

Product Specification
Project Name: NCR
Model Name: PC Card
Version: 1.6

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Revision History

Revision	Version	Date	Author	Comments
1	0.1	01/31/2007	Sidney S. Park	Initial draft based on NCR – Lucent tentative requirements
2	1.0	2/5/2007	Sidney S. Park	Modification
3	1.1	3/8/2007	Sidney S. Park	Summary Version
4	1.2	4/18/2007	Sidney S. Park	Modified per spec finalization meeting
5	1.3	4/23/2007	Sidney S. Park	Modifications requested by NCR RF Frequency - changed PRL condition - removed FCC condition - removed
6	1.4	4/27/2007	Sidney S. Park	Standards and Certifications added to section 6
7	1.5	7/22/2007	Douglas Kwon	NDIS support – changed Operating frequency – changed FCC - changed
8	1.6	12/20/2008	Eric Hyun	Modification (Rev.0 – removed)

FCC Notice

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This device meets the FCC Radio Frequency Emission Guidelines and is certified with the FCC as FCC ID number: P4M-APC500N

Radio Frequency Exposure Information (SAR)

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the U.S. Federal Communications Commission. The exposure standard for wireless devices employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands. The highest measured SAR value for the device as reported to the FCC when installed with laptop contacted with human body directly is 1.41 W/kg. The FCC has granted an Equipment Authorization for this model device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines.

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1. Overview

AnyDATA PCMCIA EV-DO Rev. A Modem enables users to connected to high speed EV-DO Rev. A network, at peak data rate of download 3.1 Mbps and upload 1.8 Mbps. Diversity antenna enhances performance.

2. Design Concept

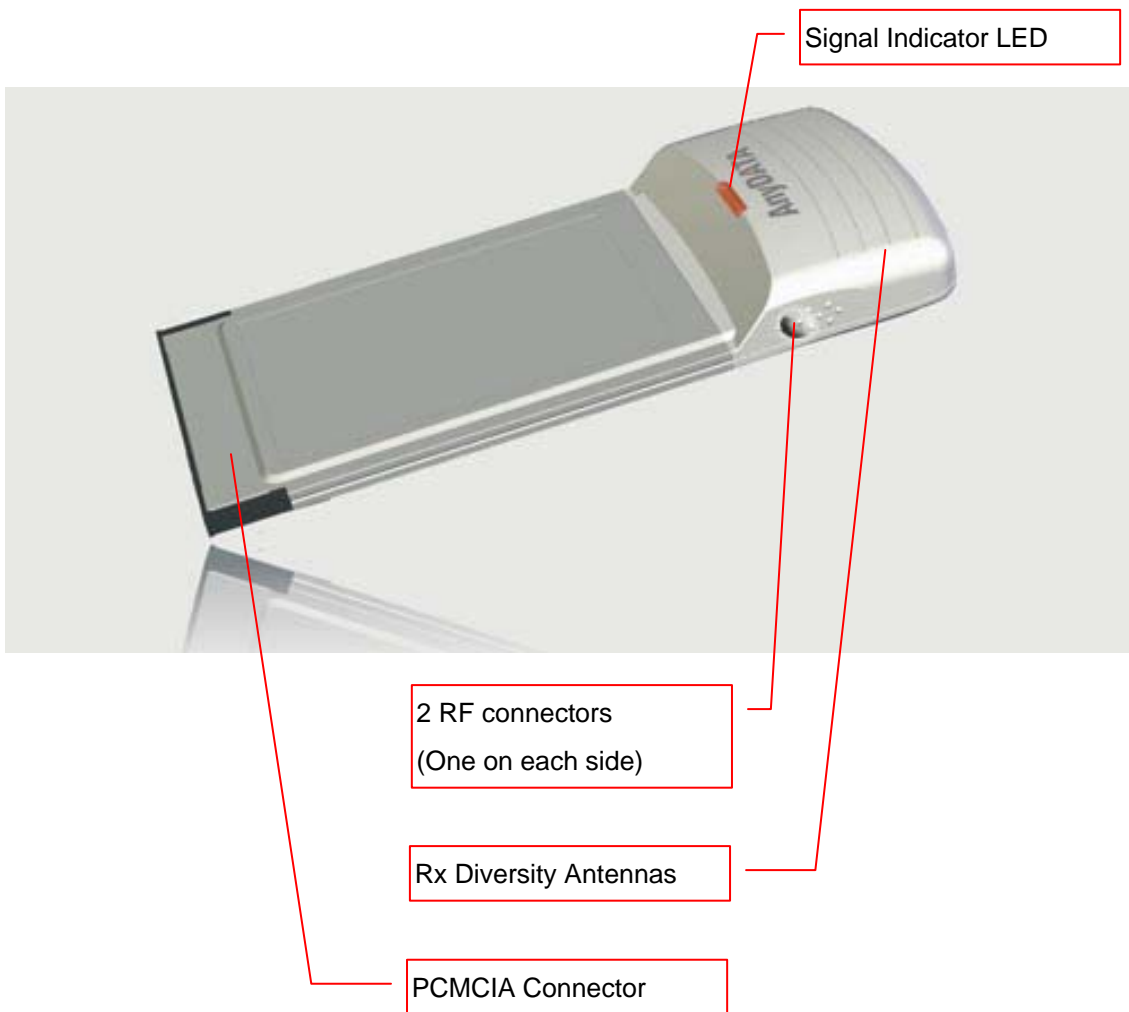
- Existing building blocks from Qualcomm technology and AnyDATA's modules will be utilized.
- RF section will be re-designed to handle 700 / 1900 MHz.

3. Key Features

- Main Chipset: MSM 6800
- Protocol: IS-856 EV-DO Rev. A
- Data Rate: Up to 3.1Mbps(FL) and 1.8Mbps(RL) peak
- Form Factor: PC Card Type II extended
- Dual receive diversity antennas encased in extended dome
- Frequencies:
 - 700 MHz
 - 1900 MHz (network dependent)
- Data connectivity only
- AGPS (gpsOne) capable
- SGPS capable
- Connection Manager

4. Form Factor

- PCMCIA (CardBus) Type II Extended Card
- Size: 130~132mm (L) x 54mm (W) x 5mm (H) , Antenna 13mm (H)
- Weight: approximately 55g
- Dual Receive Diversity Antenna
- External antenna connectors, Main & Auxiliary (RX Diversity & GPS)
- Extended part has clearance of approximately 5~7mm for obstruction due to laptop mechanical design or PCMCIA port cover
- Below rendering is provided for reference only. Final design may vary.



5. Technical Specification

5.1. Frequency Band

- CDMA 700 MHz
 - RX 763 ~ 768 MHz (Base Station to Mobile Station transmission)
 - TX 793 ~ 798 MHz (Mobile Station to Base Station transmission)
- CDMA 1900 MHz (Band Class 1) – capability available
 - No certification
 - Roaming & Certification with commercial network is out of scope of this document

5.2. Air Protocol

- CDMA 1xEV-DO Rev. A

5.3. Data Rate

- 1xEV-DO Rev. A – Max 3.1 Mbps Forward Link, 1.8 Mbps Reverse Link

5.4. Electrical Specification

- Interface: PCMCIA Standard 8.0, 68pin connector
- Input voltage: +3.3V +/- 9%, Peak 1000mA, Norm 750mA

5.5. Environmental

- Operating Temperature: -20 ~ +50° C
- Storage Temperature: -40 ~ +80° C
- Humidity: 0 ~ 95% non-condensing at 35° C

6. Standards

6.1. Standards

- IS-866 CDMA 1xEV-DO Rev A
- IS-856-ACDMA 1xEV-DO Rev A (IS-856-A-1 only)
- IS-707A Data
- IS-835A Data
- IS-637A SMS – network dependent, not supported on NCR network
- IS-637B SMS – network dependent, not supported on NCR network
- IS-683-A Service Provisioning – network dependent
- PC Card Specification 8.0

6.2. Certifications

- FCC (pending)
 - Part 15
 - Part 24
 - Part 90
- Others

- Microsoft WHQL (pending)

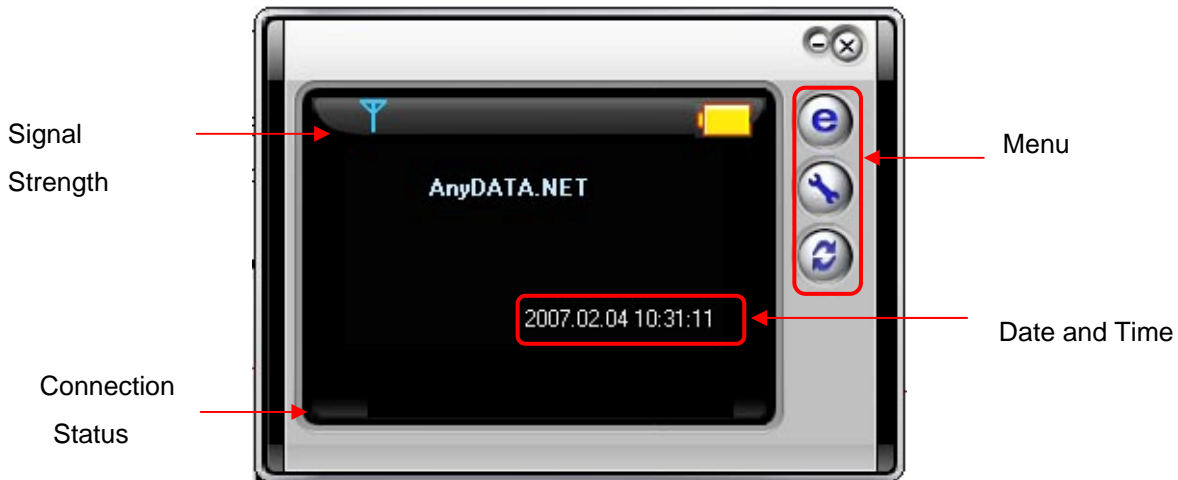
7. Client Software

7.1. System Requirements

- One (1) PC Card Type II (CardBus) Slot
- Operating System: Windows 2000, Windows XP
- Processor: Pentium 150MHz or higher
- Disk space: 10MB Hard Disk
- Memory: 64MB RAM








7.2. User Interface

Below diagram is provided for reference only. Final design may vary.






7.3. Icons

7.3.1. Main Application Window Icons

	Wireless Internet Connection
	Wireless Internet Disconnection
	Settings
	Signal Strength Indicator
	System Mode (EV-A) Indicator
	Wireless Internet Connected Indicator
	Wireless Internet Disconnected Indicator

7.3.2. Settings Sub-menu Icons

	Packet Call Meter
	Internet Settings
	Network Settings

7.3.3. Other Features

- Installer Package: Setup.exe, DUN or NDIS auto-setup, install GUI, user manual
- Sub-menus

- About menu: Firmware Version, H/W Version, PRL Version display
- Config menu:
 - ◆ ID/password, Dialup Digits, COM Port, Baud-rate
 - ◆ Preference mode (if applicable)
- History (Packet Call Meter)
 - ◆ Total Byte, Connection Time, Reset Counter
- Service menu
 - Basic service provisioning (enter with secret code or SPC)
 - ◆ NAM if applicable
 - ◆ PRL if applicable
 - ◆ Authentication parameters if applicable
- SMS – disabled
- Minimize to tray
- Auto-start