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 11Mpbs 802.11g (10% PER) -68 dBm (Typical) at 54Mpbs	802.11g: -72 dBm(Typical) at 54 Mbps 802.11b: -88 dBm(Tpyical) 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	

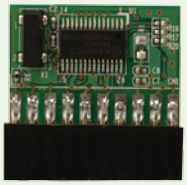
Ordering Information

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 / Features	Infineon **SLB9635 TT1.2**
	
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	EAL 4
Management Tool Function	1. TPM management 2. File&Folder En/De-cryption 3. Personal secure drive 4. Secure Email 5. Key transferring 6. Security policy configuration
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	Singnal
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	PICMG 1.0
WSB-9452-R40	
WSB-PV-D5251/D4251	
IMBA-G410	ATX
IMBA-G412ISA	
IMBA-XQ354-R11	
IMBA-9454-R40	
IMBA-9454ISA	
IMB-9454G-R40	Micro ATX
KINO-HM551	Mini ITX
KINO-780AM2	
KINO-780EB	
KINO-9652-R11	
NOVA-PV-D5251/D4251	5.25"
NOVA-945GSE-R20	
NANO-HM551	EPIC
NANO-PV-D5251/D4251/N4551	

TPM OS Supported List

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

Ordering Information

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