## WLAN 802.11a/b/g High Power mini-PCI Module

DCMA-82



- Two kinds of RD connector models for choice\_ MMCX & UFL type
- Single-Chip 802.11a/b/g mini-PCI Design for Embedded Application
- High Power Design, average power up to 25dBm
- Hear sink design provide reliable high power RD performance
- Screw hole reserved for assembly with AP main board
- Integrated 802.11i/WPA2 Supplicant
- 802.11e Compatible Bursting
- Internal Low Frequency Oscillator for Low Power Sleep Mode
- Host Interface PCI 2.3 Compatible
- WHQL Certified
- RoHS Compliant
- Operating Temp. Range can reach fm -40°C to 80°C, Industrial Spec. (optional)

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#### SPECIFICATION

Frequency Band Modulation technique	<ul> <li>A Mode: 5.15~5.35 &amp; 5.725~ 5.85 GHz for US 5.15~5.35 GHz for Japan 5.15~5.35 &amp; 5.47~5.725 GHz for ETSI 5.725~5.85 GHz for China 4.94~4.989Ghz for US safety band</li> <li>B/G Mode: 2400~2483.5 MHz (for US, Canada, EU, China and Japan)</li> <li>802.11 a/b/g DSSS (DBPSK, DQPSK, CCK) OFDM (BPSK,QPSK, 16-QAM, 64-QAM)</li> </ul>
Host interface	<ul> <li>Mini-PCI type 3A</li> </ul>
Channels support	<ul> <li>802.11b/g US/Canada: 11 (1 ~ 11) Major European country: 13 (1 ~ 13) France: 4 (10 ~ 13) Japan: 11b: 14 (1~13 or 14<sup>th</sup>), 11g: 13 (1 ~ 13)</li> <li>802.11a US/Canada: 12 non-overlapping channels Europe: 19 non-overlapping channel Japan: 8 non-overlapping channels US(safety band) : 4940~4990Mhz</li> </ul>
Operation voltage	> 3.3V +/- 10%
Power consumption	<ul> <li>➤ A Mode: Cont. Tx: 1100mA (typical)~1300mA (max) Cont. Rx: 250mA (typical)~270mA (max) Stand by: 280mA (typical)~290mA (max)</li> <li>➤ B Mode: Cont. Tx: 730mA (typical)~780mA (max) Cont. Rx: 200mA (typical)~220mA (max) Stand by: 230mA (typical)~240mA (max)</li> <li>➤ G Mode: Cont. Tx: 730mA (typical)~240mA (max) Cont. Rx: 240mA (typical)~260mA (max) Stand by: 280mA (typical)~260mA (max)</li> <li>➤ Power saving: 35mA (typical)~55mA (max)</li> <li>➤ Radio off: 40mA (typical)~50mA (max)</li> </ul>
Output power	<ul> <li>A Mode: +22.5dBm at 6, 9, 12, 18Mbps +21.5dBm at 36Mbps +19dBm at 48Mbps +18dBm at 54Mbps</li> <li>B Mode: +24.5dBm at 1,2, 5.5, and 11Mbps</li> <li>G Mode: +24.5dBm at 6, 9, 12, 18Mbps +23.5dBm at 36Mbps +22dBm at 48Mbps +21dBm at 54Mbps</li> </ul>



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#### **SPECIFICATION**

Operation System supported	➢ Windows <sup>®</sup> 2K, XP
Dimension	➢ 59.6mm(L) * 50.8mm (W) * 7.5mm (H)
Security	<ul> <li>64-bit, 128-bit, 152-bit WEP Encryption</li> <li>802.1x Authentication</li> <li>AES-CCM &amp; TKIP Encryption</li> </ul>
Operation temperature	➢ 0°C ~ 70°C
Storage temperature	► -20°C ~ 80°C
Wi-Fi <sup>®</sup> Alliance	WECA Compliant
WHQL	Microsoft <sup>®</sup> 2K, XP Complaint
FAA	S/W radio On/Off support
EMC certificate	<ul> <li>FCC part 15 (USA)</li> <li>ETSI, EN301893, EN60950 (Europe)</li> </ul>
Media access protocol	CSMA/CA with ACK architecture 32-bit MAC
Advance Function	<ul> <li>Super AG</li> <li>Extended Range</li> <li>Support JumpStart V1.0 on Microsoft<sup>®</sup> 2K, XP</li> </ul>
Antenna connector	2 x SMT Ultra-miniature coaxial connectors (2*U.FL or 2*MCX)

The 4.9GHz products will have separate ordering codes and will be available only to customers who have applied and received authorization by the FCC to use the public safety band.

Specifications are preliminary and information only. Subject to change without notices.



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