Accessories

The iPhone freely connects with Bluetooth hands free and headset accessories. Similarly the iPad supports the Bluetooth HID profile for keyboards. However establishing Bluetooth data connections with Apple devices use a unique discovery/pairing sequence and require an authentication co-processor chip.

Roving Networks Bluetooth modules natively support data connections with the Apple iPhone and iPad. This allows iPhone and iPad devices to discover and pair with any “Apple Ready” Roving networks Bluetooth module. The Roving module also directly connects to and manages the authentication process with the Apple authentication co-processor, simplifying your accessory product design and saving you development effort.

All iPhone, iPad and iPod accessory products including those that incorporate the Roving Networks Bluetooth module must be registered and approved with the Made for iPod program. Once you have joined the Made for iPod program Roving Networks can provide detailed documentation and technical support for Bluetooth modules and development kits used to create iPhone, iPad and iPod accessories. Additionally, the Made for iPod program gives you access to purchase authentication co-processor chips. If you are not a member of the Made for iPod program you can sign up at:

http://developer.apple.com/ipod/

Roving Networks Bluetooth Modules

Roving Networks Bluetooth modules support the iPhone specific Bluetooth service profile and class of device so they can be discoverable. The developer only needs to connect the module to power for the module to appear. The module is directly connected to the authentication chip and manages the entire authentication process from within the Roving Networks firmware. Once authenticated the module transfers data over the Bluetooth link to and from the UART. This significantly simplifies your hardware and software design and development.

Features

- Supports iPhone or iPad discovery/pairing and connections
- Automatically stores Bluetooth address of the last paired iPhone, iPad, or iPod device, for quick re-connect
- Supports Secure Simple Pairing (SSP), no PIN code required
- Discovery by iPhone, iPad, or iPod products AND other Bluetooth devices without changing settings
- Supports the complete Roving Networks Bluetooth feature set
- Direct hardware connection to the authentication co-processor (three GPIO pins)
- No host intervention or firmware development required for authentication

Roving Networks Bluetooth modules are available in Class 1, up to 100m range (RN-41-APL) and Class 2 up to 30m range (RN-42=APL).

Roving Networks provides an Evaluation Kit for quickly prototyping Bluetooth enabled iPhone, iPad, or iPod accessories. The RN-41-API-EVAL evaluation kit includes,

- the RN-41-APLX development board which contains the RN-41-APL module, the Apple authentication co-processor, status LEDs, power regulation, RS232 and TTL signals.
- Four RN-41-APL modules
- A complete set of design documents including schematics for integrating the authentication co-processor into your design.
- Source code for the Roving Networks Diagnostic Application

Roving Networks modules and evaluation kits for use with iPhone, iPad and iPod must be purchased from an Apple authorize dealer. Authentication co-processor are only available through he MFI program.
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