

Hardware Integration Guide SDC-SSD40L

(Preliminary Version 0.3)

Revision History

Version	Revision Date	Change Description
0.1		Pre-Release Version
0.2		General revisions made to Pre-Release Version
0.3	12/13/10	Updated Certifications sections of the Specifications table.



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Scope

This document describes key hardware aspects of the Summit SSD40L SDIO (Secure Digital Input/Output) radio module. This document is intended to assist device manufacturers and related parties with the integration of this radio into their host devices. Data in this document are drawn from a number of sources and include information found in the USI (WM-N-BM-01) data sheet issued in April, 2010.

Because the SDC-SSD40L is currently in pre-production, this document is preliminary and the information in this document is subject to change. Please contact Summit or visit the Summit website at www.summitdatacom.com to obtain the most recent version of this document.

Operational Description

This device is an SDC-SSD40L SDIO (Secure Digital Input/Output) which operates in unlicensed portions of the 2.4 GHz radio frequency spectrum. The device is compliant with IEEE 802.11b, 802.11g, and 802.11n standards using Direct Sequence Spread Spectrum (DSSS) and Orthogonal Frequency Division Multiplexing (OFDM). The device supports all 802.11b, 802.11g, and 802.11n data rates and automatically adjusts data rates and operational modes based on various environmental factors.

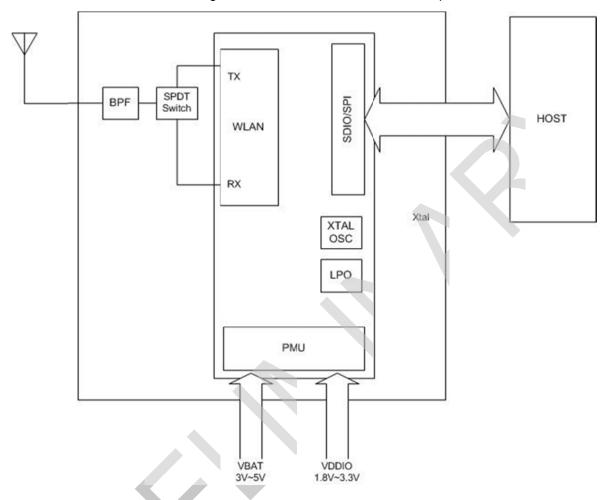
The SDC-SSD40L is a wireless System in Package (SiP) land grid array (LGA) module which interfaces to host devices via a 66-pin connector. This device is based on the Broadcom 4319 chipset which is an integrated device providing Media Access Controller (MAC), a Physical Layer Controller (PHY or baseband processor), and a 2.4 GHz transceiver. The SDC-SSD40L is powered by the host device into which it is installed. This device is designed for single antenna use.

Regulatory operational requirements are included with this document and may be incorporated into the operating manual of any device into which the SDC-SSD40L installed. The SDC-SSD40L is designed for installation into mobile devices such as vehicle mount data terminals (which typically operate at distances greater than 20 cm from the human body) and portable devices such as handheld data terminals (which typically operate at distances less than 20 cm from the human body). See "Documentation Requirements" for more information.



Block Diagram

The SDC-SSD40L module is designed based on the Broadcom 4319 chipset.



Specifications

Feature	Description
Physical Interface	0.62 mm pitch LGA (land grid array) (0.62 GSP)
Wi-Fi Interface	1-bit or 4-bit Secure Digital I/O
Antenna Interface	Single antenna port
Chip Set	Broadcom BCM4319
Input Voltage Requirements	3.3 VDC ± 10% (core)
I/O Signaling Voltage	1.8 to 3.3 VDC ± 10%
Current Consumption (At maximum transmit power setting)	802.11b (17 dBm output power) Transmit: 315 mA (1040 mW) Receive: 77 mA (254 mW)



Feature	Description
	Standby: TBD mA (TBD mW)
	802.11g (15 dBm output power)
	Transmit: 220 mA (726 mW)
	Receive: 77 mA (254 mW)
	Standby: TBD mA (TBD mW)
	802.11n (15 dBm output power) (20-MHz and 40-MHz
	channels)
	Transmit: 220 mA (726 mW) Receive: 77 mA (254 mW)
	Standby: TBD mA (TBD mW)
Operating Temperature	-20° to 70°C (-4° to 158°F) (SDIO)
Operating Humidity	10 to 90% (non-condensing)
Storage Temperature	-30° to 85°C (-22° to 185°F)
Storage Humidity	10 to 90% (non-condensing)
Maximum Electrostatic Discharge	TBD
Length	10 mm (0.39")
Note: Length, width, and thickness	
measurements include the metal shielding.	
Width	10 mm (0.39")
Thickness	1.3 mm (0.05")
Mounting	See "Mounting" section for more information
Wireless Media	Direct Sequence-Spread Spectrum (DSSS) Orthogonal Frequency Divisional Multiplexing (OFDM)
Media Access Protocol	Carrier sense multiple access with collision avoidance (CSMA/CA)
Network Architecture Types	Infrastructure and ad hoc
Network Standards	IEEE 802.11b, 802.11d, 802.11e, 802.11g, 802.11i, 802.11n
Data Rates Supported	802.11b (DSSS) 1, 2, 5.5, 11 Mbps
	802.11g (OFDM) 6, 9, 12, 18, 24, 36, 48, 54 Mbps
	802.11n (OFDM, MCS 0-7) 6.5, 7.2, 13.0, 14.4, 19.5, 21.7, 26.0, 28.9, 39.0, 43.3, 52.0, 57.8, 58.5, 65.0, 72.2 Mbps
Modulation	BPSK @ 1, 6, 6.5, 7.2 and 9 Mbps
	QPSK @ 2, 12, 13, 14.4,18, 19.5 and 21.7 Mbps
	CCK @ 5.5 and 11 Mbps
	16-QAM @ 24, 26, 28.9, 36, 39 and 43.3 Mbps 64-QAM @ 48, 52, 54, 57.8, 58.5, 65, and 72.2 Mbps
802.11n Spatial Streams	1 (Single Input, Single Output)
002. i ili Spatiai Streams	1 (onigio iripat, onigie output)



Feature	Description
2.4 GHz Frequency Bands	ETSI
	2.4 GHz to 2.483 GHz
	FCC
	2.4 GHz to 2.483 GHz
	TELEC
	2.4 GHz to 2.495 GHz
	KCC 2.4 GHz to 2.483 GHz
2.4 GHz Operating Channels	ETSI: 13 (3 non-overlapping)
	FCC: 11 (3 non-overlapping)
	TELEC: 14 (4 non-overlapping)
	KCC: 13 (3 non-overlapping)
Transmit Power Settings	802.11b/g
	17 dBm (50 mW)
Note: Maximum transmit power varies	15 dBm (30 mW)
according to individual country regulations. All values nominal, +/-2	802.11n
dBm	14 dBm (25 mW)
Typical Receiver Sensitivity	802.11b
,	1 Mbps -94 dBm
	2 Mbps TBD dBm
	5.5 Mbps TBD dBm
	11 Mbps -87 dBm (PER <= 10%)
	802.11g
	6 Mbps -86 dBm
	9 Mbps TBD dBm
	12 Mbps TBD dBm
	18 Mbps TBD dBm
	24 Mbps TBD dBm
	36 Mbps TBD dBm
	48 Mbps TBD dBm
	54 Mbps -73 dBm (PER <= 10%)
	802.11n
	6.5 Mbps TBD dBm
	7.2 Mbps TBD dBm
	13 Mbps TBD dBm
	14.4 Mbps TBD dBm
	19.5 Mbps TBD dBm
	21.7 Mbps TBD dBm
	26 Mbps TBD dBm
	28.9 Mbps TDB dBm



Feature	Description		
	39 Mbps	TBD dBm	
	43.3 Mbps	TBD dBm	
	52 Mbps	TBD dBm	
	57.8 Mbps	TBD dBm	
	58.5 Mbps	TBD dBm	
	65 Mbps	-86 dBm	
	72.2 Mbps	TBD dBm	
Operating Systems Supported	Windows Mobile 6.5		
	Windows Mobi		
	Windows Mobi		
	Windows Mobi	le 5.0 edded CE 6.0 R3	
		edded CE 6.0 R3	
	Windows Emb		
	Windows Emb		
Security	Standards		
•	 Wireless E 	iquivalent Privacy (WEP)	
	■ Wi-Fi Prote	ected Access (WPA)	
	■ IEEE 802.	11i (WPA2)	
	Encryption		
	Wireless E	quivalent Privacy (WEP, RC4 Algorithm)	
	Temporal I	Key Integrity Protocol (TKIP, RC4 Algorithm)	
	 Advanced 	Encryption Standard (AES, Rijndael Algorithm)	
	Encryption Ke	ey Provisioning	
	 Static (40-bit and 128-bit lengths) 		
	Pre-Share	d (PSK)	
	Dynamic		
	802.1X Extensible Authentication Protocol Types		
	■ EAP-FAS1	T	
	■ EAP-TLS		
	■ EAP-TTLS		
	■ PEAP-GT		
	■ PEAP-MS	CHAPv2	
	■ PEAP-TLS	3	
	LEAP		
Certifications	Wi-Fi Alliance		
	Summit is n time.	ot pursuing Wi-Fi Alliance certification at this	
	Cisco Compa	tible Extensions (Version 4)	
	Summit is n	ot pursuing CCX certification at this time.	
Warranty	One-Year Wai	ranty	
All specification	s are subject to	change without notice	
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SDIO Timing Diagrams

The following figure (Figure 2) and table display SDIO default mode timing.

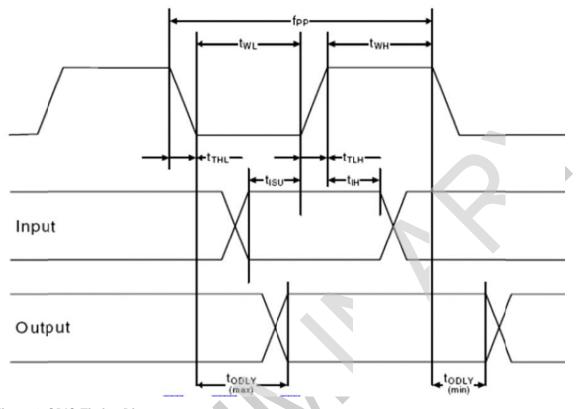


Figure 1: SDIO Timing Diagram

Parameter	Symbol	Min	Typical	Max	Unit
Clock CLK (All values are referred to min. VIH and max. VIL)					
Frequency – Data Transfer Mode	fPP	0	-	25	MHz
Frequency – Identification Mode	fOD	0	-	400	kHz
Clock Low Time	tWL	10	-	-	ns
Clock High Time	tWH	10	-	-	ns
Clock Rise Time	tTLH	-	-	10	ns
Clock Low Time	tTHL	-	-	10	ns
Inputs: CMD, DAT (referenced to CLK)					
Input Setup Time	tISU	5	-	-	ns
Input Hold Time	tIH	5	-	-	ns
Outputs: CMD, DAT (referenced to CLK)					
Output Delay time – Data Transfer Mode	tODLY	0	-	14	ns
Output Delay time – Identification Mode	tODLY	0	-	50	ns



Pin Definitions

Note: In regards to **GND** (Ground) pins, only one must be tied down. The remaining pins identified as *GND* can either be tied down or floated, depending on individual radio board design needs.

Pin Number	Pin Name	I/O	Power Type	Description		
1	GND	ı		Ground		
2	GND	I		Ground		
3	N/C	N/C		No Connect		
4	N/C	N/C		No Connect		
5	N/C	N/C		No Connect		
6	N/C	N/C		No Connect		
7	SYS_RST_L	I	VDDIO	Resets the radio, active low. Will be held low for ~300nSec by a RC reset circuit when power is applied. Do not connect when not used.		
8	N/C	N/C		No Connect		
9	N/C	N/C		No Connect		
10	WL_GPIO_1	0	VDDIO	Wake on Wireless Wake on Wireless is not currently supported in the software. May be left open.		
11	SDIO_SEL	I	VDDIO	SDIO Selection, hold low.		
12		N/C		No Connect		
13	VDDIO	I		3.3/1.8V I/O Power This is the reference pin for all I/O signaling pins. It accepts 1.8VDC to 3.3VDC		
14	CLK_32K			32k Ext Sleep Clock		
15	SDIO_CLK	I	VDDIO	SDIO Clock (25MHz max)		
16	GND	I		Ground		
17	SDIO_DATA_0	I/O	VDDIO	SDIO Data 0 – Internal pull-up. No external pull-up required		
18	SDIO_DATA_2	I/O	VDDIO	SDIO Data 2 – Internal pull-up. No external pull-up resistor required		
19	SDIO_CMD	I/O	VDDIO	SDIO Command – Internal pull-up. No external pull-up resistor required		
20	SDIO_DATA_3	I/O	VDDIO	SDIO Data 3 – Internal pull-up.		

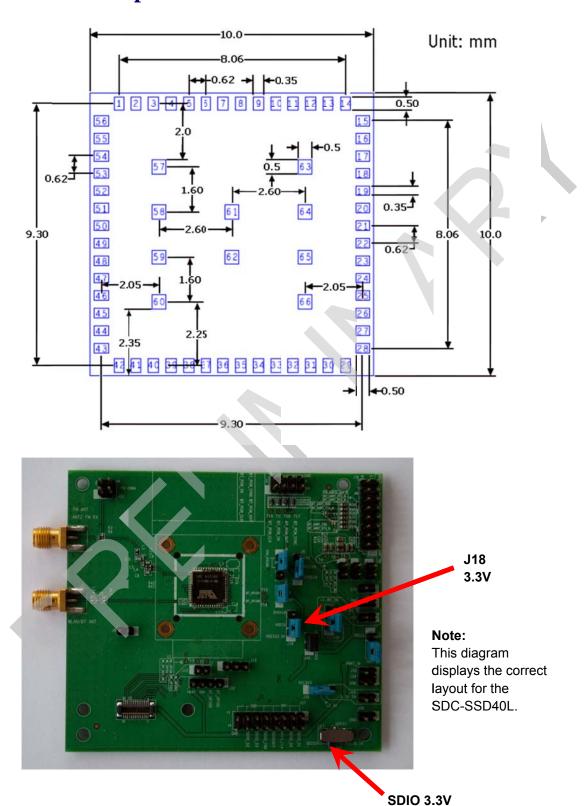
Pin Number	Pin Name	I/O	Power Type	Description
				No external pull-up resistor required
21	SDIO_DATA_1	I/O	VDDIO	SDIO Data 1 – Internal pull-up. No external pull-up resistor required
22	N/C	N/C		No Connect
23	N/C	N/C		No Connect
24	BT_ACTIVE	I		Bluetooth Active Signal Indicates that the coexistence BT is active Tie to GND when not in use
25	BT_PRIORITY	I		Reserved for input to BT device. When high, indicates that Bluetooth is transmitting or receiving high priority packets, e.g. SCO and LMP. Not currently supported in the firmware. Tie to GND when not in use.
26	GND	I	4	Ground
27	VCC3_3			3.3V Module Power
28	VCC3_3			3.3V Module Power
29	VIN_IP2LDO-L	0		Unsupported direct battery power output. Connect to Pin 30 with a 3.3uH inductor.
30	VIN_1P2LDO	I		Unsupported direct battery power input. Connect to Pin 29 with a 3.3uH inductor.
31	CHIP_PWD_L		VDDIO	Powers down the radio, active low; 4.7K pull-up resistor to VDDIO is recommended
32	BT_FREQ	I	VDDIO	Input from BT device. Indicates that the coexistence BT is about to transmit on a restricted channel Tie to GND when not in use
33	WLAN_ACTIVE	0	VDDIO	Output to BT device. When high, indicates that WLAN is transmitting or receiving. Do not connect when not used
34	GND	I		Ground
35	GND	I		Ground
36	N/C	N/C		No Connect
37	GND	I		Ground
38	N/C	N/C		No Connect



Pin Number	Pin Name	I/O	Power Type	Description
39	N/C	N/C		No Connect
40	GND	I		Ground
41	GND	I		Ground
42	GND	I		Ground
43	N/C	N/C		No Connect
44	N/C	N/C		No Connect
45	GND	I		Ground
46	GND	I		Ground
47	GND	I		Ground
48	GND	I		Ground
49	N/C	N/C		No Connect
50	N/C	N/C		No Connect
51	N/C	N/C		No Connect
52	N/C	N/C		No Connect
53	N/C	N/C		No Connect
54	GND	1		Ground
55	GND	I		Ground
56	ANT_1	I/O		Antenna 1 (Main)



Mechanical Specifications





Mounting

Summit specializes in the design and manufacturing of Wi-Fi radio modules and cards. Although we understand that every system is different, our expertise does not extend to the system level. Because of this, we can provide only integration guidelines and not individual design reviews and approvals.

The SDC-SSD40L is a Quad Flat pack with No Leads (QFN) System in Package (SiP). Summit has mounted this device to a PCB with a host and antenna connectors and markets that radio module as the SDC-MSD40NBT. The following information results from Summit's experience in producing the SDC-MSD40NBT. Summit provides these data for informational purposes only and provides no warranties or claims with regard to the applicability of this information to a particular design.

Solder Stencil Opening for Pads: 1:1 to 1:0.9 (dependent on solder type)

Solder Stencil Opening for Thermal Pads: 1:0.5 to 1:0.75 (dependent on solder type)

Solder Paste Type: No-Clean as the soldered part to board clearance will not allow for adequate post solder cleaning

Rework is technically challenging due to parts on the SIP reflowing at the same temperature needed for rework. The SDC-SSD40L cannot be lifted by the shield during rework. As such, removal of part for rework is not recommended. Reflow without removal has been successfully used to clear shorts found during x-ray inspection.

Reflow: The SDC-SSD40L is RoHS compliant and as such is sensitive to heat. The below graphic details a typical profile for such and device and is provided for reference purposes.

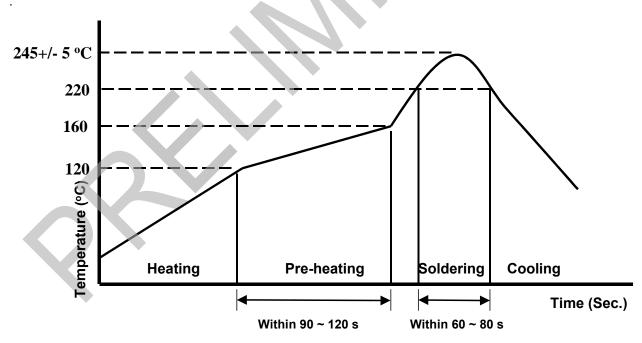


Image Verification Pending



RF Layout Design Guidelines

The following is a list of RF layout design guidelines and recommendation when installing a Summit radio into your device.

- Do not run antenna cables directly above or directly below the radio.
- Do not place any parts or run any high speed digital lines below the radio.
- If there are other radios or transmitters located on the device (such as a Bluetooth radio), place the devices as far apart from each other as possible.
- Ensure that there is the maximum allowable spacing separating the antenna connectors on the Summit radio from the antenna. In addition, do not place antennas directly above or directly below the radio.
- Summit recommends the use of a double shielded cable for the connection between the radio and the antenna elements.

Regulatory

Because the integration of the SDC-SSD40L has the potential to impact key RF parameters, a modular approval for this device is not possible. Therefore, Summit has not pursued certification for this radio. Summit will, however, perform a detailed pre-scan test of this radio and provide the pre-scan test report as soon as is available.

Documentation Requirements

In order to ensure regulatory compliance, when integrating the SDC-SSD40L into a host device, it is necessary to meet the documentation requirements set forth by the applicable regulatory agencies. The following sections (FCC, Industry Canada, and European Union) outline the information that may be included in the user's guide and external labels for the host devices into which the SDC-SSD40L is integrated.

FCC

User's Guide Requirements

As outlined in the Operational Description, the SDC-SSD40L complies with <u>FCC Part 15 Rules</u> for a Modular Approval. To leverage Summit's grant, the two conditions below must be met for the host device into which the SDC-SSD40L is integrated:

- 1. The antenna is installed with 20 cm maintained between the antenna and users.
- 2. The transmitter module is not co-located with any other transmitter or antenna that is capable of simultaneous operation.

As long as the two conditions above are met, further *transmitter* testing is typically not required. However, the OEM integrator is still responsible for testing its end-product for any additional compliance requirements required with this module installed, such as (but not limited to) digital device emissions and PC peripheral requirements.



IMPORTANT!

In the event that the two conditions above *cannot be met* (for example certain device configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID *cannot* be used on the final product. In these circumstances, the OEM integrator will be responsible for reevaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

When using Summit's FCC grant for the SDC-SSD40L, the integrator must include specific information in the user's guide for the device into which the SDC-SSD40L is integrated. The integrator must not provide information to the end user regarding how to install or remove this RF module in the user's manual of the device into which the SDC-SSD40L is integrated. The following FCC statements must be added in their entirety and without modification into a prominent place in the user's guide for the device into which the SDC-SSD40L is integrated:

"IMPORTANT NOTE: To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter."

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- 1. Reorient or relocate the receiving antenna.
- 2. Increase the separation between the equipment and receiver.
- 3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- 4. Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



IMPORTANT NOTE: FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Industry Canada

User's Guide Requirements

As outlined in the Operational Description, the SDC-SSD40L complies with Industry Canada (IC) rules for a Limited Modular Approval. To leverage Summit's grant, the two conditions below must be met for the host device into which the SDC-SSD40L is integrated:

- 1. The antenna is installed with 20 cm maintained between the antenna and users.
- 2. The transmitter module is not co-located with any other transmitter or antenna that is capable of simultaneous operation.

As long as the two conditions above are met, further *transmitter* testing is typically not required. However, the OEM integrator is still responsible for testing its end-product for any additional compliance requirements required with this module installed, such as (but not limited to) digital device emissions and PC peripheral requirements.

IMPORTANT!

In the event that the two conditions above *cannot be met* (for example certain device configurations or co-location with another transmitter), then the IC authorization is no longer considered valid and the IC ID *cannot* be used on the final product. In these circumstances, the OEM integrator will be responsible for reevaluating the end product (including the transmitter) and obtaining a separate IC authorization.

When using Summit's IC grant for the SDC-SSD40L, the integrator must include specific information in the user's guide for the device into which the SDC-SSD40L is integrated. The integrator must not provide information to the end user regarding how to install or remove this RF module in the user's manual of the device into which the SDC-SSD40L is integrated. In addition to the required FCC statements outlined above, the following IC statements must be added in their entirety and without modification into a prominent place in the user's guide for the device into which the SDC-SSD40L is integrated:

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.



European Union

User's Guide Requirements

The integrator must include specific information in the user's guide for the device into which the SDC-SSD40L is integrated. In addition to the required FCC and IC statements outlined above, the following R&TTE statements must be added in their entirety and without modification into a prominent place in the user's guide for the device into which the SDC-SSD40L is integrated:

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC. The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the R&TTE Directive 1999/5/EC:

EN60950-1:2001 A11:2004

Safety of Information Technology Equipment

EN 300 328 V1.7.1: (2006-10)

Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband Transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques; Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive

■ EN 301 489-1 V1.6.1: (2005-09)

Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements

EN 301 489-17 V1.2.1 (2002-08)

Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for 2,4 GHz wideband transmission systems and 5 GHz high performance RLAN equipment

EN 301 893 V1.5.1 (2008-12)

Electromagnetic compatibility and Radio spectrum Matters (ERM); Broadband Radio Access Networks (BRAN); Specific conditions for 5 GHz high performance RLAN equipment

EU 2002/95/EC (RoHS)

Declaration of Compliance – EU Directive 2003/95/EC; Reduction of Hazardous Substances (RoHS)

This device is a 2.4 GHz wideband transmission system (transceiver), intended for use in all EU member states and EFTA countries, except in France and Italy where restrictive use applies.

In Italy the end-user should apply for a license at the national spectrum authorities in order to obtain authorization to use the device for setting up outdoor radio links and/or for supplying public access to telecommunications and/or network services.

This device may not be used for setting up outdoor radio links in France and in some areas the RF output power may be limited to 10 mW EIRP in the frequency range of 2454 – 2483.5 MHz. For detailed information the end-user should contact the national spectrum authority in France.



ය Česky [Czech]	[Jméno výrobce] tímto prohlašuje, že tento [typ zařízení] je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
da Dansk [Danish]	Undertegnede [fabrikantens navn] erklærer herved, at følgende udstyr [udstyrets typebetegnelse] overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
de Deutsch [German]	Hiermit erklärt [Name des Herstellers], dass sich das Gerät [Gerätetyp] in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
et Eesti [Estonian]	Käesolevaga kinnitab [tootja nimi = name of manufacturer] seadme [seadme tüüp = type of equipment] vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
en English	Hereby, [name of manufacturer], declares that this [type of equipment] is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Español [Spanish]	Por medio de la presente [nombre del fabricante] declara que el [clase de equipo] cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
el Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ [name of manufacturer] ΔΗΛΩΝΕΙ ΟΤΙ [type of equipment] ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.
français [French]	Par la présente [nom du fabricant] déclare que l'appareil [type d'appareil] est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
it Italiano [Italian]	Con la presente [nome del costruttore] dichiara che questo [tipo di apparecchio] è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo [name of manufacturer / izgatavotāja nosaukums] deklarē, ka [type of equipment / iekārtas tips] atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo [manufacturer name] deklaruoja, kad šis [equipment type] atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
nl Nederlands [Dutch]	Hierbij verklaart [naam van de fabrikant] dat het toestel [type van toestel] in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
Malti [Maltese]	Hawnhekk, <i>[isem tal-manifattur]</i> , jiddikjara li dan <i>[il-mudel tal-prodott]</i> jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.



իս Magyar [Hungarian]	Alulírott, [gyártó neve] nyilatkozom, hogy a [típus] megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
Polski [Polish]	Niniejszym [nazwa producenta] oświadcza, że [nazwa wyrobu] jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
pt Português [Portuguese]	[Nome do fabricante] declara que este [tipo de equipamento] está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
slovensko [Slovenian]	[Ime proizvajalca] izjavlja, da je ta [tip opreme] v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
Slovensky [Slovak]	[Meno výrobcu] týmto vyhlasuje, že [typ zariadenia] spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
fiSuomi [Finnish]	[Valmistaja = manufacturer] vakuuttaa täten että [type of equipment = laitteen tyyppimerkintä] tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Swedish]	Härmed intygar [företag] att denna [utrustningstyp] står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

