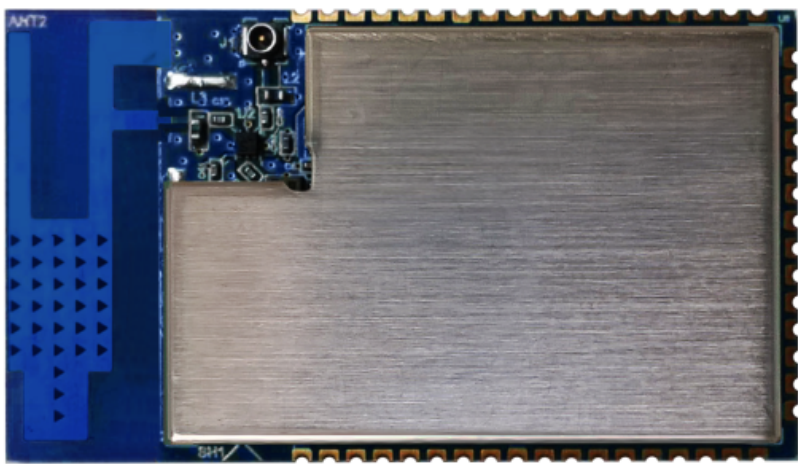




Model: IS-300TA1
MARVELL 88MW300 CHIPSET

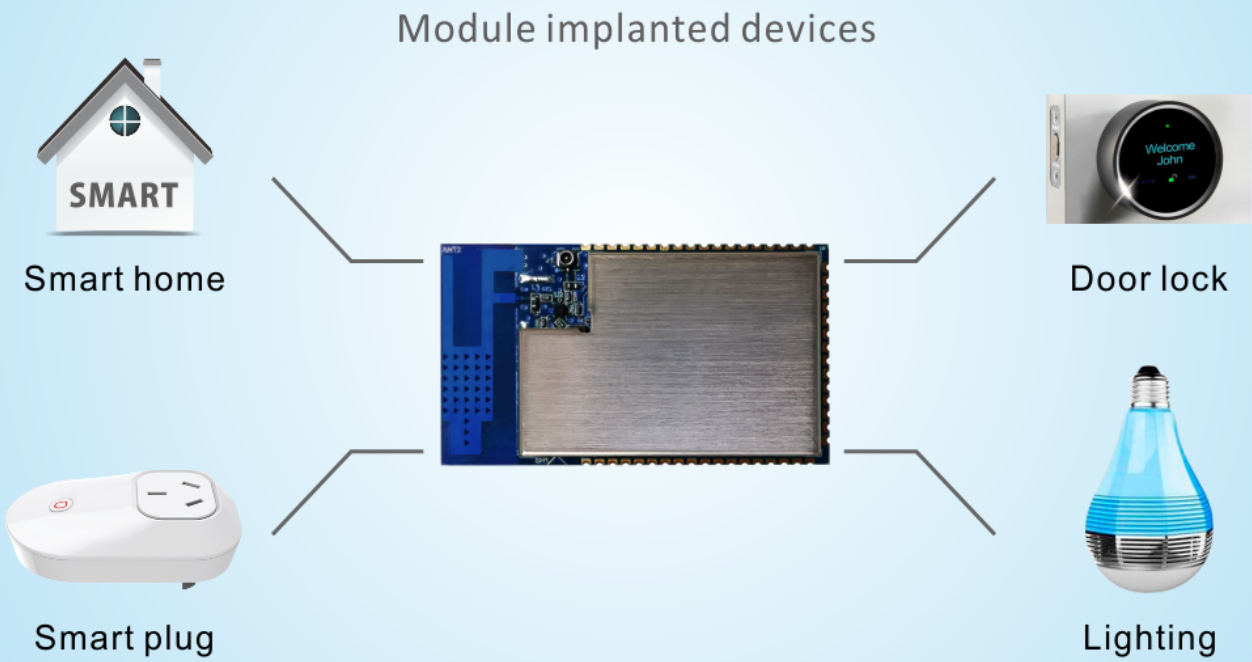
Product Application

- Consumer devices and accessories: toys, speakers, remote control
- Home automation: light switch ,security camera, doorbell ,security system
- Personal health devices: weighing scale, fitness equipment
- IOT/Wearables: rice cooker ,vacuum cleaner, smart watch ,
- Commercial/Industrial: lighting, building automation, Point of Sales (POS)
- Gateways: Connecting IR, Bluetooth Smart, Zigbee

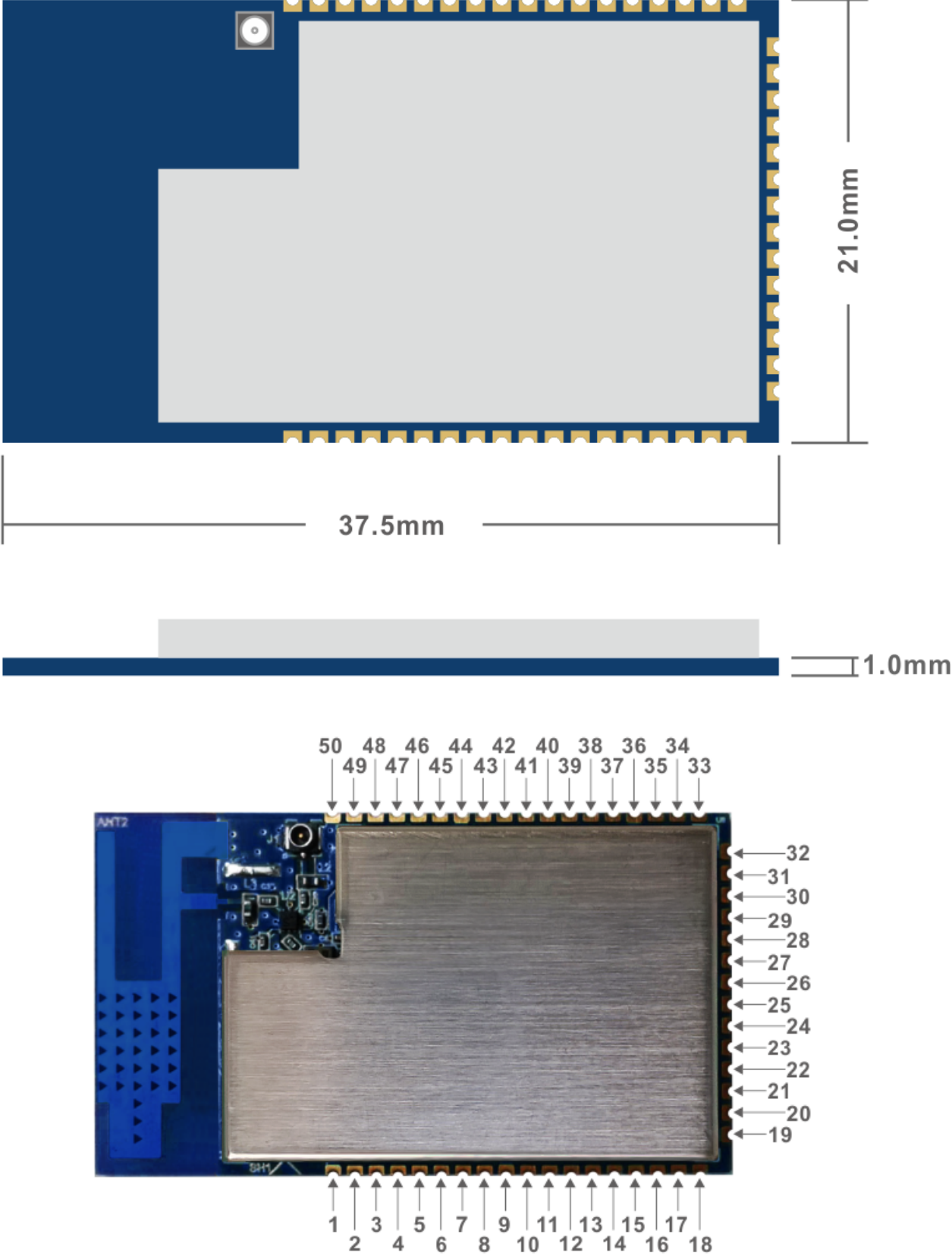
Product Introduction:

IS-300TA1 product is designed base on Marvell 88MW300 chipset. It is a highly integrated low -power WLAN Microcontroller System-on-Chip (SOC) solution designed for a broad array of smart devices for Internet of Things (IOT), wearables, accessories, Machine-to-Machine(M2M), home automation, and Smart Energy applications. The SOC includes a full-featured WLAN subsystem powered by proven and mature IEEE802.11b/g/n. The WLAN subsystem integrates a WLAN MAC , baseband, and direct-conversion RF radio with integrated PA, LNA, and transmit/receive switch. It also integrates a CPU subsystem with integrated memory to run Marvell WLAN firmware to handle real time WLAN protocol processing to off-load many WLAN functions from the main application CPU.

Application Diagram

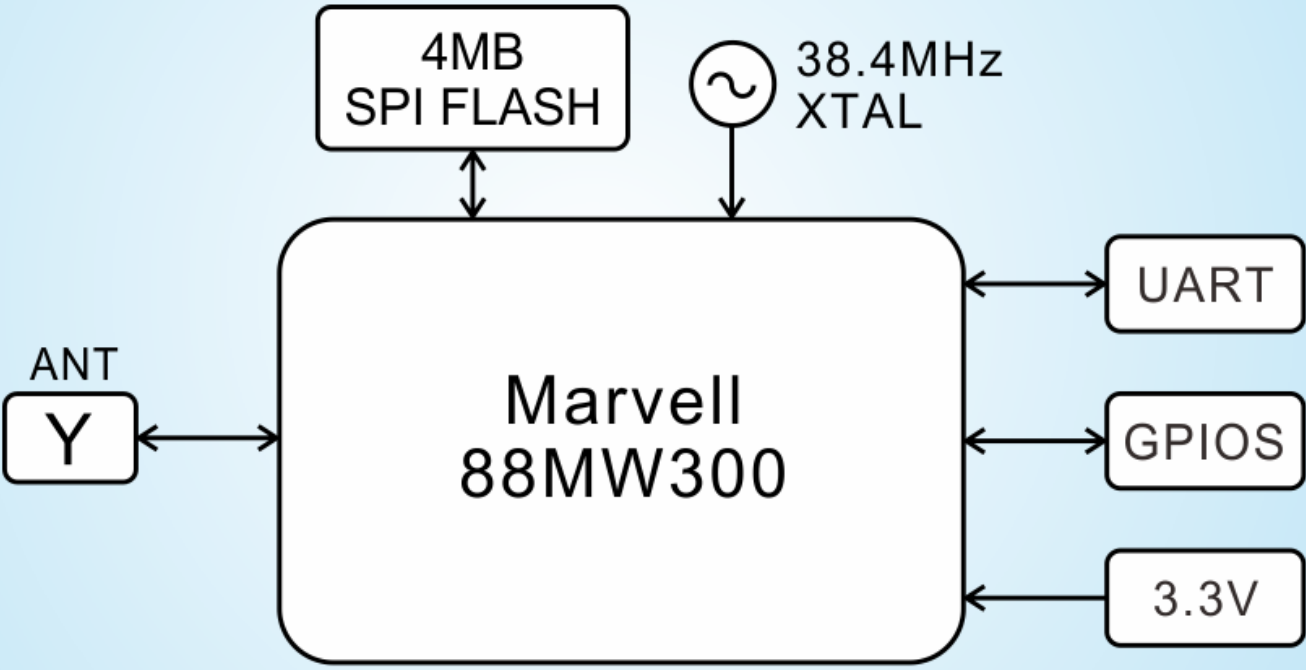


Structure and Size:



Pin No.	Function	Description	Pin No.	Function	Description
1	GND	GND	26	GND	GND
2	NC	NC	27	GPIO39	I/O pin
3	NC	NC	28	GPIO40	I/O pin
4	NC	NC	29	GPIO41	I/O pin
5	NC	NC	30	GPIO42	I/O pin
6	GPIO16	I/O pin	31	GPIO43	I/O pin
7	NC	NC	32	GND	GND
8	NC	NC	33	GPIO46	I/O pin
9	GND	GND	34	GPIO47	I/O pin
10	3.3V	3.3V power pin	35	GPIO48	I/O pin
11	3.3V	3.3V power pin	36	GND	GND
12	3.3V	3.3V power pin	37	GPIO49	I/O pin
13	RESETn	Chip Reset (active low)	38	GPIO0	UART_CTS
14	GPIO22	I/O pin	39	GPIO1	UART_RTS
15	GPIO23	I/O pin	40	GPIO2	UART_TXD
16	GPIO24	I/O pin	41	GPIO3	UART_RXD
17	GPIO25	I/O pin	42	GPIO4	I2C_SDA
18	GPIO26	I/O pin	43	GPIO5	I2C_SCL
19	GND	GND	44	GND	GND
20	NC	NC	45	GPIO6	TDO, JTAG test data
21	NC	NC	46	GPIO7	TCK, JTAG test clock
22	NC	NC	47	GPIO8	TMS, JTAG controller select
23	NC	NC	48	GPIO9	TDI, JTAG test data
24	NC	NC	49	GPIO10	TRSTn, JTAG test reset (active low)
25	GPIO27	I/O pin	50	GND	GND

Block Diagram



Specifications

Item	Description
Chipset	Marvell 88MW300
Powe supply	DC3.3V (±5%)
Interface type	UART
Standards	IEEE 802.11b, IEEE 802.11g, IEEE 802. 11n
Frequency Range	2.4GHz~2.4835GHz
Modulation Types	802.11b: DSSS(CCK, DQPSK, DBPSK) 802.11g/n: OFDM(BPSK, QPSK, 16-QAM, 64-QAM)
Sensitivity @PER	802.11b:-88dBm+/-2dBm@11Mbps; 802.11g:-70dBm+/-2dBm@54Mbps; 802.11n HT20: -68dBm+/-2dBm@MCS7
RF Power	802.11b:16dBm+/-2dB@11Mbps; 802.11g:15dBm+/-2dB@54Mbps; 802.11n HT20: 14dBm+/-2dB@MCS7
Antenna type	Printed PCB antenna
Data transfer rates	1,2,5.5,6,11,12,18,22,24,30,36,48,54 and maximum of 72.2Mbps
Flash	4MB
Environment	Working temperature: -10℃ ~ 50℃ Storage temperature: -40℃ ~ 70℃