

## WiMAX Half-Mini Card Reference Design

The **APW260 RDK** is a reference design kit for a low-cost mobile WiMAX subscriber terminal in a single-sided PCI-e Half-Mini Card format. It contains: 1) a Reference Board, 2) Software Drivers, 3) Operating Manual, 4) Fabrication Package, and 5) Test & Calibration Procedures.

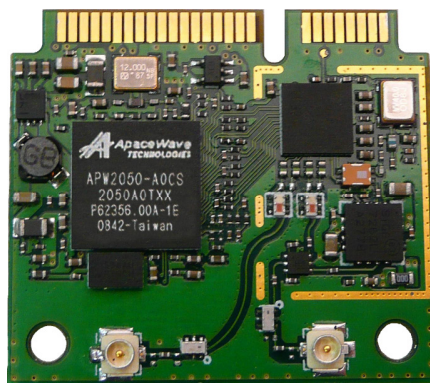
The **APW260** is supported by powerful Mobile Station embedded firmware, system drivers, APIs, connection manager, and various operating systems, such as Windows XP and Vista. It is optimized for mobile computing platforms and is an excellent solution for embedded WiMAX applications, such as Laptop and Netbook computers.

Based on ApacWave's advanced 65 nm **APW2050 WiMAX baseband SoC**, which offers very low-power operation, while achieving high data through-put and robust performance, the **APW260** offers excellent cost & performance value.

### Features

- WiMAX Wave 2 compliant & Certification-ready
- Compliant with PCI-e Half-Mini Card and USB 2.0 specifications
- WHQL certified drivers for Windows® XP & Vista
- Supports WiMAX profile MP05 (3A) for 5 MHz and 10 MHz, also 2.3 to 2.7 GHz, 25 kHz steps
- High-efficiency PA with up to 24 dBm Transmit power meeting WiMAX EVM requirements
- WiMAX 2.3-2.7 GHz chip antennas for MIMO support
- Low-cost single-sided circuit board design
- Low power consumption design
- Complete manufacturing reference design kit available with automated test & calibration for fast high-yield production
- APW2050 meets RoHS requirements

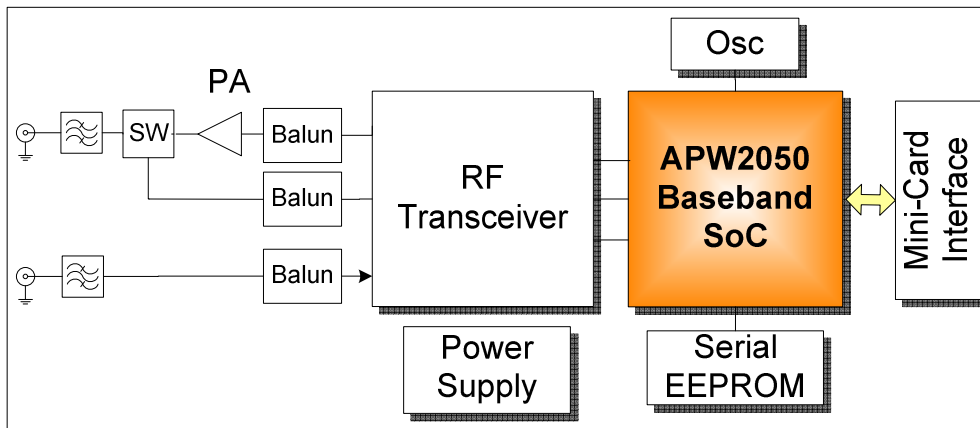
## APW260 Half-Mini Card



## APW260 Mobile WiMAX HMC Specification Summary

<b>Standards</b>	Mobile WiMAX Wave 2; PCI-e Half-Mini Card; USB 2.0	<b>Software:</b>	
<b>Host Interface</b>	Type H1 Half-Mini Card with USB 2.0 Serial Data Interface	<b>Operating System</b>	WHQL certified drivers for Windows® XP and Vista
<b>Throughput</b>	Over 25 Mbps	<b>Connection Manager</b>	Provides network discovery, selection, and preferred network profile configuration
<b>Bandwidths Supported</b>	Profile MP05 (3A) for 5 MHz and 10 MHz	<b>Configuration Manager</b>	Provides debug commands for customer support
<b>RF Frequency Supported</b>	2.3 to 2.7 GHz in 25 kHz steps; APW2050 & RF Transceiver support 3.3 to 3.9 GHz	<b>API</b>	WiMAX standard API commands provided
<b>RF Output Power</b>	Up to 24 dBm transmit power; meets WiMAX EVM requirements	<b>QoS Features</b>	BE, UGS, RTPS, NRTPS, and ERTPS
<b>RF Connectors</b>	Dual RF IPX connectors	<b>Security</b>	WiMAX Wave 2 compliant security
<b>Production Test</b>	Supports automated testing for rapid end-of-line test and calibration	<b>Power Management</b>	Supports Idle and Sleep modes with intelligent power management
<b>Power Required</b>	3.3V from PCI-e Half-Mini Card interface	<b>Disable</b>	Control input for user to disable radio operation per PCI-e specification
<b>Ordering Information</b>	APW260 – Reference Unit APW260RDK – Reference Design Kit	<b>PCB Dimensions</b>	30 mm x 26.8 mm x 2.5 mm

## APW260 Functional Diagram



**ApacWave Technologies**

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