

To Be Discontinued

W-LAN Module Data Sheet

Cypress WLAN Chipset + STMicro MCU

Sample P/N : LBWB1ZZYDZ-TEMP

MP P/N : LBWB1ZZYDZ-740

The revision history of the product specification

Issued Date	Revision Code	Revision Page	Changed Items	Change Reason
Apr.18.2013			First Issue	
Aug.11.2014	A	13 14	10.2 Schematic 10.3. Boot mode selection	
Aug.27.2014	B	13	10.2 Schematic	

TABLE OF CONTENTS

1. Scope	3
2. Part Number	3
3. Block Diagram.....	3
4. Certification Information	3
4.1. FCC/IC	3
4.2. TELEC	3
4.3. R&TTE	3
5. Dimensions, Marking and Terminal Configurations	4
5.1. Dimension.....	4
5.2. Connector.....	4
5.3. Terminal Configurations.....	5
6. Absolute Maximum Rating	7
7. Operating Condition	7
8. Power Up Sequence	7
8.1. Without NRST control.....	7
8.2. With NRST control.....	8
8.2.1. NRST circuit	8
9. RF Characteristics	9
9.1. RF Characteristics for IEEE802.11b (11Mbps mode unless otherwise specified.).....	9
9.2. RF Characteristics for IEEE802.11g (54Mbps mode unless otherwise specified.).....	10
9.3. RF Characteristics for IEEE802.11n (65Mbps(MCS7) mode unless otherwise specified.).....	11
10. Reference Circuit	12
10.1. Schematic.....	12
10.2. S2W and STW Mode Selection.....	12
10.3. Boot mode selection.....	13
10.3.1. UART Interface usage for software writing	13
10.3.2. JTAG usage for software writing	13
11. Packing	13
11.1. Tray	13
11.2. Packing in a inner box	14
11.3. Shipping box	14
12. NOTICE.....	15
12.1. Storage Conditions:	15
12.2. Handling Conditions:	15
12.3. Operational Environment Conditions:	15
12.4. Input Power Capacity:	15
13. PRECONDITION TO USE OUR PRODUCTS.....	16
14. Software License.....	17

Please be aware that an important notice concerning availability, standard warranty and use in critical applications of Murata products and disclaimers thereto appears at the end of this specification sheet.

1. Scope

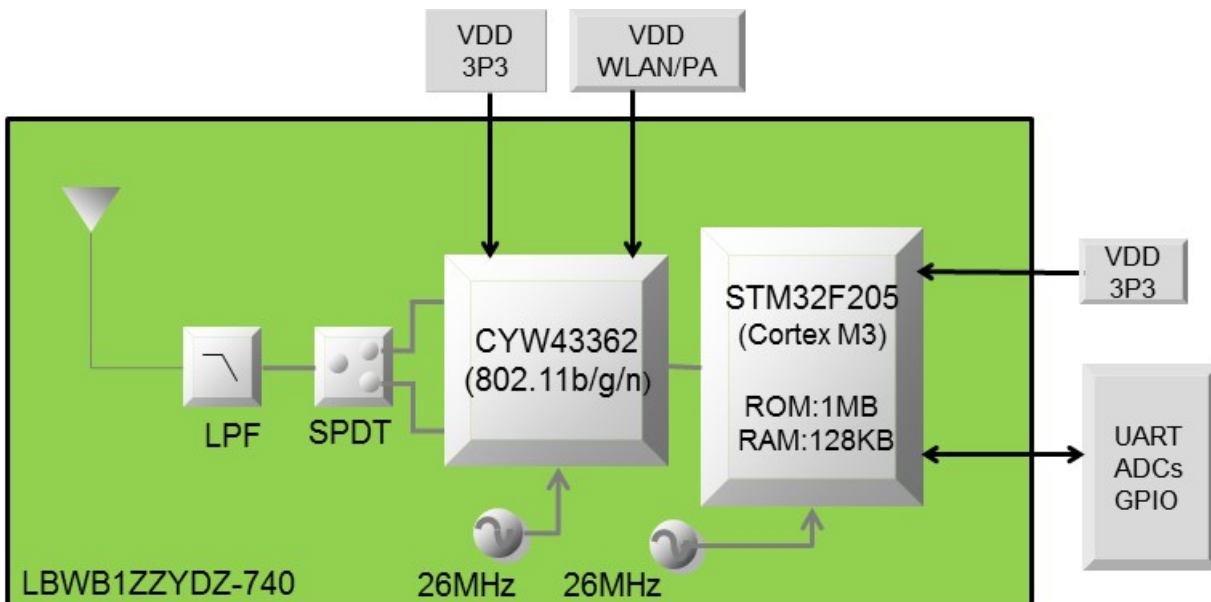
This specification is applied to the IEEE802.11b/g/n W-LAN + STM32F205 MCU complete module (WLAN smart module).

- Interface : UART
- IC : Cypress/CYW43362 + STMicro/STM32F205
- RoHS : This module is compliant with the RoHS directive.

2. Part Number

Sample Part Number	MP Part Number
LBWB1ZZYDZ-TEMP	LBWB1ZZYDZ-740

3. Block Diagram



4. Certification Information

4.1. FCC/IC

FCC ID is VPYLBYD. And IC ID is 772C-LBYD.

FCC/IC ID is not marked on the module.

To make FCC/IC certification of the module valid on the customer's product, please refer to these documents.

- Installation Manual of LBWA1ZVYDZ Certification.pdf
- LBWA1ZVYDZ Antenna Specification.pdf

4.2. TELEC

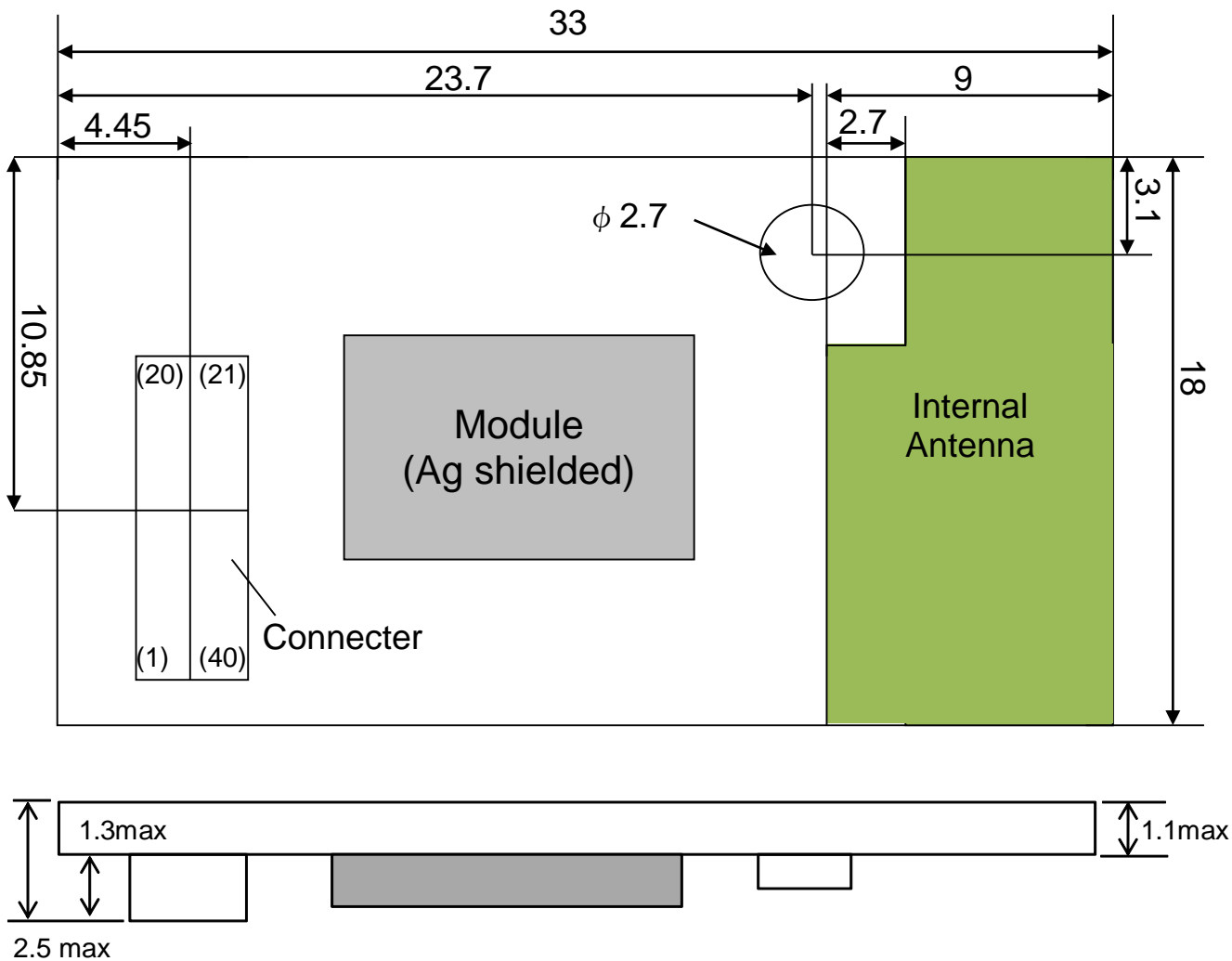
TELEC ID is 001-P00408 and marked on the module.

4.3. R&TTE

EN300328 v1.7.1 conducted test report is prepared.

5. Dimensions, Marking and Terminal Configurations

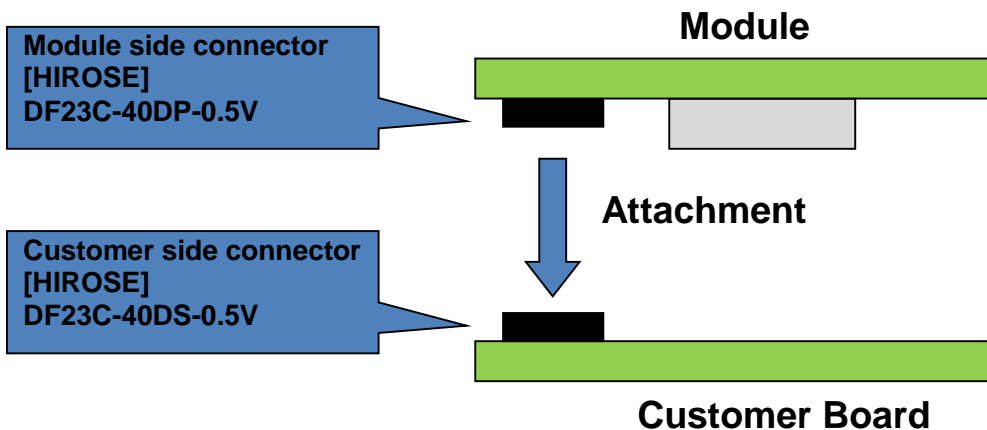
5.1. Dimension



(unit : mm)

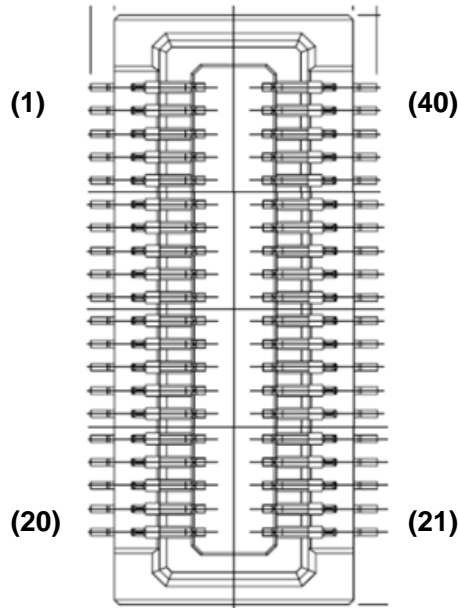
5.2. Connector

P/N: DF23C-40DP-0.5V (mounted on Murata module)
 P/N: DF23C-40DS-0.5V (mounted on Customer board)
 Maker: HIROSE Electric



5.3. Terminal Configurations

Terminal Configuration looked from a board implementation side of the customer



No.	Terminal Name	Type	Connection to MCU	Connection to WLAN IC	Description
1	GND	-	GND	GND	Ground
2	NRST	I	NRST		MCU reset Internally pulled up.
3	RTC_AF1	I/O	PC13		Do not connect.
4	OSC32_IN	I/O	PC14		Do not connect
5	OSC32_OUT	I/O	PC15		Do not connect
6	GND	-	GND	GND	Ground
7	GPIO11	I/O	PB14		GPIO.
8	GPIO10	I/O	PB15		GPIO
9	GPIO9	I/O	PB13		GPIO
10	GND	-	GND	GND	Ground
11	UART1_TX	O	PA9		UART Tx
12	UART1_RX	I	PA10		UART Rx
13	GND	-	GND	GND	Ground
14	GND	-	GND	GND	Ground
15	JTMS	I	PA13		JTAG Test Mode.

16	NJTRST	I	PB4		JTAG Test Reset.
17	JTDO	I	PB3		JTAG Test data Out.
18	JTDI	O	PA15		JTAG Test data In.
19	JTCK	I	PA14		JTAG Test Clock.
20	VDD_WLAN	PI	-	SR_VDDBAT1/ SR_VDDBAT2	Power supply for WLAN IC
21	VDD_PA	PI	-	WRF_PA_VDD/ WRF_PADRV_ VDD	Power supply for Internal Power Amplifier
22	VDD_PA	PI	-		
23	VDD_3P3	PI	VDD	VDDIO/VDDIO_ SD	Power supply for MCU VDD and Digital IO
24	BOOT0	I	BOOT0		See [10.3. Boot mode selection]
25	UART1_CTS	I	PA11		UART CTS. Test pad if not in use
26	UART1_RTS	O	PA12		UART RTS. Test pad if not in use
27	GND	-	GND	GND	Ground
28	GND	-	GND	GND	Ground
29	GND	-	GND	GND	Ground
30	BOOT1	I	PB2/BOOT1		See [10.3. Boot mode selection]
31	GPIO8	I/O	PA5		GPIO
32	GPIO7	I/O	PA7		GPIO
33	GPIO6	I/O	PA6		GPIO
34	GPIO5	I/O	PA4		GPIO.
35	GPIO2	I/O	PA0-WKUP		Indicate the connection state. ※ See [10.2. S2W and STW Mode Selection]
36	GPIO1	I/O	PA2		S2W and STW mode selection ※ See [10.2. S2W and STW Mode Selection]
37	GPIO3	I/O	PA3		GPIO.
38	GPIO4	I/O	PA1		GPIO.
39	GND	-	GND		Ground
40	GND	-	GND		Ground

6. Absolute Maximum Rating

		min.	max.	unit
Storage Temperature		-40	85	deg.C
Supply Voltage	VDD_3P3	-0.3	4	V
	VDD_PA	-0.3	6	V
	VDD_WLAN	-0.3	6	V

Stresses in excess of the absolute ratings may cause permanent damage. Functional operation is not implied under these conditions. Exposure to absolute ratings for extended periods of time may adversely affect reliability. No damage assuming only one parameter is set at limit at a time with all other parameters is set within operating condition.

7. Operating Condition

		min.	typ.	max.	unit
Operating Temperature Range ^(*1)		-40		85	deg.C
Specification Temperature Range		-20		70	deg.C
Supply Voltage	VDD_3P3	2.4	3.3	3.6	V
	VDD_PA	2.3 ^(*2)	3.3	4.8 ^{(*2) (*3)}	V
	VDD_WLAN	2.3 ^(*2)	3.3	4.8 ^{(*2) (*3)}	V

[Note] All RF characteristics in this datasheet are defined by Specification Temperature Range

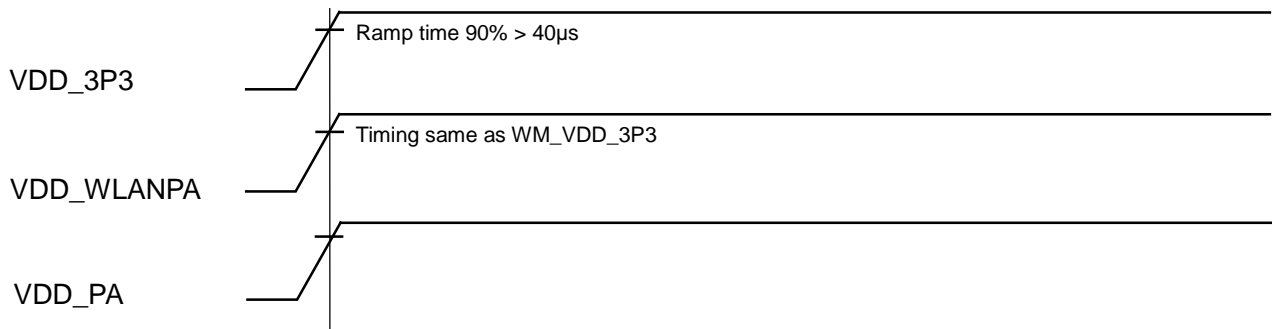
(*1) Functionality is guaranteed but specifications require derating at extreme temperatures.

(*2) The CYW43362 is functional across this range of voltage. RF performance is guaranteed only $3.0V < VDD_PA/WLAN < 4.8V$

(*3) The maximum continuous voltage is 4.8V. Voltages up to 5.5V for up to 10 seconds, cumulative duration, over the lifetime of the device are allowed voltages as high 5.0V for up to 250 seconds, cumulative duration, over the lifetime of the device are allowed.

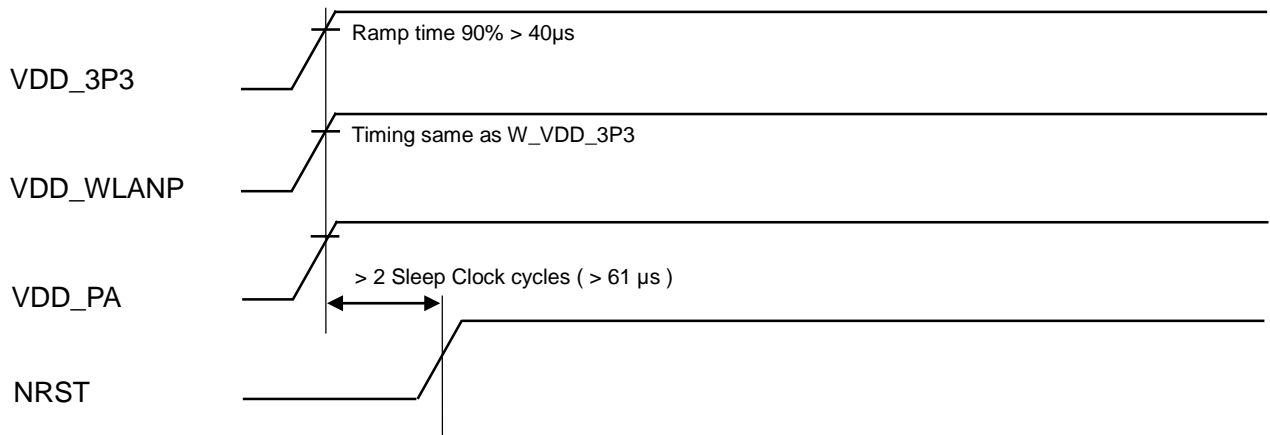
8. Power Up Sequence

8.1. Without NRST control



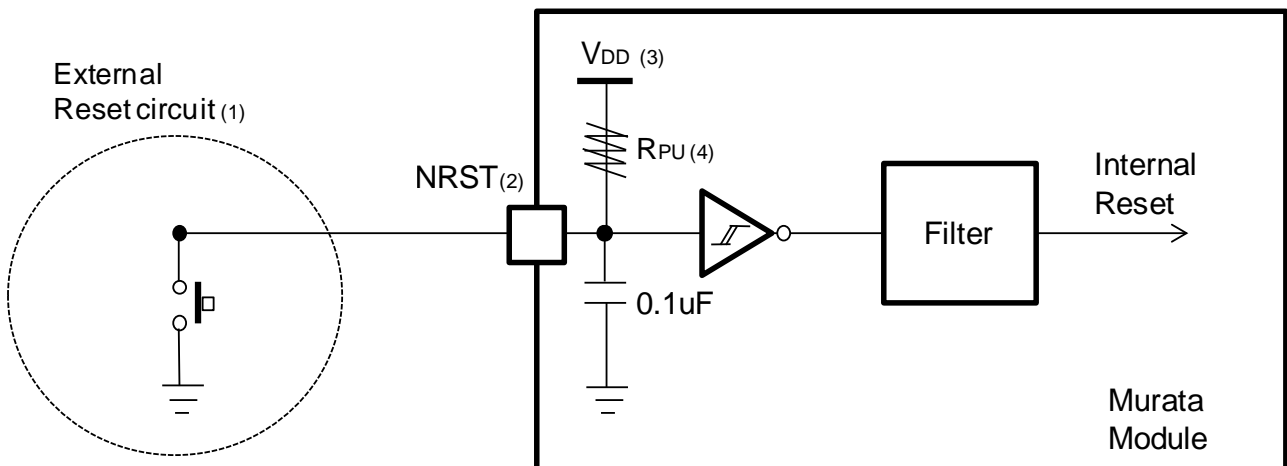
*Power down sequence is opposite sequence of power up.

8.2. With NRST control



*Power down sequence is opposite sequence of power up.

8.2.1. NRST circuit



- (1) The reset network protects the device against parasitic resets.
- (2) The use must ensure that the level on the NRST pin can go below the $V_{IL(NRST)}$ max level specified in below table. Otherwise the reset is not taken into account by the device.
- (3) $V_{dd}=3.3V$ (for the $1.8 \leq V_{dd} \leq 3.6$ voltage range)
- (4) $R_{PU}=40k$ ohm (for the $30 \leq R_{PU} \leq 50k$ ohm range)

9. RF Characteristics

9.1. RF Characteristics for IEEE802.11b (11Mbps mode unless otherwise specified.)

Conditions: 25deg.C, VDD_3P3=VDD_WLAN= 3.3V

Items	Contents			
Specification	IEEE802.11b			
Mode	DSSS / CCK			
Frequency	2400 - 2483.5MHz			
Data rate	1, 2, 5.5, 11Mbps			
Target Max Output Power	17.0dBm			
- DC Characteristics -	min.	Typ.	max.	Unit
1. DC current				
1) Tx mode (1024byte, 20usec interval)	-	365	440	mA
2) Rx mode	-	110	160	mA
- Tx Characteristics -	min.	Typ.	max.	Unit
2. Power Levels	15.0	17.0	19.0	dBm
3. Spectrum Mask				
1) 1st side lobes	-	-40	-30	dBr
2) 2nd side lobes	-	-55	-50	dBr
4. Power-on and Power-down ramp	-		2.0	usec
5. RF Carrier Suppression	15	23	-	dB
6. Modulation Accuracy (EVM)	-	23	35	%
7. Outband Spurious Emissions				
1) 30MHz to 1GHz (BW=100kHz)	-	-	-36	dBm
2) 1GHz to 12.75GHz (BW=100kHz)	-	-	-30	dBm
3) 1.8GHz to 1.9GHz (BW=100kHz)	-	-	-47	dBm
4) 5.15GHz to 5.3GHz (BW=100kHz)	-	-	-47	dBm
- Rx Characteristics -	min.	typ.	max.	Unit
8. Minimum Input Level Sensitivity				
1) 11Mbps (FER ≤ 8%)	-	-87	-76	dBm
9. Maximum Input Level (FER ≤ 8%)	-10	-	-	dBm
10. Adjacent Channel Rejection (FER ≤ 8%)	35	-	-	dB

9.2. RF Characteristics for IEEE802.11g (54Mbps mode unless otherwise specified.)

Conditions: 25deg.C, VDD_3P3=VDD_WLAN =3.3V

Items	Contents			
Specification	IEEE802.11g			
Mode	OFDM			
Frequency	2400 - 2483.5MHz			
Data rate	6, 9, 12, 18, 24, 36, 48, 54Mbps			
Target Max Output Power	13.0dBm			
- DC Characteristics -	min.	Typ.	max.	Unit
1. DC current				
1) Tx mode (1024byte, 20usec interval)	-	280	360	mA
2) Rx mode	-	110	160	mA
- Tx Characteristics -	min.	typ.	max.	unit
2. Power Levels	11.0	13.0	15.0	dBm
3. Spectrum Mask				
1) 9MHz to 11MHz (0dB ~ -20dB)		-40	-20	dBr
2) 11MHz to 20MHz (-20dB ~ -28dB)		-43	-28	dBr
3) 20MHz to 30MHz (-28dB ~ -40dB)		-50	-40	dBr
4) 30MHz to 33MHz (-40dB)		-49	-40	dBr
4. Constellation Error (EVM)	-	-28.5	-25	dB
5. Outband Spurious Emissions				
1) 30MHz to 1GHz (BW=100kHz)	-	-	-36	dBm
2) 1GHz to 12.75GHz (BW=100kHz)	-	-	-30	dBm
3) 1.8GHz to 1.9GHz (BW=100kHz)	-	-	-47	dBm
4) 5.15GHz to 5.3GHz (BW=100kHz)	-	-	-47	dBm
- Rx Characteristics -	min.	typ.	max.	Unit
6. Minimum Input Level Sensitivity				
1) 54Mbps (PER ≤ 10%)	-	-73	-65	dBm
7. Maximum Input Level (PER ≤ 10%)	-20	-	-	dBm
8. Adjacent Channel Rejection (PER ≤ 10%)	-1	-	-	dB

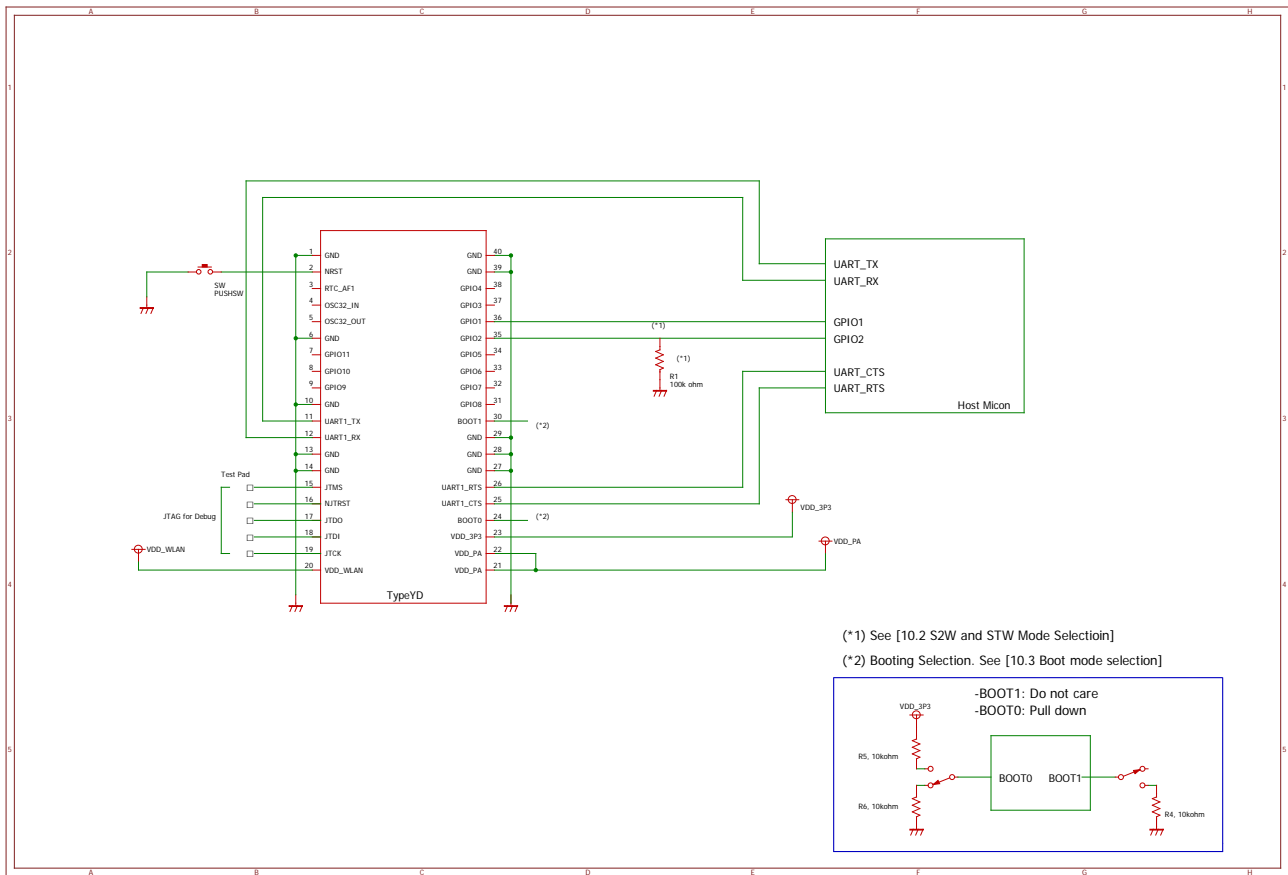
9.3. RF Characteristics for IEEE802.11n (65Mbps(MCS7) mode unless otherwise specified.)

Conditions: 25deg.C, VDD_3P3=VDD_WLAN=3.3V

Items	Contents			
Specification	IEEE802.11n			
Mode	OFDM			
Frequency	2400 - 2483.5MHz			
Data rate	6.5, 13, 19.5, 26, 39, 52, 58.5, 65Mbps			
Target Max Output Power	12.0dBm			
- DC Characteristics -	min.	Typ.	max.	Unit
1. DC current				
1) Tx mode (1024byte, 20usec interval)	-	265	340	mA
2) Rx mode	-	110	160	mA
- Tx Characteristics -	min.	typ.	max.	Unit
2. Power Levels	10.0	12.0	14.0	dBm
3. Spectrum Mask				
1) 9MHz to 11MHz (0dB ~ -20dB)		-40	-20	dBr
2) 11MHz to 20MHz (-20dB ~ -28dB)		-43	-28	dBr
3) 20MHz to 30MHz (-28dB ~ -45dB)		-50	-45	dBr
4) 30MHz to 33MHz (-45dB)		-49	-45	dBr
4. Constellation Error (EVM)	-	-31	-27	dB
5. Outband Spurious Emissions				
1) 30MHz to 1GHz	-	-	-36	dBm
2) 1GHz to 12.75GHz	-	-	-30	dBm
3) 1.8GHz to 1.9GHz	-	-	-47	dBm
4) 5.15GHz to 5.3GHz	-	-	-47	dBm
- Rx Characteristics -	min.	typ.	max.	Unit
6. Minimum Input Level Sensitivity				
1) 65Mbps (PER ≤ 10%)	-	-70	-64	dBm
7. Maximum Input Level (PER ≤ 10%)	-20	-	-	dBm
8. Adjacent Channel Rejection (PER ≤ 10%)	-2	-	-	dB

10. Reference Circuit

10.1. Schematic

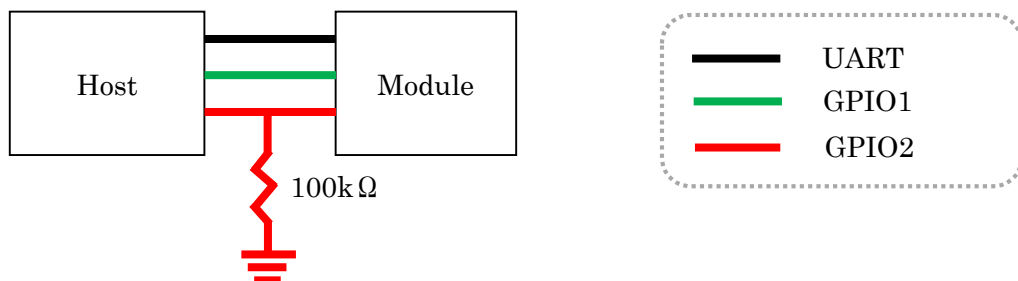


10.2. S2W and STW Mode Selection

Serial-Through-WiFi is a feature realized by combining Command Mode and Through Mode operations. Command Mode supports all the Serial Interface commands described in the prior sections of the document.

In particular, the STW provisioning commands are used to configure the connectivity parameters for the module, including the WiFi and TCP/IP configurations. Those parameters are used in the Through Mode to establish TCP connections over WiFi with a peer to enable serial data to flow transparently between the UART interface of the module and the target.

The module determines the particular Mode of operation by sampling GPIO1 at power up. GPIO2 is used in Through Mode to indicate the connection state between the module and its peer. A block diagram of the hardware interface is shown below.



GPIO1	Usage
High	S2W(Command mode) mode
Down	STW(Through Mode) Mode

Please refer to [murata SNIC Serial Interface Specification.pdf] for more information.

10.3. Boot mode selection

Default pin setting is applied as below,
 -BOOT1 is don't care
 -BOOT0 is 10k ohm pull down
 because software embedded module is supplied.

Also pin setting are available for other purpose as below.

10.3.1. UART Interface usage for software writing

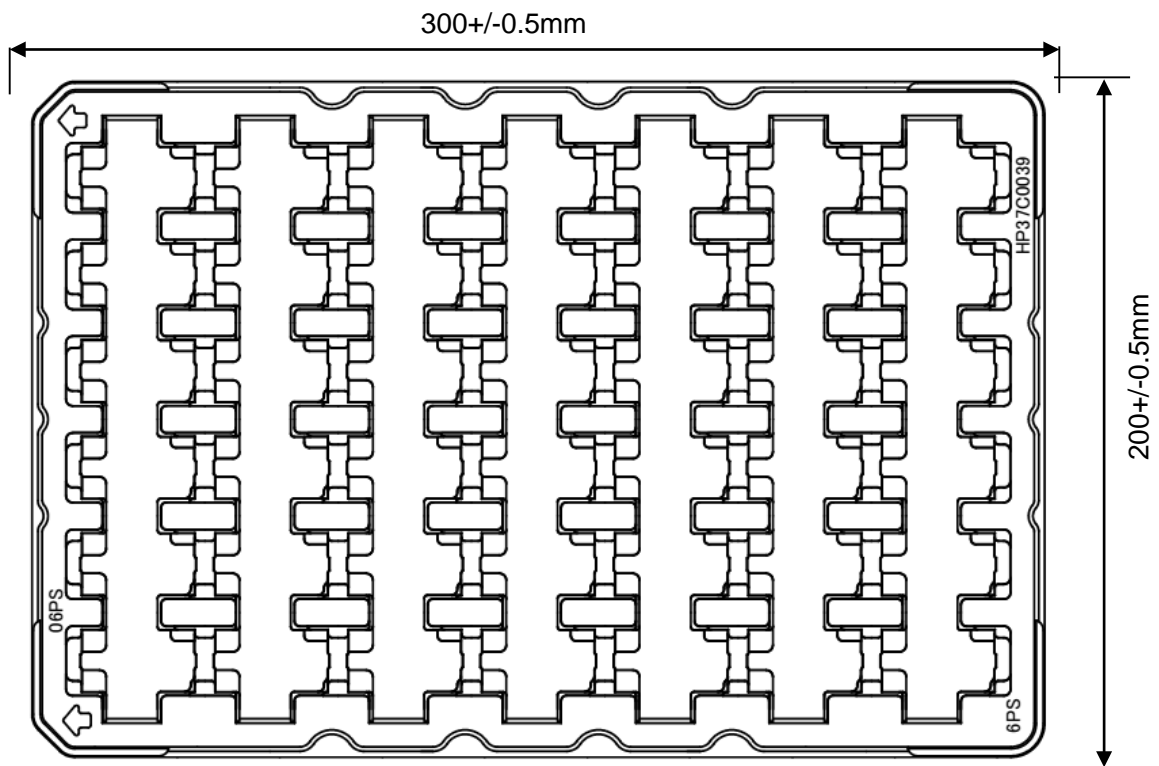
Boot mode selection pins		Usage	Aliasing
BOOT1	BOOT0		
10kohm pull down	10kohm pull up	Software Writing	These pins must be set as left condition if use UART for software writing.
Don't care	10kohm pull down	System start up	These pins must be set as left condition for system start up after software writing.

10.3.2. JTAG usage for software writing

Boot mode selection pins		Usage	Aliasing
BOOT1	BOOT0		
Don't care	10kohm pull down	Software Writing	If JTAG used for software writing, there is no need to change a pin setting for system start up after software writing.
Don't care	10kohm pull down	System start up	

11. Packing

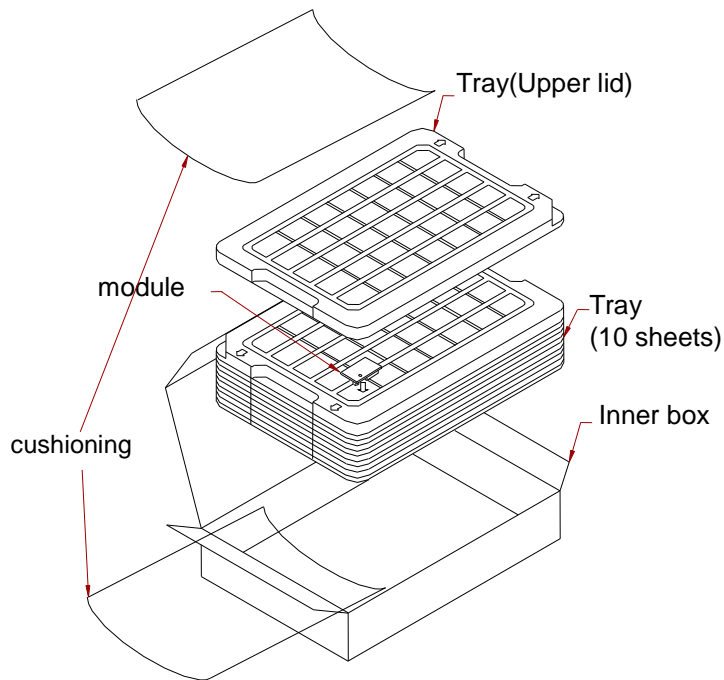
11.1. Tray



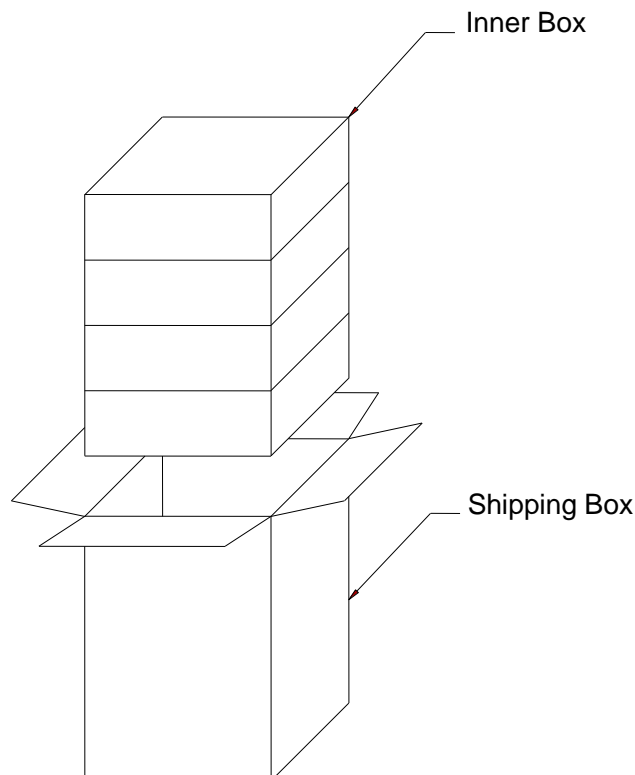
The module is placed in a pocket of the above tray with following rules.

- The module's metal shield contacts a tray' indentation
- Its chip antenna on the module is directing to an arrow on a tray.

11.2. Packing in a inner box



11.3. Shipping box



- Please keep any packaging below 40 deg.C until using it up, because a tray is potentially deformed with storage over the temperature.
- Please don't stack the shipping box over 1.5m height to avoid any physical problem.
- Four inner boxes is general number in a shipping box, but it may be dummy for some of inner boxes.
- One inner box has 420pcs as standard q'ty.
- MOQ is 1680pcs, which are constructed four inner boxes.

12. NOTICE

12.1. Storage Conditions:

- The product shall be stored in non corrosive gas (Cl₂, NH₃, SO₂, NO_x, etc.).
- Any excess mechanical shock including, but not limited to, sticking the packing materials by sharp object and dropping the product, shall not be applied in order not to damage the packing materials.
- The product shall be stored without opening the packing under the ambient temperature from 5 to 35 °C and humidity from 20 ~ 70 %RH.
(Packing materials, in particular, may be deformed at the temperature over 40 °C)

12.2. Handling Conditions:

- Be careful in handling or transporting products because excessive stress or mechanical shock may break products.
- Handle with care if products may have cracks or damages on their terminals, the characteristics of products may change. Do not touch products with bare hands that may result in poor solderability.

12.3. Operational Environment Conditions:

- Products are designed to work for electronic products under normal environmental conditions (ambient temperature, humidity and pressure). Therefore, products have no problems to be used under the similar conditions to the above-mentioned. However, if products are used under the following circumstances, it may damage products and leakage of electricity and abnormal temperature may occur.
 - In an atmosphere containing corrosive gas (Cl₂, NH₃, SO_x, NO_x etc.).
 - In an atmosphere containing combustible and volatile gases.
 - Dusty place.
 - Direct sunlight place.
 - Water splashing place.
 - Humid place where water condenses.
 - Freezing place.
- If there are possibilities for products to be used under the preceding clause, consult with Murata before actual use.
- As it might be a cause of degradation or destruction to apply static electricity to products, do not apply static electricity or excessive voltage while assembling and measuring.

12.4. Input Power Capacity:

- Products shall be used in the input power capacity as specified in this specifications.
- Inform Murata beforehand, in case that the components are used beyond such input power capacity range.

13. PRECONDITION TO USE OUR PRODUCTS

Please make sure that your product has been evaluated and confirmed from the aspect of the fitness for the specifications of our product when our product is mounted to your product.

All the items and parameters in this product specification/datasheet/catalog have been prescribed on the premise that our product is used for the purpose, under the condition and in the environment specified in this specification. You are requested not to use our product deviating from the condition and the environment specified in this specification.

Please note that the only warranty that we provide regarding the products is its conformance to the specifications provided herein. Accordingly, we shall not be responsible for any defects in products or equipment incorporating such products, which are caused under the conditions other than those specified in this specification.

WE HEREBY DISCLAIMS ALL OTHER WARRANTIES REGARDING THE PRODUCTS, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, THAT THEY ARE DEFECT-FREE, OR AGAINST INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS.

The product shall not be used in any application listed below which requires especially high reliability for the prevention of such defect as may directly cause damage to the third party's life, body or property. You acknowledge and agree that, if you use our products in such applications, we will not be responsible for any failure to meet such requirements.

Furthermore, **YOU AGREE TO INDEMNIFY AND DEFEND US AND OUR AFFILIATES AGAINST ALL CLAIMS, DAMAGES, COSTS, AND EXPENSES THAT MAY BE INCURRED, INCLUDING WITHOUT LIMITATION, ATTORNEY FEES AND COSTS, DUE TO THE USE OF OUR PRODUCTS IN SUCH APPLICATIONS.**

- Aircraft equipment.
- Aerospace equipment
- Undersea equipment.
- Power plant control equipment
- Medical equipment.
- Transportation equipment (vehicles, trains, ships, elevator, etc.).
- Traffic signal equipment.
- Disaster prevention / crime prevention equipment.
- Burning / explosion control equipment
- Application of similar complexity and/ or reliability requirements to the applications listed in the above.

We expressly prohibit you from analyzing, breaking, Reverse-Engineering, remodeling altering, and reproducing our product. Our product cannot be used for the product which is prohibited from being manufactured, used, and sold by the regulations and laws in the world.

We do not warrant or represent that any license, either express or implied, is granted under any our patent right, copyright, mask work right, or our other intellectual property right relating to any combination, machine, or process in which our products or services are used. Information provided by us regarding third-party products or services does not constitute a license from us to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from us under our patents or other intellectual property.

Please do not use our products, our technical information and other data provided by us for the purpose of developing of mass-destruction weapons and the purpose of military use.

Moreover, you must comply with "foreign exchange and foreign trade law", the "U.S. export administration regulations", etc.

Please note that we may discontinue the manufacture of our products, due to reasons such as end of supply of materials and/or components from our suppliers.

Customer acknowledges that Murata will, if requested by you, conduct a failure analysis for defect or alleged defect of Products only at the level required for consumer grade Products, and thus such analysis may not always be available or be in accordance with your request (for example, in cases where the defect was caused by components in Products supplied to Murata from a third party).

By signing on specification sheet or approval sheet, you acknowledge that you are the legal representative for your company and that you understand and accept the validity of the contents herein. When you are not able to return the signed version of specification sheet or approval sheet within 90 days from receiving date of specification sheet or approval sheet, it shall be deemed to be your consent on the content of specification sheet or approval sheet.

Customer acknowledges that engineering samples may deviate from specifications and may contain defects due to their development status.

We reject any liability or product warranty for engineering samples.

In particular we disclaim liability for damages caused by

- the use of the engineering sample other than for evaluation purposes, particularly the installation or integration in the product to be sold by you,
- deviation or lapse in function of engineering sample,
- improper use of engineering samples.

We disclaims any liability for consequential and incidental damages.

If you can't agree the above contents, you should inquire our sales.

14. Software License

13.1 Grant of Rights to Software

Subject to the terms and conditions hereinafter set forth, we (“Licensor”) hereby grant to you a non-exclusive, nontransferable, royalty-free license to use the software as described in “Murata SNIC Serial Interface Specification.pdf” (“Software”) only in the form of burned in the products specified in this W-LAN Module Data Sheet (“**Product**”) and solely as necessary to integrate and utilize the Product with your product and to distribute your product that incorporate Product. You shall have no right to modify or create derivative works of the Software provided in object or binary code form or documentation. You shall not (a) attempt to reverse engineer, decompile or disassemble any portion of the Software, including all copies thereof and (b) use, distribute and/or transfer the Software or its derivative works to any third party apart from Licensor’s products. Licensor may, in its sole discretion, provide error corrections or updates for the Software.

13.2 Ownership; Protection

You acknowledge that the Software is the sole property of Licensor and/or its suppliers. You shall have no right, title or interest in the Software or the documentation or any copies of them except as expressly provided herein. You agree not to remove, obliterate, or hide any copyright, trademark, confidentiality, patent or other proprietary notice, mark or legend appearing on the Software or on output generated by the Software. Nothing contained herein shall be construed as conferring any license or right with respect to any trademark or the corporate name of Licensor, or of any of Licensor’s suppliers.

13.3 Disclaimer; Limitation of Liability; Indemnification

LICENSOR AND ITS SUPPLIERS SHALL NOT BE LIABLE TO YOU OR TO ANY OF YOUR END-USERS FOR ANY LOSS OF PROFIT, INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR RELATING TO THE LICENSING OR USE OF THE SOFTWARE, OR DOCUMENTATION OR FOR ANY ERROR OR DEFECT IN THE SOFTWARE, OR DOCUMENTATION.

THE MAXIMUM LIABILITY OF LICENSOR AND LICENSOR’S SUPPLIERS ARISING OUT OF OR IN CONNECTION WITH ANY LICENSE, USE OR OTHER EMPLOYMENT OF ANY SOFTWARE DELIVERED TO YOU HEREUNDER, WHETHER SUCH LIABILITY ARISES FROM ANY CLAIM BASED ON BREACH OR REPUDIATION OF CONTRACT, WARRANTY, TORT OR OTHERWISE, SHALL IN NO CASE EXCEED ONE DOLLARS (U.S. \$1.00) TO THE EXTENT PERMITTED BY APPLICABLE LAWS.

THE SOFTWARE AND DOCUMENTATION ARE LICENSED “AS IS.” LICENSOR AND ITS SUPPLIERS DO NOT REPRESENT OR WARRANT THAT ERRORS IN THE SOFTWARE OR DOCUMENTATION WILL BE CORRECTED OR THAT THE SOFTWARE WILL RUN ERROR-FREE. THERE ARE NO WARRANTIES COVERING THE SOFTWARE OR DOCUMENTATION, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF DESIGN, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR AGAINST INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS.

You shall indemnify Licensor and its suppliers and hold them harmless from any and all liabilities, claims, costs, losses, and expenses including, but not limited to, reasonable attorneys’ fees and costs of suit incurred by Licensor or its suppliers, or both, arising out of or relating to your misuse, modification, upgrade, additions, alteration, marketing, disclosure, sale, sublicensing, or other distribution of the Software.

13.4 Third Party Software

You hereby acknowledge that this Software is programmed by using the SDK of Cypress WICED™ software (“WICED™ Software”). This WICED™ Software is subject to the terms and conditions set forth in

<https://community.cypress.com/servlet/JiveServlet/downloadBody/1563-102-4-3827/Click-License-July-5-2016.pdf> and you hereby agree to acknowledge and comply with terms and conditions for license of the WICED™ Software.

13.5. Termination

The license granted hereby to you shall automatically terminate upon your failure to comply with any of the terms and conditions set forth herein. In such event, you shall destroy all copies of the Software and its component parts.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [WiFi Modules - 802.11 category](#):

Click to view products by [Murata manufacturer](#):

Other Similar products are found below :

[KBPC10/15/2506WP](#) [SX-PCEAN2C-SP](#) [849WM520100E](#) [7265.NGWG.SW](#) [HDG204-DN-3](#) [FXX-3061-MIX](#) [PPC-WL-KIT02-R11](#) [450-0159R](#) [EAR00364](#) [ATSAMW25H18-MR210PB1961](#) [MY-WF003U](#) [AX210.NGWG.NV](#) [EWM-W190H02E](#) [1005869](#) [1012](#) [QCA4004X-BL3B](#) [32-2006-BU](#) [BTM-112](#) [WIZFI250-H](#) [WLNN-AN-DP551](#) [WT51822-S4AT](#) [WT8266-S2](#) [DWM1000](#) [RN171XVS-I/RM](#) [ATWILC1000-MR110PB](#) [ATWILC3000-MR110CA](#) [ATWINC1500-MR210UB](#) [BTM-182](#) [BP3595](#) [BP3599](#) [QCA4002X-AL3B](#) [QCA4002X-AL3A](#) [QCA4004X-AL3B](#) [WT51822-S2](#) [SD-528](#) [ENW-49A01C3EF](#) [LBEE5ZZ1CK-TEMP-DS-SD](#) [RS9113-NBZ-D5W](#) [ATWILC1000-MR110PB-T](#) [ATWINC1500-MR210PB1952-T](#) [ATWINC1500-MR210UB1140](#) [ATWINC1500-MR210PB1954](#) [CleO35-WiFi1](#) [SPWF04SC](#) [SX-SDMAN2-2830S](#) [ENW-49C01AYKF](#) [ST60-2230C-PU](#) [2702534](#) [ESP-WROOM-02D \(2MB\)](#) [ESP-WROOM-02U \(2MB\)](#)