

MC8780/MC8781 PCI EXPRESS MINI CARD POWERFUL, COST EFFECTIVE, STANDARDS-BASED HSPA ENGINE

MC8780/MC8781 PCI Express Mini Cards

Technical Specifications

Technology

PCI Express Mini Card
MSM7200™ Chipset
UMTS with HSDPA Category 8/6/12 (7.2/3.6/1.8 Mbps downlink)
HSUPA Category 4 (2.0 Mbps uplink)
EDGE/GPRS MS Class 12
Receive equalizer with dual antenna diversity
USIM support
PC/SC interface
Qualcomm GpsOne® technology

Package

Length: 51 mm
Width: 30 mm
Thickness: 4.5 mm
Weight: under 12 g

Power

Input Voltage Range: 3.0 ~ 3.6V
Low talk current
Low stand-by current

Antenna Connector

50 Ohm compatible
U. FL RF connector

Bands

850/1900/2100MHz WCDMA
Power class 3 (+24dBm)
850/900MHz GSM/GPRS/EDGE
GSM Power class 4/EDGE E2
1800/1900 MHz GSM/GPRS/EDGE
GSM Power Class 1/EDGE E2
GPS/1575.42 MHz

Host Interface

52-Pin Edge Connector
Pinout supports PCI-Express Mini Card Specification Rev 1.1
USB 2.0
Software configurable LED control
U-SIM

Dual Antenna Diversity Support

MC8780: 2100/850 MHz
MC8781: 1900/850 MHz

Additional Functionality

AT command interface
CnS command interface
Software Development Kit (SDK) including Application Program Interface (API)

Environmental

Operating Temperature: -25 to +60° C
Storage Temperature: -30 to +85° C

Data Services

850/1900/2100 MHz WCDMA
Downlink up to 7.2Mbps
Uplink up to 2.0Mbps
850/900/1800/1900 MHz GSM/GPRS/EDGE
Downlink up to 236 Kbps
Uplink up to 236 kbps

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CONNECTING PEOPLE AND SYSTEMS TO MOBILE BROADBAND NETWORKS AROUND THE WORLD

Sierra Wireless is a recognized industry leader in developing wireless data products and enabling software. Sierra Wireless modems and software connect people all over the world with mobile broadband networks that keep them in touch, informed, and productive from wherever they need to be. The Company offers a diverse product portfolio addressing enterprise, consumer, original equipment manufacturer, machine-to-machine, and specialized vertical industry markets. Sierra Wireless also provides professional services to customers requiring expertise in wireless design, integration, and carrier certification.

For more information, please visit our website, www.sierrawireless.com.

SIERRA WIRELESS
MC8780/ MC8781

PCI Express Mini Card Standard

Superior Integration Support

Fastest Time to Market

AirCard Enabled™



MC8780/MC8781 PCI EXPRESS MINI CARD POWERFUL, COST EFFECTIVE, STANDARDS-BASED HSPA ENGINE

■ AirCard Enabled™ Solutions

The powerful, cost effective MC8780 and MC8781 PCI Express Mini Cards easily integrate into laptops and other host devices to offer complete wireless data solutions over HSUPA-capable UMTS networks. Embedded right into computing devices for best possible performance, users will be 'AirCard Enabled™', and receive the same high-performance wireless wide area connectivity customers have come to expect from Sierra Wireless' award-winning AirCard products. The MC8780 and MC8781 PCI Express Mini Cards will truly change the way people access e-mail, the Internet and corporate applications through their computing devices.

■ PCI Express Mini Card Standard

Based on the PCI Express Mini Card specification, the MC8780 and MC8781 offer premium functionality and performance. Sierra Wireless' flexible Command and Status (CnS) interface and key software applications support compelling data products. Extensive software, applications and tools, installation and activation wizards, and essential hardware drivers simplify the certification and commercialization process. Measuring 51 x 30 x 4.5 mm and weighing in less than 12g, the MC8780 and the MC8781 comply with new European Union directives on RoHS (Restrictions on Hazardous Substances).

- POWERFUL, COST EFFECTIVE ENGINES FOR HSUPA-CAPABLE UMTS NETWORKS
- BEST IN CLASS TECHNICAL AND INTEGRATION SUPPORT AND PROFESSIONAL SERVICES ACCELERATE END PRODUCT TIME-TO-MARKET
- COMPREHENSIVE SOFTWARE OFFERING, DEVELOPMENT KIT AND APPLICATIONS SIMPLIFIES DEVELOPMENT PROCESS
- USES LATEST QUALCOMM HSPA TECHNOLOGY

■ Powerful HSDPA Engines

The MC8780 and MC8781 PCI Express Mini Cards provide wide area wireless data access at speeds up to 7.2 Mbps downlink and up to 2.0 Mbps uplink. Both offer tri-band UMTS/HSPA and quad-band GSM/GPRS/EDGE network access for roaming on high-speed networks worldwide. In addition, dual antenna diversity improves fringe performance for the MC8780 in Europe and Asia Pacific, and the MC8781 in North America.

- Peak downlink speeds up to 7.2 Mbps and peak uplink speeds up to 2.0 Mbps*
- Uses MSM7200™ chipset from QUALCOMM
- Supports tri-band UMTS (HSPA): 850, 1900, and 2100 MHz
- Receive equalizer with dual antenna diversity
 - MC8780: 850/2100 MHZ optimized for Europe and Asia Pacific
 - MC8781: 850/1900 MHZ optimized for North America
- Supports quadband EDGE/GPRS/GSM: 850/900/1800/1900 MHz
- Supports third generation (3G) digital cellular standards
- Enables rapid development of exceptional high-speed data products
- Comprehensive WHQL-certified USB software driver architecture

* Subject to network conditions, see service provider for details

■ Superior Support To Help With Integration Requirements

Sierra Wireless has extensive experience working with customers to develop and bring GSM data solutions to market on a timely basis. Backed by a leading development and support team, customers can depend on Sierra Wireless to provide comprehensive software interface, development and integration services and a full suite of complementary software drivers to expedite product development cycles. Look at Sierra Wireless as a reliable extension of your development team to efficiently design, develop, certify, and launch exceptional wireless data products.

Sierra Wireless is your only source for AirCard Enabled wireless data solutions.

