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Connecting Devices

The page scanning device's Bluetooth Device Address can be obtained in several ways:

- From an inquiry response via FHS
- From user input
- By preprogramming at manufacture

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Relationship between SP Mode and Mandatory Page Scan Period

Scan Period Mode	$T_{mandatory\_pscan}$
P0	>20 seconds
P1	>40 seconds
P2	>60 seconds

Using Power Management: When and Why Is It Necessary?

- Consider whether your application is suitable for power-managed operation.
- Consider the constraints imposed by the application (e.g., maximum response times, characteristics of the data traffic, and so on).

Security Modes

There are three different modes associated with Bluetooth security:

- Mode 1 has no security, obviously making it the least secure mode.
- Mode 2 invokes security when a higher layer protocol or service is accessed.
- Mode 3 invokes security when a connection is requested; this is the most secure mode.

Answers to Your Frequently Asked Questions

Q: How are services represented in SDP?

A: A service on a Bluetooth device is described in an SDP service record, which is stored in the device's "Service Discovery Database." A service record consists of service attributes, each of which describes some information about the available service.

Security Alert

Never remove the Bluetooth driver while the sdp_server daemon is using /proc/sdp_srv. If you do so in the current release version of the stack (0.0.2 at the time of this writing), you will get a kernel panic when you stop the daemon. Future versions of the stack will probably not allow you to remove the driver while the sdp_server daemon is using it.

The Casira Development Kit

The Casira development kit provides a variety of useful interfaces:

- **SPI interface** Connects to a PC parallel port, and allows you to reconfigure the Casira using the PSTool utility.
- **Serial interface** Connects to a PC serial port.
- **USB port** Connects to a PC USB port, and supports the Bluetooth Specification's USB protocol (H2).
- **Audio I/O** An audio jack which connects to the headsets supplied with the Casira.
- **LEDs** These can be used to monitor applications running on the BlueCore chip.
- **PIO lines** Parallel Input-Output lines; useful for connecting custom hardware.

Warning

Applications and the VDRV use the Bluetooth Library in different modes. Because of this difference, the VDRV will not be able to open while the application is holding the Bluetooth stack open.

Choosing a Codec

The Bluetooth specification supports three different audio coding schemes on the air interface:

- Continuous Variable Slope Delta Modulation (CVSD)
- Log Pulse Code Modulation (PCM) coding using A-law compression
- Log PCM with μ-law compression