AI7697H
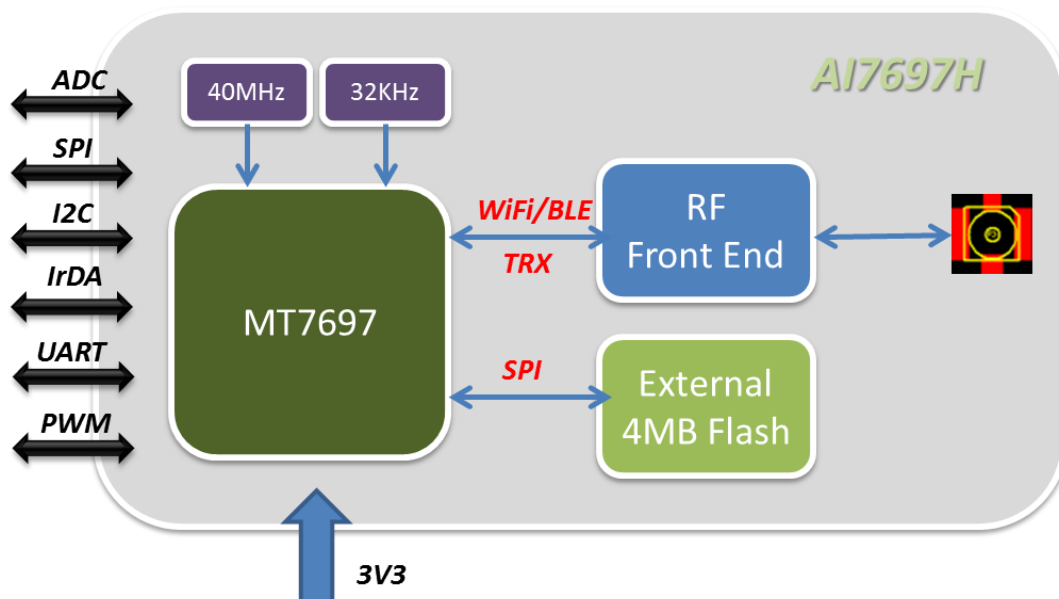# Product Brief

Internet of Things Wireless Connectivity Module

FEATURE

- Main Chip: MT7697N

- ARM Cortex M4 MCU with FPU with up to 192MHz clock speed

- Embedded 352KB SRAM and 64KB boot ROM

- 4MB external serial flash

- Supports 2.4G Wi-Fi IEEE802.11b/g/n

- Hardware crypto engines including：

  AES, DES/3DES ,SHA2 for network security

- Internal switch and control for Rx diversity

- Bluetooth 4.2 Low Energy (LE)

- Small Size 18mm X 18mm X 1.7 mm

- Versatile interface：

  - 28 GPIO/PWM multiplexed with other interfaces

  - Two UART interfaces with hardware flow control and one UART for debug, all multiplexed with GPIO

  - One SPI master/Slave interface multiplexed with GPIO

  - One I2S interface multiplexed with GPIO

  - Two I2C master interface multiplexed with GPIO

  - 4 channel 12-bit ADC multiplexed with GPIO

  - IrDA

AI7697H Block Diagram

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Operation Conditions

Power Supplies	3.3V (typ.)
I/O Voltage	3.3V (typ.)
Dimension	18mm x 18mm x 1.7 mm (typ.)
Package	Stamp type module with shielding case MHF4 connector on module
Temperature	■ Operating : -40℃ ~ +85℃ ■ Storage : -40℃ ~ +105℃
Humidity	■ Operating : 10 ~ 95% (Non-Condensing) ■ Storage : 5 ~ 95% (Non-Condensing)

Pin Assignment

PIN no.	Pin Name	PIN no.	Pin Name
1	GPIO29	23	GPIO0
2	GPIO30	24	GPIO1
3	GPIO28	25	GPIO2
4	GPIO27	26	GPIO3
5	PMU_EN_WF	27	GPIO6
6	GPIO60	28	GPIO7
7	GPIO59	29	GPIO5
8	GPIO58	30	GPIO24
9	GPIO57	31	GPIO25
10	GPIO39	32	GPIO26
11	SYS_RST_N	33	GPIO4
12	GPIO38	34	RTC_3V3
13	GPIO37	35	GND
14	3V3	36	PMU_EN_RTC
15	GPIO36	37	GPIO32
16	GPIO35	38	GPIO31
17	GPIO34	39	3V3
18	GPIO33	40	GND
19	GND	41	Thermal GND
20	NC	42	Thermal GND
21	GND	43	Thermal GND
22	GND	44	Thermal GND

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