Technical Specification & Description

1.1 Features

- 1. Support for major air interfaces including CDMA2000® 1X, CDMA2000 1xEV-DO Rev. 0, cdmaOneTM IS-95A/B
- **2.** Support the Release A of the CDMA2000 1X standard, for multimedia data applications, with offering data transmission up to 307 kbps data in forward and reverse links simultaneously.
- **3.** Support IS-856 1xEV-DO, high-speed peak data rates of 2.4 Mbps on forward link and 153 Kbps on reverse link.
- 4. Easy to connect to Internet using Easy Wireless Net running on Widows2000 and XP.

1.2 Applications

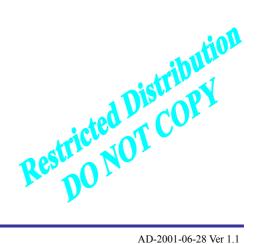
1. Internet connection through USB port

2.2 Technical Specifications

2.2.1 General Specifications

Table2-1 General Specifications

Parameters	Descriptions
External Access	Code-Division-Multiple-Access (CDMA)
CDMA Protocol	IS-95 A/B, IS-98A, IS-126, IS-637A, IS-707A, IS-2000,IS-856
Data Rate	
CDMA2000 1X	153 Kbps max. on both the forward and reverse links
1xEV-DO	Forward link: 2.4 Mbps max.
	Reverse link: 153 Kbps max.
System Memory	256Mbytes SDRAM and 256 Mbytes NAND Flash
Transmit/Receive Frequency Interval	45MHz for Cellular and 80MHz for PCS
RF technology	Zero Intermediate Frequency
Number of Channel	832 for Cellular and 42 for PCS
Operating Voltage	Battery : DC +3.4V ~ +4.3V
	External Operating and Charging DC : DC +5.0V
Current Consumption	1. External DC
	Stand by mode: Idle (110mA), Sleep (less than 9mA)
	Busy mode:650mA (Max)
	2. Battery
	Stand by mode: Idle (110mA), Sleep (less than 8mA)
	Busy mode: 650mA (Max)
Operating Temperature	-30°C ~ +60°C
Frequency Stability	±300Hz for Cellular and ±150Hz for PCS
Antenna	2 Internal Antennae
Size	59mm(W) X 101mm(L) X 26.0mm(H) with case
	56mm(W) X 100mm(L) X 15.0mm(H) without case
Weight	About 124g (with Battery), 61g(without battery)
External Interface	USB for Data and Easy Wireless Net Program
User Interface Software	Easy Wireless Net



2.2.2 Receiver Specifications

Table 2-2 Receiver Specifications

Parameters	Descriptions
Frequency Range	
Cellular	869.04 ~ 893.97 MHz
PCS	1931.25 ~ 1988.75MHz
Sensitivity	
1xRTT	Below –104.0 dBm/1.23MHz
EVDO	Below -105.5 dBm/1.23MHz
Input Dynamic Range 1xRTT	-25 dBm/1.23MHz ~ -104.0dBm/1.23MHz
EVDO	-25 dBm/1.23MHz ~ -104.0dBm/1.23MHz
EVDO	1xRTT
Single Tone Desensitization	Band Classes 0 (-30dBm @900KHz and -30dBm @-900KHz):
<u> </u>	Below –101.0 dBm/1.23MHz
The FER in each test shall not	Band Classes 1 (-30dBm @1250KHz and -30dBm @-1250KHz):
exceed 1.0% with 95% confidence	Below –101.0 dBm/1.23MHz
	EVDO
	Band Classes 0 (-30dBm @900KHz and -30dBm @-900KHz):
	Below -102.4 dBm/1.23MHz
	Band Classes 1 (-30dBm @1250KHz and -30dBm @-1250KHz):
	Below -102.4 dBm/1.23MHz
Intermodulation Spurious	1xRTT
-	Band Classes 0
Response Attenuation	Two tone (-43 dBm @900KHz and 1700KHz):
(Two interfering CW tones)	Below -101.0dBm/1.23MHz
The FER in each test shall not	Two tone (-32 dBm @900KHz and 1700KHz):
exceed 1.0% with 95% confidence	Below –90.0dBm/1.23MHz
	Two tone (-21 dBm @900KHz and 1700KHz):
	Below -79.0dBm/1.23MHZ
	Band Classes 1
	Two tone (-43 dBm @1250KHz and 2050KHz): Below -101.0dBm/1.23MHz
	Two tone (-32 dBm @1250KHz and 2050KHz):
	Below –90.0dBm/1.23MHz
	Two tone (-21 dBm @1250KHz and 2050KHz):
	Below –79.0dBm/1.23MHZ
	EVDO
	Band Classes 0
	Two tone (-43 dBm @900KHz and 1700KHz):
	Below -102.4dBm/1.23MHz
	Two tone (-32 dBm @900KHz and 1700KHz):
	Below –91.4dBm/1.23MHz
	Two tone (-21 dBm @900KHz and 1700KHz):
	Below -80.4dBm/1.23MHZ
	Band Classes 1
	Two tone (-43 dBm @1250KHz and 2050KHz):
	Below –102.4dBm/1.23MHz
	Two tone (-32 dBm @1250KHz and 2050KHz):
	Below –91.4dBm/1.23MHz
	1wo tone (-21 dBm @1250KHz and 2050KHz):
C. W. C	Below –91.4dBm/1.23MHz Two tone (-21 dBm @900KHz and 1700KHz): Below –80.4dBm/1.23MHZ Band Classes 1 Two tone (-43 dBm @1250KHz and 2050KHz): Below –102.4dBm/1.23MHz Two tone (-32 dBm @1250KHz and 2050KHz): Below –91.4dBm/1.23MHz Two tone (-21 dBm @1250KHz and 2050KHz): Below –80.4dBm/1.23MHZ Below –80.4dBm/1.23MHZ
Spurious Wave Suppression	Below –80dBc

2.2.3 Transmitter Specifications

Table 2-3 Transmitter Specifications

Parameters	Descriptions
Frequency Range	
Cellular	824.04 ~ 848.97 MHz
PCS	1851.25 ~ 1908.75MHz
Nominal Max Power	0.28 W (24.5dBm)
Peak Power in Operation Mode	0.40W (26.0dBm)
Minimum Controlled Output Power	Below –50dBm
Max Power Spurious	
Cellular	900KHz: Below –42dBc/30KHz
	1.98MHz: Below –54dBc/30KHz
PCS	1.25MHz: Below –42dBc/30KHz
	1.98MHz: Below –50dBc/30KHz

2.2.4 Standards

IS-95 A/B, IS-2000, IS-856: Protocol Between MS & BTS

IS-866: 3GPP2 C.S0033-0 Version 2.0: Recommended Minimum Performance Standards for CDMA2000 High

Rate Packet Data Access Terminal

IS-98A: Base MS Function

IS-98E: Recommended Minimum Performance Standards for cdma2000 Spread Spectrum Mobile Stations

IS-707: Data Service

IS-657: packet data

USB 2.0 Specification and OTG Supplement: Exchanging data between a host and peripheral

ITU-T G.712: Transmission systems and media, Digital systems and networks

