

Type Approval Certified Module

802.11ac 1x1 + Bluetooth® v4.2

Universal Design PCB - Mounting Option

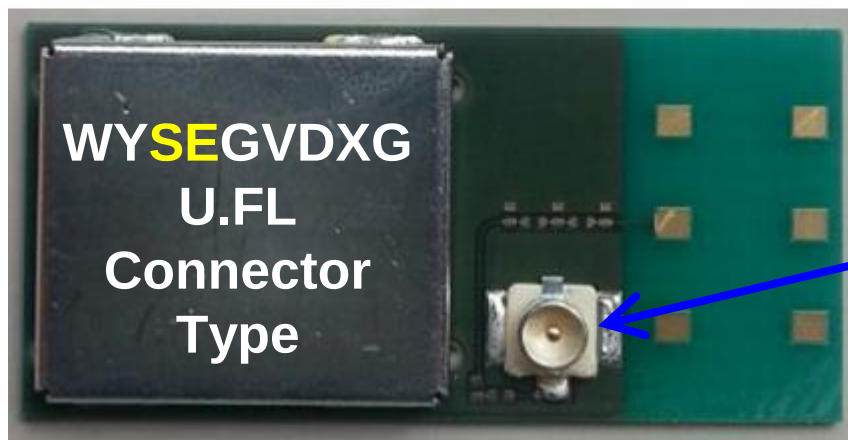
◆ Chip Antenna Type & U.FL RF Connector Type

- Both are expected to be certified for FCC, ISED and MIC regulations. Customer should not be required to test for it, just to refer our certification ID#.



**Dual Band Chip
Antenna**

AH104N2450D1



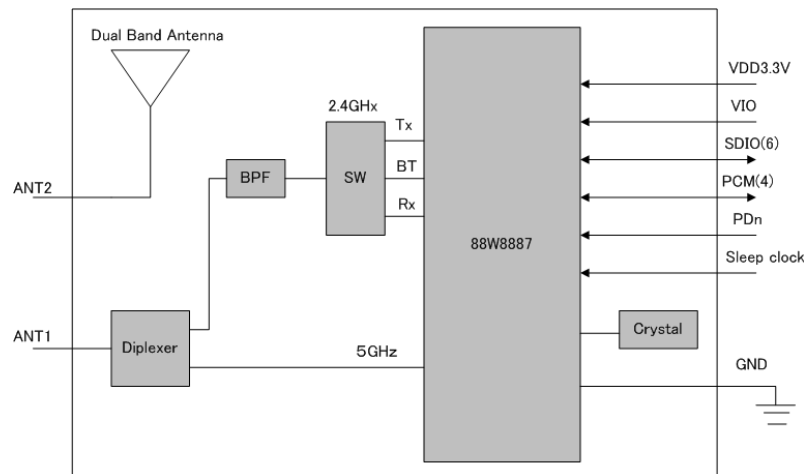
**U.FL
Antenna
Connector**

WY~~SA~~GVDXG: Chip Antenna Type

Features

- Supports IEEE802.11ac/a/b/g/n + *Bluetooth v4.2*
- Featuring Marvell **88W8887**
- Transmit speed:
11/5.5/2/1 Mbps(11b), 54/48/36/24/18/12/9/6 Mbps(11a/g),
150~6.5 Mbps (11n, MCS7~0, HT20/40),
7.22~**433.3 Mbps** (11ac MCS9~0, VHT80)
- Channel: 1 to 11ch (11bgn), W52/W53/W56/W58(11a,n,ac), 79(BT)
- Interface: **SDIO**
- Built-in Diplexer, 2G-PA, 5G-PA, 5G-LNA, OTP, RF Clock & DC/DC Power
- Security: TKIP, WEP, AES, CCMP, CMAC, WAPI, WPA/WPA2(64bit/128bit)
- Outline: 24.0 x 11.5 x 2.0 (Max) mm, **SMD Type**, Metal case shielding
- On-board **Dual Band Chip Antenna**
- **Pre-Certified for FCC, ISED and MIC Regulation**
- RoHS Compliant

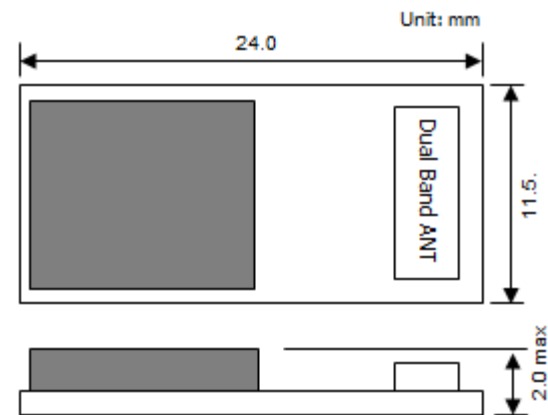
Block Diagram



General Electrical Specification

Parameter	Description	Min.	Typ.	Max.	Units
Frequency Range	11b / g / n (HT20/HT40)	2412		2472	MHz
	11a/n / ac (HT20/HT40/HT80)	5180		5825	MHz
	BT/BLE	2402		2480	MHz
Operation Voltage	VDD33	3.0	3.3	3.6	V
	VIO	1.7/2.97	1.8/3.3	1.98/3.63	
TX Output Power	11b/11g/11n-2G(HT20/HT40)	10/10/8	12/12/10	14/14/12	dBm
	11a/n / ac (HT20/HT40/HT80)	10/10/8/6	12/12/10/8	14/14/12/10	
	BT/BLE	-6/-6	0/0	4/4	
RX Sensitivity	11b/11g/11n-2G(HT20/HT40)	-	-87/-73/-69/-66	-76/-65/-64/-61	dBm
	11a/n / ac (HT20/HT40/HT80)	-	-71/-68/-65/-57	-65 / -64/-61/-51	
	BT / BLE	-	-86/-86	-70/-70	
Power Consumption	Burst Mode TX 11b (Duty=46.8%)	-	488		mW
	11ac RX 5G		358		mW
	Sleep Mode		1.8		mW
General Operation Temperature Range (Shielding case surface temperature)		-30	25	85	deg-C

Outline



Note: The above PRELIMINARY data are not guaranteed, and are subject to change without notice.

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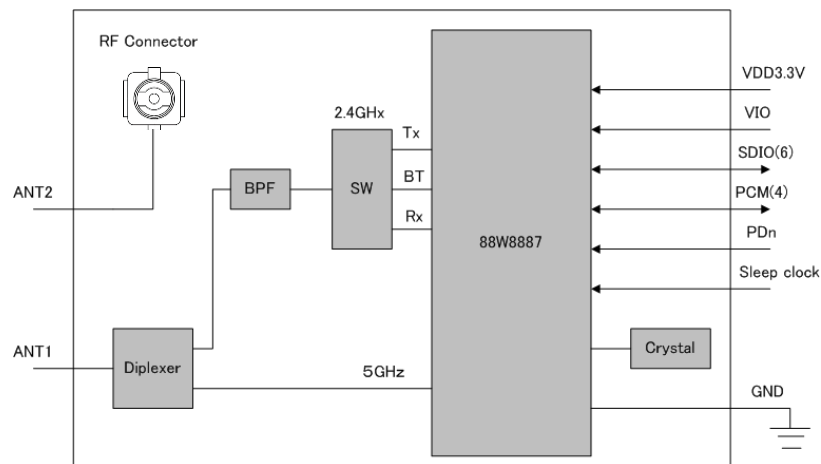
TAIYO YUDEN

WYSEGVDXG: RF Connector Type

Features

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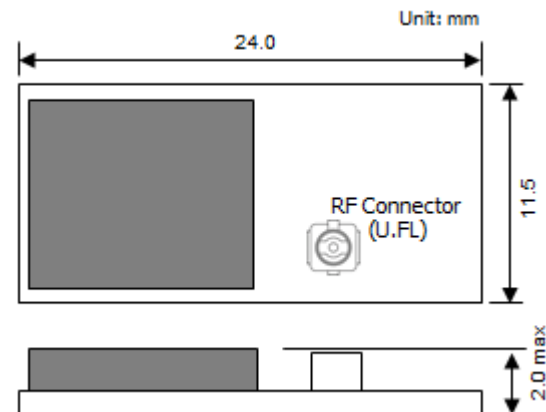
Block Diagram



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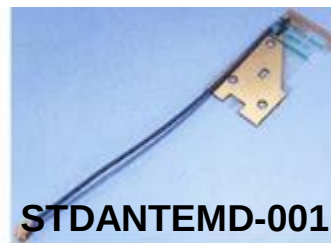
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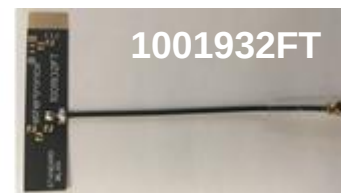
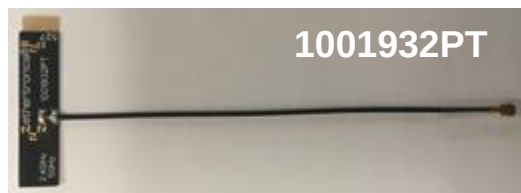
Preferred / Certified Antenna Option (Plan)

◆ SANSEI ELECTRIC, Ethertronics and MOLEX

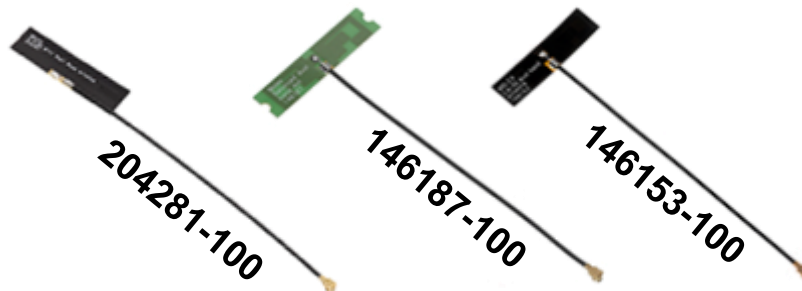
- U.FL type will be indicated with each certification ID number in product data report (listing with several “Preferred” antennas.)
- **JP Customer: SANSEI ELECTRIC**



- **US Customer: Ethertronics**



- **EU/US Customer: MOLEX**



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Mouser Electronics

Authorized Distributor

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