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Revision	Description
Version 3.6	Remove SDK developer kit information – 6/6/00 Re-arrange the layout of the specification to ease use

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3. Theory of Operation

The AC5124 has a serial interface that allows the OEM Host to send and receive communications to and from the transceiver. All I/O is 5Vdc TTL level signals except for RSSI, which is an analog output. All outputs are weakly pulled logic high (20 k !

3.2

3.2.1

3.2.2 In Range (IN_RANGE)

4.

4.3 SERIAL INTERFACE MODE 03 – API

API Mode is the most complex and detailed mode, where most of the control is given to the Host. This mode may seem extensive at first glance; however, it follows a specific pattern of commands and responses similar to an Ethernet protocol. The commands are grouped into two categories, System Commands and Transceiver Commands. See **Section 5, API Command Set** for the full list of commands and definitions.

4.4 SERIAL INTERFACE MODE 04 – DET

4.6.24.4.2

5.1 SYSTEM COMMAND SET

The System Commands allow the OEM to initialize the system and perform general system analysis.

5.1.4

[redacted]

Status Reply Example

Nal0

5.1.10 Acknowledge

5.2.2 Send Data

6. AT Command Set

Versions 3.5 and higher of the AC5124 family firmware implement an AT Command set, which is used for modifying settings during runtime without having to use any hardware control lines. AT Commands are valid for modes 1, 2, and 4 of the AC5124. Whether in mode 1, 2, or 4, this command must be sent to the radio as a complete packet. Any characters before or after this command that become appended to this strim a larger packet will cause the packet to be interpreted as a packet to send over the RF and not an AT command. If the AT command set is u4.1(i)d in mode 2, the end

be set to 6. If power is lost while in AT command mode, the radio will power back up into normal mode. All AT command characters should be capitalized. All AT commands end in a 0DH character (13 decimal). The radio will not respond to an AT command unless the 0DH character is detected at the

6.1 IRAM DEFINED

a.6(k)0.1(l)dectingee1(l)E²PROM.0227 -6.6(7)-5e inT1 vfad/W1(rad/Wre)6RN com The ra.9(acfm r).4(ED)Tdnd unlesssesw

6.2.3 Power-on Reset Command

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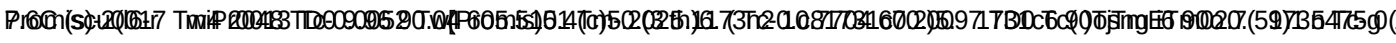
Table 6 - EEPROM Parameters

Parameter	EEPROM

7.1.5.2 Unicast (02h)

Unicast Mode is only valid for transceivers operating in API Mode. Transceivers will only receive packets that have matching IEEE 802.3 destination addresses. All other packets will be discarded.

7.1.5.3 Promiscuous (03h)



7.1.10

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7.1.16.2 Limit RF Buffer

EEPROM Address: 4Ch, bit 4

7.1.17 Interface Timeout

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5. Initializing the AC5124 Transceiver