# MF332 Specification



## 1.Overview

The ZTE MF332 HSDPA/EDGE Wireless Data Card is a type of multi-mode, 3G wireless data card, applicable to HSDPA/ WCDMA/ EDGE/ GPRS/ GSM network. With PCMCIA interface to connect to portable PC, it integrates functions of modem and mobile phone, and combines mobile communication with the Internet perfectly. Via HSDPA/ WCDMA/ EDGE/ GPRS /GSM mobile network, it carries out data, audio and SMS services, helping you break away from limitation of time and zone, and communicate wirelessly anytime and anywhere.

For ZTE MF332, the RF, BB and PM module is the core of system, they help MF332 realize functions for supporting HSDPA/ WCDMA/ EDGE/ GPRS /GSM. The RF module include HSDPA/ WCDMA/ EDGE/ GPRS /GSM sub-module which using for transceiver and receiver for different frequency. The BB module for baseband handling and PM for power, they also provides interfaces to external facilities: voice function, SIM card and PCMCIA port etc.

With BB module on MB, MF332 realizes system functions for support 3G standard and also for 2G standard protocol. The RF module independently finish transmit and receive commission among the system performance index and the PB on MB realizes power and other externa

For voice service, it is completed by software testing in BB module and ringing circuit, voice

conversion circuit and voice amplification circuit. The software in BB module realizes service flow.

The single board provides interface to PC and also provides signals of RSSI interface.

The RF transmit index of single board is mainly realized by RF module and the functional index is jointly realized by external circuit interface.

## 2.Technical specifications

| Section | | Specification | Remarks |
|---|---|---|---|
| H/W | Interface Type | PCMCIA Type II | |
| | Common Air Interface | HSDPA/UMTS/EDGE/GPRS/GSM | |
| | Frequency | HSDPA/WCDMA 2100/850MHz, GSM/GPRS/EDGE 900/1800/1900MHz | |
| | Channel Spacing | 200 KHz | |
| | Transmission (Max. Data Rate) | (E)GPRS CLASS10<br>HSDPA  DL3.6Mbps<br>UMTS  DL384/UL384 Kbps<br>EDGE  DL236.8Kbps | |
| | Voice Capability | Support | |
| | Dimensions (W X D X H) | 120.8mm*54.8mm*12mm | |
| | Weight | about 55g | |
| | Headset Jack | Support | |
| | USIM &SIM | Support | |
| | LED | Two colour status LED | |
| | Antenna | Main Antenna(for all Frequency)   >Shape : Internal<br>>Gain : 0 dBi<br>>Output Impedance : 50 ohm            Sub Antenna(only for umts 850)>Shape : Internal<br>>Gain : 0 dBi<br>>Output Impedance : 50 ohm | |
| | Supply Voltage | 3.3V | |
| | Temperature<br> - Storage Temperature | -20   ~ +65 | |

| | | | |
|---|---|---|---|
| | - Operation Temperature | 0 ~ +55 | |
| **S/W** | Data transmision<br>>Authentication<br>>PDP type<br>>Class<br>>Multislot capability<br>>IP Version | >Support PAP CHAP<br>>PPP, IP<br>>Class 10<br>>GPRS Class B<br>>IPV4 | |
| | SMS | SMS MT & MO | |
| | Concatenated SMS | Support | |
| | Voice call | Voice call MO/MT | |
| | Voice codec | HR, FR, EFR, AMR | |
| | E911 | Support | |
| | STK | Support SMS MT & MO | |
| | AT Commands | AT Interface 3GPP TS27.007 and extended AT | |
| | Call records | Support | |
| | Phonebook | Support | |
| | SMS box | Support | |
| | Online Help | Support | |
| | Language | English, Simplified Chinese etc. | |
| | Product Support Tool | Support | |
| | Tx Max Power | 0.25W(UMTS),2W(GPRS/GSM/EDGE) | |
| **Transmitter** | Frequency Range | 890~915MHz   GSM/GPRS/EDGE<br>1710~1785MHz  GSM/GPRS/EDGE<br>1850~1910MHz  GSM/GPRS/EDGE<br>824 MHz~849 MHz HSDPA/UMTS<br>1920~1980MHz  HSDPA/UMTS | |
| | Frequency Stability | 0.1ppm | |
| | BandWidth | 5MHz(UMTS),200KHz(GSM/GPRS/EDGE) | |
| | Type of Oscillation | PLL Synthesizer | |
| | Intermediate Frequency | Zero  Intermediate Frequency | |
| | Modulation Method | QPSK(UMTS),GMSK(GSM/GPRS/EDGE),16QAM(HSDPA) | |
| | Common RF Impedance | 50 ohm | |
| **Receiver** | Frequency Range | 935~960MHz   GSM/GPRS/EDGE<br>1805~1880MHz  GSM/GPRS/EDGE<br>1930~1990MHz  GSM/GPRS/EDGE<br>869 ~894 MHz  HSDPA/UMTS<br>2110~2170MHz  HSDPA/UMTS | |
| | BandWidth | 5MHz(UMTS),200KHz(GSM/GPRS/EDGE) | |
| | Type of Oscillation | PLL Synthesizer | |
| | Channel Equalizer | Support | |
| | Rx diversity | Support | |
| | Intermediate Frequency | Zero Intermediate Frequency | |
| | Modulation Method | QPSK(UMTS),GMSK(GSM/GPRS/EDGE)   16QAM | 16QAM(HSDPA) |
| | Common RF Impedance | 50 ohm | |
| **Etc.** | Operating system | Windows 2000/XP | |
| | Notebook/laptop | IBM, DELL, Toshiba, Fujitsu, SONY, HP, Founder, Lenova, etc. | |
| | Accessories | >CD-ROM (Installation software)<br>>Headset<br>>User's Guide<br>>Guarantee card | |
| | Certification & Approval | >IOT tests | |