MC8780/MC8781 PCI EXPRESS MINI CARDS

POWERFUL, COST EFFECTIVE, STANDARDS-BASED HSDPA ENGINES

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.

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 (HSDPA): 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

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).

* 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.

SIERRA WIRELESS
HEART OF THE WIRELESS MACHINE®

PCI Express Mini Card Standard

Superior Integration Support

Fastest Time to Market

AirCard Enabled™

AirCard Enabled™

- **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 TECHNOLOGY**

MC8780/MC8781 PCI EXPRESS MINI CARD

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 +60º C
Storage Temperature: -30 to +85º 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

FOR MORE INFORMATION
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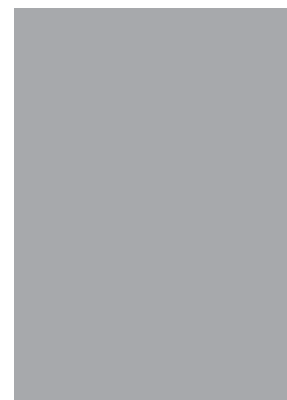**Tel: +44 20 8 622 3015**
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SIERRA WIRELESS, THE LEADER IN WIRELESS WIDE AREA MOBILE COMPUTING

Sierra Wireless is a recognized industry leader in developing wireless data products and enabling software for portable and industrial applications. Sierra Wireless's products include:

- AirCard® line of PC Cards, ExpressCards and USB Modems
- Line of PCI Express Mini Cards for CDMA and GSM technology tracks
- MP rugged wireless modem line for EDGE/GSM/GPRS and CDMA 1X networks
- Embedded module series for CDMA 1X, and CDMA 1xEV-DO networks
- Software Development Kits (SDKs)

Now Sierra Wireless enhances your wireless access choices with high-performance broadband wireless products to meet your worldwide needs.

SIERRA WIRELESS MC8780/MC8781 PCI EXPRESS MINI CARDS

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