

# Wireless LAN Module



## WMUSB-V01-R20

USB embedded module with VIA wireless LAN module

### Features

1. IEEE 802.11b DSSS / IEEE 802.11g OFDM high rate compatible
2. USB embedded module
3. Supports RF On/Off mechanism
4. Supports an external or internal LED indicator
5. WEA/WAP support



## WMPCIE-V01-R30

PCIe Mini card wireless LAN module

### Features

1. PCIe Mini card form factor
2. High speed wireless connection to 54Mbps
3. Solid design with external antenna diversity
4. Low power consumption and high performance
5. Enhanced wireless security

Standards	IEEE 802.11 b/g	IEEE 802.11 b/g , Wi-Fi compliant
Interface	USB 1.1/2.0 interface	PCIe mini card
Controller Chip	VIA VT6656	Ralink
Connectors	2 x U.FL (I-PEX) antenna connectors	2 x U.FL (I-PEX) antenna connectors
Security	Supports WEP, WPA 1.0/2.0	64/128-bit WEP, WPA, WPA2, TKIP, AES
Frequency Range	2.4 ~ 2.5GHz	2.412-2.472 GHz
Modulation Type	802.11b : DQPSK, DBPSK, DSSS and CCK 802.11g : BPSK, QPSK, 16QAM, 64QAM, OFDM	IEEE 802.11b (DSSS): CCK, DQPSK, DBPSK 802.11g (OFDM): BPSK, QPSK, 16-QAM, 64-QAM
Supported OS	Windows® 98SE/ME/2000/XP	Windows® 2000/XP/Vista
Receiver Sensitivity	802.11b (8% PER) -83 dBm (Typical) at 11Mbps 802.11g (10% PER) -68 dBm (Typical) at 54Mbps	802.11g: -72 dBm(Typical) at 54 Mbps 802.11b: -88 dBm(Typical) at 11 Mbps
Power Consumption	382 mA@ 5V Tx mode/High speed 305 mA@ 5V Rx mode/High speed	868mA@3.3V in continue Tx 485mA@3.3V in continue Rx
Temperature	operation: 0°C ~ 60°C	Operation: 5°C to 55°C      Storage: -20°C to 70°C
Humidity	operation: 10% ~ 90% non-condensing	Operation:10% ~ 90% (non-condensing)      Storage: 5% ~ 90% (non-condensing)
Dimensions	60 mm x 25 mm	510 mm x 30 mm
Weight	NW: 8 g	NW: 5 g
Compliance Certifications	FCC, CE	FCC

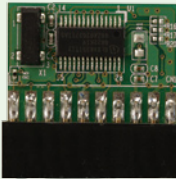

## Ordering Information

Part No.	Description	Part No.	Description
WMPCIE-V01-R30	802.11 b+g PCIe mini card wireless LAN module with Ralink	32100-143900-RS	RF cable; 300MM; 28AWG; (A)SMA connector; (B)MHF20278-11R-13; ROHS
WMUSB-V01-R20	802.11 b+g USB embedded module with VIA VT6656	32000-105000-RS	USB cable, 2x4-pin 2.54mm to JST SHR-06V 1.0mm, L:20cm
32500-000500-RS	2 dBi 109mm antenna	32000-102500-RS	USB cable, 2x4pin 2.0mm to JST SHR-06V 1.00mm, L:150mm
32500-001000-RS	5 dBi 173mm antenna		

# IEI Trusted Platform Module (TPM)

Hardware base security solution for data protection and reliable authentication via TPM that stores key, passwords and digital certificates.

## H/W Features Comparison

Solution	<b>Infineon</b> <b>SLB9635 TT1.2</b> 
Features	
Secure Startup	Root of Trust Measurement of early boot devices
Anti H/W Attack	Sensors and active shield
TSS API Support	MS-CAPI / PKCS#11, #12
H/W Certification	
Management Tool Function	<ol style="list-style-type: none"> <li>1. TPM management</li> <li>2. File&amp;Folder En/De-cryption</li> <li>3. Personal secure drive</li> <li>4. Secure Email</li> <li>5. Key transferring</li> <li>6. Security policy configuration</li> </ol>
Market Segment	Complete TPM1.2 function
TCG Specification	TCG 1.2 compliance trusted platform module
Interface	Low pin count
Software Structure	TCG software stack 1.2 complaint
Cryptographic Accelerator	HAS-1/ RSA algorithm

## Pin Assignment

Pin	Signal
1	LCLK
2	VSS
3	LFRAME#
4	KEYWAY
5	LRST#
6	VCC5
7	LAD3#
8	LAD2#
9	VCC3
10	LAD1#
11	LAD0#
12	VSS
13	SCL
14	SDA
15	SPDA1
16	SPDA0
17	VSS
18	SERIRQ
19	RC#
20	A20GATE

## IEI SBC with TPM support

Model name	Form factor
PCIE-9652	PICMG 1.3
PCIE-Q350-R11	
WSB-Q354-R40	
WSB-9452-R40	PICMG 1.0
WSB-PV-D5251/D4251	
IMBA-G410	ATX
IMBA-G412ISA	
IMBA-XQ354-R11	
IMBA-9454-R40	Mini ITX
IMBA-9454ISA	
IMB-9454G-R40	Micro ATX
KINO-HM551	Mini ITX
KINO-780AM2	
KINO-780EB	
KINO-9652-R11	5.25"
NOVA-PV-D5251/D4251	
NOVA-945GSE-R20	EPIC
NANO-HM551	
NANO-PV-D5251/D4251/N4551	

## TPM OS Supported List

OS Supported	Infineon
Windows®	Windows® XP SP2, Windows® 7, Vista
Linux	Fedora 6 (Kemel 2.6.8 or above)

## Ordering Information

Model Name	Description
TPM-IN01-R11	20-Pin Infineon TPM module, software management tool, firmware V3.17