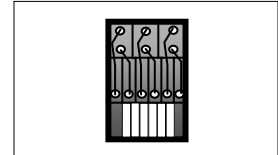


Earl J. Lum
+1-650-430-2221
elum@ejlwireless.com



Sprint Nextel AIRAVE Femtocell BTS Model SPDSC26UCS

October 2007



Entire contents © 2007 EJM Wireless Research LLC. All Rights Reserved. Reproduction of this publication in any form without prior written permission is strictly forbidden and will be prosecuted to the fully extent of US and International laws. The transfer of this publication in either paper or electronic form to unlicensed third parties is strictly forbidden. The information contained herein has been obtained from sources EJM Wireless Research LLC deems reliable. EJM Wireless Research LLC disclaims all warranties as to the accuracy, completeness or adequacy of such information. EJM Wireless Research LLC shall have no liability for errors, omissions or inadequacies in the information contained herein or for the interpretation thereof. The reader assumes sole responsibility for the selection of these materials to achieve its intended results. The opinions expressed herein are subject to change without notice.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	4
Active/Passive Component Summary	4
Important Note:	4
CHAPTER 1 SPRINT FEMTOCELL TECHNOLOGY	5
1.1 Overview of Femtocell Technology	5
CHAPTER 2 AIRAVE PRODUCT	7
2.1 Product/Mechanical Analysis.....	7
2.2 System Architecture Analysis	13
2.3 Baseband CDMA Processor Section.....	15
2.3 Power Management Section	17
2.3 RF Transmit/Receive Section	18
2.4 GPS Receiver Section	21
2.5 Internal GPS Antenna Section.....	24
2.6 External GPS Antenna Section	26
APPENDIX A - PASSIVE CASE SIZE ANALYSIS.....	28
APPENDIX B - ACTIVE COMPONENT MARKET SHARE	29

TABLES

Table 1: Bandwidth Requirements for Active Callers	6
Table 2: AIRAVE Processor Section Bill of Materials	16
Table 3: AIRAVE Power Management Section Bill of Materials	18
Table 4: AIRAVE RF Transmit/Receive Section RFA Bill of Materials	19
Table 5: AIRAVE RF Transmit/Receive Section RFB Bill of Materials	19
Table 6: GPS Daughter card Front Bill of Materials	22
Table 7: GPS Daughter card Back Bill of Materials	22
Table 8: GPS Shielded Section Bill of Materials	23
Table 9: AIRAVE Internal GPS Antenna Bill of Materials.....	26
Table 10: AIRAVE External GPS Antenna Bill of Materials	27
Table 11: Active/Passive Component Distribution by System Subsection.....	28

EXHIBITS

Exhibit 1: Sprint Airwave Femtocell Network Diagram.....	5
Exhibit 2: Sprint AIRWAVE Product.....	7
Exhibit 3: Sprint AIRAVE Front and Rear View	8
Exhibit 4: AIRAVE Side View.....	8
Exhibit 5: AIRAVE Back View	9
Exhibit 6: AIRAVE Bottom View.....	9
Exhibit 7: AIRAVE Sprint Product Label	10
Exhibit 8: AIRAVE Product Label	10
Exhibit 9: AIRAVE Cover Inside.....	11
Exhibit 10: AIRAVE Body Front	12
Exhibit 11: AIRAVE Body Back	12
Exhibit 12: AIRAVE System	13
Exhibit 13: AIRAVE PCB Back	14
Exhibit 14: AIRAVE Processor Section Component Diagram	15
Exhibit 15: AIRAVE Power Management Section Component Diagram	17
Exhibit 16: AIRAVE RF Transmit/Receive Section RFA & RFB.....	18
Exhibit 17: AIRAVE RF Transmit/Receive Section RFA Component Diagram	19
Exhibit 18: PCS Antenna Duplexer Module.....	20
Exhibit 19: AIRAVE GPS Receiver Section Component Diagram, Front	21
Exhibit 20: AIRAVE GPS Receiver Section Component Diagram, Back	22
Exhibit 21: AIRAVE GPS Receiver Shielded Section Component Diagram	23
Exhibit 22: AIRAVE Internal GPS Antenna	24
Exhibit 23: AIRAVE Internal GPS Antenna Dimensions	25
Exhibit 24: AIRAVE Internal GPS Antenna Component Diagram	25
Exhibit 25: AIRAVE External GPS Antenna Dimensions.....	26
Exhibit 26: AIRAVE External GPS Antenna Component Diagram.....	27
Exhibit 27: Passive Component Case Size Distribution	28
Exhibit 28: Active Component Analysis by Pin Count	29
Exhibit 29: Active Semiconductor Component Market Share	30